

# Coursework Overview: Graphical User Interfaces

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The task is to design and prototype an interactive user interface for showing information about current weather and weather forecasts on a mobile device (i.e. a Weather App). The coursework assessment contributes 40% of the marks for the GUI module and is divided up as follows with the below deadlines (all deadlines are on Friday mornings at 10.00 am).

**Week 5:** Deliverable 1: Requirements and Design 10%

**Week 9:** Deliverable 2: Implementation 20%

**Week 12:** Deliverable 3: Evaluation report 10%

The aim of this coursework is to introduce you to the different aspects of Graphical User Interface design and implementation. The objectives are that 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 requirements of a complex situation.
- Developing 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.

The work will be carried out in your groups of maximum 5 people. We request that you include in part of the coursework a **Contributions** description. In this description you briefly describe what each member of the group contributed to that part of the coursework.

## Background: Weather Apps

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 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 adult skiers, some are aimed at farmers, whilst the majority are aimed at general population. You will also see that there are a wide range of designs for Weather Apps - some apps provide a lot of information for many different locations, some provide maps, some have animations and videos, others have minimal designs focusing on core information elegantly displayed. In the coursework your task is to design and prototype a Weather App.