

# ECS522U GUI COURSEWORK 2022/23

## BACKGROUND INFORMATION

### 1. DESIGN CONTEXT

Your task is to design and prototype a weather app, which will provide an interactive user interface for showing information about current weather and weather forecasts on a mobile device.

There are thousands of weather apps and weather forecasting web pages. Most mobile phones now come with a built-in weather app. You might think that these apps are very simple - they just tell you the weather, after all. However, when you look at them closely you will see that there are a number of complex design questions that need to be answered:

- Who is the app for?
- What will they use it for?
- What is the most important information to show the user?
- How can my app stand out against the thousands of other apps?

A quick survey of existing weather apps will show you that they are designed for a range of users and target activities. For example, some apps are aimed at young users, others are aimed at skiers or climbers, others are aimed at farmers, whilst the majority are aimed at the general population. You will also see that there is a wide range of designs for weather apps: some apps provide a lot of information for many different locations, others provide maps, others have animations and videos, and others have minimal designs focusing on core information elegantly displayed.

### 2. COURSEWORK LEARNING OUTCOMES

This coursework aims to introduce you to different aspects of graphical user interface design and implementation. By the end of the coursework, you will have some hands-on experience of:

- Characterising complex situations in terms of users, technology, and social aspects
- Identifying requirements for development from characterisations of situations
- Developing design ideas to meet the requirements of complex situations
- Developing a rationale for design decisions and selecting appropriate designs for development
- Understanding the role of design in the development of new interfaces
- Techniques and practice of building graphical user interfaces using React

### 3. COURSEWORK GROUPS

You will carry out the coursework in groups of 4-5 members. The coursework groups have been assigned and are available on the QMPlus module page.

### 4. COURSEWORK ASSIGNMENTS AND DEADLINES

The coursework is worth 40% of the overall module assessment and is divided into 3 assignments:

- Assignment 1: Requirements and Design (worth 10% of the overall module assessment)
- Assignment 2: Implementation (worth 20% of the overall module assessment)
- Assignment 3: Evaluation (worth 10% of the overall module assessment)

***For each of the assignment submissions, you must include a Contributions section, which briefly describes what each group member has contributed to that assignment.***

The schedule for the assignment submissions is below. All assignments will be submitted on QMPlus.

WEEK	DATE AND TIME	ASSIGNMENT SUBMISSION
5	Mon 24 Feb 1000	Assignment 1: Requirements and Design
9	Fri 24 Mar 1000	Assignment 2: Implementation
12	Mon 14 Apr 1000	Assignment 3: Evaluation