Design Document: SDUT 24\*7 HealthCare App

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**Introduction**

The purpose of this document is to outline the design for the SDUT 24\*7 HealthCare App. The app aims to provide users with a convenient platform to manage lab test reports and purchase medicines. This document covers interface design ideas, functional design logic, code technology implementation, and a course learning summary.

**Interface Design Ideas**

The app will have an appealing splash screen that includes an image and text to engage users upon launch. The main screen will display a list of medicines using a RecyclerView with a CardView layout, providing a visually pleasing and organized view. Each medicine item will present key information such as the medicine ID, title, groups, and milligram. Tapping on a medicine item will navigate to a detailed view that offers comprehensive information about the medicine. In the detailed view, users will have the option to update or delete their order. Additionally, the app will include a menu with an option to delete all orders for added convenience.

**Functional Design Logic**

The app will consist of several screens, each serving a specific purpose. The SplashscreenActivity will display the splash screen image and text, creating an attractive and engaging start to the app. After a brief period, the app will automatically navigate to the MainActivity, where the list of medicines will be displayed using the RecyclerView and CardView. This screen will handle click events for medicine items, allowing users to interact with and select specific medicines. Upon selecting a medicine, the app will transition to the OrderDetailActivity, which will provide detailed information about the selected medicine and offer options to update or delete the order. To add a new order, users will be able to access the AddActivity screen, where they can enter the necessary details, such as the title, groups, and milligram.

**Code Technology Implementation**

The app will utilize various technologies and libraries to achieve its functionality and design:

XML will be used for defining layout files and menu resources, providing a structured representation of the app's UI.

The app's logic and functionality will be implemented using either Java or Kotlin, taking advantage of their respective strengths.

AndroidX libraries will be used for UI components and support, ensuring compatibility across different devices and versions of Android.

RecyclerView and CardView will be utilized to display the list of medicines in an organized and visually appealing manner.

To store and manage medicine data, the app will employ either SQLite or Room Database, allowing for efficient data storage and retrieval.

ConstraintLayout will be used to design the app's layouts, enabling flexible and responsive UI designs.

The MenuInflater class will be utilized to inflate the menu XML file, enabling the creation of menus with various options and actions.

Intents will be used for navigation between activities, facilitating smooth transitions and interactions within the app.

Event listeners will be implemented to handle user interactions and respond to specific actions, ensuring a seamless user experience.

**Course Learning Summary**

Throughout the Android development course, we have gained valuable knowledge and skills that will be applied in the design and development of the SDUT 24\*7 HealthCare App. Key concepts covered in the course that will be utilized include:

XML layout design using various layout managers such as RelativeLayout, ConstraintLayout, LinearLayout, and CardView.

Implementing RecyclerView and CardView to display lists of items efficiently and beautifully.

Utilizing SQLite or Room Database for data storage, retrieval, and management, ensuring persistent and organized data.

Creating and managing activities for different screens, allowing for modular and structured app architecture.

Handling user input using EditText and Button components, enabling user interactions and data entry.

Incorporating menus into the app to provide additional options and actions, enhancing user convenience.

Applying event listeners and event handling to respond to user actions, enabling interactive and responsive app behavior.

**Conclusion**

This design document provides a comprehensive overview of the SDUT 24\*7 HealthCare App, covering interface design ideas, functional design logic, code technology implementation, and a course learning summary. It serves as a blueprint for the development process, guiding the implementation of the app and ensuring the successful realization of its functionalities and design goals.

OutPut:























