

The Dingoes: Umami

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CIS 404.01

Multimedia and Human Computer Interaction

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Ideation

Ideation is really the second phase of the iterative cycle. It happens after the observation phase is complete and is where ideas for solutions are generated based on the findings from the observation. The following sections provide some background about Umami along with its intended purpose and target audience. The tasks supported by the Umami web app are also described in detail and requirements, restrictions, and limitations of Umami are also listed. The ideation portion of this report also includes discussion about the personas used for the development of Umami and task scenarios for chosen tasks.

Brief Description

The sleek and sophisticated design of Umami, a recipe mobile web app, was created to assist beginner chefs who are just starting to learn how to cook. These chefs are young professionals who never really explored cooking in their early years, but now are on their own. The goal of Umami is to make learning how to cook easier, more enjoyable, and an overall better experience for beginner chefs. Umami makes recipes more understandable for beginners by having detailed cooking instructions and a cooking terms dictionary for users to reference if they come across any unfamiliar words, phrases, or terms while following a recipe. Umami also includes a cooking tips and cheat sheet feature which consists of helpful insights on easier ways to possibly complete tasks that experienced chefs may use, and could result in our users being more successful while cooking their chosen recipes. This web app allows users to give their feedback about particular recipes through a rating feature. The purpose of Umami is to provide young professionals who want to learn how to cook for themselves a convenient starting point for their cooking adventures.

Umami is designed to attract these young professionals into wanting to cook and be an assistive tool while they are learning.

Intended Audience

Our target audience is multicultural male and female individuals ranging from the ages of 18 - 26 years old. These individuals are sophisticated college students or young professionals working in corporate America, who by chance never actually learned how to cook before entering the 'real world'. These individuals are now on their own working full-time careers having minimal time to learn how to cook. They need a recipe web app that is easy and mobile where all of their basic recipe-following essentials are in one place while being portable if need be.

Supported Tasks

This is all of the tasks supported by the Umami web app. In alphabetical order the Umami features include: a cooking tips and cheat sheet, a cooking terms dictionary, a grocery list generator, guest user access, home page, log in/user registration, recipe pages, a searching feature, a serving size adjuster, an uploading recipes feature, user profiles, and a web app main menu. Descriptions of all these tasks describing their purpose and function are below.

Cooking Tips and Cheat Sheet

This feature is one of the options on the main menu of the web app and therefore will be available at any time for registered or non-registered users to access. It will contain information for users with help in conversions and colloquialisms. It will also provide tips on ways to cook a dish and things to look for on a recipe by recipe basis, i.e. what to look for when getting a perfect sear on a fish. The cheat sheet portion of this feature will also consist of appropriate temperature measurements for meats so the user is able to make sure that their meat is cooked thoroughly enough. The tips and cheats included in this feature are based on cooking in an overall general sense meaning that they are not specific to one particular recipe but rather are concepts that can be applied to various recipe situations. The tips and cheats are listed alphabetical so they are relatively easy to locate. The user will also be able to search the entire tips and cheat sheet by typing in a keyword(s) into the search bar which will in turn produce a shorter list of results based on their keywords. Due

to the original and possible lengths of the tips and cheat sheet screen this feature will be able to scroll on the screen of the user's device.

Cooking Terms Dictionary

This feature is a dictionary of cooking terminology. It will be in alphabetical order. The dictionary will be accessed through the main menu button on the top of the screen or through hyperlinked terms within the actual recipe pages. It will be available at all times for registered or non-registered users to access. The formatting of each definition will be as follows: the defined word with bolded font beneath which is the indented definition with regular font. In order to navigate the dictionary in a different matter other than scrolling through the entire list there will be a menu to the right side of the screen with each letter of the alphabet visible as a choice. When the user clicks on one of the letters they will be taken to the first defined word in the dictionary that starts with that letter. The user will also be able to search the dictionary by typing a keyword into the search bar located at the top of the dictionary list. The cooking terms dictionary will also be a scrolling screen to account for various mobile device screen sizes.

Grocery List Generator

This feature will automatically generate a list of ingredients for the user that would be needed for the recipe(s) they intend to make. The grocery list will automatically compile grocery list items from all of the user's recipes to create a collective list of ingredients within their account on Umami where it is saved and stored. In order to access their grocery list a user must log into Umami where once logged in they will find this feature as an option on the main menu or within their user profile. This feature is only available to registered Umami users therefore it is not visible as an option on the guest user main menu. The listed ingredients are not displayed in any particular order and are paired with the cumulative amount needed of that ingredient for all of the user's recipes. The user is able to click on an ingredient name or the dropdown arrow to the left of the ingredient name which will display the recipes that include that ingredient along with the specific amount required for each particular recipe. This feature will work in conjunction with the serving size adjuster, which is on all the recipe pages, to accordingly display the increase or decrease of the amount of ingredients required for the recipe or recipes that were adjusted. If a user already

has the correct amount of ingredients needed they will be able to delete any displayed ingredients on the list by clicking the “X” button to the right of each ingredient name. This list will also be a scrolling screening for lists there are longer than the user’s particular mobile screen.

Guest User Access

This feature enables users to use Umami without having to actually make an account on the system. This makes the app accessible to everyone, but when using the web app as a guest user certain features are not available such as the grocery list generator and the uploading recipe feature.

Home Page

Home page is different than user profile which is described later. Home page is visible to any user and is the same for all of them. This page just consists of the ‘Recipe of the Day’ displaying the recipe name, picture, and rating. If clicked the user will be brought to the actual recipe page for that particular recipe. As the title implies this recipe is changed on a daily basis.

Log in/User Registration

This feature lets a user create an account on the Umami web app and forevermore be able to log onto it. In order to make logging in easier and enabling connections to their social media, a user is able to simply log into Umami through Facebook and/or Google+. Both of these options are found on the user log in page and automatically create an Umami account for the user. If neither of these log in options are taken the user can log in with their own Umami username and password which were both created when the user registered on the web app. If a user logs in via username and password and either are not found or incorrect then the user will see an error message appear.

Before being able to log in with an Umami username and password a user must first make an Umami account by going to the register page from the user log in page. The registration process is fairly simple as it only requires the user to choose a username and password, confirm their chosen password, and provide an email. Error messages will appear if the username a user has selected is already taken, the passwords do not match, and/or there is

already an account registered with the given email address. By being a registered Umami user the user is able to access extra features of the web app such as the grocery list generator, the uploading recipes feature, and having a user profile all of which are not available to guest users.

Recipe Pages

This feature is the main feature of the Umami application. Each recipe page will consist of only one recipe. It will start with the title of the recipe then, if the uploader decided to include a picture of the finished product, it will appear underneath the recipe title. To give credit to the user who uploaded the recipe their username appears right under the recipe name and before the picture. Under the name and picture there will be the approximate duration times, the recipe rating, and the serving size adjuster. The approximate duration times are on the left side of the screen and are listed in the order of total time, prep time, then cook time represented as minutes and hours when needed. The recipe rating scale appears under the duration times as a five star scale where one star is horrible and five stars is excellent. Umami will automatically determine and display the average rating for a particular recipe, and the user will be able to give their rating by simply clicking the number of stars they want to rate the recipe as which is then factored in by the Umami system. To the right of the screen is the serving size adjuster which is described later. The serving size that is automatically displayed is what was set by the user who uploaded the recipe.

Under this section there will be the list of all ingredients needed for the recipe along with their corresponding measurements required appearing to the left of and thus before the ingredients listed. Below the ingredient list is the actual detailed cooking directions in paragraph form. Any technical cooking terms that are listed in the cooking terms dictionary and appear within the directions of a particular recipe will appear blue and also be hyperlinked to the corresponding dictionary definition. When the user clicks on the hyperlinked term the definition appears in a dialog box right within the recipe page itself. Lastly, at the bottom of the screen there are the Facebook and Google+ buttons so that a user is able to share the recipe on their social media. Registered users are also able to save recipes they find to their 'My Recipes' section of their user profiles. To save a recipe they simply have to click the save button at the top of screen next to the recipe name.

Searching Feature

This feature is a simple and basic search capability that will allow the user to input keywords into the search bar in order to find recipes that match or are related. This task will take the user's keyword and filter out recipes that do not contain that word. The results of the search will be displayed in order of relevancy beginning with the most relevant search result. This feature is accessible by all users and can be found as an option on the main menu which will bring the user to a screen designed to focus only on searching recipes. As a registered user, a user will be able to set preferences in their user profile which will automatically be linked to any search they do and filter the results accordingly to only display recipes that match their preferences.

Serving Size Adjuster

As previously mentioned, adjusting the serving size is a feature incorporated into each recipe page. It allows the user to change the serving size of a particular recipe based on what the user desires. Users are not allowed to adjust the serving size to be less than 1, and if they try then they are presented with an error message. Changing the serving size will automatically adjust the ingredient measurements in the recipe accordingly which will also automatically update the grocery list generator to account for the larger or smaller serving sizes.

Uploading Recipes Feature

This feature is only available to registered Umami users and allows them to create their very own recipe pages that can be posted up on the web app and thus be seen by all other Umami users both registered and non-registered. While uploading a recipe the user must include: the name of the recipe, the approximate duration times (total, prep, and cook), the ingredients with corresponding measurements, the detailed cooking directions, and the serving size which acts as the default serving size on the actual recipe page. The user may also upload an image with their recipe but it is not necessary. After uploading their recipe all of the information gets formatted by the system in order to be consistent with all the other recipe pages. The uploaded recipe not only gets posted on the public Umami web app but also gets stored in the user's "My Recipes" section of their profile. The uploading feature can be accessed from the user's profile page.

User Profiles

The profiles and accounts go hand in hand since the user profiles are created as a result of a user registering with Umami via the in-app registration process, Facebook, or Google+; therefore, this feature is only available to registered Umami users. Having a user profile gives a user access to sub-features that are incorporated into their profile page. These sub-features are: a ‘my recipes’ section, preferences, settings, and the uploading recipe feature. The uploading recipe feature has already been discussed in detail in a previous section. These four sub-features appear as buttons at the bottom of the user’s profile page.

The ‘my recipes’ sub-feature is essentially just a part of the web app where the user is able to view the recipes they have saved. The actual page consist of two tabs at the top of the screen where one is labelled ‘Saved’ and the other is labelled ‘Uploaded’. The ‘Saved’ tab consists of all the recipes the user found, liked, and then saved so they could easily access it later. The ‘Uploaded’ tab consists of all the recipes that the particular user created and posted themselves. This tab also allows them to edit or delete any of the recipes they have already uploaded by having a pencil icon and a red ‘X’ icon to the right of the screen in-line with the recipe name. The recipes in each of these tabs are listed alphabetically by the recipe name which is hyperlinked to the actual corresponding recipe page.

The preferences sub-feature is where the user is able to indicate any food allergies they may have along with any specific diet they follow. These preferences are automatically filtered into any search that the particular user performs so only results matching their preferences are displayed. This is in order to prevent a user having to continually input their preferences into search and/or finding a recipe that does not meet their dietary needs. Settings is just the basic setting options found in most apps. It really just consists of the user being able to turn on/off capabilities such as notifications and alerts. They are also able to disable ratings here, make their profile private, and turn off the tracking of their recipe history.

Web app Main Menu

Very simply the main menu for Umami allows for all users to navigate between the different features and pages of the web app faster and easier. There are two different main menus depending on whether a user is a guest user or a registered user with an account.

Less features are available to guest users so their main menu consists of: home, search, dictionary, and tips and cheat sheet. Registered users have access to more features which makes their main menu longer because it consists of: home, profile, search, dictionary, tips and cheat sheet, and grocery list. The button for the main menu for either type of user can be found in the upper left-hand corner of the screen represented by a small box with three squiggly lines inside implying an option selection.

