

Prototype Report

Prototype Description

Quiz with dining location suggestions

Our first task example that relates to this feature can be seen through one of our personas from the previous milestone - Lily. Lily was trying to find somewhere to eat that had options available to her due to her dietary restrictions. Through the use of the quiz feature she can narrow down her dining options to a few dishes that would be nut-free based on her allergen restriction, as well as any vegetarian dishes if she is interested in that option. The result of this quick dining preferences quiz will guide her towards the dining common with the majority of her dishes of choice efficiently in a short amount of time.

Another task example that relates to this feature of our design/prototype was a user looking to find unique foods at different dining locations. This task example can also be seen in one of the personas we created, James. He went to a dining hall expecting a specific food to be there but was mistaken. Our prototype will address these needs through both the quiz and the menu features. Users will be able to take the quiz and find locations on campus that are serving the foods they are interested in. In James' case, he could have taken the quiz and answered that he was looking for food locations with desserts and received a list of locations. He could then search the menus of these locations to identify which was serving a dessert he was looking for. We believe this feature is a differentiator of our product from the official dining app and is important to include in the prototype.

Map with pinpointed locations

For the map with pinpointed locations, one of the related tasks that we discovered was the user finding dining locations that are closest to themselves. Our prototype supports this task by giving the user a virtual map that they will be able to interact with in various ways which will in turn give them the ability to see all food venues in their respective area of campus. To go into more detail, let us give an example of a student who is living in the northeast residential area at UMass, they will be able to use the map built into our web application and filter for dining locations in their area as well as those in the surrounding areas (such as campus center or central). From there, they will be able to see all locations on the map and will be able to click on them to see further features such as their menu and hours of operation.

From there we identified a second task that relates to the map with pinpointed locations, and that is discovering locations that a user has never seen before/don't know where they are. The map feature of the prototype will also support this by allowing the user to explore all of the different dining locations on campus from a bird's eye-view. This will give them the ability to click on locations they might not be familiar with if they have never heard of it or visited it. From there, the app will allow the user to click on a given location on the map and the prototype application will give them various options such as viewing the location's menu, or if the location has their own website (such as greeno sub shop) to travel to their as well. To add onto this, the application will also allow to user to put the location address into google maps in order to get directions. That way if the user has never visited the location before, they can get clear and

easy directions to find their way to their destination without having to share their location data with us.

Menu with dietary information

Looking at the menu with dietary information we discovered two task examples that this feature will be able to support in our prototype. The first task we found was looking for foods that fit a given user's dietary needs. The way that our application will support this is by showing a user all important ingredients for a given food item on a given menu, this will allow them to see if a food they are interested in contains something they might not be able to eat due to allergies or general dietary preferences. For example, if a user is allergic to nuts, they will be able to clearly see any given items on the menu that contain nuts or nut-based products so they will know to avoid it when in the dining hall.

Building off this, the dietary-information feature will also support another task we discovered which is discovering new options on the menu. Again, our prototype feature will be able to support this by giving a user an easy and accessible way to browse through a given menu to look for foods that they might be interested in trying but also allowing them to see if it will fit into their dietary restrictions. While this may seem slightly redundant, it is an important feature to the application, especially if the user does not wish to utilize the quiz feature which is also built into the app. It gives the user an alternate way of exploring the menu as well as all of their potential options.

Low Fidelity Prototype

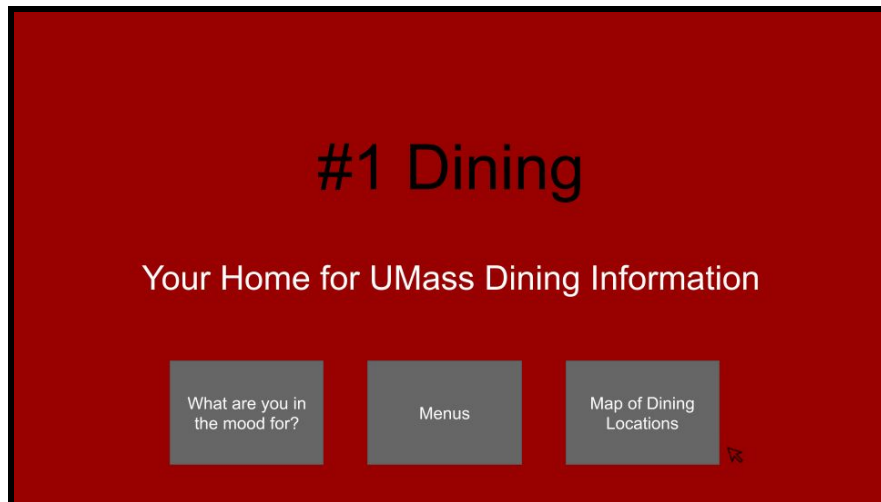
Photos of Low Fidelity paper prototype of 3 features – Justify that the prototype is appropriate in the scope of the problem as claimed in the prototype description. The photos should illustrate the main components of the design and show how the prototype supports task examples. (8 points)

The optional dining preferences quiz feature of our web application has approximately 5 questions that allows the users to specify the type of payment, type of meal, any allergens and dining preferences based on the cuisines and categories of dishes on the UMass Dining menu. Once this optional dining preferences quiz is taken, the user will receive recommendations of dining venues that are currently serving the dishes that match their preferences. The user can click on the more info link to view additional information about their desired dining venue such as the address, operating hours, menu and directions.

The menu tab of our web application has categorized dining venues at UMass Amherst into three main categories labeled as Dining Halls, Retail Dining and Student-Run Businesses. If the user clicks on one of these options, a list of dining venues that pertain to that particular category will expand. The user is then able to choose their desired venue by clicking on it which redirects him/her to the current menu, and if the venue is a dining commons then the food served for the day can be explored according to the type of meal - designated as breakfast, lunch or dinner.

The map feature of our web application can be accessed through different methods. One way is through the view more information as mentioned above via the Get Directions link. If a user is interested in exploring all the UMass Dining venues and their respective locations including its address and directions from specific buildings, this information can be obtained through the Map

section. The dining locations are separated based upon dining halls, retail dining and student-run businesses such that filtering can occur based upon the interests and preferences of our users.



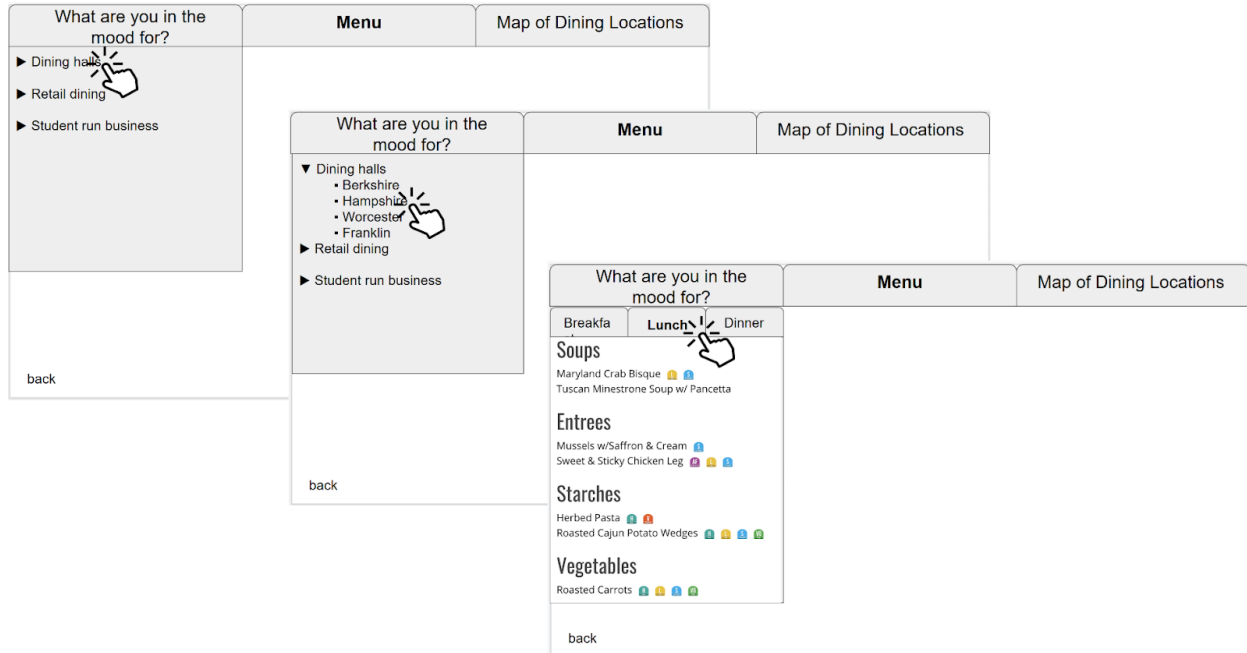
Annotations: This is the landing page of our web application. This displays each feature prominently so the user is able to choose which aspect of our web application fits their needs best. They have the option of clicking one of the three boxes and will be taken to a different feature by doing so.

What are you in the mood for?	Menu	Map of Dining Locations
<p>How do you want to pay?</p> <div><input type="radio"/> Swipes</div> <div><input type="radio"/> YCMP</div> <div><input type="radio"/> Dining Dollars</div> <div><input type="radio"/> Cash</div> <div><input type="radio"/> I don't care!</div>		

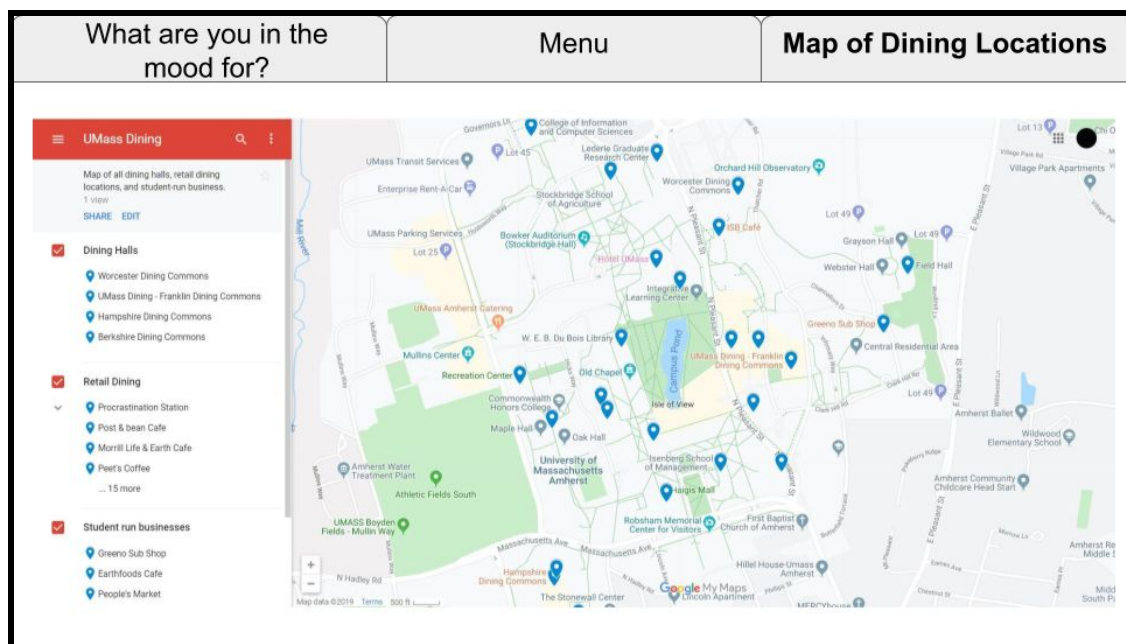
What are you in the mood for?	Menu	Map of Dining Locations
<p>Any allergies?</p> <div> <input type="checkbox"/> Gluten </div> <div> <input type="checkbox"/> Peanuts </div> <div> <input type="checkbox"/> Shellfish </div> <div> <input type="checkbox"/> Eggs </div> <div> <input type="checkbox"/> Tree Nuts </div> <div> <input type="checkbox"/> Fish </div> <div> <input type="checkbox"/> Soy </div> <div> <input type="checkbox"/> Corn </div> <div> <input type="checkbox"/> Sesame </div>		

What are you in the mood for?	Menu	Map of Dining Locations
<p>Your Recommendations</p> <div> <div> <p>Worcester Dining Commons (more info)</p> <ul style="list-style-type: none"> Stir Fried Vegetables Asian Noodle Salad Thai Chili Steamed Vegetables Yaki Udon </div> <div> <p>Star Ginger (more info)</p> <ul style="list-style-type: none"> Thai BBQ Chicken Lemongrass Pork Chops </div> <div> <p>Wasabi (more info)</p> <ul style="list-style-type: none"> Donburi Chicken Katsudon Teppanyaki </div> </div> <div> <p>Worcester Dining Commons</p> <div> <p>Address: 669 N Pleasant St, Amherst, MA 01003</p> </div> <div> <p>Operating Hours: Sunday - Thursday 5:00 PM - 11 PM</p> </div> <div> <p>View Today's Menu</p> </div> <div> <p>Get Directions</p> </div> </div> <div> <p>back</p> </div>		

