Samantha Maxey
CS 402

Homework 3

Collections App

1. This app will be like a list of collections such as books, vinyl, artwork, anything someone would like to document. It will require an account to keep all the different collections within the profile. So, if I were to create a collection of my books, I would like a profile so I can sign in and see my collection. It will allow several different collections/folders to keep in order.
2. Feature List:
    a. Username/Password : 1 hr
        i. Login: 30 min
        ii. Logout: 30 min
    b. Folders : 2 hrs
        i. Add a folder: 1 hr
        ii. Save folder to account: 3 hr
    c. Folders within Folders: 2 hrs
    d. List in folders : 5 hrs
        i. Save list: 1 hr
        ii. List description: (description of item) 1 hr
        iii. Create internal API: 3 hrs
    e. App will work offline (no wifi required) : 30 min
3. Competitors
    a. Librarian Pro:
        i. This is very similar to what I want to do, where it can record movies, books, and TV shows that have already been collected.
        ii. It is only available on the MacBook, so it's meant for laptops
        iii. It has categorizing based on the collection
    b. Records:
        i. Similar to the Librarian Pro app except it can also take Recipes.
        ii. Only available on Mac
4. Proposed revenue
    a. I would make mine free since it may only be used by friends and family. It will be available for anything that works on iOS, so it can be in the pocket when you travel. When I first thought of it, I wanted a list of my books with me when I go to the bookstore so that I wouldn't buy the same copy twice.

Is the login for a server to keep its data? Is that factored into the estimate?

If this is backed by Core Data and you give it the ability to add images, this would make a great final.

Mileage Tracker App

1. This app would be a calculator and price holder for when you fill your gas tank in a car. Essentially, you'll be able to keep track of how much you're spending on gas and calculate how many miles/gallon you are getting in each trip. You'd be able to input the price per gallon and how many gallons you fill the tank with. You would then input the total mileage of the car. This piece would calculate how many gallons per mile were used based on how many miles were traveled from the previous gas fill.
2. Feature List:
    a. List of Cars: 1 hr
        i. Input a specific car
        ii. Save the car so that when the app closes it saves the car's data
    b. Mileage of Car: 1 hr
        i. Save value of the car's mileage
    c. Calculate miles per gallon: 5 hrs
        i. Record of how much gas was used to fill the car
        ii. Input the price per gallon
            1. This will calculate how much you spent on gas for this trp
        iii. Odometer:
            1. Get the value of the previous odometer mileage
            2. Subtract previous from the new mileage
            3. Divide this value from how many gallons were used to fill the car
            4. This gives mpg
        iv. Save all values for when app closes
    d. App will work offline: 1 hr
        i. Useful since it's used while at the gas station
3. Competitors:
    a. Mileage Keeper
        i. Very similar to what I would want to do. Has a list of the cars, their refuelings, and even a more detailed list of the specific fuelings. Theirs is free and handles multiple cars at once to show how much is spent on each car for gas. I found that pretty cool.
    b. MilelQ: Mileage Tracker & Log
        i. This is an actual tracker with a GPS to see how much you have traveled. It personalizes the drive and a mileage tax reduction. Which I didn't know was a thing. I don't think I would use this app in particular for what I'm looking for but it was cool to look at.
4. Proposed revenue:

While this is a simple idea, I like it and if you back this one with Core Data and add a graph, it'll make a great final as well.

a. I would make this free because you could use a calculator to track your mileage and gas usage. It is more of a convenient app to hold records and to look back on how much you spend on gas.

Construction in the Treasure Valley App

1. This app would be able to check the area you are in and see if there is any construction in the area and give you a different path option to dodge the construction traffic. It would implement an alert system to let you know if there is construction in the area. This is helpful because Boise is always under construction and it can hit you when you are least expecting it.
2. Feature List:
    a. GPS: 10 hrs
    b. Alerts: 5 hrs
        i. Give an alert if within 10 miles of construction and tell the user where the construction is.
    c. Construction API: 10 hrs
3. Competitors:
    a. Google Maps
        i. Google Maps lets you know when there is going to be a traffic jam, but it doesn't tell you what is causing the traffic. It could be an accident, construction, etc. It does let you know if there is a congestion of traffic in a certain area and gives alternate routes.
4. Proposed revenue:
    a. I would mark this one at $0.99 since it would be a bit harder than others to implement. It would take more time than the other apps I had listed as I would have to do research and figure out how to tell where and when construction is in order for the app to get the correct calculation.

Waze is another competitor that emphasizes this feature. Where would the data come from for this to stay updated? ACHD has something that lists hazards and maybe you can use that data to display these on the map. If you implement location, maps and a path finding API that's in maps, this would also make a great final.