



DEPARTMENT OF COMPUTING

COMP3130 2023 Mobile Application Development

Major Work Deliverable-II (25%)

Design and Development of a Mobile Application

Sunday May 21, Week-12, 11.55 pm (Marked out of 100)

Problem Statement

You are required to create a mobile application using expo/react-native in a platform of your choice. The theme is creating an app to record details about different charities. Using the app, the viewer must be able to browse through their charity collections. Once logged in, the user must be able to add, view, delete and update every content (both the collections, and the charities within the collection) they have added. Please note this is an open-ended problem statement and you are encouraged to try new concepts that are not covered in the lectures/workshops. It is up to you, how you choose to implement this.

You are allowed to add/delete one/two more screens if you want. Ideally, the number of screens here should be sufficient to display all the information. Please note, you are allowed to change the content in the screen as well. Below is just an idea of how you can arrange your content.

Welcome Screen: This could be your first screen (You may choose to add a Splash screen as your first screen) that provides the options to register and login.

Register Screen: In this screen, the user must have the option to register and create an account.

Login Screen: In this screen, the user must use their username and password to login.

Account Screen: This is the home screen for the users that provides the option to go to their charity collections (Here is the place where tabs would start to appear, and you could use that for navigation too). An option to logout must take the user back to the Welcome Screen.

Charity Screen: This is the screen that displays all the charities from a collection. Within a collection, the user must be able to filter through the categories and display them. There must be an option on the screen (in the tab/on the screen) to add a charity to a collection. If you want to add your edit and delete option here, you may do so.

More Information Screen: This is the screen that displays the charity information in detail. If you want to add your edit and delete option here, you may do so.

Task Descriptions

Task 1: Development

Using a wide range of components and APIs that are provided by react-native, build a mobile application based on the specifications provided in the problem statement. You are highly encouraged to create custom components and use them wherever applicable. You are also expected to use Stack and Tab Navigation to help navigate between screens. You will also be graded for good programming practices such as naming conventions, commenting, etc. Please include a readme file for instructions such as OS, the device you want us to test it, and any extra instructions.

Task 2: Tests

You must create at least two unit tests that the marker can run using `npm test`. In your readme you should include a 50 word explanation of why each test counts as a unit test as opposed to a system or integration test. You will be graded on the existence, correctness, and value of the tests. I.e. the more valuable to the test, the higher your grade.

Submission Instructions

You will submit these Tasks on a the Major Work Deliverable-2 link on iLearn.

You will submit a zip file of your project (Compress your project folder and submit it). Please add a readme file for Task2 and any comments to the marker. Rename this file to *YourName_StudentID.zip*