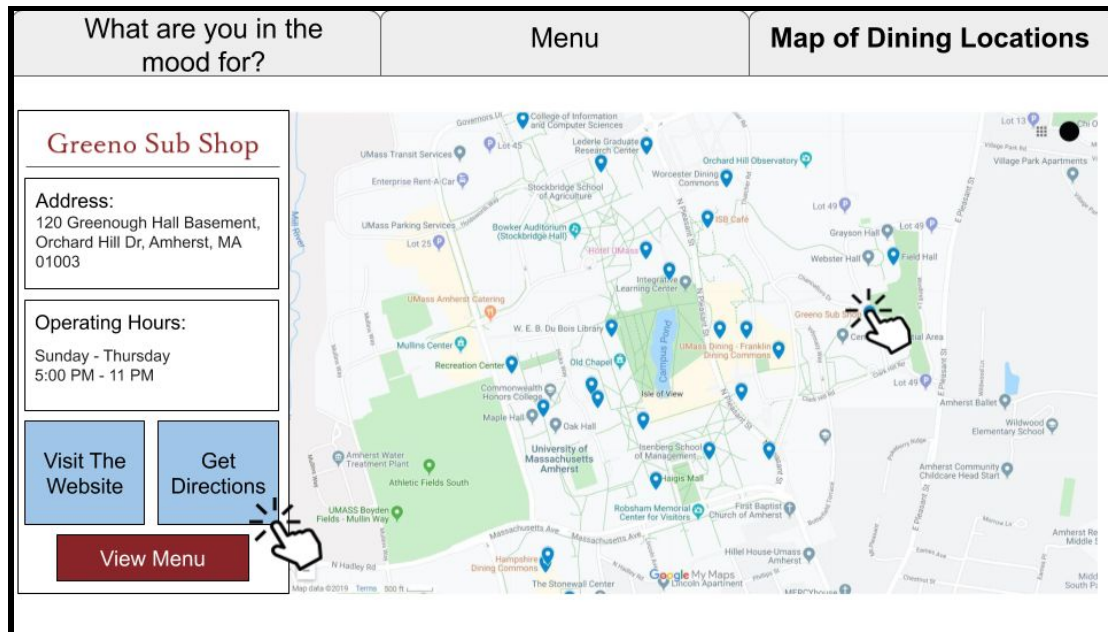
If the user chooses the quiz (what are you in the mood for?), they are sent here. A series of questions which will act as a filter when determining what their recommended foods/locations will be. The user will be able to select each answer by simply clicking on each answer. Some questions are multiple choice while others are checkbox style so the user can put in multiple answers. Once completing the survey, the user will be brought to a page that looks similar to this where they will be able to see their recommendations as well as see more information which can be obtained by clicking on it.



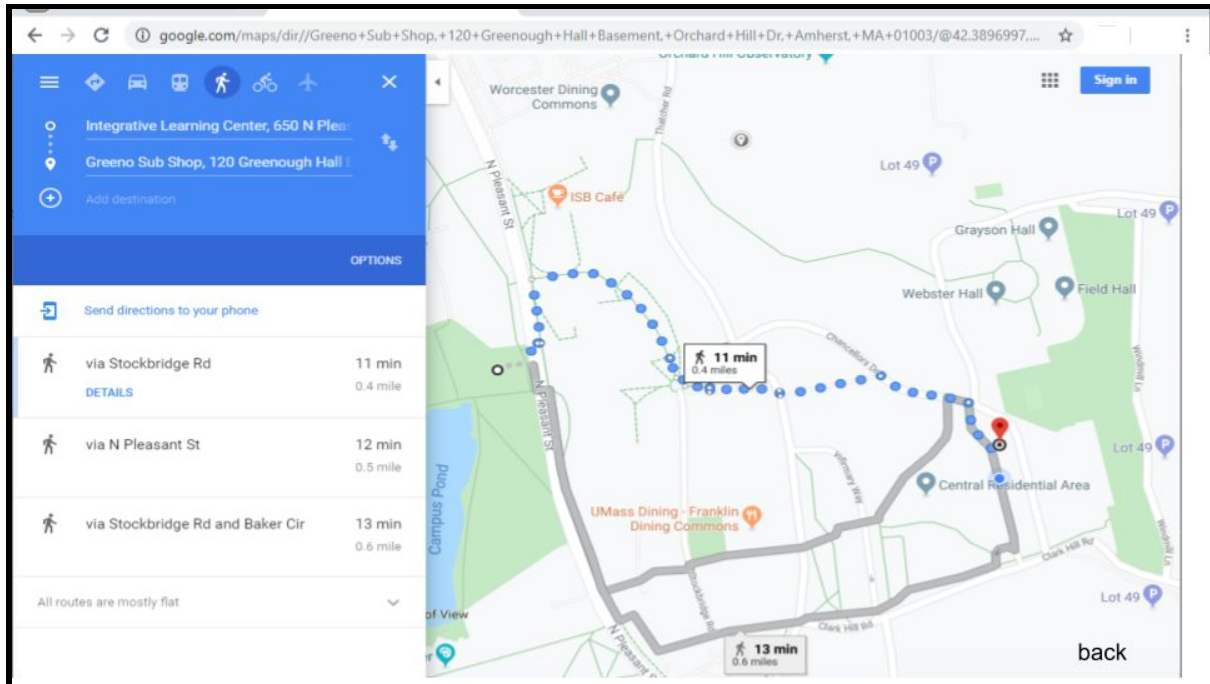
This is the second feature of our web app. When the user clicks on the menu tab, it brings them to a page that lists the different dining locations categorized into the dining hall, retail dining and student-run business. Each of them serves as a drop-down menu that will list detailed locations after the user clicked on it. The user can click on a location and the app will jump to today's menu page. The user can find menus of breakfast, lunch, and dinner through tabs on the top. Each menu will list dishes as well as having them categorized and labeled.



