* **1.1 Introduction**

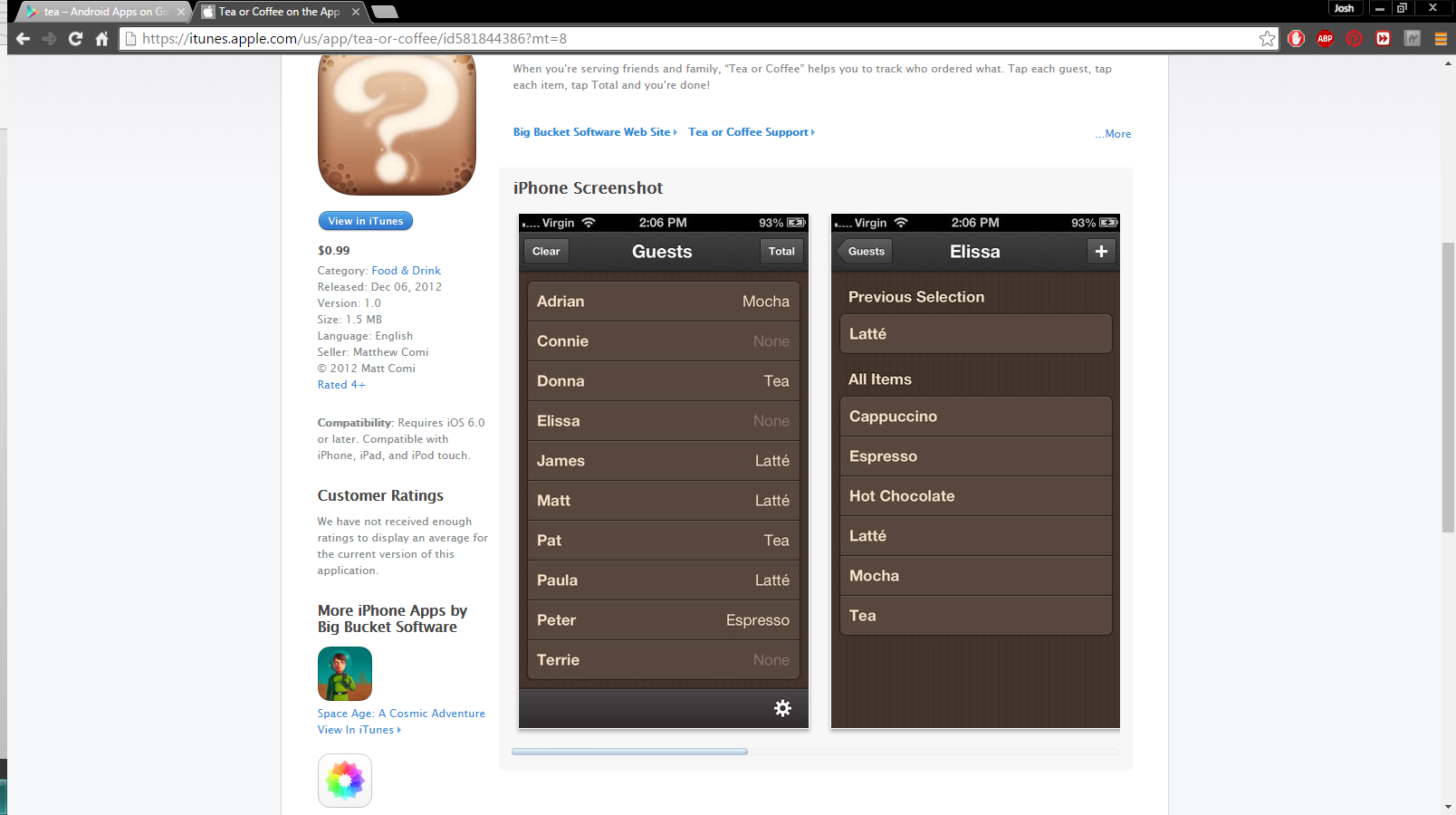
The application built for this assignment is designed to take in orders for teas, coffees and beverages whilst having guests. Growing up, my parents always had folks over and the question was always asked; who wanted tea and who wanted coffee? And then there was always the awkward person who wanted something else. Even at meetings I’ve been to, this issue crops up. And even if you get the right number there’s always the confusion over who had milk and who had sugar. I thought that this could be done in a much simpler way, through an app. The app could be passed around the group with individuals filling in their order and no fuss would be needed.

* **1.2 Scope and Content**

The application should be able to handle the input of orders for a given event. The user will name the event (i.e. “Family get together”, “meeting”) and the app should allow either Tea, Coffee or ‘Other’ drinks to be selected. There should be an option for the amount of sugar required and an option for milk level. The latter should be shown graphically and there should be good user feedback given throughout usage. When all orders have been done, the host should be able to see the information in a clear way and this should end up making the whole process easier.

* **1.3 Resources and Reading**

As well as the Module workbook and notes available through the website, I have extensively used online sources. Most notably ‘Stack Overflow’ for aid with problems and Google’s own android documentation. I have also researched both the IOS App Store and Google’s Play Store. On the App Store there is one app available like this, however this app looks basic and not very aesthetically pleasing and the user can only select pre-selected items. I can find no apps specifically like my one on the Play Store however there are plenty of coffee apps and tea brewing ones available for download.

