Library Management Android App

Overview

This Android application is designed to support basic Library Management functions such as maintaining books, membership, and lending details. The app utilizes a SQLite database stored in the device's SD card to manage data. It provides users with CRUD (Create, Read, Update, Delete) functionality for various entities including books, book copies, members, publishers, authors, lending details, and branch details.

Features

Book Management: Add, view, edit, and delete book details including title, author, publisher, ISBN, and genre.

Book Copy Management: Manage book copies by adding, viewing, editing, and deleting copies associated with specific books.

Member Management: Add, view, edit, and delete member details such as name, contact information, and membership status.

Publisher Management: Manage publishers by adding, viewing, editing, and deleting publisher information.

Author Management: Add, view, edit, and delete author details including name, biography, and contact information.

Lending Management: Track lending details by adding, viewing, editing, and deleting lending records including borrower information, due dates, and return status.

Branch Management: Manage library branches by adding, viewing, editing, and deleting branch details such as name, address, and contact information.

Setup

Database Initialization: The app initializes the SQLite database with appropriate tables using the provided SQL commands. Ensure the database setup is completed before using the app.

User Interface: Analyze the requirements and develop appropriate UIs with buttons for each CRUD operation.

Code Development: Develop code to support CRUD functions for each table in the SQLite database.

Integration: Integrate the CRUD functionality with respective buttons in the user interface.

Enhancements: Make the app attractive and useful by adding additional features as necessary to improve usability and user experience.

Testing: Test the application with real data to ensure proper functionality and reliability.

Development Environment

Language: Java for Android development

Database: SQLite for local storage

IDE: Android Studio for development