All in One: An Android based Application

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ABSTRACT- All in one application will be designed to help the user to more work done in less time. This application is a mobile Application to manage all day to day operations related to computerized work, such as: Calculator which help us to calculate faster, Notepad which carry important points or notes, Small games like puzzle, Tic tac toe, and Multiple choice questions for quick revision There are mainly three modules in this application, login (admin, user), account and apps. The aim of the project is to build a simple, effective computerized mobile application that provide information in a quick time according to the requirements that are accomplished. This application provides inconsistency of data and reduce the paper work. The project has been developed using Android studio software. An application that provides multiple user interface from which one or more than one user can access multiple applications, for that it needs personal or individual login that's-Admin can register the members or users from there user id's and password's. Here there will be two type of account, Admin who manages all the User accounts and Users who uses the application. Functionality for Admin Account: - Login for Admin, Forget password for Admin, Edit profile for Admin, Manage User such as- Adding new user, Editing/Removing the existing user, List of user, Block account, User details. And functionality for User Account:- Registration for user, Login/sign, Forget password, Two authentication, Edit Customer Profile, Can use all the applications.

KEYWORDS- This application is a mobile Application, operations related to computerized work, Calculator, Notepad, Small games like puzzle, Tic tac toe, and Multiple choice questions.

I. INTRODUCTION

All in one Application is an application to manage all day to day operations related to computerized work. The project has been developed using Android studio software. The system aims to improve user productivity and efficiency by streamlining work processes. It comprises three primary modules: Account, Admin, and User. The Admin module is responsible for registering new members to the application. The aim of the project is to build a simple, effective mobile application provide information in a quick time according to the requirements that are to be fulfilled. The application offers a reduction in paperwork and enhances data consistency. Multiple applications like; Calculator: - which help us to calculate faster, Notepad: - which carry important points or notes, Small games like puzzle, tic tac toe, and Multiple choice questions. Admin can login using ID and password, in case admin forgot his or her password he/she can reset password by providing login ID or register mobile number and reset the password. Admin can also edit his/her profile by visiting the profile or admin section. Admin also manage users that is adding new user, removing existing user, block an user account, able to access user details. User

account is generally created by following simple instruction provided by the admin, only admin can creates any persons user account for the application. The only need is that the person has to fill his personal details in the 'create new account' interface of the application provided by the admin, after that admin verifies the mobile number provided by the person in his personal details. After that the person is able to login and becomes a user of the application. Now User can login using user id and password which is set by him only, and the user is good to go forward for the application. In case user forgot his or her password, he/she can reset password by providing basic details to admin that is login ID or register mobile number for verification after verification user can easily reset the password.

II.   LITERATURE SURVEY

1. Li Ma et al. As the hardware of mobile devices continues to advance, their performance capabilities are exceeding the current demands of software configurations. Phone features more depend on software. With the growing popularity of the Android operating system, applications developed using the Android SDK have become increasingly popular. However, some of these applications have been criticized for having cumbersome interfaces, excessive pop-up ads, and limited functionality, which can inconvenience users. To address these issues, this article proposes the development of applications that eliminate redundancy. Specifically, the article presents the development of three applications, including a Weibo client, a video player, and an audio player, using Java and the Android SDK.

2. Suhas Holla et al. Android is a modern mobile operating system that is based on the Linux Kernel. Developers can use Java language codes to write Android Mobile Applications, which can then control mobile devices through Google-enabled Java libraries. The Android platform is a crucial tool for developing mobile applications and utilizes the software stack available in the Google Android SDK. The Android OS offers a flexible environment for developers to utilize Android Java Libraries and create a range of applications. to use normal Java IDEs. The team of software developers at Mobile Development India possess a wealth of experience and skill in creating applications that utilize Android Java Libraries and other essential tools.

3. Neha Verma1 et al. The paper discusses the development of a Cab application using the latest version of Android Studio. Additionally, Mobile Development India specializes in cross-platform development for both Android and iOS platforms. A research paper on cross-platform development also features a demonstration of a cab application, showcasing its functionality and practical applications. The cab application was developed using Android Studio 8.0.1, which is the official integrated development environment for the Android operating system offered by Google.

