

PROJECT REPORT
ON
COLLEGE EVENT MANGEMENT SYSTEM

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S. E. (Computer) have successfully completed the project titled “**College Event Mnagement System**” during the academic during the academic year 2023-2024.

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ABSTRACT

In today's fast-paced world, mobile technology has become an integral part of our daily lives, revolutionizing the way we communicate, work, and even learn. With the rise of smartphones and tablets, the accessibility and convenience offered by mobile apps have transformed various aspects of society, including education. One such area where mobile technology has made a significant impact is in the realm of college admissions. The transition from traditional websites to mobile applications has been a natural progression, particularly in the context of higher education institutions. Recognizing the growing reliance on mobile devices, colleges and universities are increasingly leveraging the power of Android applications to enhance the overall experience for both prospective students and faculty members. Enter the College App – an innovative Android application designed to serve as a digital gateway to the college's resources and services. Serving as a miniature version of the college website, the app offers a comprehensive platform where users can access essential information, documents, and services conveniently from their Android devices. One of the primary objectives of the College App is to streamline communication and information dissemination between faculty members and students. Through a centralized server, faculty members can effortlessly upload and share relevant data, documents, and announcements with students in real-time. This seamless exchange of information eliminates the need for cumbersome email threads or manual distribution of materials, thereby saving time and reducing administrative burden for both parties. For students, the College App serves as a one-stop destination for accessing vital resources related to their academic journey. Whether it's downloading course materials, accessing lecture notes, or retrieving important announcements, students can conveniently retrieve the information they need directly from their Android devices. This accessibility fosters greater efficiency and productivity, empowering students to stay organized and informed throughout their academic pursuits.

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1. Introduction

The "College Application" stands as a beacon of modernization, poised to address the shortcomings inherent in manual systems. Developed with a keen eye on efficiency, this application aims to alleviate, if not entirely eradicate, the challenges that plague traditional methods. Tailored to the specific needs of the college, it promises to usher in a new era of seamless and effective operations.

At its core, the application prioritizes accuracy and simplicity. By minimizing manual intervention, it mitigates the risk of errors often associated with data entry. Moreover, its user-friendly interface ensures that no specialized knowledge is required, democratizing access and empowering users of all backgrounds to leverage its functionalities.

The College Application comprises two distinct components: one catering to users and another tailored for administrators. The administrative interface grants college administrators unprecedented control, enabling them to upload crucial information such as notices, faculty details, institution profiles, gallery images, e-books, and even manage notice deletion seamlessly. This centralized hub empowers administrators to disseminate information swiftly and efficiently, fostering a culture of transparency and accessibility within the institution.

Complementing the administrative prowess of the College Application is its user-centric counterpart, designed to cater to the diverse needs of students. Through this platform, students gain access to a treasure trove of resources curated by administrators. From video lectures to e-books and thematic websites, the application enriches the learning experience, transcending traditional boundaries and fostering a culture of continuous growth and exploration.

Furthermore, the application serves as a nexus for community engagement, facilitating seamless communication of event notices occurring within the college. By keeping students informed about upcoming events, workshops, and seminars, the application fosters a sense of belonging and camaraderie, enriching the collegiate experience beyond the confines of academia.

In addition to its operational efficiencies, the College Application offers practical benefits that extend far beyond administrative convenience. By aggregating vital information pertaining to college admissions, financial aid, and test preparation, the application equips students with the tools and resources needed to navigate the intricate labyrinth of higher education. Armed with this knowledge, students can make informed decisions and chart a course towards academic success with confidence and clarity.

In essence, the College Application transcends its role as a mere technological solution; it represents a paradigm shift in how colleges operate and engage with their stakeholders. By harnessing the power of digital innovation, it paves the way for a future where efficiency, accessibility, and empowerment are the cornerstones of higher education.

2. Literature Survey

College event management systems are pivotal in orchestrating various events within educational institutions, ranging from academic conferences and workshops to cultural festivals and sports tournaments. This literature survey delves into the functionalities, advantages, and potential areas for improvement of existing systems in college event management.

Integrated Information Management:

College event management systems serve as centralized platforms for managing all aspects of event planning and execution. These systems typically encompass modules for event scheduling, participant registration, venue booking, resource allocation, communication, and reporting. By integrating these functionalities, colleges can streamline administrative processes and ensure seamless coordination of events.

User-Friendly Interface:

User experience is paramount in college event management systems. A user-friendly interface enables administrators, event organizers, attendees, and other stakeholders to interact with the system effortlessly. Intuitive navigation, clear layout, and responsive design contribute to enhanced usability and engagement.

