Assessment regulations

See the Assessment guidelines https://www.westminster.ac.uk/current-students/guides-and-policies/assessment-guidelines

for a clarification of how you are assessed, penalties and late submissions, **what constitutes plagiarism etc.**

Penalty for Late Submission

If you submit your coursework late but within 24 hours or one working day of the specified deadline, 10 marks will be deducted from the final mark, as a penalty for late submission, except for work which obtains a mark in the range 40 – 49%, in which case the mark will be capped at the pass mark (40%). If you submit your coursework more than 24 hours or more than one working day after the specified deadline you will be given a mark of zero for the work in question unless a claim of Mitigating Circumstances has been submitted and accepted as valid.

It is recognised that on occasion, illness or a personal crisis can mean that you fail to submit a piece of work on time. In such cases you must inform the Campus Office in writing on a mitigating circumstances form, giving the reason for your late or non-submission. You must provide relevant documentary evidence with the form. This information will be reported to the relevant Assessment Board that will decide whether the mark of zero shall stand. For more detailed information regarding University Assessment Regulations, please refer to the following website http://www.westminster.ac.uk/study/current-students/resources/academic-regulations

Note: By submitting the work through Blackboard you are acknowledging that this is solely your <u>own work</u>. Any code which is <u>not created by you</u> MUST be clearly commented as such. Any code discovered to not have been created by you will mean that the work will be submitted to academic standards for a potential assessment offence, which may result in a zero mark in the component or whole module.

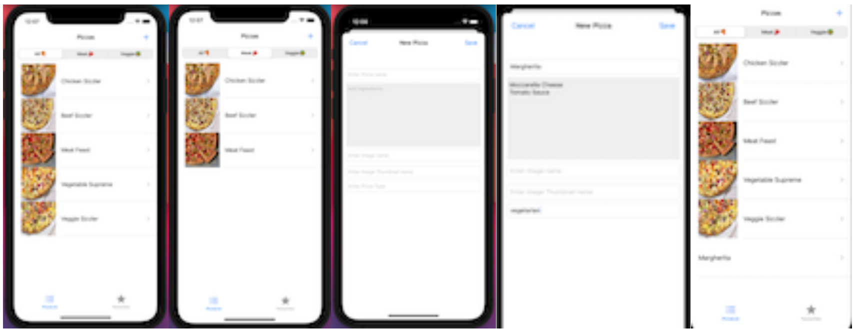
6COSC004W Native Programming Coursework 2 Individual coursework

Introduction

Your coursework comprises of two parts, part A worth 40 marks and part B worth 60 marks.

Part A

You are given a partially completed pizza application that was built using a previous version of Xcode using storyboard interface, UIKit Framework and swift 5 as shown below.



Your task is:

Re-build the app using Xcode13.x and SwiftUI Framework.

The partially completed app is missing some important features like adding a new pizza and deleting a pizza.The new version of the app must have these two additional features that must be persistent.

(40 marks)

Marking Scheme:

Re-engineered app using SwiftUI lifecycle:

- Main list view built with sub views (5 marks)
- Correct mapping of tables from UIKit (5 marks)
- Correct mapping of table cell from UIKit (5 marks)
- Implementation of additional features:
  - Add a new pizza with image (5 marks)
  - It must be persistent (5 marks)
  - Delete a pizza from the list (5 marks)
  - Deletion must be persistent (5 marks)

Part B

You are to create a weather app using Xcode 13.x and SwiftUI life cycle that will show the **current** weather and **forecasted** weather for a location chosen by the user.

The functional requirements are (cf: images below):

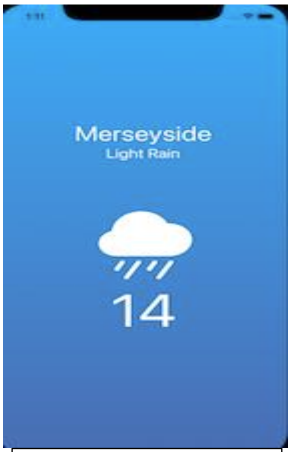
- User can input a place name and get the current weather data displayed in real time.
- The app must safely handle non-existent locations and non-alphabetic entries.
- A basic display must show the temperature and location.
- A detailed display will have a number of current weather elements with appropriate weather icons such as temperature, humidity, wind speed, pressure as shown in Figure 2 and Figure 3.
- An enhanced display will present user with detailed ***current*** weather and ***forecasted*** weather as shown in Figure 4 and Figure 5.