Requirements, Restrictions, and Limitations

Below is a list of all the requirements, restrictions, and limitations that Umami must comply with. These requirements, restrictions, and limitations include:

- Responsive design to adhere to any mobile screen size
- Provide user feedback in less than 100 milliseconds
- Buttons are easy to press
- Font size should be 16 css pixels
- User gets 3 failed attempts at logging in, after that their password can be automatically reset and sent to their email
- Platform-Centered workflow for Chrome on Android Smartphone
- Will be tested on an android V4.4 KitKat
- Requires an internet connection over Wi-Fi or cellular data
- Permissions to access to the camera for picture uploads
- System will only support and maintain the current version
- Only one user account will be able to be created per email address
- Size restrictions for picture uploads
- Web hosting that handle 10% of our users simultaneously using the app
- Shall support a touch driven interface
- Users shall be able to upload recipes, cooking terms, photos
- Initial release will only support the English language
- Comments and reviews are limited to 300 characters or less
- To accommodate the various size requirements all screens will be able to scroll if needed based on the size of a user's particular mobile device screen

- Recipe content will be obtained from the registered Umami users after the web app develops a user audience. For initial launch of the web app recipe content will be retrieved from other public, already established recipe websites with the permission from the uploader

Personas

A male and a female persona were created by the design team to represent the target audience of Umami which is 18 – 26 year olds who are young professionals that may still be in college and want to learn how to cook. Both personas have a strong influence on the development of the Umami web app because both are part of the design team’s primary target market. These personas were created based on interviews and observations done by each of the design team members.

Shannon Masters is the female persona. She is 22 years old and is a senior at the College at Brockport in the School of Business while also working 20 hours part-time at an on-campus job. She cooks at least once a day with an intermediate skill level. John Deer is the male persona. He is 20 year old Criminal Justice student at SUNY Albany who also works to help pay for school. He has limited cooking knowledge but can follow instructions and normally cooks something boxed or frozen once a day. A more complete and detailed version of both personas can be found in Appendix A along with the interviews conducted by each design team member and their observations.

Task Scenarios

In preparation for conducting usability testing the design team chose four of the previously described supported tasks to focus on. The four supported tasks that were chosen were: the search feature, the defining of a dictionary term embedded within a recipe, the grocery list generator, and the serving size adjuster. The design team created task scenarios for each of these chosen tasks. A task scenario is a detailed set of steps that describes how a task is to be completed.

Search Feature Task Scenario

Tom is a 22 year old college student who lives off campus. He wants to have something different than his usual cereal for breakfast. He is unsure what to make, so he grabs his

cellphone and opens up a recipe app called Umami. The home screen shows the recipe of the day, spinach hummus dip, but he wants a more traditional breakfast. Tom taps on the three line menu icon on the top left side of the screen. From the drop down menu he selects search. Tom knows that he has eggs in his house, so he types egg in the search bar to see what he can make with those. After clicking the go button, a list of thumbnail pictures and recipe names appears. Tom scrolls through the list looking at the picture and reading the recipe name. The recipes that appear are Egg Nog, Egg Salad, Egg Casserole, and Eggs Benedict. He remember that he had Eggs Benedict as a child and liked it, so he clicks on the picture to see what ingredients are needed to make the dish. On the recipe page for Eggs Benedict he notices that he has most of the ingredients to make the dish and that it only takes 20 minutes to make.

Defining Embedded Dictionary Term Task Scenario

Casey the 20 year old female college student is on Umami looking at a recipe for Chilean sea bass. After reading the ingredient list she starts to read the directions for the recipe. In the first paragraph the directions state that she has sear the bass in a pan. Casey is not familiar with the term sear so she taps the word, which is blue and underlined signifying a hyperlink, once. After taping the word the definition appears in a box with a tan background and black text with a large close button underneath it.

Grocery List Generator Task Scenario

Shannon clicks on the Umami app icon to get to the log-in screen. Since she already has an account, Shannon clicks on the log-in button which brings her to another screen where she enters her username and password. Once logged-in Shannon clicks on the menu button in the top left-hand corner of the screen to open up the main menu, while in the main menu she clicks on 'Profile' which brings her to her profile page. While on her profile page, she clicks on the 'My Grocery List' button which is to the right of the screen. This brings her to her grocery list for all of the recipes she had previously added. Shannon scrolls down the screen to find cocktail shrimp. She reads that the grocery lists says 2 pounds of cocktail shrimp and she wants to know why she needs so much. Shannon taps on the word 'Cocktail Shrimp' and a drop down space appears. In the drop down space she sees the two recipes she added that incorporate cocktail shrimp. She needs half a pound for a stir fry recipe she

wanted to try and the other pound and a half is for a new cocktail recipe she is going to bring to a dinner party later in the week. Shannon taps the word ‘Shrimp’ once again to close the drop down space, and continues to search for more recipes on Umami.

Serving Size Adjuster Task Scenario

Shannon the 19-year-old college student is on Umami looking at a recipe for traditional Italian sausage spaghetti. When reading through the ingredients and the serving size, she notices that it won’t be enough to feed her and a friend. She notices there is a plus button next to the serving size which currently reads “1” and decides to press it. The serving size now reads “2” and all of the ingredients have now doubled to reflect the change. She then gets the news that her friend is unable to eat with her, so she reduces the serving size by pressing the minus button. The ingredients are reduced to their original values.

Design

This portion of the report relates to the low- and high-fidelity prototypes of Umami that were created. Prototypes are basically tangible visuals of the ideas generated in the ideation phase that are quickly made in order to help people sort of visualize how a system is supposed to look and work. Prototypes also enable the design team to test the ideas they came up with.

Low-Fidelity Prototypes

Low-fidelity prototypes are the most basic and broad prototypes that you can develop because they do not require a lot of detail. The low-fidelity prototypes created for Umami were paper prototypes meaning exactly what it sounds like, they were made out of paper. These prototypes were based off of each of the four task scenarios created by the design team during the ideation phase. These prototypes were then used to test the chosen supported tasks in a handful of usability testing sessions. The four tasks created into prototypes were: the searching feature, defining an embedded dictionary term, the grocery list generator, and the serving size adjuster. The grocery list generator prototypes were more so testing how users would get to the grocery list rather than focusing on testing the feature functionality. Appendix B is a plastic bag containing all of the Umami low-fidelity

prototypes. The design team decided to use index cards for the Umami paper prototypes because this is a mobile web app and an index cards are relatively the same size as a phone screen. All of the Umami paper prototypes are labelled/numbered on the back of their index cards in the order in which they were used in the usability testing sessions.

Features that Comply with Patterns, Guidelines, and Principles

This is a list of five features incorporated into the design of the Umami web app. Each of these features complies with at least one design pattern, guideline, or principle that has been discussed at some point this semester. There are various other features designed within Umami that comply with some design pattern, guideline, or principle, but these are just five of them. The five complying features are:

- The main menu button on the top left corner of the screen is a box with three lines in it. It does not say menu in it but is identifiable as a menu button. The Gestalt principle of similarity allows the user to perceive it as a menu button due to its similar shape, location, and internal design with menu buttons on other mobile web applications.
- The search box we used is based on the search box pattern on wellie.com. The design was altered slightly because we did not need a drop down box like the one that was included in the pattern.
- On the grocery list there are arrows next to each listed ingredient which correctly implies that there are more options being hidden deeper down. This is an example of visibility, one of Norman's principles.
- The scrolling screen feature follows the principle of mapping. Natural mapping is followed by this feature because pushing up on the page scrolls down. The scroll indicator on top of the page uses knowledge of the world to communicate the message.
- The error message that appears when a user tries to lower the serving size below 1 is an example of feedback and also a forcing function.

Low-Fidelity Design Tradeoffs

One tradeoff of the design is in the search button. The design team followed the search box pattern from the pattern library, but the pattern in the library had the search box label to the left of the search box. The Umami application is a mobile based web app and therefore will presumably be used on smaller screens than what the Wellie pattern library search box pattern was most likely designed for. Since it is a mobile web app the horizontal space available is minimal. Having a label to the left of the search box as opposed to having it on top of the search box is a trade off with space to follow the pattern. Another tradeoff in the design of this mobile web app is having the Umami brand header at the top of each screen. This design traded screen space for increased brand exposure to consumers. In order to decrease time to market for the Umami web app and ensure a well-designed product the number of features originally included in the design of Umami had to be limited, therefore the features included in the final design of the web app had to be taken into careful consideration.

Evaluation

The evaluation phase of the iteration cycle is the actual testing of the prototypes and the evaluations of the designs. This portion of the report allowed the design team to evaluate the low-fidelity prototypes they created individually and as a group. This portion also includes the usability test conducted by the design team and the results gained from those tests. Another part of evaluation is coming up with recommendations for redesign so when this entire process is repeated again there is some growth and development in the designs.

Usability Test

One way the Umami web app was evaluated was by the design team planning and conducting a usability test. This kind of evaluation allowed the designers to see how users would actually interact with the prototyped interfaces provided for them. For this usability test the low-fidelity prototypes created during the design phase on this process were tested. In the order that they were tested the four major features tested were: the search feature, the defining of an embedded dictionary term, the grocery list generator, and the serving size adjuster. These usability test sessions were conducted in class, so the people who participated were college students which by chance happens to place them within the target

audience for Umami which is 18 – 26 year olds. There were a total of four usability test sessions conducted and recorded.

Before conducting this usability test the design team had to prepare test scenarios, paper prototypes, scripts to be read during the sessions, an overview and background sheet for the test, logging sheets to record session notes, and questionnaires including pre-testing questions and post-testing questions. The task scenarios used were the same as the ones provided earlier in this report. The design team used the task scenarios as is which might have ended up becoming an issue because they were too specific and told the participants how to complete the tasks. After conducting the tests the design team realized that they should have edited the task scenarios they provided to participants so that they just got the backstory of the task that needed to be completed. A packet for each usability test session was created and consisted of the recorded notes and observations of the particular session on the logging sheet as well as the questionnaire questions with the participant answers. The actual planning documents used for the usability tests can be found in Appendix C along with the revised task scenarios that should have been used for the usability tests and the logging sheet packets with the recorded notes and observations for each session conducted.

Summary of Usability Test Results

In the first task, participants were told go through the search feature. This task was completed quickly and easily by all the participants with only one small issue along the way. The label for the search box was confused for a button to launch the search. But after clicking on it and it doing nothing the participants quickly clicked on the “GO” button and moved forward with the task. The second task was to find the embedded dictionary term and get its definition. The term was a hyperlinked word connected to the cooking terms dictionary. This task was also easily completed by all of the participants. The blue word within the directions on the recipe page was quickly identified as being a hyperlink, however the scrolling feature of the low-fidelity prototype took a few moments for the participants to grasp. The third task assigned to be completed was locating the grocery list generator. This task faced some difficulty with the participants due to the various screens they had to navigate through in order to access the feature which was behind two menus.

The log in process went smoothly for each participant after which they were able to navigate to the main menu off of the home screen. After this many of the participants did not realize that they had to click on the profile option in the main menu in order to access the other sub-features present on the user profile which included the grocery list generator. For the most part participants had to be pointed in the right direction. After this step was completed the rest of that task went smoothly. The last portion of the testing was focused on the serving size adjuster feature. All of the participants easily and quickly completed the task of adjusting the serving size of the recipe up and down. Several screens were prepared in case the participants clicked on a different part of the screen that strayed from the path they were intended to follow but none of these extra screens were used which is a positive thing. Besides these deviated path screens, error screens were also prepared but like the other screens they were never used during any of the usability test sessions.

Analysis of Usability Test Results

The overall usability testing for Umami went very well. Upon the participants' completion of all the assigned tasks several possible improvements were identified. As mentioned, one of the biggest issues the design team faced was the provided task scenarios being too specific. The information given to the participants in the scenarios gave them a path to follow instead of letting them find their own way. Even though participants were provided with "the answer", most of them still had difficulty completing some of the tasks. The participants may not have realized that the correct path was given to them or just did not remember the steps after handing back the task scenario. Only one participant seemed to really retain the steps given in the task scenario or rather just retained the fact that the steps were there, but either way they noticed the design team's mistake. Even though most of the participants did not show any signs of being influenced by the correct steps being provided to them, they may have subconsciously remembered what steps needed to be taken in order to complete the tasks. This issue could have possibly swayed the results of the design team's usability test evaluation.

Based on the occurrences of the sessions it appears that for the most part Umami had a relatively easy-to-use design. Reactions from the participants and observations made by the design team lead to the conclusion that a couple minor elements should be changed

such as the positioning of the search box label. They also concluded that the location of and path to the grocery list generator feature seriously needed to be looked over and revised. The responses to the post-testing questions showed that, overall participants really enjoyed the design and concept of Umami. It was referred to as very user friendly and for the most part easy to use with the exception of the grocery list generator location. Participants said that they really liked the features they saw and found them helpful and interesting. When asked they also said they would recommend this mobile web app to a friend which is also very positive feedback. In regards to Umami meeting its objective of being a mobile web app that makes cooking easier and simpler for young professionals just beginning to learn how to cook, participants said that that objective was clearly shown through the features provided. According to their responses, they felt that the web app really reflected what the designers intended it to do. This is very good and positive feedback because it provides evidence that the message and purpose of Umami was really taken into account throughout the whole process; and that the design team has so far created an effective and usable design.

