

# **CSC 642 HCI Summer 2019**

## **Initial Proposal**

### **Seated**

*An easy to use app, designed to help restaurant goers to find the shortest wait times for tables near them.*

### **Team 07**

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# 1. Executive Summary

Today consumers are able to hail a taxi, check the news and weather, order takeout and delivery, and even manage their thermostats from the palm of their hands via their smartphones; so, why is it we are still required to call a restaurant in order to be provided a wait time to eat, which we have all experienced at some point to be horribly inaccurate. That's where Seated comes in. With Seated we provide a user-based information ecosystem, much like Waze, to provide the most up to date and accurate real-time waiting estimates at restaurants all over the world.

When a user downloads and launches our app, they will be greeted with a default list of the nearest restaurants, the restaurant provided wait times, and an app provided wait time based on previous user experience. From here the user will be able to make a number of choices such as sorting by the nearest restaurants, the shortest wait times, and even the cuisine of their choice. The user will be provided with a website, food menu, directions, phone number, and the locations reputation score. Then, the user will be able to simply set their GPS directions or close the app and head towards a venue of their choice. Once they've entered a predetermined geo-fenced area the application will automatically start their wait timer. At the end of their estimated waiting window + approximately 5 minutes, they will be notified and queried if they had been seated yet or not. If they have been seated, the restaurant's reputation score is updated to reflect the accuracy of their wait time provided. If they have not, we will adjust the app provided wait time as well as adjusting the reputation score. After the user has left the geo-fenced area, they will be provided with an exit survey, which will give us the ability to ask the user about their overall experience, the time waited and any other comments. This information will be provided, along with the total time inside the geo-fenced area, to the restaurant in return for being a partner on the application. The restaurant can then use this information to adjust their waiting times, staff behavior, or any other issues reported during the clients visit.

Our aim for this project, as Computer Science students studying here at SFSU, is to not only to create a useful and functional product which we could potentially build and sell after completing this course, but to learn, innovate and explore the theory behind creating positive user experience and great user interface design.

## 2. Personae

### 2.1 Alison:



Age:	45
Occupation:	Business Professional
Income:	75k
Status:	Married

Alison is a business professional and a mother of three children of ages ranging from ten to sixteen. She often works late, and therefore dining out is a big part of her and her family's lives. Alison is decently technology savvy (she has a smartphone and uses apps like Waze, Facebook, Instagram, etc.), but she is far away from being an expert on these sorts of devices. Alison lives a very busy life and if she finds a tool that makes things easier for her, without too much of a commitment to learning on her part, she will use it.

#### Needs:

- Tools that work quickly and without much input on her part.
- Clear instructions and useful information.

#### Pain Points:

- She can't waste time browsing lots of screens and features, as when she is out her attention is divided between whatever she is doing and her children.
- If it isn't obviously useful, immediately, she'll drop it in favor of something else.

## 2.2 Zachary:



Age:	25
Occupation:	Restaurant Host
Income:	less than 50k
Status:	Single

Zachary works at a trendy restaurant in downtown San Francisco. His manager has signed a partnership with Seated which is now a part of the responsibilities of his job. Zachary is not very fond of computers, but he has worked a number of customer service jobs which require him to use some kind of POS system or organizational software, and he is willing to learn any new tools he is asked to by his boss. Zachary's job is already pretty hectic as is, so he is a little nervous about adding another step to the process when Seated is fully implemented.

### Needs:

- Clear instructions and design to help him acclimate to using the new system.
- The least possible involvement on his part, so that he can keep up with his busy position at the restaurant.

### Pain Points:

- If the system is too complicated, he will have a hard time understanding it.
- If Seated asks too much of him, such as requiring too many updates from him on wait times, it will make his job impossible.

## 2.3 John:



Age:	30
Occupation:	Restaurant Manager
Income:	100k plus
Status:	Single

John is a restaurant manager of a busy and popular restaurant. He wants to improve his business by partnering with an application which will allow him to reach out to potential customers. John knows that there is much to be gained from integrating applications into a restaurant's business model as apps like Grubhub and Postmates have already proven to bring in new customers who might not have already known about his business. John has a demanding job and cannot devote too much attention to managing applications from his computer, so if he's going to add another piece of software to his business model it needs to be pretty lightweight and cannot be very demanding of his time.

Needs:

- Opportunities to grow his customer base.

Pain Points:

- His job is very demanding, so he cannot devote too much time to new software.