4. Derivco, A game development firm recently undertook a website project to enable in-house Electronic Sports Leagues for its employees. As part of this initiative, the company required a mobile application to capture a photo of the match result screen and upload it along with the final score to the server. The application also offers additional features commonly used on mobile devices, such as checking upcoming matches and recent results. The project encompasses the development of both the eSports mobile application and a web service to enable data exchange between the server and the mobile application.

5. Application framework defined the common structure of programs in the specific domain. Essentially, a framework is a component that can be reused, it sets the architecture of applications and incorporated as a set of abstract classes and the cooperation of their instances. Google launched the Android operating system, which is built on the Linux kernel and is open source. Mobile phone operating systems face certain limitations such as hardware constraints, limited storage capacity, power consumption, and mobility concerns that do not exist in PC operating systems. Consequently, there are unique characteristics of mobile phone applications development compared to PC applications development. The paper presents an overview of the Android operating system's architecture and application framework. It provides a detailed explanation of the primary components of Android applications and the techniques employed for their development based on Android application framework

6. The fluidity of application markets complicate smartphone security. Despite some progress in identifying specific security concerns, there is still a significant knowledge gap regarding the overall security features of smartphone applications. The aim of this research is to address this gap by analysing 1,100 widely used free Android applications to gain a better understanding of smartphone application security. The research introduces a compiler that can extract the source code of an Android application directly from its installation image, which enables a more comprehensive analysis of the security We conducted a comprehensive study on smartphone applications by analysing 21 million lines of code through static analysis. The results revealed that personal and phone identifiers were frequently used and misused, while advertising and analytics networks were extensively integrated into these applications.

7. The Connectify app combines elements of social networking and e-commerce to provide users with a unique and innovative platform. The main focus of this project is on the growth and development of the freelancer business model. This platform provides opportunities for new and emerging entrepreneurs to showcase their talents and skills, allowing them to sell their art and services to potential customers. Our application offers a platform for freelancers to sell their talents, such as dancing, singing, photography, and more, to the target audience through an online transactional process. Connectify Networks is created using PHP and a MySQL database, while the structural components of the primary application are designed using Android Studio. Subscribed user-generated content will be displayed in the "Subscribed" tab, while the various categories to which users have subscribed will be visible in the "Feed" tab. More and more companies are leveraging online communities to generate value for both their organization and their customers.

8. Institutional services are now accessible in new and innovative ways through the use of mobile devices, which have become powerful tools for enabling interactions with these services. The application provides users with access to a range of mediated and self-access services, including databases, announcements, registration, events, consultation booking, schedules, and more. It is designed to be accessible via both mobile and web-based interfaces, catering to the needs of students, instructors, and administrators. The app offers a user-friendly, web-based graphical user interface for students to request educational services, send text message inquiries, and perform tasks such as adding, dropping, or deferring courses. Instructors can also use the mobile or web-based interface to send or receive text messages from students.

9. Hayoung Noh et al. The high demand for mobile applications and the relative ease of market access has attracted a growing number of developers to mobile application development. As part of its E-Sports Portal website project, Derivco, a game development company, has initiated the development of a mobile application. However, before beginning the development process, it is important to conduct thorough background research in software engineering, various platforms, and design principles. This literature review provides an over
an overview of these areas, serving as a valuable starting point for mobile application development.

10. The primary objective of this study is to examine the perspectives and opinions of industry professionals regarding cross-platform mobile development, with a focus on the popularity, adoption, and emerging issues related to technical development frameworks and tools. To achieve this goal, we conducted an online survey questionnaire, recruiting 101 participants from various developer-oriented online forums and websites. Our study includes a total of five questions, two of which employ a Likert scale instrument, while three are based on multiple-choice responses. Our findings reveal that PhoneGap, the Ionic Framework, and React Native were the most commonly used technical frameworks in both hobby projects and professional settings.