Clicking on the map feature will bring the user to a map to an interactive map that will display all dining locations on campus while providing a filter feature so that users can get a better idea of their options and what is available



Upon clicking on one of the locations, a sidebar will appear that will give the user basic information on the location they have chosen such as the address and hours of operations. The user will also be able to click on buttons so that they may visit the locations website (if applicable) or to view the menu (which will take them to our menu feature). If the user clicks on get directions, it will open up a google maps direction page as seen below.



Once this is opened, the user will be able to get precise directions to the location of their choosing.

User Test Report

User test report – Briefly describe the protocol and what was learned about the strengths and weaknesses of the design. (8 points)

Our protocol began with a short introduction to the prototype and how the test users would be helping in the design process. It stated, "Thank you for participating in this study. We are creating a centralized UMass Dining app that provides recommendations on where to eat based on user preferences in addition to location and menu information. Our goal is to provide a positive user experience and your input today will play a key role in succeeding. You will be asked to complete a series of tasks and then answer some questions afterward. Do you have any questions before we begin?". After allowing test subjects to ask any questions, we gave the users three tasks to complete with the paper prototype, which were printed pages. The first task was filling out the quiz questions and receiving recommendations from the app. The second task was finding the menu of the resulting dining location. The third task was finding a location on the map and identifying how to get there. After completing these tasks, the test users were given a few questions to assess their satisfaction with the prototype.

One feature test users had positive comments on was the map feature. A user mentioned how she did not know where any of the student-run businesses were located, especially due to the construction at the Student Union, and she found the feature very helpful. A critique of the map feature was the inclusion of other landmarks, such as parking lots, which distracted from the specific dining locations. Test subjects suggested using a bolder color to demarcate dining locations and/or eliminating all non-dining locations from the map.

Another well acknowledged feature of the web application was the simplicity of our design alongside the streamlined questions. We received positive feedback in regards to how straightforward the process of going through the quiz is, as there are no distractions on the

webpage that took attention away and that the questions were simple and not overwhelming. While this is just a low fidelity prototype and our design is subject to change, we think it is important to keep that in mind for our future design.

A suggestion made for the quiz feature was to make sure that each question included a “no preference” or “not applicable” option. This was especially relevant to the allergen question, which did not include such an option in the prototyping phase. We will make sure to make this improvement in the final product.

A general feature that was requested was that of a back button or a drop-down site map, rather than tabs at the top of the site. One user found the tabs confusing and wanted a way to get back to the home page, which could be implemented through a website logo that takes users back to the home page.

Another feature that was mentioned by one of the users was the ability to “favorite” specific meals, and to be sent a notification when that meal was being served at a location. This is something to consider, but seems to be out of the scope of our project, as it would require a lot more personalized features and potentially account creation. If we had more time, we could see that as a good feature to implement, but for our prototype, it deviates from our main goals.

Team Member Contribution

Jarrold Daniels - Wrote prototype descriptions for map and dietary menu features.

Helped construct low fidelity prototype for map feature as well as general text editing.

Xiaoxue Lou - this person sketched the menu low fidelity prototype and its description.

Kuhu Wadhwa - Helped with creating prototype for menu and dietary info features

Corey Kozlovski - Helped with creating the prototype and contributed to the user test report.

Jinhong Gan - Helped created prototype/general design for the menu feature of prototype.

Vista Sohrab - Low Fidelity Prototype descriptions and first prototype task description

Arianna Kazemi - Designed user test protocol and conducted test. Wrote 1 task description.

Annapurna Jagasia - Helped with creating the prototype and its description.

Efosa Ighodaro - Helped with User Testing