

# COMP2010: App Development for the Apple Ecosystem

## Assignment One: App Design and Dev Basics

### Background

Neppatsrev Coffee is a start-up café that desires to gain market share in the highly competitive coffee market. One way that Neppatsrev Coffee aims to elevate itself amongst its competition is through an iOS App-based ordering system that will let people order and customise Neppatsrev Coffee 'on-the-go'. Neppatsrev Coffee has contracted you to build a proof-of-concept iOS App that provides a menu of hot drinks, detail on each individual drink (including the ability to customise the milk, the number of shots and the size), a scannable loyalty card and a store locator with a location indicated on a map for the four initial concept stores.

### Task

Your task is to build the proof-of-concept application for Neppatsrev Coffee. Please read the entire specification before you begin, as this will save you time later. This will entail the following tasks:

1. Identification of the Views (screens) required. Detail these in a Word processor document and discuss what method(s) you will use to navigate between the views within your App, identifying and justifying your choice.
2. Design of each of the Views (screens). Sketch (either using a digital tool or by hand) what each View (screen) should look like. Label each individual View, Control and Navigation Item from the SwiftUI user interface library which the View (screen) is composed of. Include these sketches in your Word processor document.
3. Construct the App using Xcode, the Swift programming language and the SwiftUI user interface library for the iOS operating system (i.e. targeting mobile phones). Note the following caveats below to help you with the design of your App:
  - a. Ensure that you have implemented navigation between views and that all Views (screens) have a visible and relevant title;
  - b. Create four locations of your choosing for the store locator, you do not need to add annotations of the store names or other details to the locator, just pins;
  - c. Ensure that you have at least four drinks to choose from and that each has four parts which can be customised. Once the detail screen has been left, the same screen can be used for other drinks. You are free to use vaguely-relevant SFSymbols icons, rather than actual images of items to demonstrate them;
  - d. The loyalty card screen should contain a barcode, the member's name and the number of Neppatsrev Coffee the member has consumed. This information can be hard-coded and a barcode image found on the web and used with an Asset Catalogue.
4. Once you have completed and tested your App, reflect upon how you would modify the design of your App for the iPad. Add a short paragraph talking about this to your Word processor document. Sketch how one of your View (screens) would look on the iPad.

### Submission

You should work on this assessment alone. The assessment should be your own work, however you are free to contact the teaching staff regarding any queries you may have. Please check MS Teams for when the assignment is due, in case this date changes. By the due date, please upload the following to the MS Teams submission point:

- A .zip file containing your Xcode project;
- A .pdf file containing your Word processor document;
- A signed Declaration of Originality.

Please follow the links in the Unit Outline to submit a Request for Assessment Extension if this is required.

## Rubric

*The following is a draft rubric that may be subject to minor changes.*

| Criteria (Marks)                          | Not Met (0%)                          | Barely Met (25%)  | Partially Met (50%)   | Mostly Met (75%)  | Fully Met (100%)   |
|---|---------------------------------------|---|---|---|--|
| View Identification (5)                   | Not present or completely irrelevant. | One view has been correctly identified.   | Some, but not all, views have been correctly identified.                          | All views have been correctly identified.   | All views have been correctly identified and described.  |
| View Design: Views and Controls (15)      | Not present or completely irrelevant. | Only one view has any design attached to it.  | All views have some level of design attached to them.                             | All views are designed well, with most elements identified and chosen appropriately.    | All views are well designed, with all elements identified and chosen appropriately.                      |
| View Design: Navigation (5)               | Not present or completely irrelevant. | The identified method of navigation is unachievable.  | The identified method of navigation is inappropriate.                             | The identified method of navigation is appropriate.                                     | The identified method of navigation is the most efficient way of doing so.                               |
| View Construction: Neppatsrev List (10)   | Not present or completely irrelevant. | Only some of the View has been constructed.   | The View is mostly there, however there are some minor errors.                    | The View has been constructed, however redundant structures or elements have been used. | The View has been completely constructed and in the most efficient way.                                  |
| View Construction: Neppatsrev Detail (10) | Not present or completely irrelevant. | Only some of the View has been constructed.   | The View is mostly there, however there are some minor errors.                    | The View has been constructed, however redundant structures or elements have been used. | The View has been completely constructed and in the most efficient way.                                  |
| View Construction: Loyalty Card (5)       | Not present or completely irrelevant. | Only some of the View has been constructed.   | The View is mostly there, however there are some minor errors.                    | The View has been constructed, however redundant structures or elements have been used. | The View has been completely constructed and in the most efficient way.                                  |
| View Construction: Store Location (10)    | Not present or completely irrelevant. | Only some of the View has been constructed.   | The View is mostly there, however there are some minor errors.                    | The View has been constructed, however redundant structures or elements have been used. | The View has been completely constructed and in the most efficient way.                                  |
| Reflection (10)                           | Not present or completely irrelevant. | There is insufficient detail provided in the reflection to answer more than the basics of the question. | The reflection is somewhat, but not completely sufficient to answer the question. | The detail in the reflection provided is sufficient to answer the question.             | The detail in the reflection is sufficient to answer the question and an appropriate sketch is provided. |
| <b>Total (70)</b>                         |                                       |   |   |   |  |