11. The present paper addresses concerns related to the development of successful mobile applications, with a focus on both business and user satisfaction. Despite the various limitations posed by mobile devices, this paper argues that it is still a worthwhile endeavour to develop mobile applications. The rise of mobile commerce could be a key motivator for the creation and advancement of mobile applications, similar to how electronic commerce spurred the development of web applications. Special emphasis is placed on goal-driven applications, and the paper outlines seven key principles for developing highly goal-driven mobile applications. Additionally, the paper underscores the importance of conducting mobile usability evaluations.

12. The rapid growth of smart phones in the consumer market has led to easy access for various applications in business, entertainment, gaming, and social –networking sectors on mobile devices. According to a report, Android and iOS were the dominant smartphone operating systems in the fourth quarter of 2012, accounting for 91.1% of all smartphone shipments. The widespread use of mobile devices has resulted in many vendors focus on mobile application development. Over the last few years, flexibility with mobile application development has resulted in the creation of 675,000 applications and games for the Android operatingsystemand775,000 applications for iOS. Currently, mobile applications are designed to be more user-centered and intuitive.

13. In this paper, they present a study and characterization of current mobile application development processes based on a practical experience. Consider a set of real case studies to investigate the current development processes for mobile applications used by software development companies, as well as by independent developers. The outcome of the current investigation is the recognition of mobile software development procedures, particularly agile methodologies, as well as the inadequacies in the existing methodologies used in both industry and academia. agile approaches, and also of shortcomings in current methodologies applied in industry and academy, namely agile approaches, and also of shortcomings in current methodologies applied in industry and academy, namely the lack of informed and experienced resources to develop mobile apps.

14. Abhijeet Singh, et al. shares that even after putting many efforts and using all knowledge, there is not much noticeable decrease in crime rate related to woman and so he developed an application M with U which aims to overcome all barriers and disadvantages of previous solutions and provide a complete solution with the app. It is a web based technology so the system requirement is very low for the application. You have to login in the app and register your details along with guardian details. The main advantage of the app is that even if your phone is in your pocket or bag, it will detect any problem by itself and react accordingly.

15. D. G. Monisha, et al. focus on the many crimes against women despite our country becoming so developed in the recent years. The paper claims that crimes against women can be brought to an end with the help of their product "FEMME". The device is a security system designed for women to use when they are in any dangerous situation or in distress. . The basic motive is to provide the instant location and a distress message to the cops and the pre-set numbers which are registered in the system. A GSM module is used to the alerts and messages. The system also features a hidden camera detector which works using RF signal interface. The app will also have buttons to record video and audio instantly as to collect evidence of the incident. The main advantage of the system is that it is an all-in-one system and it does not require internet connectivity to work.

III.EXISTING SYSTEM APPROACH

At present, there are numerous single-purpose mobile applications available, and while this approach offers advantages such as rapid development and improved user experience, it can also result in a proliferation of apps. Downloading and managing too many individual apps can be inconvenient, and an alternative solution may be necessary. Calculator which help us to calculate faster , Notepad which carry important points or notes, Small games like puzzle, Tic tac toe, and Multiple choice questions. An application that provides single user interface from which a user can access multiple applications. The existing system needs multiple user interface so multiple user can use it. Couple of applications are not working. Logging in, also known as signing in, signing on, or logging on, refers to the process of gaining access to a computer system or network by providing the system with identifying credentials such as a username and password

