

Ideate Report

Task Examples

Task Example 1

Lily is a sophomore on campus and just had two morning classes. She is extremely hungry for lunch and loves that UMass is number 1 dining in the nation! However, she has a lot of food allergies and needs to be sure that what she eats won't harm her in any way. Once she has a general idea of her desired meal, she would like to check the menu to see which dining commons are serving food that closely matches her taste. She is a chemical engineering major and most of her classes are in Lederle, Goessmann, Life Sciences Building, and Engineering Lab. The dining common closest to those is Worcester Dining. It's a Tuesday afternoon and Lily wants to know what's cooking at Worcester! She walks into Worcester and realizes she only has 45 minutes before her next class. She frantically walks around the dining common trying to see what matches her dietary restrictions. After about 15 minutes, she realizes that there aren't many options that she can eat. She soon starts to regret choosing Worcester as her choice of dining and wishes she went to Franklin instead. With only about 20 minutes left to eat, she goes to grab and go and gets the first thing there, just to make it to her class on time. She leaves Worcester unsatisfied and down 2 swipes.

Task Example 2

James sometimes gets bored of eating the same foods in the dining halls closest to him throughout the day. While there is always a variety, it has become predictable. He also hears his friends talking about each dining hall having a distinct food but cannot remember which ones are which. He wants a centralized location to identify all the unique foods for each dining hall, so he can change up what he eats and get some specialized foods, like hard ice cream. He thinks someone mentioned that Berkshire has hard ice cream on weekends, and encourages a group of people from his floor to make the long trek to Southwest from Northeast one Saturday night. As they settle at their table, he realizes that the ice cream is just the same as it is at Worcester, near his dorm - soft ice cream. His group has a good meal otherwise but he leaves disappointed that he made them go so far to not get any hard ice cream.

Task Example 3

James is a new freshman at UMass Amherst and is very unfamiliar with the different parts of campus. One of the main reasons that James decided to enroll at UMass was the fact that they are known for their high-quality dining experience for students. One of James' favorite activities is to try new restaurants and foods, as this is also a way for James to socialize and meet new people. Specifically, James is interested in trying out some of the student run businesses on campus that he was told about during his new student orientation. The problem however is that he does not always know the name nor location of each business and a result, is unable to find their menu as well. When this occurs, James must reach out to his friends and acquaintances in order to get this information which is not always reliable. To add to James' difficulties, often,

once James has obtained the correct information (name, location, menu, etc.), he has run into issues in the past where he has not been able to gain access to the locale and must ask random strangers in the area how he should go about entering.

Task Analysis

Task Analysis 1:

In this case, Lily isn't just facing an inconvenience by not having a desired meal available, but she is also at risk of accidentally eating an item that may contain anything that she may be allergic to. The way that we want to approach this situation with our web app is two-fold. First, we plan to create a quiz that asks the user about any allergies, dietary preferences, and a few other questions to assess what they are in the mood for and then provides a few suggestions about dishes that match their interest in the dining locations near them. Furthermore, users can select these dishes and scroll through the nutrition information and ingredient list for these dishes that are displayed in an easy to read format as opposed to the complex and often confusing format of the UMass Dining App menus. With the help of these features, Lily would have been able to do the quiz, and have meals suggested to her that met her dietary needs and would also be able to confirm that manually for her peace of mind. This would enable her to save time and plan ahead so that she can get a fulfilling meal between her busy schedule.

Task Analysis 2:

In this situation, James was left embarrassed and frustrated that he promised his friends a type of food they have been craving but couldn't deliver. He cannot rely on his memory to identify which dining commons have which foods and when. Currently, there is no better method than word of mouth to retrieve this information. As designers, we recognize how these small details are difficult to remember. Since we want our web app to provide unique information that students are interested in to differentiate it from the official UMass Dining App, we want to include a description of each dining hall and its specialties in our design on a details page. When users go to this page, not only will they see a menu, but they will be able to see what makes that particular location unique from the others. To make this information easier to access, we can include date specific information which details what those specialties are directly on the map to make decisions even easier. For example, if it were a Tuesday and a user was quickly glancing at locations on the map, the location pin, once tapped, would also include a small note stating that it was Mac and Cheese day at Worcester and that hard ice cream was being served. If this feature were available, James would have been able to look through all the dining halls and see which ones serve hard ice cream and when. A potential negative outcome could be overcrowding in certain dining halls due to an increase of students going on one day, which may prevent students from going to a dining hall or cause the special item to run out.