Comprehensive Functionality:

College event management systems offer a wide range of functionalities to cater to the diverse needs of event organizers and participants. These include:

Event Scheduling: Administrators can schedule events, define event details such as date, time, venue, and agenda, and manage event calendars.

Participant Registration: Attendees can register for events online, providing necessary information and preferences. Administrators can track registrations, manage attendee lists, and send event confirmations.

Venue Management: The system facilitates venue booking, including availability checks, reservation requests, and logistical arrangements.

Resource Allocation: Administrators can allocate resources such as equipment, catering services, and transportation based on event requirements and budgets.

Communication: Integrated communication tools enable administrators to send event invitations, updates, reminders, and announcements to participants via email, SMS, or social media platforms.

Reporting and Analysis: The system provides reporting tools to evaluate event success metrics such as attendance rates, participant feedback, financial performance, and return on investment (ROI).

Scalability and Customization:

College event management systems are designed to be scalable and customizable, allowing institutions to adapt the system to their specific requirements and preferences. Whether organizing small-scale workshops or large-scale campus-wide events, the system can accommodate varying needs and scale accordingly.

Integration with Existing Systems:

Seamless integration with existing college management systems, such as student information systems and financial systems, is essential for ensuring data consistency and efficiency. By leveraging data from these systems, event management processes can be streamlined, and administrative overhead can be reduced..

3. Specifications of the Project

The college application process can be overwhelming for both students and faculty. Applicants need to stay up-to-date with important information such as notices, event schedules, and course details. Meanwhile, faculty members need to manage and distribute this information effectively, as well as answer applicant queries promptly. As a result, there is a need for a streamlined and efficient platform that can provide college applicants with access to timely information and resources in a user-friendly manner.

The proposed platform would offer a variety of services to college applicants, including:

- Notices:** The platform would provide real-time updates on important notices such as application deadlines, admission requirements, and scholarship opportunities.

- Images about events:** The platform would provide images and descriptions of events such as college fairs, open houses, and campus tours, helping applicants make informed decisions about their college choices.

- Faculty:** The platform would offer information about the college's faculty, including their areas of expertise, research interests, and teaching experience. This would help applicants identify potential mentors and advisors.

- PDF related course:** The platform would provide detailed information about the college's courses, including course descriptions, prerequisites, and schedules. Applicants could also download PDFs of course catalogs and other relevant materials.

By providing these services, the proposed platform would offer college applicants a comprehensive and user-friendly way to navigate the college application process. It would help them stay up-to-date with important information, make informed decisions about their college choices, and connect with faculty members who can support their academic and professional goals.

View notices sent by college :

Notices are sent to the students by HOD or admin. Useful information, college notices, important announcements are received on College application. They can view it anytime.

We make college app which are available for all. Basically we are creating app for Organisation

Characteristics:

Characteristics of a college student application which contain college event images, faculty updates, about college, pdfs, notice updates are:

- It should be user-friendly and easy to navigate for the students and faculty members.
- It should be compatible with devices ,such as Android.
- It should be secure and protect the privacy and confidentiality of the users and their data.
- It should be reliable and provide accurate and timely information and services to the users.
- It should be interactive and engaging and allow the users to communicate with each other and share feedback and opinions.
- It should be innovative and creative and offer unique features and functionalities that enhance the academic and non-academic experience of the users.

4. Block Diagram and Description

Front End:

Introduction of Android :

Android operating system: is the largest installed base among various mobile platforms across the globe. Hundreds of millions of mobile devices are powered by. Android in more than 190 countries of the world. It conquered around 71% of the **global** market share by the end of 2021, and this trend is growing bigger every other day. The company named Open Handset Alliance developed Android for the first time that is based on the modified version of the Linux kernel and other open-source software. Google sponsored the project at initial stages and in the year 2005, it acquired the whole company. In September 2008, the first Android-powered device was launched in the market. Android dominates the mobile OS industry because of the long list of features it provides. It's user-friendly, has huge community support, provides a greater extent of customization, and a large number of companies build Android-compatible smartphones. As a result, the market observes a sharp increase in the demand for developing Android mobile applications, and with that companies need smart developers with the right skill set. At first, the purpose of Android was thought of as a mobile operating system. However, with the advancement of code libraries and its popularity among developers of the divergent domain, Android becomes an absolute set of software for all devices like tablets, wearables, set-top boxes, smart TVs, notebooks, etc.

Features of Android:

Android is a powerful open-source operating system that open-source provides immense features and some of these are listed below.