IV.PROPOSED SYSTEM APPROACH

All in one, It is a collection of different applications, that used in daily life. No need to download separate applications, just download this All-in-one application. Rewritten: At present, there are a variety of integrated smart tools available in one place that are easy to use. This application is a mobile application to manage all day to day operations related to computerized work, such as: calculator which help us to calculate faster. notepad which carry important points or notes, small games like puzzle, tic tac toe, and multiple choice questions for quick revision there are mainly three modules in this application, login (admin, user), account and apps. Admin can login using ID and password, in case admin forgot his or her password he/she can reset password by providing login ID or register mobile number and reset the password. Admin can also edit his/her profile by visiting the profile or admin section. Admin also manage users that is adding new user, removing existing user, block an user account , able to access user details . User account is generally created by following simple instruction provided by the admin, only admin can creates any persons user account for the application. The only need is that the person has to fill his personal details in the 'create new account' interface of the application provided by the admin, after that admin verifies the mobile number provided by the person in his personal details. After that the person is able to login and becomes a user of the application. Now User can login using user id and password which is set by him only, and the user is good to go forward for the application. The term "score" in the context of games generally refers to a numerical value that is associated with a particular player or team. The score in games is commonly quantified in abstract units such as points, and various events occurring during the game can either increase or decrease the score of different parties involved. System needs Score board. The aim of the project is to build a simple, effective computerized mobile application that provide information in a quick time according to the requirements that are accomplished. This application offers a reduction in paper usage and promotes data consistency.
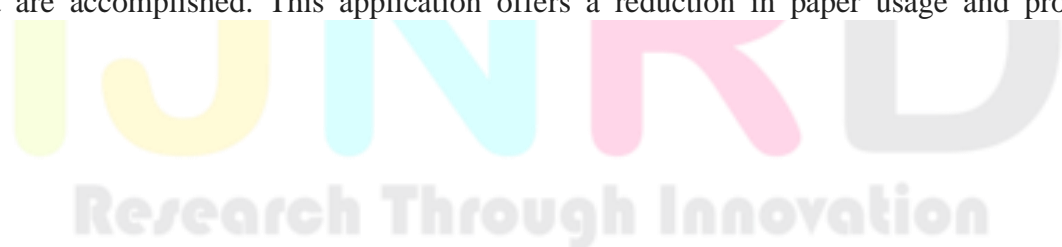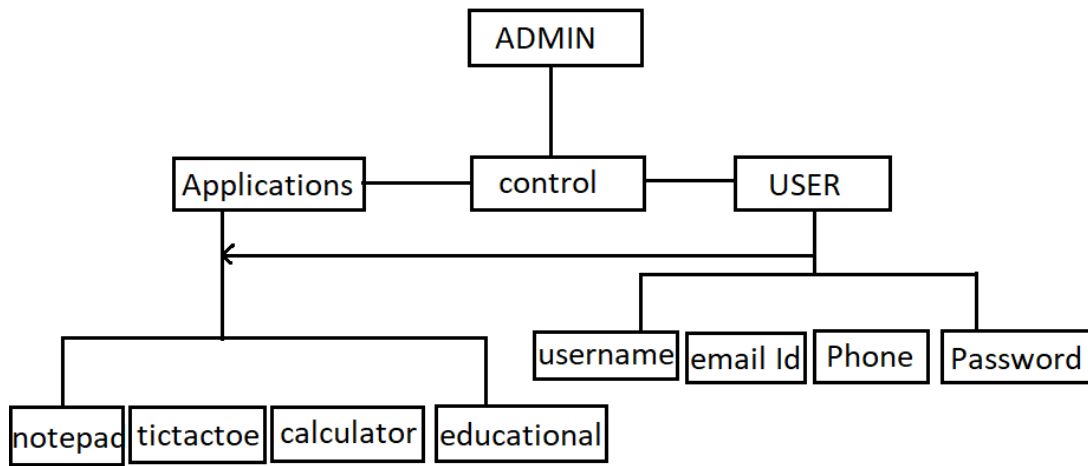
Fig.1 Block Diagram of Application

Flow Diagram:

1. In the proposed application first the user registration with login with proper authentication.
2. The user is proceed to the app menu to select a particular app and use it.
3. Admin also manage users that is adding new user, removing existing user.
4. Admin is able to access user details.
5. User can check there game score in scores option.

V. CONCLUSION

The concept of this project is to develop the user friendly and interactive web application which will faster and save the time. all in one Application where user can use applications developed in android studio such as calculator, notepad+, puzzle game, IP finder, word count tool, source code generator, picture puzzle game, tic tac toe game and exam system.

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