Umami Evaluation of Low-Fidelity Prototypes

In order to effectively evaluate the Umami mobile web app each member of the design team had to first individually evaluate the various low-fidelity prototypes and then come together to discuss their evaluations. The evaluations are meant to be used to identify the elements within the design that violate some guideline, pattern, and/or heuristic.

Individual Evaluations of Designs

These are the individual evaluations written by each member of the design team. These evaluations follow the author order seen on the title page, but each evaluation will also be labelled with the design team members' names.

(Casey Galloway) The biggest problem users in the usability testing seemed to face during the usability testing was locating the grocery list generator. It was mostly difficult to find because it was under 'Profile' in the main menu which most participants did not think of by themselves. While looking back at the prototypes, another pattern violation with the grocery list generator page was that there was no editing functionality which means that users would not be able to change anything about the list. This violates the pattern of

enabling users to edit the information in data tables. Another pattern violation was the placement of the search box label. Many participants in the usability testing pointed out that the search box label looked very similar to a button because it was surrounded by a box and was seemingly connected to the search box field. This spacing issue violates the Gestalt principle of proximity since the search box label was so close users mistook it for a button. On the low-fidelity prototypes there was no registration button included in the design which was not necessarily a violation but it was a rather important feature that was missed in the design of these prototypes. Another problem with the low-fidelity prototypes was the fact that the various recipe pages looked quite different in terms of the design, layout, and pattern of them. This caused inconsistencies in the prototypes which violates the principle of consistency. Lastly, the rating scale was located at the bottom of the one prototype it appeared on. This violates the pattern of putting the rating scale next to or very close to the main product name. Besides these couple of violations the overall design of Umami looked pretty good.

(Brendan Kincella) The low fidelity prototypes that we made were well designed and creative. The scrolling features and pull tab text fill in allowed for a more realistic and seamless experience for the usability test participants. The prototype for the serving size changing feature and the term defining feature are both based on the same screen however there are differences in the two screens in the prototypes. The location and format of the time information and the layout of the picture and serving size buttons are different. There was a similar issue with the spinach dip recipe home page. The lack of consistency with the different recipe pages both looked bad and could have had a negative effect on the usability testing. It violated the principle of similarity and each page had different affordances. Another issue with the paper prototypes was the lack of headers on some pages. The Umami header was supposed to appear on the top of the screen at all times. These issues violate the Norman principle of consistency. I think the issues in the paper prototypes came from the division of labor without internal patterns or guidelines being clearly communicated between group members. The focus on the completion of the task overshadowed the details of some of the screens.

(Sean Morrow) Each design was well done in a paper prototype fashion, everything was acceptable according to the guidelines of staying in a mobile screen that we designed for. All the screens were designed for left side text for easy reading on a phone when scrolling through the interface. Many of the screens had an interactive part to them that allowed for some pushing of a button and something new appearing. As far as the length at which the designs took for each task scenario, the many menus that were needed to be traversed for the grocery list generator seemed to be the biggest complaint among the users. Overall the designs adhered to the rules and flowed well and were consistent with each other.

(Michelle Schmiedlin) The search interface violated proximity because users were not able to distinguish between the search button and the go button, this caused difficulty performing the search operation. The grocery list generator was difficult to find because it is under the profile. This made it difficult for users to find because it did not follow any natural mapping. The user also was not able to use knowledge in the world to find the grocery list generator, they had to remember to all the steps and use knowledge in the head to perform this task. The logout is only available after the user clicks the three bar menu and then the logout button is on the right side of the screen, not with the rest of the menu items.

Group Summary of Individual Evaluations

After writing the individual evaluations the design team came together and discussed what they had determined. All of the issues identified were put into a collective list and then prioritized based on what the design team members felt was most important. The prioritized list of identified issues is as follows:

1. There was no registration button or screen on the low-fidelity prototypes
2. The grocery list generator was extremely hard for users to find
 - a. It does not follow natural mapping and requires more knowledge in the head rather than knowledge in the world
3. Grocery list generator does not have any editing functionality connected to it thus enabling the user to change the grocery list based on what they may already have, i.e. deleting an ingredient

4. The search field label was surrounded by a box and looked very similar to a button along with being connected to the actually search text box field; and the “GO” button is also a little close to the search text box. These spacing issues violate the Gestalt principle of proximity
5. There are differences in recipe pages throughout the low-fidelity prototypes which means there are inconsistencies in the designs and patterns
6. There is a lack of Umami header across the top all screens
7. On the low-fidelity prototypes the rating scale was placed at the bottom of the recipe page where the commenting feature would have appeared. This violates the pattern of putting the rating next to or near the main product name/image
8. The log out button is only available on the main menu screen and while on the main menu screen it is in the upper right-hand corner whereas all other options are in the centered list

Recommendations for Redesign

Based on the evaluations of the low-fidelity prototypes the design team was able to come up with recommendations as to how the design of the Umami mobile web app can be changed for the next iteration of the development cycle. These recommendations are solutions to the various issues previously listed that were thought up by the design team. This list includes multiple solution options for some of the issues identified. After these redesign recommendations were determined they were rearranged into order to prioritize the changes. The highest priority recommendations are related to and solutions for the identified issues. The lower priority recommendations do not necessarily directly related to any of the issues, but were pointed out by the design team as things that could be improved. The prioritized list of recommendations for redesign is as follows:

1. Add a registration screen
2. Enabling users the ability to log in and/or register via their social media
3. Have the registration screen/field boxes be on the same page as the log in
4. Moving grocery list generator option to the main menu
 - a. Greying the option out for non-registered users
 - b. Creating two different main menus for registered and non-registered users

5. Adding editing and deletion capabilities to the actual grocery list. Enabling the user to change the amount of the listed ingredient or completely deleting it
6. Just enabling users to delete a listed ingredient from the grocery list
7. Move the search box label further to the left of the screen away from the search box field and remove the outline around it
8. Make all test field labels top aligned
9. Get rid of commenting capability and multi-rating system
10. Move the log out option to the bottom of the main menu options list
11. Make sure Umami appears at the top of every screen
12. Only have the Umami header on some screens (i.e. the main screens)
13. Allowing users to be able to share recipes on their social media
14. Add a follow button and feature on recipe pages along with the ability to send direct messages to the user who posted a particular recipe
15. Add a 'Save Recipe' button to the recipe pages so that registered users can save the recipes to their profiles
16. Add the username of the user who posts a recipe to their corresponding recipe page
17. Simplifying the overall design of the mobile web app
 - a. Take out the meal planner feature since there is already so much capability within the app and the feature does not strongly relate to the purpose of Umami
 - b. Make the Umami header more appealing to all genders
18. Remove the notifications and message buttons from the user profile pages
19. Get rid of the home page screen (the recipe of the day)

All of the above recommendations were taken into consideration and solutions for each issue were decided. These recommendations contributed to the next and final design iteration of Umami. The following section discusses the tradeoffs of the chosen solutions from the above list that were incorporated into the final high-fidelity designs. All of the actual changes that were made to the low-fidelity prototypes including the ones mentioned in these tradeoffs were documented and are provided in a later section of this report.

High-Fidelity Designs Tradeoffs

One tradeoff for the high-fidelity designs of this web app was the discontinuation of the use of user comments. The design team was concerned about users posting inappropriate comments on the public recipe pages. This would be an issue which would lead to the need for a system administrator to constantly monitor the site. The design team decided to keep the star rating scale on each recipe page which will still allow them to maintain some sort of rating system for the recipes. It was also decided that the location of the rating scale would be moved towards the top of the recipe page under the picture in order to follow the design pattern. In order to make the web app appear more gender-neutral, the tradeoff of removing the flower that was layered behind the “i” in the Umami header was made. This essentially got rid of the original logo and made the header look rather boring, but the tradeoff is now the web app is more likely to get more users because now the header appeals to both male and female audiences. The simplified header also gives a cleaner look to the mobile web app pages. Another tradeoff made with the high-fidelity designs is now there are two different main navigational menus. This is a tradeoff because now there are more screens involved in the web app, but after conducting the usability tests and seeing the trouble users were having with finding the grocery list generator it was determined that creating the two different main menus is better than users being confused and not being able to use one of the major features of Umami. This tradeoff was also made because many of the participants in the usability tests stated that they liked the idea of having this feature but they wanted an easier way to find it; therefore the grocery list generator option was brought to the main menu and the second main menu without this option was created for the non-registered users because it is not a feature available to them.

Design Iteration

This section of the report relates to how the Umami web app designs were changed. Here is where the actual design changes are documented and discussed. These documented changes are what were made to the low-fidelity prototypes in order to create the high-fidelity prototypes. If there was more time then these designs could have been evaluated and iterated again.

Documented Design Changes

These are the actual and official changes that were made to the low-fidelity prototypes. They are based on the recommendations for redesign that were made in the evaluation phase. There is no particular order to this list other than being in the order in which the changes were decided and implemented. The documented design changes include:

1. The addition of a registration screen
2. Adding Facebook and Google+ log in/register options to the log in screen
3. Creating two main navigation menus: one for guest and one for registered users
 - a. The guest main menu had 'Profile' removed from it
 - b. The registered user main menu had 'Grocery List' added to it
4. The removal of the 'My Grocery List' option on the user profile
5. The removal of the 'Meal Planner' option on the user profile
6. The removal of the notifications and messages buttons on the user profile
7. The pictures on the option buttons on the user profile were removed
8. The search box label was moved to be on top of the search box
9. The ratings and reviews feature was changed to just being a star rating scale
10. The star rating scale was moved towards the top of the recipe page to be underneath the recipe picture and approximate duration times
11. Decided on uniform layout of the recipe pages
12. The addition of Facebook and Google+ sharing buttons at the bottom of the recipe pages
13. The flower was removed from the logo
14. The addition of a delete capability on the grocery list listed ingredients
15. An delete confirmation dialog box was created for the grocery list
16. The addition of the 'Save Recipe' button at the bottom of the recipe pages
17. The addition of the username of the user who posts a recipe appearing on the corresponding recipe page underneath the serving size adjuster
18. Error messages were created for the log in and registration screens
19. Only have the Umami header on the main screens of user profile, log in and register screens, and grocery list generator

Explanations for Design Changes

These are brief explanations as to why a particular design change was made. Almost all of the issues that were identified by the individual and group evaluations are addressed by these design changes. Below the issues not addressed are discussed first followed by the individual reasoning for each of the changes that were actually made. The individual reasonings are grouped together by screen relation meaning that all the changes related to the recipe pages are together and the changes related to the user profile are together, etc.

Issues Not Addressed

The only issue that was completely not addressed by a design change was the ‘Log out’ button being in the upper right corner of the registered user main menu. The recommendation to move the ‘Log out’ button to being the bottom option on the main menu was ignored because when it is located in the upper right corner users are less likely to accidentally click it when they might be trying to click another option. Keeping the design the way it is prevents more accidental log outs from happening than if it were to be placed at the bottom of the menu. Also, even though it is not in-line with the other options it is still clearly visible and relatively easy for users to locate.

Another issue that was only somewhat addressed is the lack of Umami headers across all screens. This issue was kind of addressed because in the design changes being made for this iteration of Umami it was decided that the Umami header was only needed on the main screens of the web app which are the log in and register screens, the user profile screen, and the grocery list generator screen; therefore the header does not appear on all screens but this time that was a conscious decision made by the design team. All of these screens are more likely to be seen by the general public, for example if a user has their Umami grocery list pulled up on their phone while shopping and someone looks over their shoulder for some reason at the web app, they will know exactly which one it is. The other screens are really only seen by the user, so it might get annoying to them to constantly see the Umami header on every screen.

Log in/Registration Design Changes

These changes addressed the issue of there being no registration screen. The big change was actually adding the registration screen. This change was made because the user profile feature of the Umami web app requires a registration process in order to create the user

profiles. It was designed to look the way it does because the design team wanted to make the registration as quick and painless as possible for the users.