The non-functional requirements are:

- The app interface follows Apple guidelines.
- The app interaction is consistent.
- The app should render on any iPhone

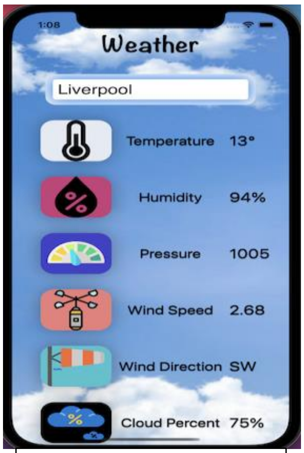
The weather data app will make use of an API provided by openweather.org (https://openweathermap.org/). You will need to register and obtain an API key with openweathermap.org
You should study the API options available and make the appropriate choice.
The weather data shown in terms of the weather elements and images will depend on your design and elements you consider important including the background that may reflect the current weather.

Sample images displaying different weather app design and information for user:



Merseyside
Light Rain
14

Figure 1 Basic Display

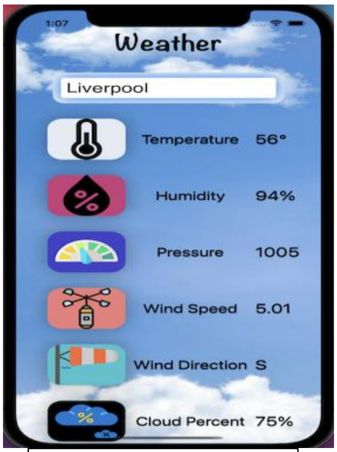


Weather

Liverpool

Temperature 13°
Humidity 94%
Pressure 1005
Wind Speed 2.68
Wind Direction SW
Cloud Percent 75%

Figure 2 Detailed Display for one time with metric units

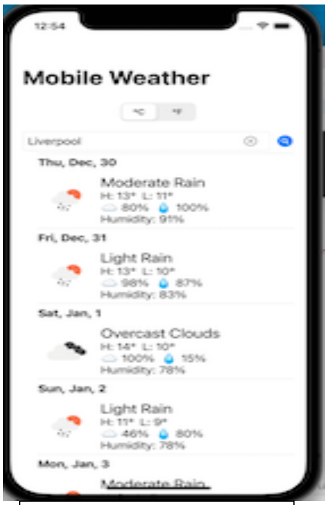


Weather

Liverpool

Temperature 56°
Humidity 94%
Pressure 1005
Wind Speed 5.01
Wind Direction S
Cloud Percent 75%

Figure 3 Detailed Display for one time with imperial units



Mobile Weather

°C °F

Liverpool

Thu, Dec, 30
Moderate Rain
H: 13° L: 11°
80% 100%
Humidity: 91%

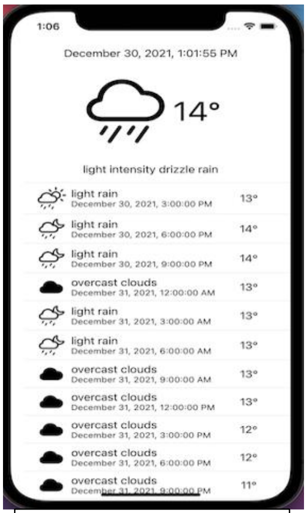
Fri, Dec, 31
Light Rain
H: 13° L: 10°
98% 87%
Humidity: 83%

Sat, Jan, 1
Overcast Clouds
H: 14° L: 10°
100% 15%
Humidity: 78%

Sun, Jan, 2
Light Rain
H: 11° L: 9°
46% 80%
Humidity: 78%

Mon, Jan, 3
Moderate Rain

Figure 4 Detailed Display for current and 5 day forecast with toggle option for units



December 30, 2021, 1:01:55 PM

14°

light intensity drizzle rain

light rain
December 30, 2021, 3:00:00 PM 13°

light rain
December 30, 2021, 6:00:00 PM 14°

light rain
December 30, 2021, 9:00:00 PM 14°

overcast clouds
December 31, 2021, 12:00:00 AM 13°

light rain
December 31, 2021, 3:00:00 AM 13°

light rain
December 31, 2021, 6:00:00 AM 13°

overcast clouds
December 31, 2021, 9:00:00 AM 13°

overcast clouds
December 31, 2021, 12:00:00 PM 13°

overcast clouds
December 31, 2021, 3:00:00 PM 12°

overcast clouds
December 31, 2021, 6:00:00 PM 12°

overcast clouds
December 31, 2021, 9:00:00 PM 11°

Figure 5 Detailed Display for current and 3 day forecast, every 3 hours.