### **3. High Level Use Cases**

#### **3.1 Alison:**

Alison and her partner are working late again today and by the time they are home they don't have enough time to make dinner for their children. So, Alison pulls out her phone and opens up Seated to check and see if there are any restaurants in her area with short wait times. She looks at the home page and sees a list of all nearby restaurants sorted from lowest to highest current wait times. Her kids are picky eaters, so she further filters the results by "American Cuisine" (kids love burgers and hot dogs, right?). Upon filtering, she finds that her local T.G.I. Fridays has a currently posted wait time of only fifteen minutes, with an accuracy rating of eighty percent. So, she gets everyone into the car and heads over. After putting in her name with the host/hostess at the front desk, she opens Seated again to indicate that she has just begun her wait. In about twenty minutes time, Seated sends her a notification to check in and see if she is still waiting or has gotten seated. Luckily for her she had been seated about five minutes ago, so she indicates on the app that she was seated in time.

#### **3.2 Zachary**

Zachary is starting his shift at work on a busy Saturday night. He knows that the place is going to fill up quickly and he'll have to move pretty fast to make sure that everyone gets seated on time. Currently there are plenty of tables available, so from his phone he opens the Seated app and logs into the hosting side of system. Entering his information, he is automatically connected to the profile of the restaurant he currently works at. From here he updates the current wait time to zero minutes. But then, as the night goes on the place begins to fill up and the wait time increases to twenty minutes. When this happens, Zachary opens his phone again and adjusts the wait time on Seated to match the actual wait time of the restaurant. Zachary is then able to return to his busy shift without thinking about Seated again until the wait time either increases or decreases.

#### **3.3 John**

John is visiting the Seated website in order to set up a partnership account with the application. He navigates from the home page to the partners page and clicks on the register a new partner button. From here he fills out the form detailing his restaurant's name, address, cuisine type and hours of operation. He then activates his account, which puts his restaurant onto the list of restaurants visible to Seated end users and makes it possible for his employees who work his front desk to make accounts connected to the restaurant.

## **4. List of Major Functions Envisioned**

### **4.1 Listing of restaurants:**

listed by distance then Wait time, listed by wait time then distance; listed by cuisine type and then wait time.

### **4.2 Geo fencing:**

Allows for autonomous check in to the restaurant via the app, automatic starting of wait timer for tracking application derived wait time, and serves for notification time of departure for survey.

### **4.3 Mobile check-in:**

Users can place their name on available “call ahead seating” for partners which allow it, cutting down their current wait time.

### **4.4 Reputation score:**

Provides users the accuracy of the restaurant supplied wait time. In the case of lack of user data, the restaurants wait time and reputation score will give users security knowing the wait time provided is somewhat accurate, very accurate, or not accurate. This is calculated in a way similar to ELO rating systems, where ratings which are consistent with the majority are weighted more heavily than those which stand as outliers from the previously collected data. This data will be retrieved as part of the exit survey.

### **4.5 Application derived wait time:**

Wait time based on live user data versus the time provided by restaurant, second matrix giving users the most accurate wait times available.

### **4.6 Exit survey:**

Allows for app to query users on experience, wait time, and comments section. To be provided to restaurants in exchange for being partnered with the application.

## 5. Competitive Landscape

		Hostme	Dini Waitlist	Waitlist me	Seated
FEATURES	Browse by cuisine (i.e. Italian, American, Chinese, Moroccan...)	+	-	+	+
	Browse by distance	+	-	+	+
	Browse by price	+	-	+	+
	Review summary	+	-	-	+
	Notification when table's ready	-	-	+	+
	Satisfaction survey (using geolocalization)	-	-	+	+
	Easy signup (Facebook, Google)	+	-	-	+
	Restaurant's menus	+	-	-	+
	Wait time optimization (updates)	-	-	-	+

*+ feature exists. - feature doesn't exist*

Seated is a web application that helps restaurant goers to find the shortest wait times in restaurants and eateries. Our platform allows people to browse by distance, price range and cuisine, and wait time. The user can log in using their credentials or their social media accounts (Facebook or Google). When the customer makes reservation, he will be given an estimated waiting time, which can be updated depending on other parameters (food prep time, available server/staff...). Based on these factors, the wait time can be optimized, and the customer will be notified. Once the table's ready, a notification will be sent to the customer's phone. After the customer leaves the restaurant. The app automatically sends a satisfaction survey to the customer's phone. Reviews will be available for other customers to read to give them an idea on what to expect (food quality, customer service, parking tips...).

Although there are few wait list apps that offers the same service. "Seated" is definitely providing an exceptional experience for restaurant goers by offering unique features such as wait time optimization and the easy signup.



## **6. Tools and Frameworks**

For this project we will be first developing our mock-ups by hand, then using Figma to build a storyboard of our use cases. Finally, we will implement our application's front-end using React and JavaScript.