The addition of the Facebook or Google+ log in buttons was done because it is a very common log in method used by a large amount of websites and apps in today's society. Users like to be able to connect all of their devices and social media, so this ensures that they are able to do so. They were also added because it is much easier to log in via Facebook or Google+ because all of your details are already set so you just have to hit allow. By logging in via social media Umami users are also able to share the recipes they like with their friends, but they would not be able to do this if they just logged in on their separate Umami account.

Including the error messages for the log in and registration screens is important because it gives the user feedback as to why the system might not be working the way they think it should be. The error message for logging in is "Error: Incorrect Username or Password!", this lets the user know that the log in credentials they are using do not match anything in the system. The error messages for the registration screen are "Error: Username is already taken!", "Error: Password mismatch!", and "Error: Email already in use!". These messages basically prompt the registering user to choose other options for log in credentials.

Grocery List Generator Design Changes

These design changes address the two issues identified the deal with the grocery list generator. The first really big issue was the location of the grocery list generator within the app being too difficult for users to find, therefore the design was changed so that the grocery list generator can now be found as an option on the main menu. Since the grocery list generator is only available to registered users, the design team was reluctant to include it on the main menu because they did not want the non-registered users seeing it and getting frustrated that they are not able to click it since it would be greyed out. This all lead to the change of two main menus being created, one for the registered user and one for the non-registered user. Having the two main menus was decided because now the non-registered users do not get frustrated with the web app because they can see but not access certain features; and the registered users are able to find their grocery lists easier since it is right there on the menu which was actually a suggestion given to the design team by one of the

usability test participants. Another thing with now having the two separate main menus is 'Profile' was removed from the non-registered user menu because it is yet another feature that is not available to them.

The other grocery list generator related issue identified was there being no editing capability on the page. This is addressed by a deletion capability being added to the right side of the grocery list listed ingredients. This design changes was made because a user might already have a particular ingredient included in the recipe therefore they do not need to go out and buy it, so by being able to delete the ingredient they will be less likely to buy that ingredient when they go to the store and forget that they have it at home. An ingredient amount adjuster was not included as a design change because this web app is geared towards college-aged and slightly older individuals, therefore they should be able to recognize that if the grocery list calls for four eggs and they have one at home then they need three more. Also, the amounts on the grocery list are controlled by the serving size adjuster on each recipe page so the user should not be messing around with the recipe ingredient proportions.

Going along with the newly added deletion capability a delete confirmation dialog box was also needed. Confirming that a user wants to delete a particular ingredient is not exactly necessary but it prevents them from accidentally deleting an ingredient and thus messing up the entire recipe since they would not have the ingredients needed. It is also a way to provide the user with feedback letting them know that their actions are being registered by the system.

Search Screen Design Change

There was only one change made to address the fact that the search box label was too close to the search box itself and was repeatedly mistaken as button. The search box label was moved away from the search box itself and placed on top of the box. This makes the label be top aligned which provides for more horizontal space. Since Umami is a mobile web app the amount of horizontal space is very limited and should be conserved, so having the label be top aligned provides for more horizontal space on the small screen. This change also removed the users' confusion of the label being a button.

Recipe Pages Design Changes

The two issues identified on the recipe pages was the location of the rating scale on the page and the fact that there were many inconsistencies on the low-fidelity prototypes of the recipe pages. The inconsistencies issues is addressed by the design team deciding on a uniform layout that all of the recipe pages will be formatted as. This uniform layout was contributed to by a few of the other design changes that were made which in turn created the layout of the recipe pages. These contributing changes are the buttons and elements that were added and positioned, or moved to a specific spot on the page.

The Facebook and Google+ sharing buttons are positioned at the bottom of the page. Their presence in the web app will allow for more exposure of the app when users share their Umami recipes on their other social media, and therefore enables more social network interaction which leads to a larger audience base. The 'Save Recipe' button was also added at the bottom of the page. This connects the different features of the web app because now a registered user is able to save a particular recipe to their user profile. Before this design change a registered user was had a spot for saved recipes but no way to actually save them. Having the username of the user who posts the recipe mainly gives credit to the user for creating and uploading the recipe. Placing under the serving size adjuster puts it in a rather visible spot for other users to see. By all three of these elements having their own specific spot on the page then the recipe pages naturally become more uniform and consistent.

The location of the rating scale on the original low-fidelity designs violated a ratings pattern. It made sense in the low-fidelity design because it was paired with the reviews features, but now there is no review feature. The review, or otherwise known as commenting, feature was removed in an attempt to eradicate the possibility of internet trolls getting onto the site and posting horrible comments on users' recipes. It is also reducing the impact that they could possibly have on other users' overall experience with the web app. Since the ratings and reviews feature lost the reviews part of the feature, it lead to the ratings part becoming a feature all on its own. It was changed to a star rating scale where users are able to rate the recipe as a whole. This part of the feature was left as a part of web app because the design team still wanted a way for other users see how good or bad a recipe based on others' experience even though there was no longer recipe reviews. The rating scale was positioned just beneath the picture and approximate duration times which means

that it follows the rating design pattern. It is now also easier for users to find and like the buttons described earlier it adds to the amount of fixed elements on the page.

User Profile Design Changes

The design changes made on the user profile screen do not address any particular issues but instead happened in order to clean up the overall web app a little and make it simpler for the user to use since there are already so many features of Umami. Firstly, the ‘My Grocery List’ option button was removed simply because of the fact that ‘Grocery List’ was moved to the registered user main menu, and the feature does not need to be in more than one spot on the web app.

Second, the ‘Meal Planner’ option button was removed in an attempt to make the system even simpler for users. It was also determined that even though the meal planner was a nice idea and feature, it did not really contribute to the main purpose of Umami.

Third, both the notifications and messages buttons were removed from the user profiles. This buttons, like the meal planner, were determined to be good features but not really be necessary for the system. While considering all of the recommendations made there were two choices that could be made in related to these buttons: even more buttons could be added to the recipe pages or they could just be removed. The design team chose to remove them because there is already so much functionality happening on the recipe pages that adding more buttons would just make it unnecessarily cluttered.

The last design change made in relation to the user profile pages deals with the remaining option buttons. On the low-fidelity designs there were very small pictures or designs on each option button and those pictures were removed in the high-fidelity designs. They were removed to again make the visual of the system simpler. Now, they also match with the other buttons throughout Umami so there is even more consistency in the different pages.

Umami Header Design Change

The change here is another one that was made to better the web app in general, not to address any issue specifically. Originally the Umami logo was the word umami with a lotus type flower behind the “i”. Having the logo like this could be seen as Umami being a “girly” web app even though it is for any gender. Since it is a web app for everyone, the flower

was removed but the color remained a lighter purple in order to appeal to both men and women. Since more people would find it appealing then that means more of the target audience users are most likely being reached which means more users on the Umami web app.

High-Fidelity Designs

These high-fidelity designs are much more detailed than the low-fidelity ones. High-fidelity designs and prototypes are generally used near the end of the development process. Everything completed up to this point has led to these final designs of the Umami mobile web app. These designs are based off the original designs but incorporate the recommendations and changes that were discovered through evaluations and conducting a usability test. The high-fidelity Umami mobile web app designs show the overall system consisting of less features making it more simple than the earlier designs, and a better flow happening while a user is going from screen to screen. The Umami high-fidelity designs can be found in Appendix D.

Appendix A

Umami Personas with Interviews and Observations

Umami Personas with Interviews and Observations

These are the two complete and fully detailed personas created for the Umami mobile web app. The female persona, Shannon Masters, is a 22 years old senior at the College at Brockport in the School of Business. Besides going to school she also works 20 hours a week part-time at an on-campus job. She cooks at least once a day with an intermediate skill level. The male persona, John Deer, is a 20 year old Criminal Justice student at SUNY Albany who also works to help pay for school. He has limited cooking knowledge but can follow instructions and normally cooks something boxed or frozen once a day.

These personas are based off of interviews conducted by the members of The Dingoes with real people. They are also based off of observations team members had of real people using existing cooking/recipe sites.

Female Persona – Shannon Masters

<p>Photo:</p>	
<p>Name:</p>	<p>Shannon Masters</p>
<p>Age:</p>	<p>22</p>
<p>Personal Details:</p>	<ul style="list-style-type: none"> • Female • In a Relationship <ul style="list-style-type: none"> ○ Boyfriend likes home-cooked meals • Family of five, Oldest sibling and parents are still together • Business Administration undergraduate student at The College at Brockport SUNY <ul style="list-style-type: none"> ○ Full-time student ○ Senior • From Brockport, NY • Lives Off-Campus with two roommates
<p>Work Details:</p>	<ul style="list-style-type: none"> • Works On-Campus • IT Help Desk • Part-time (20 hours) • Prioritizes and assists with technical issues brought up by students and professors
<p>Aspirations:</p>	<p>Become a successful woman in the professional field and have a high paying job</p>
<p>Summary of Shannon:</p>	<p>Shannon is a full-time student business student. She lives with her two roommates in a house near campus and works part-time at the IT Help Desk on-campus. Shannon eats both on-campus and off. She cooks with a intermediate skill-level and cooks at least once a day. Even though she does not cook a lot, her boyfriend likes when she cooks for him even if it is not super great. Her favorite food is pasta and she is trying to eat healthier by working more fruits and veggies into her meals. Shannon usually only cooks food for herself</p>

	but occasionally makes meals for her roommates. She also cooks for her family of five when she visits home.
What is Important to her:	<ul style="list-style-type: none"> • Spending time with the people she cares about (family and friends) • Being able to manage her time well • Doing well in life/Being able to provide for herself
Goals:	<ul style="list-style-type: none"> • To graduate college with a good GPA • To get a good job after college • To do everything she does to the best of her ability • To eat a little healthier and be able to cook for herself
Concerns:	<ul style="list-style-type: none"> • Not living up to her full potential • Having to pay back loans after graduation
Likes/Dislikes:	<p>Likes:</p> <ul style="list-style-type: none"> • Animals • Outdoor Activities (hiking, snowboarding, etc.) • Music <p>Dislikes:</p> <ul style="list-style-type: none"> • Ads on websites • People talking extensively talking about their families online
Knowledge/Skills/Abilities:	<ul style="list-style-type: none"> • Has an above average technological literacy • Mainly uses mobile smartphone and laptop • Has some knowledge and understanding of cooking terms and tips/tricks • Is able to follow a recipe
Market size/Influence:	<p>Strong influence</p> <ul style="list-style-type: none"> • Within primary target audience <ul style="list-style-type: none"> ○ Four years above youngest target age and four years below oldest target age ○ College student and young professional • Cooks but does not have an advanced skill-set or knowledge base

Male Persona – John Deer

<p>Photo:</p>	
<p>Name:</p>	<p>John Deer</p>
<p>Age:</p>	<p>20</p>
<p>Personal Details:</p>	<p>John is a college student who lives with two roommates off campus at SUNY Albany. He works at the local grocery store to help pay for school. He likes to hunt and fish and hike in his free time.</p>
<p>Aspirations:</p>	<p>John wants to be a conservation officer in Virginia after graduation. He wants to be married and have two kids. His house will be in the country with two dogs and nice truck.</p>
<p>Summary of Shannon:</p>	<p>John is a 20 year old Business Administration major in his third year of college. John enjoys playing videos, running, biking, and hanging out with friends. He recently started dating a girl from Rensselaer Polytechnic Institute. He uses a smartphone, but has few apps. The apps he uses most often are those necessary for school, such as Desmos graphing calculator.</p>
<p>What is Important to him:</p>	<p>What’s important to John is the relationships with his family and friends. He wants to enjoy life and have a memorable time at college. Reliability is important to John in the things that he uses and owns. Even though he owns and laptop and smartphone he does not care for own things just for status symbol.</p>
<p>Goals:</p>	<p>In the short term his goals are to get a 3.5 GPA in his current semester at college. To be able to cook fancier dinners for his girlfriend, such as filet mignon. To make enough money at the grocery store before graduation to afford a down payment on a truck.</p>
<p>Concerns:</p>	<p>John’s main concerns in life are about making money, getting good grades, spending time with his girlfriend, and finding a job after graduation. John is concerned about the health of the food he eats, but due to lack of time, he usually just eats quick and easy just as</p>

	macaroni and cheese. He is concerned about his family history of heart disease and wants to be able to find recipes that are quick and easy to make, but also healthy.
Likes/Dislikes:	I likes websites that are easy to use, and navigate. He dislikes sites that lots of words he needs to scroll sideways and up and down, making it difficult to find what he was looking for.
Recipe App:	The market share of people like John is very large. Our site is aimed at college age people with limited cooing experience he fits the bill perfectly. I would say that total people like john are 70% of the market share when it comes to our site. There are also people who are a little older than john who don't know how to cook very much but want a good site to learn and find good tasting recipes.
Knowledge/Skills/Abilities:	John's knowledge of cooking is very small and limited. He tends to cook one meal a day and it is often quick and easy foods such as macaroni and cheese, spaghetti. I can follow instructions and am open to learning how to cook more complex meals. I do not know a lot of cooking techniques and need them explained to me if I am to do them correctly.
Market size/Influence:	The market share of people like John is very large. Our site is aimed at college age people with limited cooing experience he fits the bill perfectly. I would say that total people like john are 70% of the market share when it comes to our site. There are also people who are a little older than john who don't know how to cook very much but want a good site to learn and find good tasting recipes.