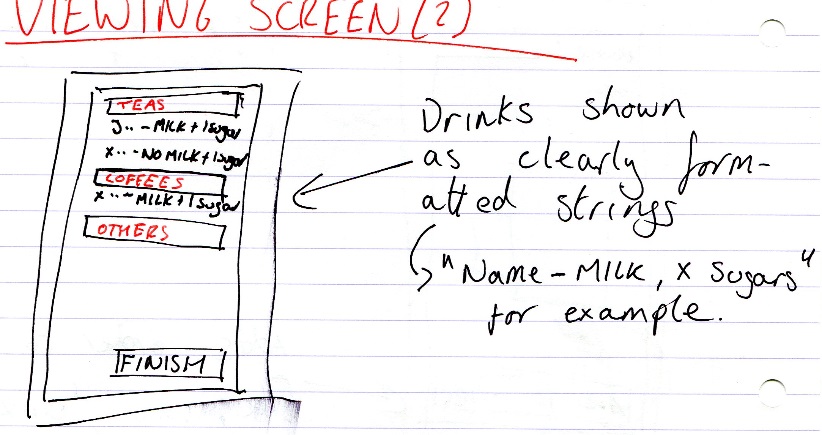
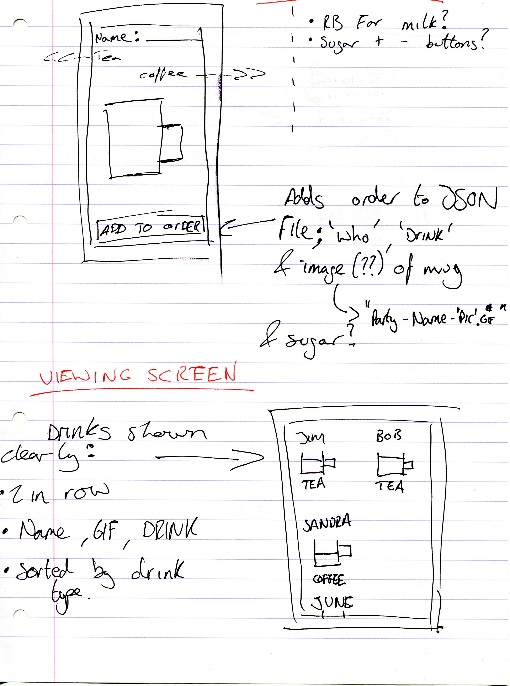
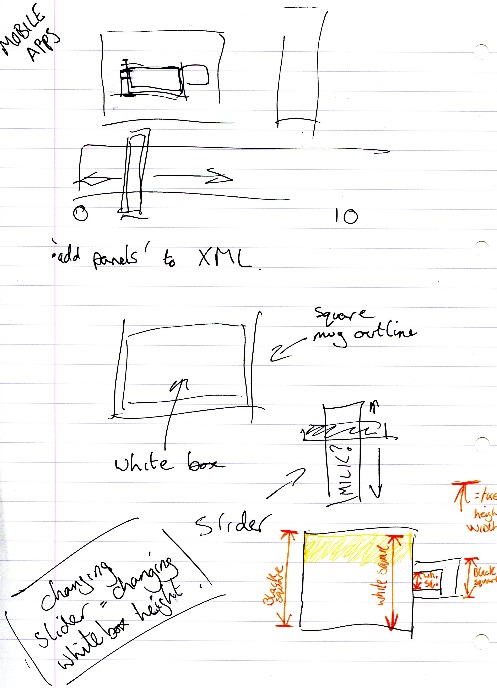


*Fig 1.1 – IOS Alternative*

In terms of physical resources, I am using android studio to build and design my app. Due to not having an android device personally, I am virtualising one via Android studio. While not gaining all the features of a physical device this works just fine for the developmental phase. I will also be using source control via GitHub and SourceTree throughout.

* **2.1 Software Design**
* **3.1 Implementation (Paper Based Design)**

Before any programming and implementation was done, a few short and basic paper based designs were made. As well as this a few notes were taken on implementation ideas. There were a few alternatives and due to the basic detail shown these were adapted in order to fit all functionality in the final app.



*Fig 3.1 Sketches of initial ideas*

There were a few major decisions taken at this point that really steered the app in the direction it ended up going in. I decided that I definitely wanted some sort of user feedback based on their milk level. The first way contemplated was using a two image system (one black mug, one white mug) and changing their overlay amount, the more milk the more white was shown. However this seemed like an un-necessary use of data and a complex method that may not even have the desired look. In the end it was decided that using a canvas and the paint method would be simpler and also have a more retro but obvious look as to what it represents.

Another major decision chosen here was how to display the data in the end. As shown in Fig 3.1 I had two different methods in mind. One of them would use a squared layout and display the mug graphic again but individualised based on the person’s order. The other would be the orders split into drink type using either an expandable list view or a table. In the end I chose the latter as it was clearer and, if formatted correctly, easier to read.

* **3.2 Implementation (Working App)**
* **4.1 Comparison to Original ‘Scope and Content’**
* **4.2 Comparison to IOS alternative**
* **4.3 Real World Evaluation**
* **4.4 The Future**
* **5.1 Resources/References List**