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CSE 403 Project Proposal

Vision

Have you ever walked into a bar and wanted to try a new drink, but had no clue what to order? You could ask your friend what he/she likes or have the bartender give a suggestion, but they don't know what all of your preferences are. Some bars don't even have drink menus. In sit down restaurants and bars alike, many times you are expected to make up your mind within minutes, so you choose your usual or order something on a whim which may or may not suit you. Wouldn't it be better if there were a way to get a drink suggestion tailored to your specific tastes without having to search through thousands of drink recipes online? OneDrinkAway for Android smart phones allows the user to enter their cocktail preferences and get custom tailored drink suggestions. Not only that, but after the user adds a drink to their list of favorites, the application intuitively suggests more drinks the user may like.

There exist applications for smart phones that allow you to search for recipes or find a drink recipe at random, but ours keeps a list of your favorite drinks and provides more suggestions based on those. What sets this application apart is the lack of searching the user has to do to find something they might like. You do not have to think of what flavors go together or what flavors you might like and then go search; OneDrinkAway figures it out for you based on cocktails in your favorites list. With this handy application, never again do you have to keep ordering the same drink because you are unsure of what else is out there or take your quality time to search for a new drink yourself. We also plan to add features that allow the user to search drinks based on categories and certain ingredients. The target client can range from a novice cocktail drinker who only knows of a select few drinks to a cocktail connoisseur who is looking for a new twist. The application provides drinks along with recipes which will be useful for anyone who is interested in trying a cocktail, whether they are at a bar or enjoying a night-cap on their couch.

Software Architecture

OneDrinkAway relies on an external database of cocktail recipes called cocktaildb.com. We plan on using cocktaildb.com to build our personal databases in which we may need to use SQLite. We are also planning on using Android SDK to develop the app for Android phones and will use Android framework for the user interface. We may need an object relational mapper to make interaction with the database

simpler. We will be looking for people who know more and who have experience with databases.

Our application will have access to the database of cocktail recipes, as well as a database containing the main features of each cocktail that are used to determine what drink the user will like. As the user enters one of their preferences, the list of possible drinks to recommend discards the drinks that do not fit the users preference. The list will continue to shrink as the user enters more drink requirements. Once the user has entered all of their tastes, our app will suggest the remaining drinks in the list for the user to try. If the user likes the drink, they can add it to their list of favorites, which is stored in the application, or add it to their dislike list to make sure the application does not suggest it again.

Challenges and Risks

The most daunting challenge is categorizing each drink in a uniform way so that each drink is defined by a few different tastes, and then creating a database off of that. Since there are thousands of different cocktails, we need to come up with a systematic way to group them as well as a systematic way to extract them from the drink database that we will be getting the drink information from. It is not as simple as searching the database to find drinks with certain ingredients.

Another almost equally challenging risk is developing the user interface and making the application usable for Android. Since we have never created an Android application before, it could be a lot more time consuming than expected to learn how to use the Android SDK properly. Also, creating pretty and user friendly GUIs takes a lot of design planning and effort.

We need team members who have experience with databases and could create a database for our cocktail data, along with people who could help us create the UI and Android application.

To minimize risk, we may have to keep our focus on the drink suggestion feature and discard and minimize some of the other search features and favorite list features. Our main focus will be to make sure there are drink suggestions for each combination of preferences. We do not want to tell the user we could not find a drink that fits their tastes. This will be the basis of the features of the app and everything else will follow in order to keep on schedule.