Interviews and Observations

Team Member 1

Participant 1 Interview

1. *How old are you?*
20
2. *Where are you from or currently live?*
Brockport, NY
3. *Where do/did you attend college? Do/did you live on or off campus?*
The College at Brockport SUNY, Live on-campus
4. *What is your degree?*
Business Administration with a minor in Accounting
5. *What is your occupation(s), and can you describe your responsibilities?*
Works in Student Accounts and Accounting office on campus
Responsibilities include: office work, making copies, sending out letters, etc.
(administrative work)
6. *Tell me about yourself such as family, hobbies, interests, and things you find important.*
Likes nature and going on walks and hikes
7. *What are your goals, aspirations, and concerns?*
Wants to be able to get a good job after graduating
Finishing college with a good GPA
8. *What kind of devices do you mainly use?*
Cell phone (Android)
9. *Do you cook? Yes*
 - a. *If so, how often?*
Once or twice a week
 - b. *If not, what is stopping you from cooking? N/A*
10. *What type of food do you like to eat and/or cook?*
Mainly pasta
Sometimes chicken and mac & cheese when they go home
11. *Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?*
Trying to eat more veggies
12. *How many/who do you cook for usually?*
Self usually
13. *What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?*
Intermediate because they can cook but they are no chef
14. *Do you currently use any cooking or recipe apps/websites?*
They use a website when they are cooking something new, and uses any recipe they find good
 - a. *If so, what do you think are the best and the worst features/capabilities of the app/website?*

Some don't have pictures of what they are cooking, it doesn't allow them to know what the end product is supposed to look like

- b. If not, why and would you ever consider using one?* N/A
- 15. What kind of feature(s) would you want or like to see in a recipe app?**
Pictures, comments of people who have used that particular recipe, an estimate of how much the materials will cost
- 16. What do you find most annoying about finding and following recipes online?**
Nothing really
- 17. Would you use a meal planner to pre-plan your meals for the upcoming week?**
Maybe. Usage would depend on how easy and fast it is
- 18. How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?**
Not much
- a. Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful?* Maybe a cheat sheet
- 19. What do you like to see on recipe pages? What do you not like to see?**
Directions, ingredients, pictures, estimated costs
- 20. How simple or basic do you think recipes should be in order to easily follow them?**
Not too long of a prep time. No crazy cooking terms. Overall pretty basic with a few more advanced recipes
- 21. How do you like to navigate through mobile apps?**
Usually just scrolling. Maybe filter things depending on how many recipes or findings there are
- 22. How technologically literate would you consider yourself to be?**
Not very techy

Participant 2 Interview

- 1. How old are you?**
21
- 2. Where are you from or currently live?**
From Long Island, but now they live in Spencerport, NY
- 3. Where do/did you attend college? Do/did you live on or off campus?**
The College at Brockport SUNY, Live off-campus
- 4. What is your degree?**
Exercise Science undergraduate
- 5. What is your occupation(s), and can you describe your responsibilities?**
Is a student
- 6. Tell me about yourself such as family, hobbies, interests, and things you find important.**
Family: mom, dad, and younger brother
Enjoys doing things outdoors, physical activity, and wants to lead a fun and healthy life
- 7. What are your goals, aspirations, and concerns?**
Find a job in the health and wellness field

8. *What kind of devices do you mainly use?*
Laptop and smartphone
9. *Do you cook? Yes*
 - a. *If so, how often?*
At least once a day
 - b. *If not, what is stopping you from cooking? N/A*
10. *What type of food do you like to eat and/or cook?*
They eat a wide variety of foods. They are always looking for new recipes to try
11. *Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?*
No special diets
12. *How many/who do you cook for usually?*
Self usually, occasionally for 2-4 people
13. *What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?*
Intermediate
14. *Do you currently use any cooking or recipe apps/websites?*
Tasty channel online and cook books that they own
 - a. *If so, what do you think are the best and the worst features/capabilities of the app/website? N/A*
 - b. *If not, why and would you ever consider using one? N/A*
15. *What kind of feature(s) would you want or like to see in a recipe app?*
Categorization by the type of meat or vegetarian, the time it takes, the complexity of the recipes, and the low calories
16. *What do you find most annoying about finding and following recipes online?*
Not much annoys them about online recipes
17. *Would you use a meal planner to pre-plan your meals for the upcoming week?*
They do not currently use a meal planner, but would be open to trying it
18. *How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?*
They have a pretty good knowledge of cooking terms
 - a. *Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful? They think a cooking terms dictionary would be helpful*
19. *What do you like to see on recipe pages? What do you not like to see?*
Calories, prep time, cook time, servings
20. *How simple or basic do you think recipes should be in order to easily follow them?*
Label and easy to complex, more or less ingredients
21. *How do you like to navigate through mobile apps?*
No preference
22. *How technologically literate would you consider yourself to be?*
Pretty good with technology but not the best

Participant 3 Interview

1. ***How old are you?***
21
2. ***Where are you from or currently live?***
Orchard Park, NY
3. ***Where do/did you attend college? Do/did you live on or off campus?***
The College at Brockport SUNY, Live off-campus in a house
4. ***What is your degree?***
Computer Information Systems with minors in Business Administration and Criminal Justice
5. ***What is your occupation(s), and can you describe your responsibilities?***
IT Help Desk employee
Responsibilities include: answering phone calls, helping professors and students with technical issues
6. ***Tell me about yourself such as family, hobbies, interests, and things you find important.***
Family: two siblings, parents are still together, and has a Saint Bernard
Hobbies: snowboarding and figure skating
Interests: they love dogs and old people
Important things: family and friends
7. ***What are your goals, aspirations, and concerns?***
Goals: wants to move out West and be a housewife
Aspirations: being a rich housewife
Concerns: going into World War III and having any one of the presidential candidates being selected as the next president
8. ***What kind of devices do you mainly use?***
iPhone
9. ***Do you cook? Yes***
 - a. ***If so, how often?***
Every day, probably at least once
 - b. ***If not, what is stopping you from cooking? N/A***
10. ***What type of food do you like to eat and/or cook?***
Healthy foods (fruits, veggies salads, etc.)
11. ***Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?***
Tries low-carb, low-calorie, and gluten free (for their sister who has to be gluten free)
12. ***How many/who do you cook for usually?***
Self. Sometimes their 2 roommates, and their family of 5 whenever they go home
13. ***What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?***
Intermediate because they can follow recipes
14. ***Do you currently use any cooking or recipe apps/websites? No***
 - a. ***If so, what do you think are the best and the worst features/capabilities of the app/website? N/A***
 - b. ***If not, why and would you ever consider using one?***
Because there is no storage on their phone. They would consider using one
15. ***What kind of feature(s) would you want or like to see in a recipe app?***

Pictures, being able to upload your own recipes, an edit or commenting feature on the actual recipes (different from the commenting section at the bottom)

16. ***What do you find most annoying about finding and following recipes online?***
How small the screen is in the sense of mobile phones which causes the text to be small
17. ***Would you use a meal planner to pre-plan your meals for the upcoming week?***
No
18. ***How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?***
Pretty knowledgeable
 - a. ***Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful?*** Yes
19. ***What do you like to see on recipe pages? What do you not like to see?***
Like to see: strictly just the recipe
Not like to see: introductions to the recipes at the beginning of the recipe page (people talking about families, etc.). Just finds them unnecessary
20. ***How simple or basic do you think recipes should be in order to easily follow them?***
Depends on what recipe is being made
21. ***How do you like to navigate through mobile apps?***
Search buttons and home buttons
22. ***How technologically literate would you consider yourself to be?***
Pretty literate, above average

Participant 4 Interview

1. ***How old are you?***
19, almost 20
2. ***Where are you from or currently live?***
Caledonia, NY
3. ***Where do/did you attend college? Do/did you live on or off campus?***
The College at Brockport SUNY, Live off-campus
4. ***What is your degree?***
Computer Information Systems
5. ***What is your occupation(s), and can you describe your responsibilities?***
McDonald's Crew Member
Responsibilities include: preparing food, taking orders, and customer service
6. ***Tell me about yourself such as family, hobbies, interests, and things you find important.***
They are Asian
Family: two parents and a cat
Hobbies: playing tennis and singing
Interests: music (they are in an orchestra), fashion, and vaping
Important things: their cat and making sure they do not kill it
7. ***What are your goals, aspirations, and concerns?***
Goals: be able to survive on their own

Aspirations: be a successful woman in the technology world

Concerns: failing all of their classes this semester

8. **What kind of devices do you mainly use?**
Cell phone (Android), Xbox 360
9. **Do you cook? Yes**
 - a. **If so, how often?**
Once or twice a week. They are just too lazy on all the other days
 - b. **If not, what is stopping you from cooking? N/A**
10. **What type of food do you like to eat and/or cook?**
Pasta, Chinese, and fruit
11. **Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?**
Low-sugar because they are pre-diabetic
12. **How many/who do you cook for usually?**
2-3 people
13. **What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?**
Intermediate because they do not really go out of their comfort zone, but they can make more than Ramen Noodles
14. **Do you currently use any cooking or recipe apps/websites?**
Sort of. They use Pinterest
 - a. **If so, what do you think are the best and the worst features/capabilities of the app/website?**
Best: having the step-by-step pictures on some of the pins
Worst: pins just having the recipe instructions followed by a picture of the final product
 - b. **If not, why and would you ever consider using one? N/A**
15. **What kind of feature(s) would you want or like to see in a recipe app?**
Videos, recipe suggestions (described as being similar to Amazon's 'People Who Have Bought This Product Have Also Liked These...'), feedback options and preferences (having the app gradually learn the user's habits/preferences and be able to adapt and predict recipes that the user sees)
16. **What do you find most annoying about finding and following recipes online?**
When there are no measurements with the recipes
17. **Would you use a meal planner to pre-plan your meals for the upcoming week?**
Yes because it would probably save time, but would really only use it during summer and winter breaks
18. **How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?**
They know 'puree' and that pinch is an actual measurement
 - a. **Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful? Yes, they think it would be cool**
19. **What do you like to see on recipe pages? What do you not like to see?**
Like to see: They are very visual, so they like seeing lots of pictures
Not like to see: people's reviews

- 20. How simple or basic do you think recipes should be in order to easily follow them?**
Fairly easy but not too simple. It needs to have some pizzazz and just not be dull
- 21. How do you like to navigate through mobile apps?**
Things organized in alphabetical order and menus (mainly slide menus)
- 22. How technologically literate would you consider yourself to be?**
Good on the end user aspect of technology

Participant 5 Interview

- 1. How old are you?**
22
- 2. Where are you from or currently live?**
Albany, NY
- 3. Where do/did you attend college? Do/did you live on or off campus?**
The College at Brockport SUNY, Live on-campus
- 4. What is your degree?**
Computer Information Systems with a minor in Business Administration
- 5. What is your occupation(s), and can you describe your responsibilities?**
IT Technician
Responsibilities include: prioritizing technical problems that arise in their organization
- 6. Tell me about yourself such as family, hobbies, interests, and things you find important.**
Family: is one of four children
Hobbies: programming, snowboarding, and blacksmithing
Interests: artificial intelligence, philosophy, and physics
Important things: family, friends, and not having a stressful life
- 7. What are your goals, aspirations, and concerns?**
Goals & Aspirations: to do everything they want to do, stay out of debt, and has eight “get rich” plans
Concerns: not living up to where they think they should be in life
- 8. What kind of devices do you mainly use?**
Cell phone, desktop, laptop
- 9. Do you cook? Yes**
- a. If so, how often?**
At least once a day
- b. If not, what is stopping you from cooking? N/A**
- 10. What type of food do you like to eat and/or cook?**
Foreign foods. They like trying new things
- 11. Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?**
No
- 12. How many/who do you cook for usually?**
Self and their family of 6. Sometimes for their friends

