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**SAVITRIBAI PHULE PUNE UNIVERSITY**

**MASTER OF COMPUTER APPLICATION**

Project Report on

“Multi Utility App”

Under The Guidance Of

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**BY**

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1. **Introduction**
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In today's fast-paced world, managing multiple applications for basic tasks can be inconvenient. The need for a unified platform that integrates essential utilities like a calculator, note-taking, and currency conversion has never been more critical. Our project aims to address this issue by developing a Multi-Utility Android App, streamlining the user experience and enhancing efficiency. In an era where simplicity and efficiency are paramount, our project endeavors to create a Multi-Utility Android App, offering a unified platform for essential tasks. This app integrates a calculator, notes functionality, and a currency converter, eliminating the hassle of managing multiple applications.

* 1. **Abstraction**

The abstraction of our project lies in the consolidation of various utilities into a single, cohesive platform. By abstracting complex functionalities into simplified user interfaces, we ensure that users can seamlessly perform tasks without being burdened by the intricacies of individual applications.

* 1. **Need for system**

The need for our Multi-Utility Android App arises from the growing demand for streamlined solutions. Users increasingly seek simplicity in their digital interactions. By providing a singular application catering to diverse needs, our system fulfills the need for a hassle-free user experience.

* 1. **Scope for system**
* **Integrated Utilities:** The app will include a calculator, notes functionality, and a currency converter, allowing users to perform essential tasks without switching between multiple applications.
* **User Interface:** The user interface will be intuitive, ensuring ease of navigation and seamless interaction with each utility.
* **Future Expansion:** The system will be designed to accommodate future expansions, allowing the addition of more utilities or features based on user feedback and emerging technologies.
* **Calculator Features:** Basic arithmetic operations (addition, subtraction, multiplication, division).
* **Notes Functionality:** Creation, editing, and deletion of notes.
* **Currency Converter Features:** Support for multiple currencies, allowing users to convert between various international currencies.
* **Cross-Device Compatibility:** Compatibility with various Android devices, ensuring the app functions smoothly across different screen sizes and resolutions.
  1. **Operating Environment**
* **Hardware :** Ryzen 5 hexacore, 8GB RAM, 512GB SSD
* **Software :** Android Studio
  1. **Brief Description of Technology used**
* **Operating System Used :** Windows
* **Frontend technology :** XML (Extensible Markup Language)
* **Backend technology :** Java
* **Database :** SQLite

1. **Proposed System**
   1. **Study of similar systems**

**All-in-One Utility App X :**

All-in-One Utility App X is a popular mobile application available on Android platforms. Similar to our proposed Multi-Utility Android App, App X integrates various essential utilities into a single application, providing users with a comprehensive toolset for everyday tasks.

All-in-One Utility App X serves as a successful model for integrating multiple utilities into a single platform. Its emphasis on user experience, continuous innovation, and adaptability demonstrates the effectiveness of a unified approach to utility applications. By addressing the limitations observed in similar systems, our Multi-Utility Android App aims to provide an improved and seamless user experience, ensuring a competitive edge in the market.

**Link :** <https://play.google.com/store/apps/datasafety?id=com.vikasphulriya.AIOTools>

* 1. **Feasibility Study**
* **Technical Feasibility :**

The technical feasibility of the Multi-Utility Android App is robust. The technologies required for the project, including Java/Kotlin for programming, Android Studio for development, SQLite for database management, and integration with external APIs, are well-established and widely used in the industry. The development team possesses the necessary skills and expertise to implement the desired features effectively. Furthermore, the chosen architectural pattern, the Model-View-View Model (MVVM) design, ensures a structured and maintainable codebase.

* **Operational Feasibility :**

Operationally, the app is designed for seamless integration into users' daily routines. The user interface is intuitive and user-friendly, minimizing the learning curve for users. Additionally, the app's offline functionality ensures users can access essential features even without an internet connection, enhancing its usability in various scenarios. The operational feasibility is further reinforced by the ability to receive user feedback, enabling iterative improvements and updates to enhance user experience continually.

* **Economic Feasibility :**

From an economic standpoint, the Multi-Utility Android App demonstrates strong feasibility. The development costs are within budget constraints, and the project's timeline is manageable. The app's revenue model, which may include advertisements, in-app purchases, or a one-time purchase fee, is designed to ensure profitability without compromising the user experience.

* 1. **Objective of Proposed system**
* **Efficiency Enhancement :** Enable users to perform essential functions without the need to switch between different applications.
* **Simplicity and User-Friendliness :** Design an intuitive and user-friendly interface, ensuring ease of use for users of all backgrounds.
* **Accessibility:** Enhance accessibility by ensuring compatibility with different Android devices and screen sizes.
* **Time and Effort Saving :** Improve user productivity by reducing the time and effort required to perform tasks.
* **Positive User Experience :** Foster a positive user experience by focusing on smooth interactions, responsive design, and minimal loading times.
  1. **Module Specification**
     + Calculator Module
* Currency Converter Module
* Notes Module
* Unit Converter
  1. **Users of System**
* Admin
* User