

20CE 504L Programming Skills Development-II Laboratory (2023-24 Sem-I)

SYNOPSIS FORMAT FOR MINI-PROJECT

1. Group Member Roll No and C no. Name

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2. Problem Statement.

'BookBhandar App'

3. Technology Selected – Android

Creating a book app for Android can involve various technologies.

Here are some commonly used ones:

• Programming Languages:

Java: Official languages for Android development.

• Development Frameworks:

Android Studio : Official Integrated Development Environment (IDE) for Android development

• Database:

Firebase

4. Keywords

Android studio, User Interface Design, XML Layouts, Recycler View, Intents, Fragments, Activities, Navigation Component, Firebase Authentication

5. Abstract(150 words approx.)

Creating a book shop app involves designing the user interface and writing the underlying code to make the app function seamlessly. This can be achieved using android studio as follows:

User Interface Design:

- 1. Main Activity UI
- 2. Book listing UI
- 3. Book detail UI
- 4. User Profile and settings
- 5. Shopping cart UI

Coding Aspects:

- 1. UI layout and elements
- 2. Activity and fragment classes
- 3. Recycler view for book listing

- 4. Navigation
- 5. Data Management
- 6. User Authentication

6. Module wise Scope

App module: It contains the main activities, fragments, and user interface components for navigating the app.

UI module: Contains XML layout files and user interface components for navigating the app.

Data module: Contains data models, database access code and network communication.

Profile module: Contains user profile, order and payment history.

Home module: Contains home fragment, image slider adapter, etc.

Search module: Contains searching mechanism for books.

Seller module: Adding books, their quantity available at the shop and prices.

7. Technological features covered

Android studio provides a wide range of technological features and tools to help us create, test and debug android applications.

User Interface Design:

Different Layouts, Buttons, Custom drawable resource files, Colors and containers.

Code Editing:

Code Completion: Android Studio offers intelligent code completion, helping developers write code faster and with fewer errors.

Code Navigation: Easy navigation through the project, with features like Go to Definition, Find Usages, and more.

Refactoring Tools: Built-in refactoring tools for code restructuring and maintenance.

Firebase Integration:

 Firebase Tools: Integration with Firebase services for app analytics, cloud messaging, crash reporting, and more.

Build and compilation:

Gradle Build System: Android Studio uses Gradle to manage project build processes, including dependency management and task automation.

Instant Run: Allows quick code and resource updates without a full app rebuild.

Debugging.

Emulation.

8. Conclusion:

The app's features, such as intuitive search functions, and a seamless shopping experience, cater to the individual preferences and reading habits of each user. The integration of user reviews and ratings adds an element of trust and peer-driven recommendations, making the Book Shop App a reliable source for literary enthusiasts.

9. References:

Different you tube videos, Google, and study material provided on classroom

10. Screenshots:

