- Android Open Source Project so we can customize the OS based on our requirements.
- Android supports different types of connectivity for GSM, CDMA, Wi-Fi, Bluetooth, etc. for telephonic conversation or data transfer.
- Using Wifi technology we can pair with other devices while playing games or using other applications.

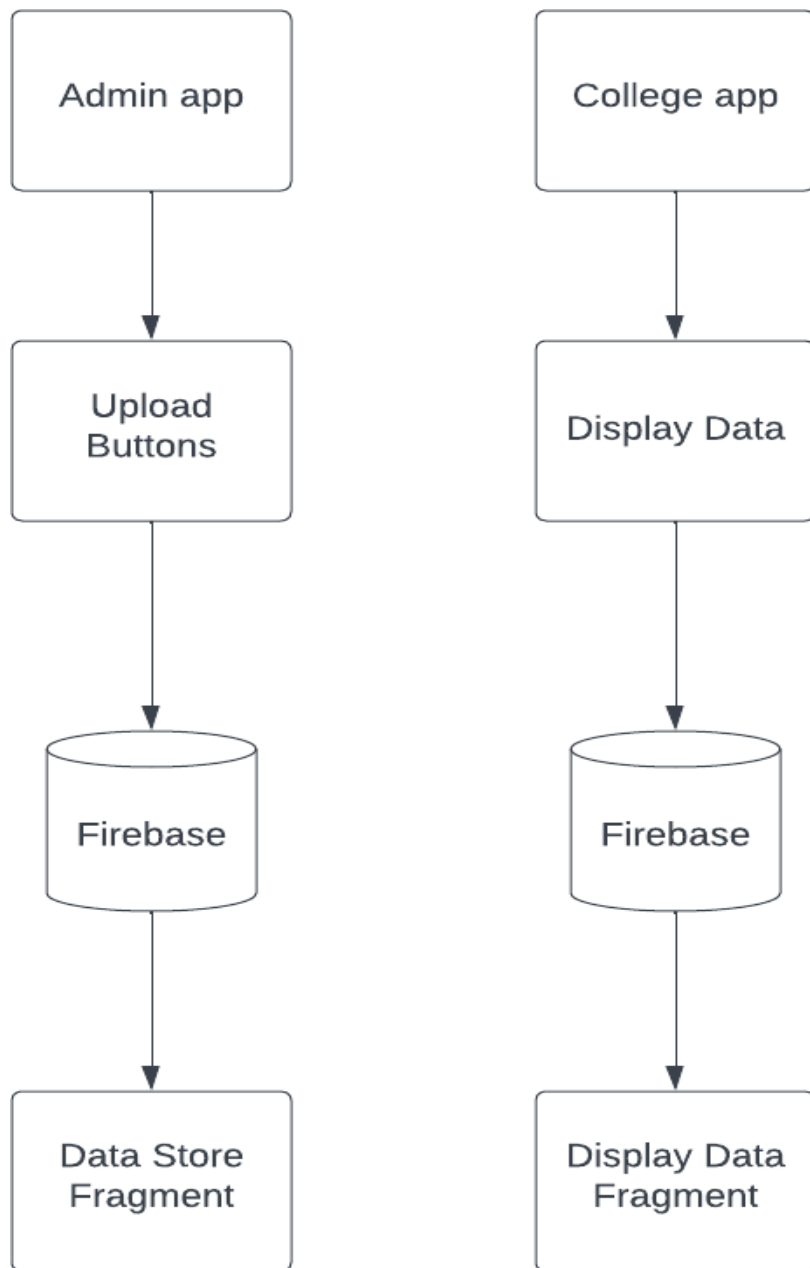
Back End:

Introduction to Firebase:

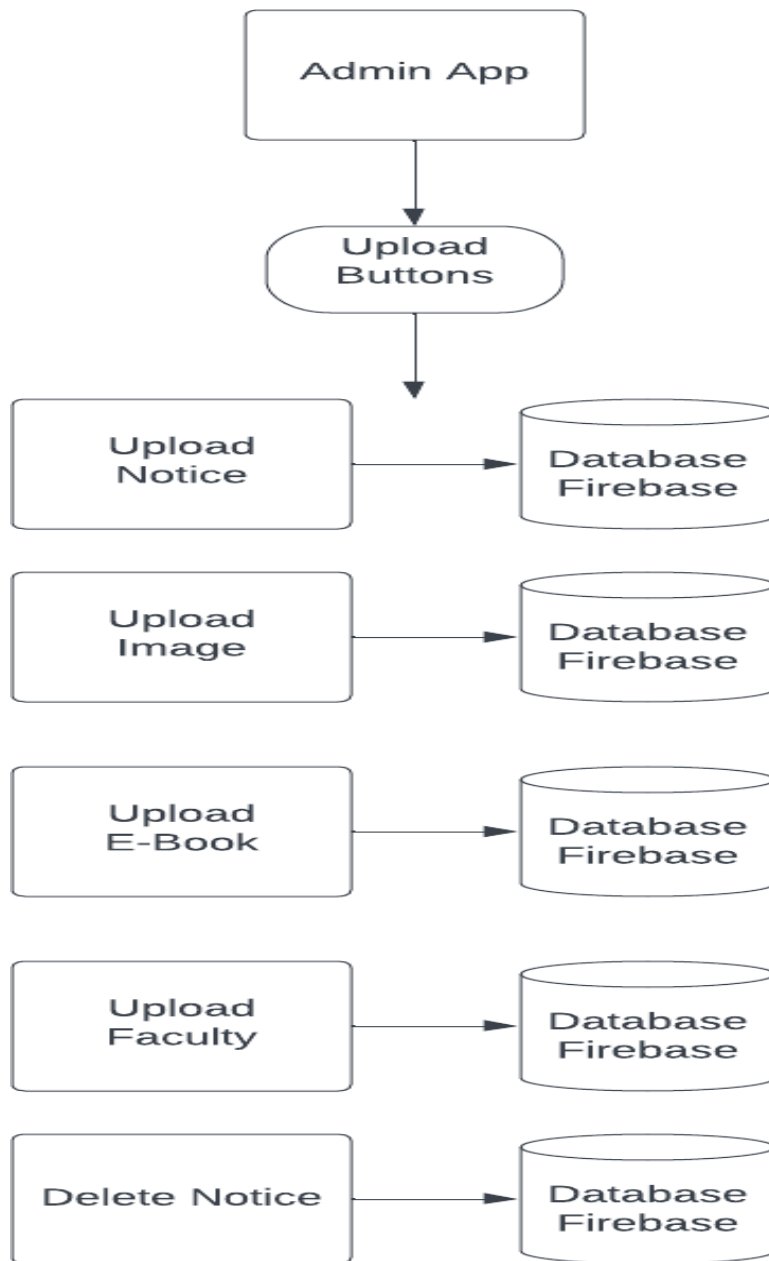
Firebase is a product of Google which helps developers to build, manage, and grow their apps easily. It helps developers to build their apps faster and in a more secure way. No programming is required on the firebase side which makes it easy to use its features more efficiently. It provides services to android, ios, web, and unity. It provides cloud storage. It uses NoSQL for the database for the storage of data.

Features of Firebase:

- **Realtime Database:** The Firebase Realtime Database is a cloud-based NoSQL database that manages your data at the blazing speed of milliseconds. In simplest term, it can be considered as a big JSON file.
- **Cloud Firestore:** The cloud Firestore is a NoSQL document database that provides services like store, sync, and query through the application on a global scale. It stores data in the form of objects also known as Documents. It has a key-value pair and can store all kinds of data like, strings, binary data, and even JSON trees.
- **Authentication:** Firebase Authentication service provides easy to use UI libraries and SDKs to authenticate users to your app. It reduces the manpower and effort required to develop and maintain the user authentication service. It even handles tasks like merging accounts, which if done manually can be hectic.
- **Remote Config:** The remote configuration service helps in publishing updates to the user immediately. The changes can range from changing components of the UI to changing the behavior of the applications. These are often used while publishing seasonal offers and contents to the application that has a limited life.

