FIT5046 – Mobile and Distributed Computing Systems

Assessment 3 - Android App Development and Demo (40%)

Moodle Submission Deadline: Friday 10 May 2024, 11:55 PM (Week 10)

The assignment is **worth 40%** of the total mark for this unit.

The assignment is a **group assignment**:

- Each group must have **3 to 4 members**.
- All group members should be **the same from Assessment 1.**

The assignment is **a group assignment**. Each group can have 3 to 4 members. The group members should be **the same group members** from Assignment 2.

Learning outcomes: this assessment supports unit learning outcomes 1, 2 and 3.

- **LO1:** identify and describe different approaches and methods for building distributed and mobile computing systems;
- **LO2:** evaluate several models and approaches and select suitable mobile computing solution to a particular case;
- **LO3:** propose and develop a mobile or distributed system that is appropriate to a problem domain.

In this assignment you will **develop an Android app based on your proposed components, functionalities, and main screens proposed in Assignment 1**.

You can must create this app in **Kotlin** and using Jetpack **Compose**.

For the implementation and demo, you **must use the emulator (not a real device)**.

Assignment marking

The assignment will be marked based on the marking guide and rubric (uploaded on Moodle).

The marks allocated for all the tasks in this assignment will add up to **100 marks** (**worth 40%** of the total mark).

The **group mark is 60%** that will be based on the final app, considering completion of features, full functionality and other criteria mentioned in the marking guide.

The **individual mark is 40%** and will be determined based on the interview results, considering **promptness, correctness and level of understanding** regarding the written code, Android concepts implemented, the application logic, and connections/links between different parts of the code and application.

Interviews are compulsory **for each group member** and will be held in the labs in Week 11 and 12.

Submission requirements

This assignment requires submitting **a zip file** (details below).

Please use this file name: **FIT5046Assign3-[studentSurnname]-[studentId]-[tutorSurname].zip**

The final submission (the zip file) must contain:

1. **Android project** (containing all the folders and files)

2. **A demo video** **file (5 minutes)** to show all the screens, navigation and how the app works. For the demo, you must use **the emulator**.

3. **A short report** that provides:
    - A table listing all the **functionalities** of the Android app compared to the ones proposed in Assignment 1 and their status: **fully implemented, partially implemented, not implemented**.
    - A list of new and **additional features** that were not proposed in Assignment 1 (if any).
    - **Screenshots** of all the main screens **with a title** to understand their purposes. **For some functionalities**, you need to **provide multiple screens to capture each status/mode**, e.g. a search screen and its result screen, or an empty form and a completed form, and after submission.
4. **A task allocation form -** This will be based on Assignment 1 but you could make changes in this version.

Code similarity check

This assignment will be submitted to the similarity detection system that is trained to find similarities in the programming code.

Late Submission:

There will be **10% penalty per day.**

Academic Integrity Rules

Please note: **Generative AI tools are not restricted** for this assessment task **BUT a** combination of the following should be provided to acknowledge the use of generative AI in academic work:

- Written acknowledgment of the use of generative artificial intelligence and its extent;
- Descriptions of how the information was generated (including the prompts used); and
- Citing and referencing using closest source types in the style being used

When marking assessments, **if unauthorised use of generative AI is suspected or unacknowledged work is discovered,** it will be managed **as an allegation of academic misconduct** in accordance with existing disciplinary processes.

https://www.monash.edu/learnhq/build-digital-capabilities/create-online/acknowledging-the-use-of-generative-artificial-intelligence

An example from the above website:

Prompt: Was Sir John Monash a good man?

"Sir John Monash is widely regarded as one of Australia's greatest military leaders" (OpenAI, 2023)

Reference

OpenAI. (2023). *ChatGPT* (Jan 9 version) [Large language model]

http://chat.openai.com/chat