# Android Development Class - Assignments

Below are the details for the assignments in your Android Development course. You can choose one from the three themes provided. Each project focuses on different aspects of Android development and allows you to demonstrate your understanding and creativity. These assignments will help you practice the skills you have learned so far and build a fully functional Android app.

## Submission Deadline

- Submission Date: 15 October 2024  
- Submission Format: A working APK file, along with the source code in a GitHub repository.  
- Deliverables:  
 1. APK file.  
 2. Source code link (GitHub repository).  
 3. A video demonstration of the app showcasing the key features and functionality (to be uploaded on the LMS).  
 4. A brief documentation file explaining the key features and the development process.

## Assignment Themes

### 1. Word Games (e.g., Wordle-like Game)

- Objective: Develop an interactive word game where users have to guess a word based on certain hints.  
- Features:  
 - A daily or random word that the user has to guess.  
 - Option to input guesses with feedback after each guess (e.g., correct letters in correct or wrong positions).  
 - Track the number of attempts and display a win/loss result.  
 - Optionally, include levels of difficulty and shareable results on social media.  
- Focus Skills: UI design, string manipulation, game logic, user interaction, and data persistence.

### 2. Daily Commute Helper App

- Objective: Create an app that assists users with their daily commute by providing relevant travel information.  
- Features:  
 - Display real-time information about routes (public transport, driving, walking).  
 - Notify the user about delays, traffic conditions, or changes in their usual commute route.  
 - Optionally, integrate with Google Maps or other API services for location data.  
 - Reminders for when to leave based on traffic or commute schedules.  
- Focus Skills: API integration, location services, background processes, notifications, and user-friendly interfaces.

### 3. Gallery Organizer App (e.g., Like Slidebox)

- Objective: Build a gallery app that helps users organize their photos and media efficiently.  
- Features:  
 - Allow users to view, delete, or move images into albums with simple gestures.  
 - Include a sorting/filtering feature (by date, size, location, etc.).  
 - Optionally, integrate cloud storage support (e.g., Google Drive, Dropbox).  
 - Provide a user-friendly interface with efficient media handling.  
- Focus Skills: File management, gestures, multimedia handling, storage APIs, and user experience.

## General Guidelines:

- Code Quality: Ensure that your code follows clean coding practices, is well-documented, and adheres to Android development guidelines.  
- UI/UX: Pay attention to user experience and ensure that the UI is responsive and intuitive.  
- Creativity: Feel free to add extra features or improve upon the ideas given above.

## Additional Requirement:

- Video Demonstration: In addition to the APK and source code, you are required to submit a video (uploaded on the LMS) that demonstrates your app's functionality, highlights the key features, and provides a brief walkthrough of the user interface.

Good luck, and I look forward to seeing your creative implementations!