- 13. What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?**
Intermediate because there is always more to learn and they can follow directions
- 14. Do you currently use any cooking or recipe apps/websites?**
Sort of. They use Reddit
- a. If so, what do you think are the best and the worst features/capabilities of the app/website?**
Best: wide user base to provide inputs/ large variety of other users
Worst: sometimes Reddit gets cluttered and cannot filter things out
- b. If not, why and would you ever consider using one? N/A**
- 15. What kind of feature(s) would you want or like to see in a recipe app?**
An advanced search and previews of recipes (a picture of what the recipe is supposed to look like)
- 16. What do you find most annoying about finding and following recipes online?**
Nothing really
- 17. Would you use a meal planner to pre-plan your meals for the upcoming week?**
No. They are not very good at planning
- 18. How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?**
Above average knowledgeable
- a. Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful? Yes**
- 19. What do you like to see on recipe pages? What do you not like to see?**
Like to see: all of the relevant information necessary to get the job done
Not like to see: too many ads
- 20. How simple or basic do you think recipes should be in order to easily follow them?**
As simple as possible relative to the food that is being made and should be specific
- 21. How do you like to navigate through mobile apps?**
Vertical scroll and categories (drop down menus)
- 22. How technologically literate would you consider yourself to be?**
Pretty literate

Participant 6 Interview

- 1. How old are you?**
20
- 2. Where are you from or currently live?**
Attica, NY
- 3. Where do/did you attend college? Do/did you live on or off campus?**
The College at Brockport SUNY, Live on-campus
- 4. What is your degree?**
Communications with a concentration in Interpersonal and Organizational and a minor Women and Gender Studies
- 5. What is your occupation(s), and can you describe your responsibilities?**
Union Manager

- Responsibilities include: overseeing building operations and union staff
6. ***Tell me about yourself such as family, hobbies, interests, and things you find important.***
Family: part of a family of five with divorced parents
Important things: education and personal development
Enjoys outdoor activities and likes going to school (they are going to graduate school next year)
 7. ***What are your goals, aspirations, and concerns?***
Goals: going to graduate school
Aspirations: to work at a college
Concerns: the investment that comes with getting their education
 8. ***What kind of devices do you mainly use?***
Cell phone (iPhone) and HP laptop
 9. ***Do you cook?*** No
 - a. ***If so, how often?*** N/A
 - b. ***If not, what is stopping you from cooking?***
Because they have miserably failed at cooking in the past and they are just not good at it
 10. ***What type of food do you like to eat and/or cook?***
Carb-based foods such as pasta, chicken, and turkey (i.e. chicken alfredo). They do not like red meats
 11. ***Are you on any special diets (i.e. vegan, low-carb, gluten free, etc.)? If so, which ones?***
No, they eat whatever they want
 12. ***How many/who do you cook for usually?***
If they were to cook it would probably only be for about 3 people
 13. ***What skill level would you consider your cooking skills to be at (beginner, intermediate, advanced, or expert), and why?***
Beginner because they do not have much experience
 14. ***Do you currently use any cooking or recipe apps/websites?***
When they do actual look something up they use Recipes.com or something of the sort
 - a. ***If so, what do you think are the best and the worst features/capabilities of the app/website?***
Best: recipes indicate how many portions it will make/feed
Worst: when a website assumes a user knows how to do something, and when the user does not know they then have to go look it up elsewhere
 - b. ***If not, why and would you ever consider using one?*** N/A
 15. ***What kind of feature(s) would you want or like to see in a recipe app?***
Clickable terms
 16. ***What do you find most annoying about finding and following recipes online?***
Ads
 17. ***Would you use a meal planner to pre-plan your meals for the upcoming week?***
Yeah. They think it is a nice idea and would probably stick to it if the recipes are interesting

18. How knowledgeable are you about various cooking terms used in recipes and cooking tips/tricks?

Not very knowledgeable

- a. **Would you consider a cooking terms dictionary and/or cooking tips/cheat sheet within a recipe app to be useful?** Yes

19. What do you like to see on recipe pages? What do you not like to see?

Like to see: suggestions and an ingredient list followed by step-by-step instructions

Not like to see: commentary within the actual recipe instructions from the person who posted the recipe

20. How simple or basic do you think recipes should be in order to easily follow them?

Basic and very minimal

21. How do you like to navigate through mobile apps?

Back buttons with menus

22. How technologically literate would you consider yourself to be?

Above average literacy

The two representative tasks chosen for the observations were searching for recipe and creating a profile. The choice of recipe site and what recipe to look up was left up to the participant.

Participant 7 Observation

Participant 7 chose to use their laptop as a medium for this observation. First, Participant 7 opens a new tab in their browser and types foodnetwork.com into the URL bar. When the homepage finished loading, Participant 7 scrolled up and down through the homepage glancing at the pictures and making comments about what looks good and what they want to try.

Recipe Search Task:

From the homepage Participant 7 quickly finds the search bar in the center right side of the screen near the top of the page. They start typing 'mac' into the search bar and a list of possible options appears beneath the search bar. The first option that appeared was macaroni and cheese which happened to be the type of recipe Participant 7 wanted, so they clicked on the words 'macaroni and cheese' which started the search and produced a list of results. Participant 7 started scrolling through the search results right away and skimming each recipe. After a few seconds Participant 7 found a recipe posted by a cook they like and clicked directly on the recipe name which brought up the recipe page. Right away Participant 7 starts scrolling through the recipe page to see what it looks like, and they kept getting distracted so to say by the pictures of other recipes on the side of the screen.

After looking at the macaroni and cheese recipe they found, Participant 7 went to the top of the page and clicked on the 'Recipes' tab in the main ribbon to look at other possible recipe options. The tab opened a drop down menu consisting of various category titles that could be clicked on. Participant 7 clicked a category and then started clicking around the page seeing what things did. They explained to me that they were testing out the navigation of the site.

Create A Profile Task:

Participant 7 rather quickly located the log in button in the same proximity as the search bar. They clicked on it and skimmed the log in pop-up box that appeared in order to find some sort of sign-up or create account button. They could not find it at first so they closed the log in pop-up box and skimmed the top of the main website page to see if they missed the sign-up button there. When they did not see the button they were looking for on the main page, they clicked the log in button again to search the pop-up box again. This time they found the sign-up button in small text at the bottom of the pop-up box and they clicked it which brought them to the sign-up page. At this point Participant 7 filled in the required sign-up information and clicked the 'Sign-up' button at the bottom of the form. This automatically logged them in and enabled various features on the site. The sign-up process was rather quick and only took about 45 seconds to complete. Right away Participant 7 notices that they can favorite and save the macaroni and cheese recipe they found earlier, so they favorited the recipe. Participant 7 starts clicking around on the site again, this time seeing what other features were now available to them because they created an account. While clicking around Participant 7 found that foodnetwork.com has a mobile version of the site. This ended the observation of Participant 7.

Participant 8 Observation

Participant 8 also chose to use their laptop for the observation. They open a new browser page and search 'allrecipes' in the google search bar and hit enter. They clicked on the first search result that appear which was allrecipes.com and was the recipe site they were looking for. Participant 8 was brought to the allrecipes.com homepage and waited for further instructions from me. Participant 8 has had some experience with the recipe website they chose.

Recipe Search Task:

Participant 8 located the site's search bar near the top of the screen on the right side. They typed 'vegan cookies' into the search bar and then pressed the search button. The search results appeared and gave previews of each recipe with a large picture and the recipe name. Participant 8 scrolled down the page and skimmed the search results by looking at the pictures and names. They found a recipe that interested them near the beginning of the search results and click directly on the recipe name which was 'Vegan Mexica Wedding Cookies'. After clicking on the recipe name the recipe page was brought up and Participant 8 scrolled up and down the page looking at the information.

Create A Profile Task:

Participant 8 went right to the right side of the screen around the top of the page and clicked on this small circular icon which was located in the same area as the search bar. A log in pop-up box appeared and provided different log in options (Facebook, Google Plus, and site log in). First, Participant 8 clicked on the 'Log in with Facebook' button,

entered their Facebook log in credentials, and clicked the log in button. For the purpose of this observation Participant 8 was directed to sign-up for the site with their email which was another log in option. Participant 8 clicked on the large 'Sign-up' button at the bottom of the log in pop-up box and was brought to another page. Participant 8 entered the required information into the form fields and clicked the 'Finish' button at the bottom of the form.

There was a problem with the sign-up and Participant 8 assumed it was the password they used even though that was not the problem indicated. Actually no specific problem was indicated in any way by the website, it only reloaded the sign-up page and displayed a rather vague error message at the top of the form. After retyping the password a couple of times and getting the same error message, Participant 8 closely read the sentence of instructions for choosing a password, and tried to sign-up a couple more times by entering different passwords and repeatedly clicking the 'Finish' button at the bottom. Participant 8 went to the URL bar at the top of the browser window and clicked the refresh icon to the right in order to try to resolve the problem. Once the sign-up page was refreshed, they tried to enter a password again and click the 'Finish' button but still got the same error message.

Participant 8 was going to give up on signing-up for allrecipes.com with their email and asked if we just wanted them to log in with Facebook again. Before having them log in with Facebook I looked over the form one last time and noticed the words 'Display Name' in light grey at the beginning of the form. I pointed this out to Participant 8 who then clicked on 'Display Name' and revealed another form field that they were missing. Participant 8 entered a display name, scrolled to the bottom of the form, and click the 'Finish' button again. This time their sign-up was registered and their account created. Before getting back into the main website, there appeared a last step which displayed other profiles that could be followed. Participant 8 clicked the follow button located next the corresponding profile pictures. They made mention that it looked like Twitter and that is what they thought it was at first. Participant 8 scrolled down the page a little to find another 'Finish' button and they clicked it. They were brought back to the main allrecipes.com homepage and was presented with another pop-up box asking for feedback from them. Participant 8 decided to opt out of giving feedback and clicked the 'No thank you' button on the bottom left of this pop-up box. This sign-up process took at least 3-5 minutes to complete. This concluded the observation of Participant 8.

Team Member 2

User 1

1. What is your age and gender?
21 year old male

2. What is your highest level of education?
Currently in college at SUNY Brockport.
3. How do you currently look up recipes or cooking instructions (web,book,other)?
User 1 mainly uses google to search for a recipe and clicks on the first one that pops up. If he does not like the recipe he goes back to google and clicks down the page till he finds one that he wants to use.
4. What is your level of experience in cooking and how often do you cook?
User 1 cooks everyday usually two meals. He feels very comfortable cooking and has a lot of experience cooking.
5. What foods or type of food do you commonly make?
Most of user one meals consist of a protein chicken or fish with rice or a vegetable. Most of the fish is baked and the chicken grilled. The vegetable is a salad or cooked mushrooms or spinach. User one usually does not cook breakfast and when he does it is a simple affair with not much cooking.
6. How big of a factor are pictures of the recipe in your recipe selection?
The biggest factor in user ones recipe selection is what he already has on hand. Recipes that require a lot of one time use ingredients are often passed over. The user will go with a second choice recipe if it means he can use the ingredients he has. He has many cooking basics so this is not an issue most of the time.
7. Do you feel like you are comfortable with a wide variety of cooking techniques?
User 1 feels comfortable with a wide variety of cooking techniques but not a lot of baking techniques. Any new technique can be learned by user 1 if properly explained and demonstrated.
8. Does a difficult recipe turn you away from a site or will you attempt to complete it?
No unless it is complicated and time consuming and my time is short.
9. What is the most important feature in a recipe website to you?
Having the recipe be quick and easy to find. If it takes too long the user will leave and go to another site in search of the recipe.
10. What is your biggest pet peeve with your current method of recipe look up?
When he clicks on the link from google and it takes him to the sites home page not the recipe. He does not want to search google and then search the site.

11. If you could sort recipes one way only what would it be?
By main ingredient like the protein or the main vegetable.

12. How many people do you cook for typically?
One.

13. Do you buy your own groceries?
Yes user 1 does.

14. What is the average time you spend cooking one meal?
40 min including prep time and cook time.

15. Are you likely to contribute recipes to a food site?
No user one is not likely to contribute to a site.

User 2

1. What is your age and gender?

21 Female

2. What is your highest level of education?

Fourth year of college.

