



Mobile Application Development
SOFE 4640U

Assignment 2 - LocationPinned Application

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[GitHub Link](#)

Assignment Task

This report explains how layouts, views, and intents were used in the development of the LocationPinned app, which involves loading and managing location data in a SQLite database and geocoding. In the application, two primary layouts were used: the main page and the new location page. These layouts serve as the foundation for organizing the visual components of the app. Both layouts were designed using the ConstraintLayout, a versatile and efficient layout manager. ConstraintLayout enables you to create complex user interfaces by defining the relationships between views, which is essential for responsive design. On the main page, I placed a load button to initiate the loading of coordinate pairs from a text file. Through the use of geocoding, InputStream and BufferedReader, I was able to obtain the full address including street name and number given input textfile of 50 coordinates and place it into the database. This layout also features an EditText field for searching for addresses and a trash bin icon to delete entries from the database. The new location page, intended for adding new location data, is another instance of effective layout usage. It includes views for entering location details and buttons for confirming or cancelling the addition of a new location.

There were various types of views employed in the application to create a functional but easy-to-use user experience. EditText views were used for both searching and entering location details. These views allow users to input text and interact with the app. The load button, trash bin icon, and navigation buttons are examples of Button views, which respond to user clicks. These views trigger actions within the app, such as loading data, deleting entries, or navigating to different screens. The visual representation of information, like showing location data, is facilitated by TextView views.

Intents are a fundamental concept in Android for enabling communication between different parts of an app or between different apps. In your app, intents were used for navigation and interaction. The main page features a "New Location" button, which utilizes an intent to open the new location page. This enables users to switch to a different screen for adding new location data. Additionally, intents are employed within the new location page to support user actions. There are intents to confirm and cancel the addition of a new location, providing a straightforward means of interaction.

Screenshots

