PROG3210 - Programming: Mobile Applications II

ASSIGNMENT TWO: (25%)

UI for API Data

Strengthen your ability to apply your knowledge of SQLite DB

Overview

Overview: On your own, create a simple UI to connect to the OMDB Database and display the Matching Movie results in a List (or Table) and display all the details in a Movie Details Screen.

Your UI should include at least two screens: A **Movie Search Screen** where you search for and display movie results (Title, Studio, Rating and Year) and a **Movie Details Screen** where you display the full details of the Movie (including the short description and the movie Poster).

You will need to register for an API key from the OMDB website (https://www.omdbapi.com/)

You will need to create a new Model that matches the data from the OMDB API.

Your app must be written in Java for Android. Hybrid platforms (e.g., React Native) are not acceptable.

Instructions:

Part 1 Your Movie Search Screen (50 Marks):

- Include a Search Field and Search Button and a RecyclerView. When the
 user presses on the Search Button all the matching results from the OMDB
 will be displayed in a RecyclerView (30 Marks)
- 2. Each Row in your **RecyclerView** should use a Custom View (e.g., Custom Table Cell) and display the Movie Title, Studio, Rating, and the Year the movie was released. **(10 Marks)**.
- 3. Include a UI Element or interaction (e.g., pressing on the Row Item) that allows the User to navigate to the **Movie Details Screen**. **(10 Marks)**.

Part 2 Movie Details Screen (20 Marks):

- 4. Movie Details Screen should include UI Elements (e.g., Labels, Text Fields and an ImageView) that allow the user to view all the Movie properties. This will include the Movie's description and an image of the Movie Poster and all other relevant details. (15 Marks).
- 5. Your Movie Details Screen should include a UI Element or interaction that allows the user to navigate back to the **Movie Search Screen** (5 Marks).

Part 3 Your App is Aesthetically Pleasing (10 Marks):

6. You've designed your App with good Aesthetic standards including appropriate margins, padding, colours, contrast and overall layout while always keeping the user in mind (**10 Marks**).

Part 4 Code Quality: (10 Marks)

- 7. Share your files on GitHub to demonstrate Version Control Best Practices and push your site to a Cloud Host (**10 Marks**).
 - a. Clean Build
 - b. MVVM Architecture
 - c. LiveData

- d. ViewBinding
- e. Structure/Good Varriable Names/No Hardcoded Values

Part 5 Video Presentation: (10 Marks)

- 8. Create a Short Video presentation on YouTube or another streaming provider. You must include a short PowerPoint (or Google Slides) Slide Deck that includes a single slide to start your video (**10 Marks**)
 - a. The **first** (and only) **Slide** of your Slide Deck must include a **current image** of you (no avatars allowed) that is displayed appropriately on the page. You must also include your Full Name(s), Student ID(s), the Course Code, Course Name, and your Assignment information.
 - b. You will **demonstrate** your database's functionality.
 - c. Sound for your Video must at an appropriate level so that your voice may be **clearly heard**.
 - d. Your screen resolution should be set so that your code and app demonstration is **clearly visible**.
 - e. Your Short Video should run no more than 5 minutes.
 - f. Your Video may be unlisted, but must be accessible to the instructor

Submission Details:

Your submission should include:

- a. A zip archive of your Project files (Manditory)
- b. Format for Zip file: assignmentNumber_StudentLastName.zip
- c. A link to your Video Presentation

Assessment:

You will be assessed on the following:

Tod Will be discised	Not Quite	Good Work	Awesome
Movie Search Screen (50 Marks)	(0 - 16 marks)	(17 - 34 marks)	(35 - 50 marks)
Movie Details Screen (20 Marks)	(0 - 6 marks)	(7 - 13 marks)	(14 - 20 marks)
Your App is Aesthetically Pleasing (10 Marks)	(0 - 3 marks)	(4 - 7 marks)	(8 - 10 marks)
MVVM Clean Build LiveData ViewBinding (10 marks)	(0 - 3 marks)	(4 - 7 marks)	(8 - 10 marks)
Video Presentation Your short video must demonstrate your site and describe your code (10 marks)	(0 - 3 marks)	(4 - 7 marks)	(8 - 10 marks)

Assignment Due Date:

See Class Website

Late Submission:

1 day late
2 days late
3 days late
-20% cumulative penalty
-40% cumulative penalty
-100% cumulative penalty

Assignment Weight:

Assignment Two is worth 25% of your final grade.

Please submit your assignment online under Assignments > Assignment Three.

!important

Please ensure that any work you submit is your own unique and independent work. Work submitted that is found to be not your own unique, and independent work will be subjected to a grade of 0 and considered to be academic misconduct.