3. How do you currently look up recipes or cooking instructions (web,book,other)?

Websites that I visit frequently, pinterest, or a google.

4. What is your level of experience in cooking and how often do you cook?

Medium to high level of experience in cooking. I would say I cook almost every day or at least six days per week.

5. What foods or type of food do you commonly make?

I make mostly make dessert recipes or dinner recipes that can be made in less than one hour.

6. How big of a factor are pictures of the recipe in your recipe selection?

Very big deal, if there is no picture I will not use the recipe.

7. Do you feel like you are comfortable with a wide variety of cooking techniques?

Yes, I feel comfortable with a variety of cooking techniques.

8. Does a difficult recipe turn you away from a site or will you attempt to complete it?

A difficult recipe does not turn me away as long as there are detailed instructions as well as tips. I also like to read reviews from others who made the recipe in order to learn what they altered or changed.

9. What is the most important feature in a recipe website to you?

Organization of the recipes by specific categories.

10. What is your biggest pet peeve with your current method of recipe lookup?

The variety of formats from different websites.

11. If you could sort recipes one way only what would it be?

I would sort recipes by type of food such as cakes, cookies, pies, chicken, pork, beef, soups, etc.

12. How many people do you cook for typically?

One or Two

13. Do you buy your own groceries?

Yes she does

14. What is the average time you spend cooking one meal?

40 minutes

15. Are you likely to contribute recipes to a food site?

No

User 3

1. What is your age and gender?

23 year old male

2. What is your highest level of education?
Currently a student at SUNY Brockport
3. How do you currently look up recipes or cooking instructions (web,book,other)?
Online on his phone often from Facebook suggestions.
4. What is your level of experience in cooking and how often do you cook?
Beginner cook who cooks once a day.
5. What foods or type of food do you commonly make?
Meat and vegetables mainly chicken or steak
6. How big of a factor are pictures of the recipe in your recipe selection?
Amount of ingredients used the less the better. Less ingredients is similar and less he has to buy.
7. Do you feel like you are comfortable with a wide variety of cooking techniques?
No mainly uses the stove burner on a pan and cooks the same way every time.
8. Does a difficult recipe turn you away from a site or will you attempt to complete it?
It turns him away if it looks too hard and he will find a similar site.
9. What is the most important feature in a recipe website to you?
Quickness of response and usability
10. What is your biggest pet peeve with your current method of recipe look up?
Advertisements on the website and popups that block the recipe
11. If you could sort recipes one way only what would it be?
Main ingredients like proteins
12. How many people do you cook for typically?
One person himself

13. Do you buy your own groceries?

Yes he does

14. What is the average time you spend cooking one meal?

20 minutes

15. Are you likely to contribute recipes to a food site?

No he doesn't know many in the first place.

Task Observation

User 1 Task looking up a recipe online

User 1 first decided that he wanted a recipe for pork tenderloin. He went to his phone and opened google and types in pork tenderloin recipe. When the search results returned he glanced at them quickly and noticed number two and three are from food network. User 1 occasionally watches food network and that made him go to option two first. He clicked on option two and it opened a list of recipes on food network. This made him back out of it and then click on option three. This opened a recipe for herb rubbed pork tenderloin from food network that he decided to use.

User 2 looking at a recipe for cheesy biscuits

First the user looked at the picture and the rating of the recipe. She decided that it looked worth her time and then proceeded to look at the time it would take to cook the recipe in total including prep time. After that the user looked at the ingredients she would need to cook the recipe. She then compared the list to what she already had and made a list of things she would need to buy. Lastly she glanced at the directions to make sure she had all the equipment needed.

Team Member 3

Jane Doe 1:

1. Tell me about yourself.

Female, college student, freshman, works part time, in relationship.

2. What types of apps or sites do you use?

Pintrest, facebook

3. Do you cook for yourself, or anyone else?

Yes and yes

4. How do you accomplish this goal?

Goes by what the box instructions are

5. Would you use a cooking app or website?

yes

6. What types of devices do you use?

Droid, asus laptop

7. What are your hobbies or interests?

Radio station, marketing, netflix

8. Do you prefer apps or websites?

websites

9. What do you want in a recipe app?

One that wont crash very often, easy to use.

10. If you use an app like this already, which?

Pintrest, Trusper tips

11. How old are you?

19

12. Are you interested in communities on sites/apps like this?

yes

13. Would it be helpful if a site/app like this could plan your grocery runs?

Very helpful

14. What is your favorite type of cooking?

Simple recipes

15. How well do you know cooking terms?

Not super well.

Jane Doe 2

1. Tell me about yourself.

Female, 20, mother, its almost 2

2. What types of apps or sites do you use?

Facebook, snapchat, yikyak, youtube, spotify

3. Do you cook for yourself, or anyone else?

My child and i

4. How do you accomplish this goal?

Read directions on box

5. Would you use a cooking app or website?

no

6. What types of devices do you use?

Galaxy s4, ipod nano

7. What are your hobbies or interests?

Horseback riding

8. Do you prefer apps or websites?

apps

9. What do you want in a recipe app?

How long it takes to cook (search), contains food(search)

10. If you use an app like this already, which?

Google, all recipes

11. How old are you?

20

12. Are you interested in communities on sites/apps like this?

NOPE, or very simple profile, like rating and no comments!

13. Would it be helpful if a site/app like this could plan your grocery runs?

yes

14. What is your favorite type of cooking?

Italian, German

15. How well do you know cooking terms?

Not very well 3/10

John Doe 3

1. Tell me about yourself

Male, college student, single, CIS Student, lives alone.

2. What types of apps or sites do you use?

Facebook, various gaming apps

3. Do you cook for yourself, or anyone else?

Cooks for self

4. How do you accomplish this goal?

Read package instructions or go to food.com

5. Would you use a cooking app or website?

yes

6. What types of devices do you use?

Droid

7. What are your hobbies or interests?

Games, managing people, bowling

8. Do you prefer apps or websites?

Websites, easier to navigate

9. What do you want in a recipe app?

Rating and search system, step by step guides

10. If you use an app like this already, which?

Website, food.com

11. How old are you?

23

12. Are you interested in communities on sites/apps like this?

sure

13. Would it be helpful if a site/app like this could plan your grocery runs?

definitely

14. What is your favorite type of cooking?

Oriental

15. How well do you know cooking terms?

5/10

Witnessing Jane Doe 1 use Pintrest

- Subject was able too use web pages with general ease
- The website was well optimized for phone with vertical scrolling
- There was an estimated cook time, ingredients, and instructions
- Subject liked the pictures that were provided and the ease of using the website
- Looking for recipes was generally quite easy, but the search results page was a bit hectic to decipher where things were

Witnessing Jane Doe 2 use allrecipes

- Search page had pictures, ratings, and reviews on it
- Had portion size editing, ingredients needed, cooking time, suggested brands, and sales that are occurring near you for products you might need
- Ability to share the fact you made the food on many different social medias
- People are able to leave detailed reviews and ratings
- Subject was at ease using the site, everything was very clean cut and cute
- The loading bubble was a bowl with a mixing spoon stirring, great addition

Appendix B
Low-Fidelity Prototypes

Low-Fidelity Prototypes

These are the original paper prototypes. These are the Dingoes' low-fidelity prototypes that help visualize and test four their main features of Umami. The four supported tasks that these prototypes were designed for are: the searching feature, defining an embedded dictionary term, the grocery list generator, and the serving size adjuster. These prototypes were then evaluated by actual users in through a usability test and then again by the team members individually and then as a group. The paper prototypes are made out of index cards because they were relatively representative of the size of a smart phone which we were designing for. All of the Umami paper prototypes are labelled/numbered on the back of their index cards in the order in which they were used in the usability testing sessions.

Appendix C
Usability Test Documents

Usability Test Documents

These are all of the planning documents and logging sheets for the usability test conducted in class. This appendix consists of the four revised task scenarios that should have been used during the usability test, the script for the facilitator to read to the participants during the sessions, the overview and background sheet which briefly explains the test being conducted, and the logging sheet packets where all notes and observations about each individual session were recorded along with the participants' responses to the questionnaire questions.

Revised Search Feature Usability Task Scenario

You want to have something different than your usual cereal for breakfast. You are unsure about what you want to make, so you grab your phone and open up Umami. You know that you have eggs in your house, so you want to find an eggs benedict recipe.

Task: Search for eggs benedict

Revised Defining Embedded Dictionary Term Usability Task Scenario

You are looking at a recipe for Chilean sea bass. You are reading through the recipe page and find a word that you do not know, so you want to find the definition.

Task: Locate the embedded dictionary term and figure out definition

Revised Grocery List Generator Usability Task Scenario

You are planning on making a trip to the grocery store soon, so you are getting your shopping list reading. You know you have some recipes saved on Umami and want to know how much ingredients you need for those recipes. You log onto Umami and go to you grocery list generator. While there you see you need 2 lbs. of cocktail shrimp and you want to know why before buying all that shrimp.

Task: Locate the grocery list generator and determine why you need 2 lbs. of cocktail shrimp

Revised Serving Size Adjuster Usability Task Scenario

You made plans to have dinner with your and you are looking at a recipe for traditional Italian sausage spaghetti. You notice that the serving size is only enough for you, so you increase it to have enough for you and your friend. Then your friend calls and says they will not be able to make it, so you have to decrease the serving size for just you now because you still have to eat.

Task: Increase and decrease the serving size

All of the usability test documents are separately attached.

Appendix D
High-Fidelity Designs

High-Fidelity Designs

These are the final designs of the Umami mobile web app. They are based off the original designs but incorporate the recommendations and changes that were discovered through evaluations and conducting a usability test. There were 19 changes made to the low-fidelity prototypes designs to create the high-fidelity ones. The 19 changes that were made are: The addition of a registration screen; adding Facebook and Google+ log in/register options to the log in screen; creating two main navigation menus: one for guest and one for registered users; the removal of the 'My Grocery List' option on the user profile; the removal of the 'Meal Planner' option on the user profile; the removal of the notifications and messages buttons on the user profile; the pictures on the option buttons on the user profile were removed; the search box label was moved to be on top of the search box; the ratings and reviews feature was changed to just being a star rating scale; the star rating scale was moved towards the top of the recipe page to be underneath the recipe picture and approximate duration times; decided upon uniform layout of the recipe pages; the addition of Facebook and Google+ sharing buttons at the bottom of the recipe pages; the flower was removed from the logo; the addition of a delete capability on the grocery list listed ingredients; an delete confirmation dialog box was created for the grocery list; the addition of the 'Save Recipe' button at the bottom of the recipe pages; the addition of the username of the user who posts a recipe appearing on the corresponding recipe page underneath the serving size adjuster; error messages were created for the log in and registration screens; and only have the Umami header on the main screens of user profile, log in and register screens, and grocery list generator. The high-fidelity Umami mobile web app designs show the overall system consisting of less features making it more simple than the earlier designs, and a better flow happening while a user is going from screen to screen.

Log in/Register Screens

Umami

User Login

- of -

Guest User

Umami

Username:

Password:

Log In with:

Log In Google

New? Register Now!

Umami

Username:

Password:

Confirm Password

Email Address

Register!

Log in with Facebook

Umami

Continue as Tester?