Task Analysis 3:

The core of this task is that James is trying to eat at a new restaurant that he has limited information on. This has various implications on how we will approach designing our final product. Based on James's goals in the task example, when designing our web application, we are going to want to create a page that will hold a consolidated list of all dining locations on

campus. Furthermore, each locale will be categorized based upon what type of place it is (dining hall, student run business, café, etc.) which the user should be able to filter through in order to easier look through the list of locations/offerings. From there, the design should include a details page for each location which would be a link located directly under the title of each location. Within this page, the user would get access to a variety of useful information. This would include details such as its location (this would be pinned to google maps so a given user would be able to see where a given venue is relevant to their own location), menu, hours of operation, as well as any additional information which may be important to the user such as how to actually gain access to the place (a good example of this would be for Greeno Sub Shop. In order to enter, you must enter through the basement door on the backside of the dorm). This would all be organized in a meaningful way that allows a user such a James to explore new options without becoming overwhelmed.

List of Features

Absolutely Must Include:

- Quiz
- Map with pinpointed locations
- Menu with dietary information

Should Include:

- Fun food facts about each dining hall (ie: dining hall exclusive drinks)

Could Include:

- Search bar

Could Exclude:

- Dining Hall activity (ie: busy, not busy)

Absolutely Must Include:

Quiz

The quiz/survey is going to be a vital part of our design as it is going to be the primary method in which users interact with our web application and is the backbone of the solution we have created to tailor their dining experience at UMass. One of the main problems our design is trying to solve is helping users who are not sure where/what they want to eat, narrow down their choices and make an informed decision. This quiz will give each user the opportunity to compare their preferences in what they want to eat what is available at the given time of taking the quiz. Thus, the quiz will be a crucial part of our design that while optional to each user, must be included in the application.

Map

The map is going to also be a necessary feature as it will act as a bridge between the application and the real world. What the pinpointed locations will allow each user to do is not only see all dining locations from a birds eye view, it will also help them make an informed decision on where to eat based upon what their location is and how far they are willing to travel. Furthermore, by pinning each location using google maps, it also allows the user to navigate to them without having to share any sensitive information with us such as their location data.

Menu

The menu is going to be a necessary feature which list menus of the Dining Commons and Restaurants around campus. The goal of the menu feature is to help students with specific dietary preferences and food allergies. The menu also helps student with passion for specific food like mac & cheese. For cafe, the menu will list a static typical daily menu and specials if there are any. For UMass Dining Common, the menu will list "today's menu" as well as the menu for the week with tab of breakfast, lunch and dinner. All dishes listed will be categorized by stations and labeled by legends of "Vegetarian", "Nut", "Gluten" and others with identical notation.

Should Include:

Dining Hall Exclusives

The exclusives feature was suggested multiple times in our initial research, leading us to believe it is something the users would want. It is not absolutely necessary since these exclusives do not always make or break a decision to go to a dining hall, especially when compared to information such as allergens and menu choices. This feature is more of a unique differentiator from the official UMass Dining App that should be included if possible.

Could Include:

Search Feature

Since there are so many options to choose from at UMass, it can be overwhelming to look through each menu to find something. If a user is looking for one particular food item that they really enjoy, it may be useful to have a search feature. However, such a feature will likely require a good index of the data which would add difficulty and is not likely to be used by our primary persona. It may also not be needed alongside our quiz feature, which would allow users to identify specific food areas of interest.

Could Exclude:

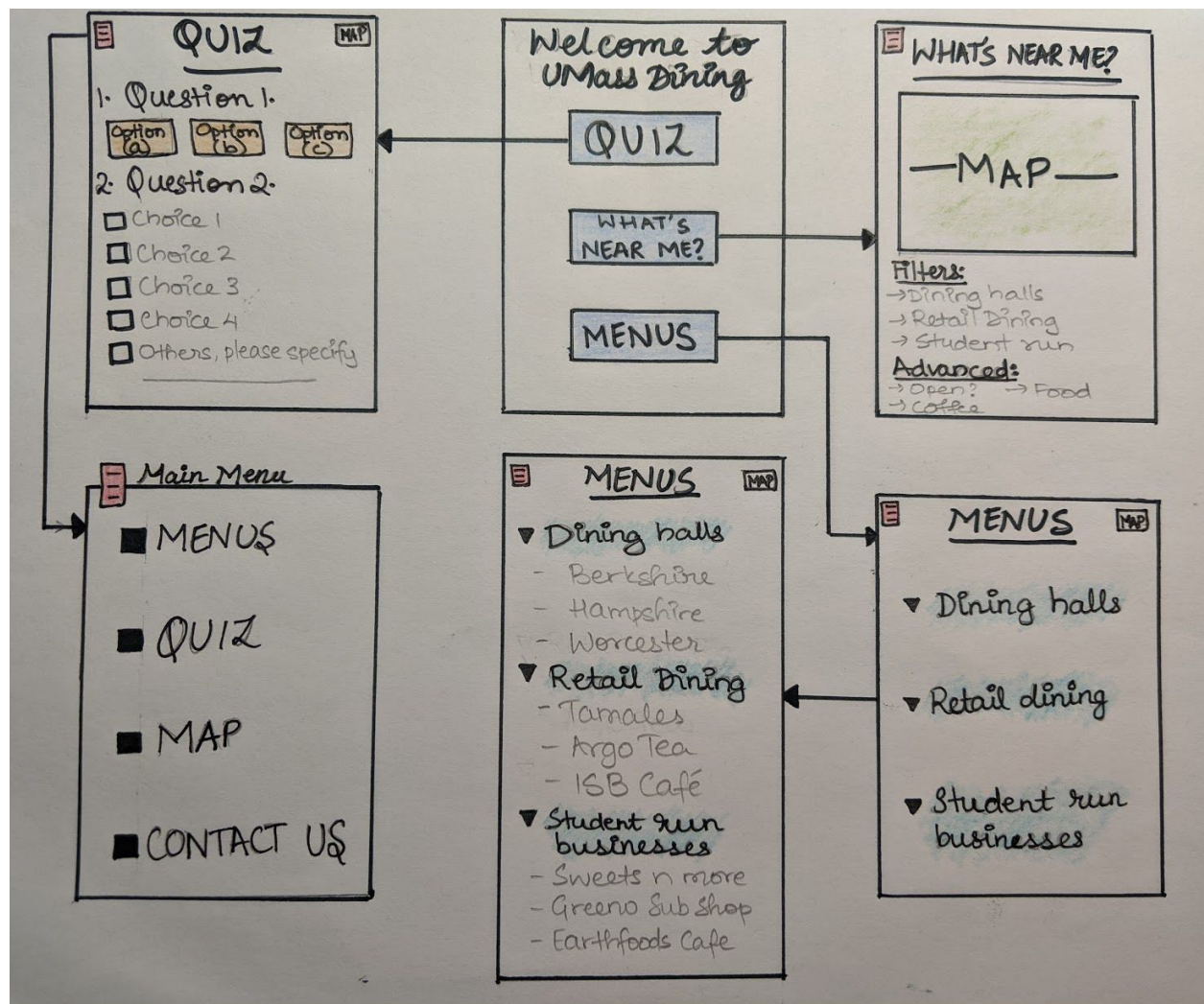
Dining Hall Activity

Our survey data surprised us as it showed that most students do not rely on the busy feature on the current UMass Dining App, as they can infer from time of day how busy a certain location will be. Therefore, we do not think this feature is necessary as it would likely not be used.

Conceptual Model

The front page of the web application will include a welcome screen with the following features that our users can choose from: Dining Preferences Quiz, What's Near Me, and Menus. The Dining Preferences Quiz is an optional questionnaire that will allow our system to match users with current food being offered throughout UMass Dining based on their preferences and allergens. On the top of the Dining Preferences Quiz page, there will be links to the map -through our What's Near Me feature - as well as other main features of the app such as the menus. The Menus page will be subdivided into three main categories which consist of Dining Halls, Retail Dining and Student Businesses. In this section of the web app, the menu for all dining options on campus will be made available to our users. The What's Near Me feature links

to a map with filters that correspond to Dining Halls, Retail Dining and Student Businesses respectively. There will be advanced options as well, such as unique or novelty foods offered at dining locations and opening times.



- Metaphor: The metaphors will be limited to a menu, like one would encounter in real life, and a map and pins, which will be presented digitally. A paper and pencil icon will resemble the Dining Preferences Quiz and the result will guide users to make more informed dining decisions.
- Concepts: For concepts, users will be able to “press” buttons for different features, be able to click and drag to move the map around, and use pins to identify significant locations.
- Relationships: Pins will delineate locations and each “restaurant” will have a menu.
- Mapping: Users can explore the map and browse menu options.
- Terminology: The map, quiz, and menus will not be called differently. Dining halls will refer to UMass Dining Locations which require swipes, Retail Locations refer to those

that require dining dollars, YCMP, or normal payment, and Student-Run Locations will refer to operations not run by UMass Dining.

