**INFO 6215 Assignment: Choosing Your Product**

**Idea 1 – ORCA Mobile App**

Sound Transit’s current contract with Vix, the company running their technology, is set to expire in 2021. As of now ST’s fare collection system is built on infrastructure designed in 2003. Companies are already bidding to take over the project and the new scope which involves a centralized account-based system should be internet-friendly and thus makes it possible to develop an app to interact with it.

Sources:   
https://seattletransitblog.com/2015/10/05/orca2-the-next-generation/  
Bids for the project can be seen [here](https://www.ebidexchange.com/Solicitation.aspx?cid=b7ed7fa3-38ea-40d0-854d-357a810a8d41&uid=00000000-0000-0000-0000-000000000000&sid=100889).

**PROBLEM**

For the consumers, the current ORCA card needs to be refilled in designated places and online refills take about 2 business days to process due to their current infrastructure. This can be a problem if people ran out of balance when they’re about to enter the bus. On the other hand, everyone has a smartphone and most them are now installed with NFC chips which allows quick tap-processing (think Android Pay). With the ORCA app, users will be able to refill in an instant using payment methods stored on their device and tap their phones in existing ORCA terminals just as they usually do with cards.

**CUSTOMER**

To start with, the consumers of this app will be every commuter in the greater-Seattle area. Once this is successfully implemented, we can expand to other cities which has similar infrastructure or those willing to upgrade.

**MARKET**

On the government’s side (Metro or Community Transit), the main benefit of implementing this solution would be more people using ORCA and thus more reliable cash flow from transactions. A good number of people still use cash and sometimes they can ride even when they’re short on cash. Additionally, some people take advantage of the Youth price even though they’re above 18 years old because it relies on the bus drivers’ judgments. Having a “wallet” app tied to each user’s identity will help alleviate, and potentially eliminate these issues. As a side benefit, this solution allows for better data-tracking (within the bounds of user privacy) that can potentially be used to optimize route distribution.

**Idea 2 – SmartChef**

SmartChef is a mobile app that utilizes AI to provide food recipe recommendations based on your available ingredients, personal taste, time given, etc. It will enable input through voice commands and detect specific keywords, ask follow-up questions to come up with a list of dishes the user can cook right away.

As for technology resources, we can utilize [Google’s API.AI](https://api.ai/), and the [Food and Recipe API](https://spoonacular.com/food-api) by Spoontacular.

**PROBLEM**

For home cooks, often we need to browse the internet to find inspirations on what we can make at home. That means we need to know what to cook ahead of time, and buy the appropriate ingredients. But what if we have a bunch of leftover ingredients and we don’t know what to do with those? With SmartChef, we just need to tell it what we have in our refrigerator, maybe what genre of food we feel like, and it will tell us what we can make.

**CUSTOMER**

Generally, most adults can cook a simple dish, but people who might be attracted to use the app are those who often cook at home and are comfortable with mobile technology. This narrows down the initial target market to frequent viewers of recipes on sites such as Youtube or Allrecipes.com.

**MARKET**

According to [a recent study](http://www.theharrispoll.com/health-and-life/Cooking-Dinners-At-Home.html), 97% of Americans cook, with 84% cooking at least once a week followed by 31% cooking every day. Though a smaller number, 17% takes recipes from websites while the rest gets them from notes, family members or TV shows. This can be a potentially big market if the app is made and marketed right even to those who don’t necessarily look for recipes online.

**Idea 3 – Voice**

Voice is a polling app that presents political and social issues in a user’s country and state, and allows the user to support a position on those issues with a tap of a button. The app would then display the positions of the general population and the users’ state representatives on several popular issues and policies. This would result in a centralized database where all parties of interest can view the percentage of citizens in support of different policies.

**PROBLEM**

When it comes to politics, most polling data are collected separately by different news stations and shows, each with their own known biases. With a neutral, singular application collecting data from validated users, there would be a more accurate representation of the citizens’ position on several issues.

**CUSTOMER**

Major parties of interest would be voters, activists and politicians, though technically any US citizen can submit their opinions on different matters.

**MARKET**

Ideally this app can be used by every voting citizen in the United States, and potentially other countries with the right resources.