

## Assignment 3

### Instructions and Grading Criteria

- This is an **individual** assessment. Please review the college's **Academic Integrity Policy** to ensure that you are completing your work in an academically honest manner.
- Your application will be tested using an iPhone 14. It is your responsibility to ensure that your application runs properly on this simulator.
- In addition to the required functionality, learners are expected to use the coding conventions demonstrated in class, meaningful variable naming, and clearly organized code. Comments are helpful but not required.

### Submission Checklist

For your submission to be graded, provide a **zip** file of your project, and a **screen recording** demonstrating the functionality you implemented.

#### 1. Create a zip file of your project

- Name the zip file **A3\_firstname\_lastname.zip**. **.7zip or .rar files will not be accepted.**

#### 2. Creating Your Screen Recording

- In the screen recording, demonstrate the app running in the console, and show the relevant output.
- Max 7 mins.

#### 3. In the assignment:

- Submit your **zip file containing the project and screen recording**.
- If your screen recording is too large, then upload your screen recording to **Microsoft OneDrive** and ensure that the link is set to: "Anyone with the link can view". Paste a link to the recording in the submission comments.

### Academic Integrity

- This is an individual assessment.
- Permitted activities: Usage of Internet to search for syntax only; usage of course materials
- Not permitted:
  - Communication with others (both inside and outside the class)
  - Discussion of solution or approaches with others; sharing/using a "reference" from someone
  - Searching the internet for full or partial solutions
  - Sharing of resources, including links, computers, accounts

## Problem Description

### Create a Movie App

**PS:** The initial instructions for this assignment serve as a foundation. Expanding on these with original thought and creativity is not only welcomed but encouraged. Thoughtful design decisions and creative features will be regarded as an asset to the overall quality of the completed assignment.

#### Instructions:

- Mock Data Initialization:
  - Define a Movie model in Swift that has properties such as title, year, imdbID, type, and poster url.
  - Create an initial array of Movie objects to act as your local data source.
- UI Setup:
  - Your main screen should include:
    - A search bar for filtering the list of movies.
    - A "+" button for adding new movies.
    - A table view for displaying movie title, year, and poster.
  - Create a secondary screen for displaying movie details.
  - Search Functionality:
    - Implement the search bar delegate methods to filter the movies based on the title as the user types.
  - Adding Movies:
    - Add functionality to the "+" button that presents a form in a new screen or an alert for adding a new movie. This form should collect details like the movie's title, year, imdbID, type, and poster.
    - On submission, create a new Movie object and add it to the local data source.
  - Deleting Movies:
    - Implement swipe-to-delete functionality in the table view, allowing users to swipe on a movie cell to reveal a delete option.
    - When the user confirms deletion, remove the Movie object from the local data source and update the table view.
  - View Movie Details:
    - When a user selects a movie from the table view, navigate to the movie details screen.
    - Display the selected movie's details on this screen like the movie's title, year, imdbID, type, and poster.

**END OF ASSESSMENT**