- Interaction types: Users will be able to give responses to the quiz and receive recommendations as a result, select menus to look at, and explore areas of the map.
- Interface types: The users will interact with our web interface which will have icons and links to our features.

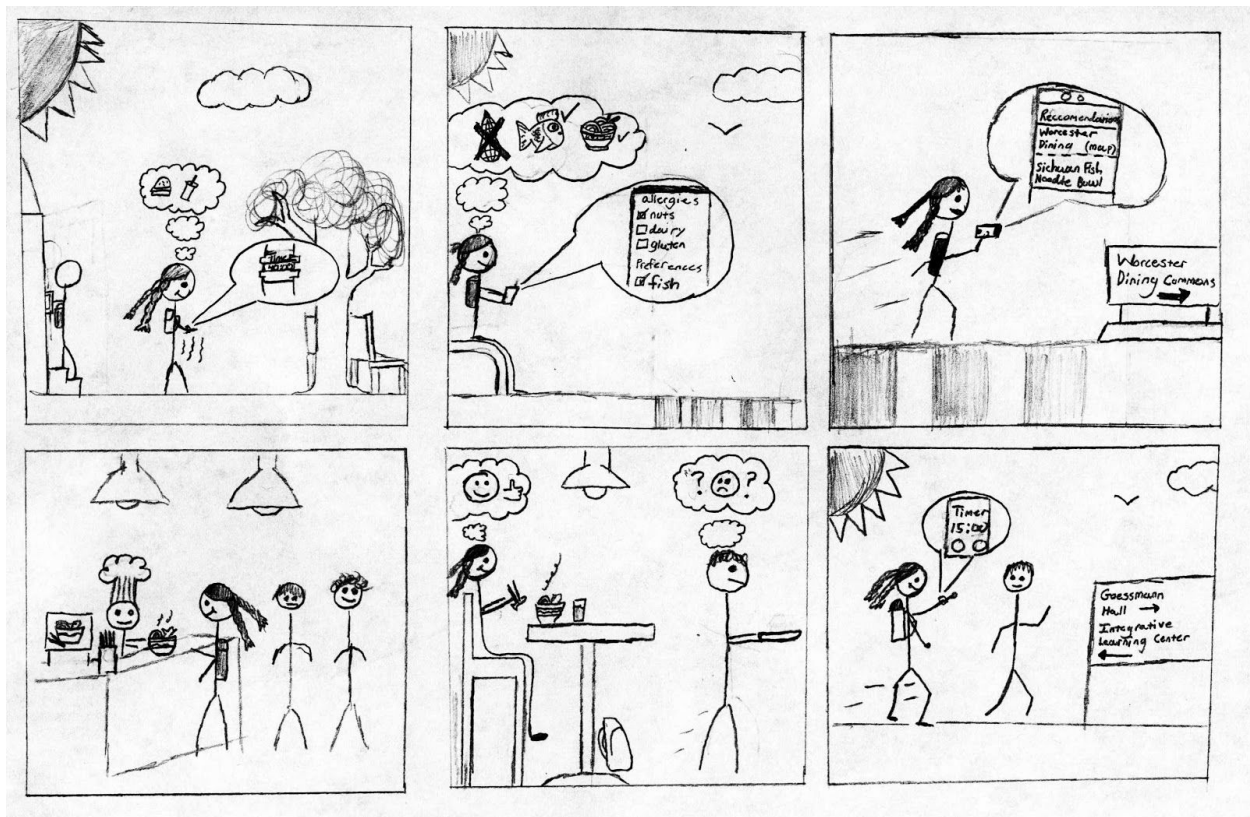
Strengths:

- The Conceptual model is very concise for the directories
- It uses simple lexicon for everyone to understand
- The usage of buttons lets the user select exactly what they want
- The Quiz helps with indecisive users

Weaknesses:

- The Main Menu and Menus might cause a little confusion
- The Map could be hard to decipher
- The app requires a little exploration/getting used to because every decision has to be made by the user

Storyboard



Team Member Contribution

Jarrold Daniels - Task Example, Task Analysis, List of Features, Storyboard

Xiaoxue Lou - Menu Feature

Kuhu Wadhwa - Task Example, Storyboard

Corey Kozlovski - List of Features, Storyboard

Jinhong Gan - storyboard

Vista Sohrab - Task Example, Conceptual Model, Editing

Arianna Kazemi - Task Example, Task Analysis, Feature explanation

Annapurna Jagasia - Task Analysis, Conceptual Model

Efosa Ighodaro - Conceptual Model Strengths and Weaknesses