Assignment 1: Report

The Team

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Experienced in Python, Java. Learning C, C++, HTML/CSS.

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What we are building?

The idea is to build an iOS app that people can use on their iPhones to work out what the best alcoholic beverage is for them to drink based on standard drinks per dollar ratio. Stores have sales all the time and nobody wants to go around to every store to find the best price but everybody wants the cheapest option with the most alcohol content. We feel like this app could be very favorable among students who don’t have a lot of money and are very frugal.

The base idea for the project will be a calculator where the user will input the cost of the drink, how many bottles/cans and the number of standards per bottle and the program will return how many standard drinks they are getting for every dollar. The user can then input other drink options and compare them to find out which one is their best option.

From this we can expand it so that the user can choose what drinks they want from a list and then input the current cost and the program prints out what the standard to dollar ratio is, once again with an option to compare different drinks.

The ideal final app will automatically retrieve price data from various databases (SuperLiquor, Henry’s, Liquorland etc) and display the best standard drinks to cost ratio in the area. The user will be able to choose a category (RTD, beer, spirits etc) and the app will bring up the results in an ordered list of going from the best bargain to the more expensive drinks.

Who is going to build it?

All three team members will participate in the coding and designing of the software but each member will be focusing on certain aspects. Fergus will be designing the user interface, app icon, logo, and any other aesthetic components of the app while Hugo and Oliver will code the software, e.g. the calculations, printing the results, retrieving the data from the relevant sources, creating the lists of products etc.

How are we going to build it?

We will code the program in C/C++ and the user interface will be made using Xcode.

We chose Xcode because the labs that we use have Xcode installed so it is easily accessible to us. None of us have much experience with this software so we will have to learn from the beginning but getting experience with it will be beneficial to us in the long run.

We will retrieve the data from each retailer’s website using C/C++. We have a Gantt chart (see Figure 1) containing the timeline for the whole project, with the estimated time for each milestone. This will be our guideline to keep us on track for release.

How are we going to ensure quality?

We will ensure quality in the code by reviewing each other’s code to make sure it is efficient and readable. Any improvements, more efficient techniques or alternations that we feel would be better suited for the program will be considered and tested.

Each member will be using this app on a regular basis as well as any friends or colleagues that are willing to help with the testing process. This will provide us with a larger user base than just the three members of the team so that will give us more input into improving the product as well as finding bugs to fix and improvements to make.

How long it will take to build?

The following Gantt chart has the details of when we expect to have certain milestones completed by.

*Figure 1.*

The deadline for the software is the 29th of May so we will have the release build finished by that date at the very latest. We will aim to have the release build finished a few days before then to reduce stress levels.

None of us on the team have experience designing, coding or releasing a full app to the extent of this project so we are all learning how this process is done. We have no clue how long each step in the Gantt chart will actually take so they are more a guideline of how long we want to spend doing each part. We are not sure if we will be able to fully implement all the features that we want to add before the release date so some features will be held back for future updates.

Mock Ups of the User Interface

The interface will be a simple, intuitive design. We want to create an easy to use app where the user knows what they are doing and how to navigate without too much of a learning curve. We are still figuring out details like the colour scheme and icon design but we have put together some concept designs for the user interface. These are simple, early stage mock ups and the final product will vary depending on which features are in the final build.

The images are in the appendix of this report.

Why will we use this software at least once a week?

A lot of the students at University do not have an income other than Studylink so they don’t have a lot of disposable income to spend on social events. This app will help these students make the best financial decisions and get the most bang for their buck when they go out on the weekend. With minimal effort, users will be able to find the best deals in their area and know exactly what they’re going to buy and how much it is going to cost so they can get in and get out quickly.

Permissions and Legal Stuff

We will be scraping the websites of various companies for the prices of their products so to ensure that we are not going to get taken to court, we have checked that us using their data will not cause any problems. We will not be making any money off of this app so we will be using the data for informational use rather than commercial use.

Appendix

Concept Images:





