

# CMPS 312 – Mobile Application Development

## Midterm Practical Exam – 17 October 2023 (2-hour duration)

**Objective:** Showcase your mobile development skills by crafting an Android application named "NewsQuest" designed for news article exploration with category sorting.

### Implementation Tasks:

#### 1) News List Screen

- Create a **News List screen** that displays a list of news articles. The list should be populated from the **articles.json** under the assets folder.
- Each news article entry should include the title, a brief summary, a category tag, author name, publication date, and an image as shown in Figure 1.
- Integrate a top app bar, featuring three distinct buttons representing the news categories: **Politics**, **Technology**, and **Business**. When a user selects one of these category buttons, the screen should dynamically load all the relevant news articles associated with that specific category. Make sure you change the color of the selected button.

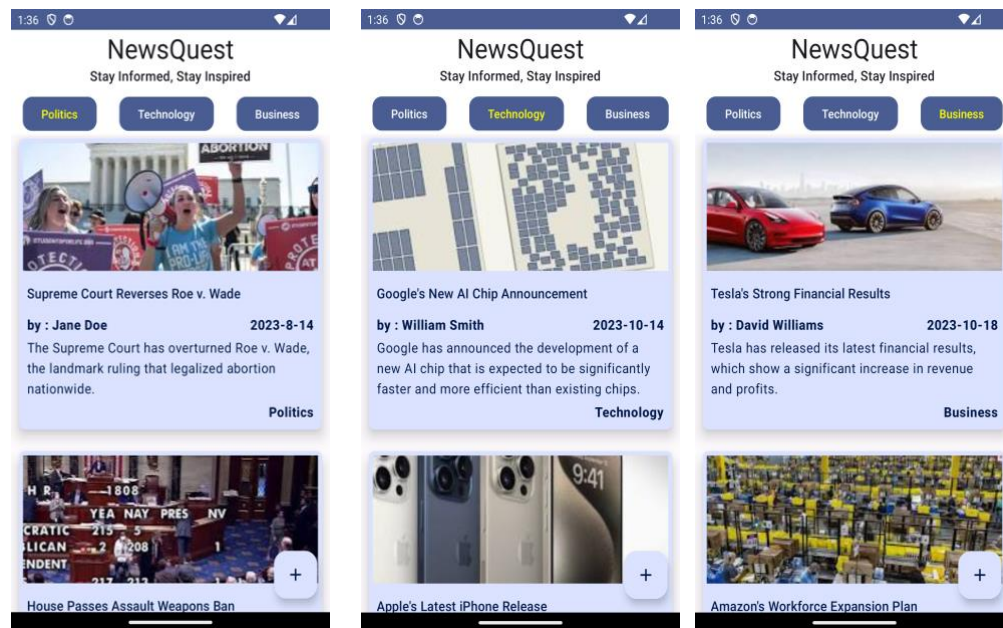


Figure 1 News List Screen

#### 2) Add News Screen

- Create an Add News screen that allows users to add new news article.
- Users should be able to enter the title, the article's content, choose a category from a dropdown, provide the author's name, and set the publication date.
- Also, implement an option for users to enter image name an image in the drawables to associate with the news article. Use images\_18 for testing.

- o Include the "Add Article" button that stores the user-added news article in the list of articles. When the news article is added, it should be immediately visible in the News List.

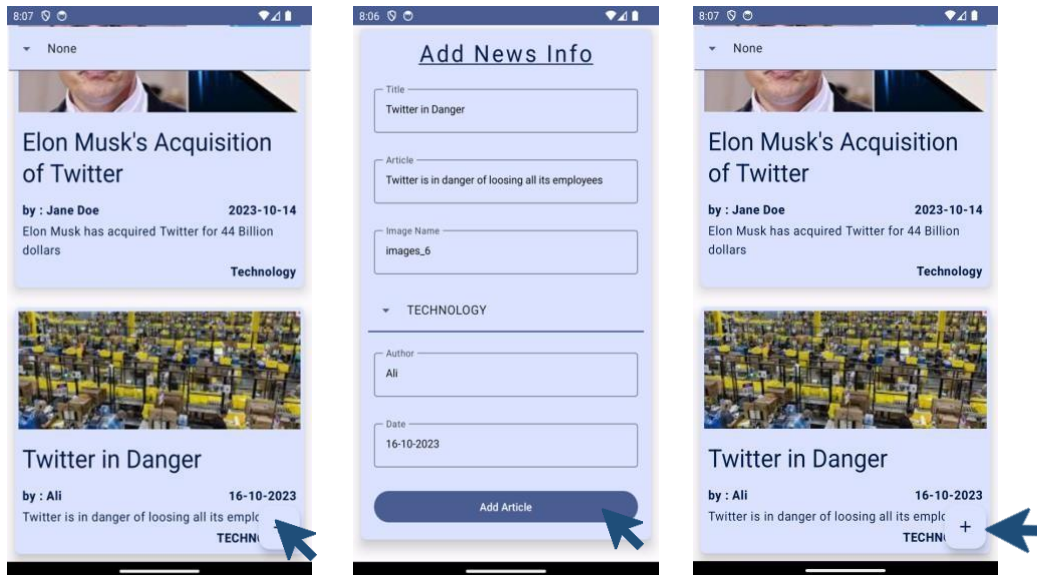


Figure 2 : Add New Article

## Grading Rubrics

Criteria	%	Functionality*	Quality of the implementation	Score
<b>News List Screen (70%)</b> <ul style="list-style-type: none"> <li>Successfully displayed the list of news articles from the JSON file as per the design shown in Figure 1.</li> <li>Properly implemented filter news articles by category.</li> </ul>	70			
<b>Add News Screen (30%)</b> <ul style="list-style-type: none"> <li>Correctly designed and implemented the Add News form.</li> <li>Successfully added the news article to the list of articles. Plus, demonstrate the ability to display the newly added news article in the list.</li> </ul>	30			
Total	100			
Provide screenshots in <i>testing.docx</i>	-		<i>[-10pts if missing]</i>	

## Possible grading for functionality:

- **Complete and Working** (get 70% of the assigned grade),

- *Complete and Not working* (lose 40% of assigned grade)
- *Not done*, get 0.
- The remaining grade is assigned to the quality of the implementation.
- Must submit screenshots in this **Midterm Testing-GradingSheet.docx** (otherwise - 10pt)