Cancel **Okay**

Google

Umami

Log in with Google

- Remember me on this device
- Don't let Google use this info to personalize ads
- Personalized ads

Next **Done**

Log in/Register Error Messages

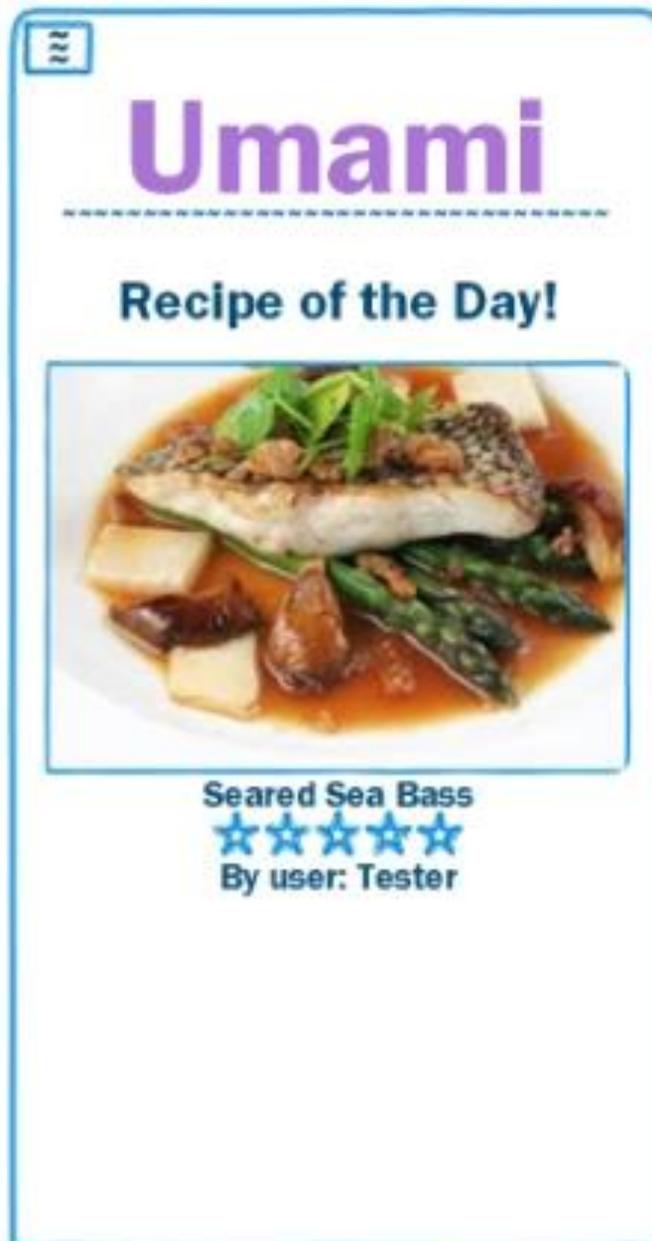
Error:
Incorrect
Username or
Password! 

Error: Username is
already taken! 

Error: Password
mismatch! 

Error: Email already
in use! 

Home Screen





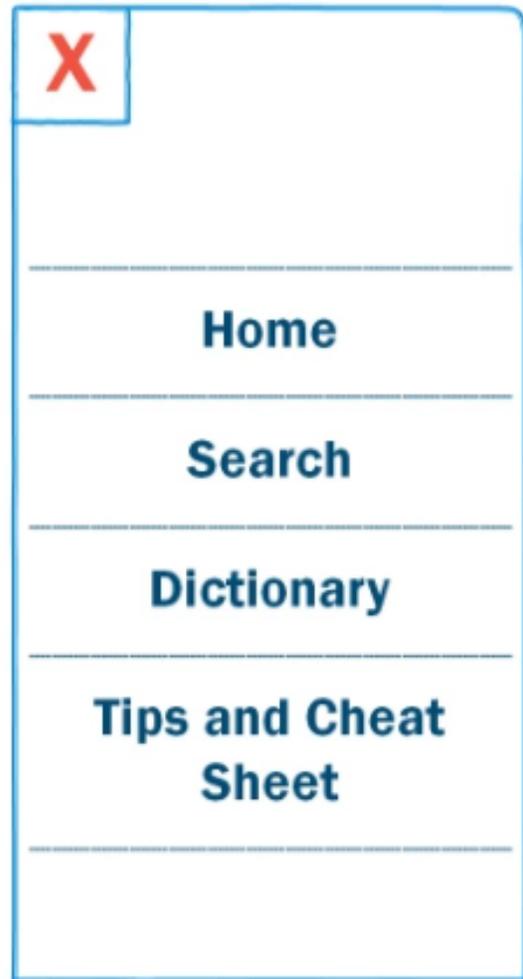
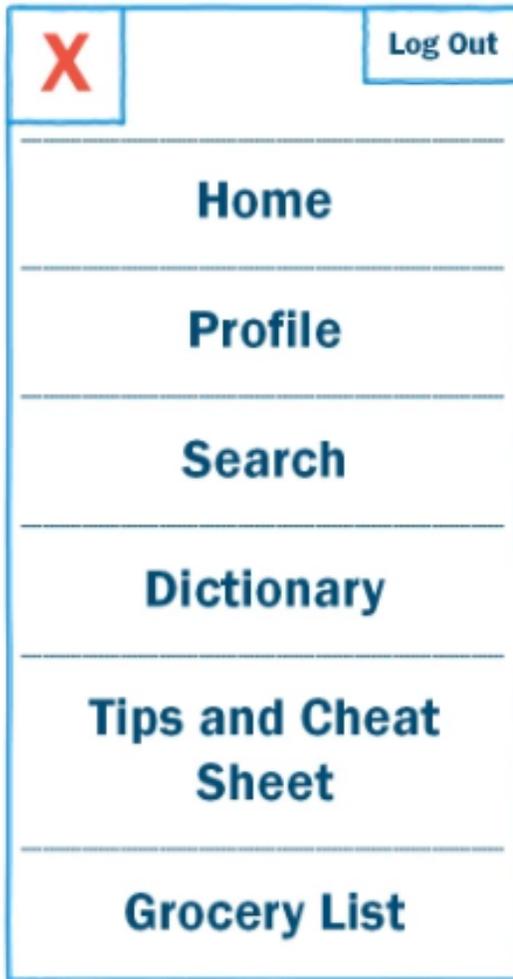
Umami

Recipe of the Day!



Seared Sea Bass
☆☆☆☆☆
By user: Tester

Registered User Main Menu and Non-registered User Main Menu



Recipe Page, Serving Size Adjuster, Social Media Share Buttons, Star Rating Scale, Embedded Dictionary Term Definition, and Serving Size Adjuster Error Message

Seared Sea Bass



Time: 45 Min
Prep: 30 Min
Cook: 15 Min

Serving Size:

★★★★★
By user: Tester

***COOKING TIMES MAY VARY**

Ingredients:
1 Teaspoon of Olive Oil
1 Teaspoon of Lemon Juice
1 ½ Tablespoon of Butter
Salt
Pepper
1 Sea Bass fillet with skin

Directions:
In a large pan heat oil and butter on medium high heat. **Sear** the sea bass skin side down for 10 minutes until golden brown. Remove from the pan and pour on lemon juice and serve.

[Save Recipe](#)  

Seared Sea Bass



Time: 45 Min
Prep: 30 Min
Cook: 15 Min

Serving Size:

★★★★★
By user: Tester

***COOKING TIMES MAY VARY**

Ingredients:
2 Teaspoon of Olive Oil
2 Teaspoon of Lemon Juice
3 Tablespoon of Butter
Salt
Pepper
2 Sea Bass fillet with skin

Directions:
In a large pan heat oil and butter on medium high heat. **Sear** the sea bass skin side down for 10 minutes until golden brown. Remove from the pan and pour on lemon juice and serve.

[Save Recipe](#)  

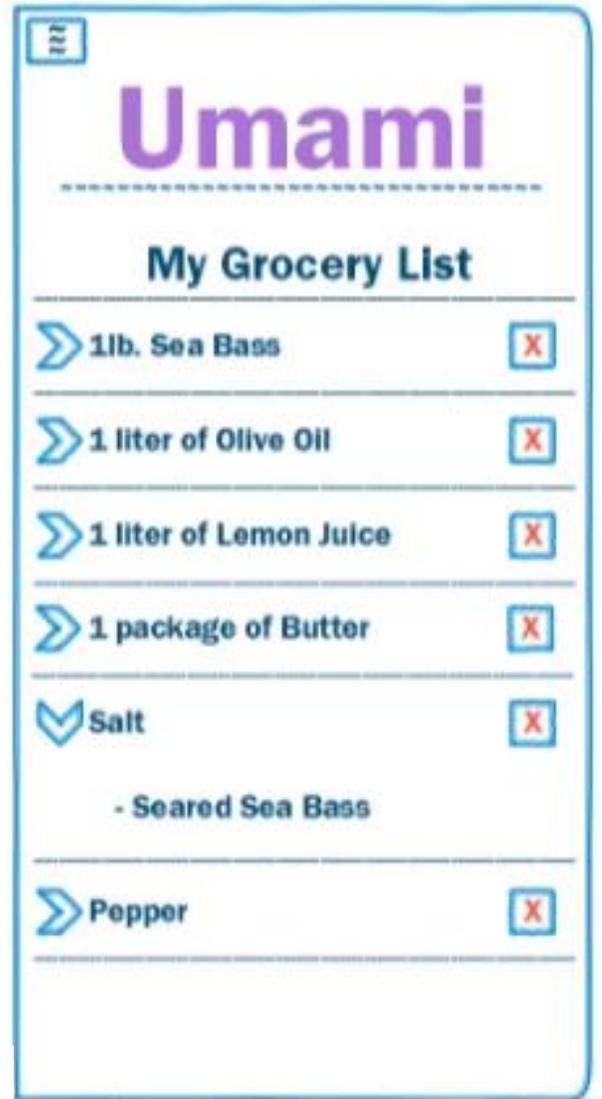
Searing – a quick cooking method using high heat on a stove top



Error: Serving Size must be a positive integer!



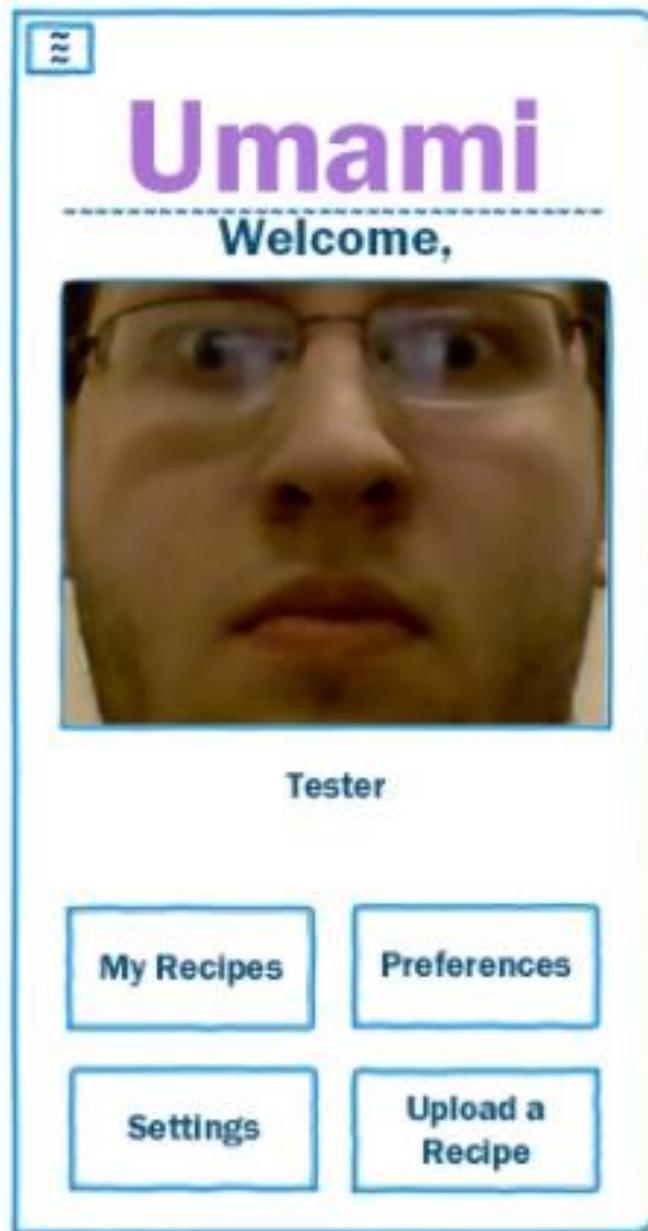
Grocery List Generator Screens



Search Feature Screens



User Profile Screen



My Recipes and Upload a Recipe Screens

My Recipes



Seared sea Bass



☰ Recipe Name

Image

Time:

Prep:

Cook:

Ingredients:

Directions:

Submit

Tips and Cheat Sheet and Cooking Terms Dictionary Screens

Tips and Cheat Sheet

Baking - When using a baking sheet in an oven, be sure to spray the sheet with a non-stick substance



Dictionary

Searing - a quick cooking method using high heat on a stove top



Preferences and Settings Screens

Preferences

Food Allergy: 

Cooking Style: 



Settings

Active Notifications: 

Active Alerts: 

Message Noise: 

Public Profile: 

Disable Ratings: 

Recipe History: 