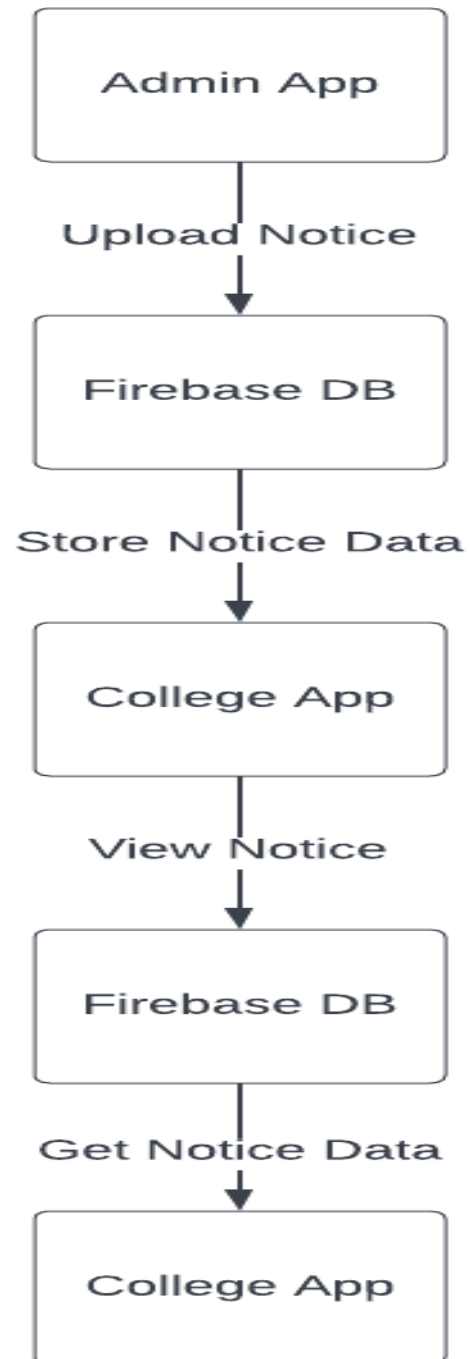


Dfd Level 1

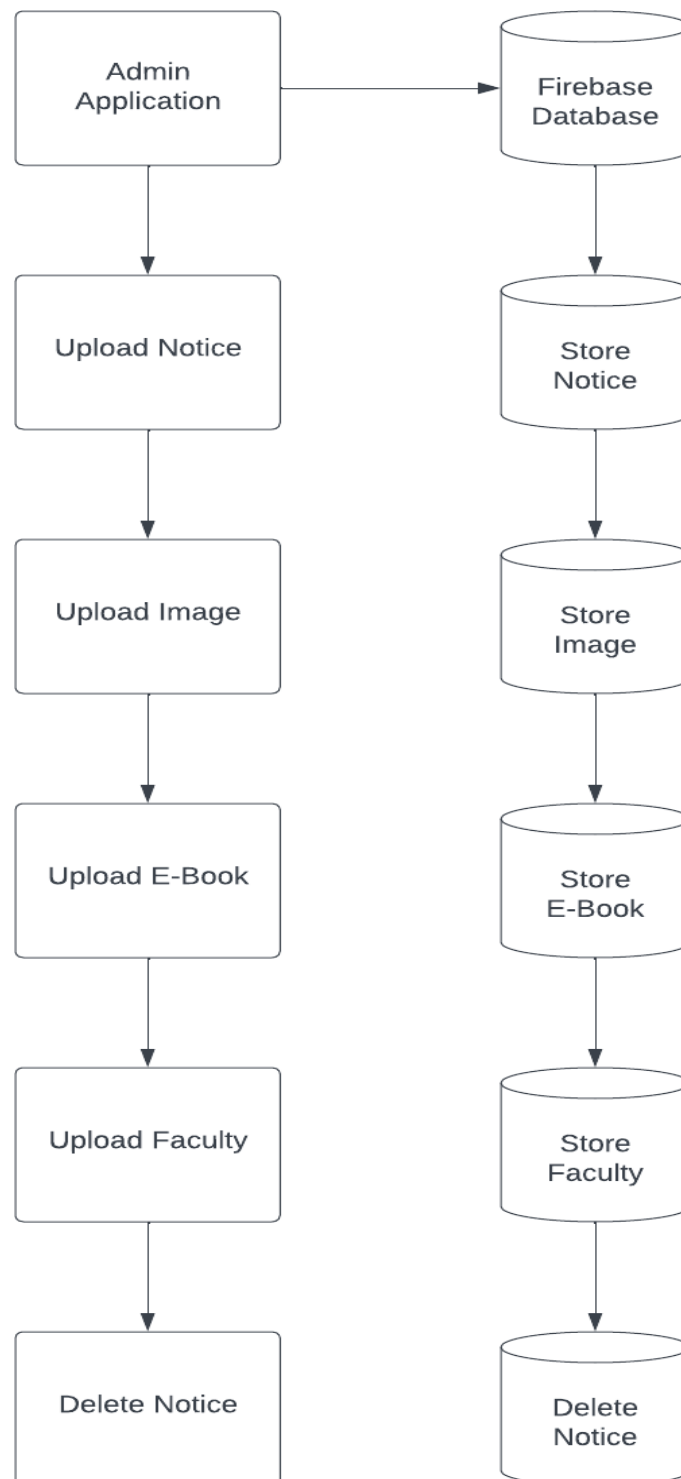


Dfd Level 2

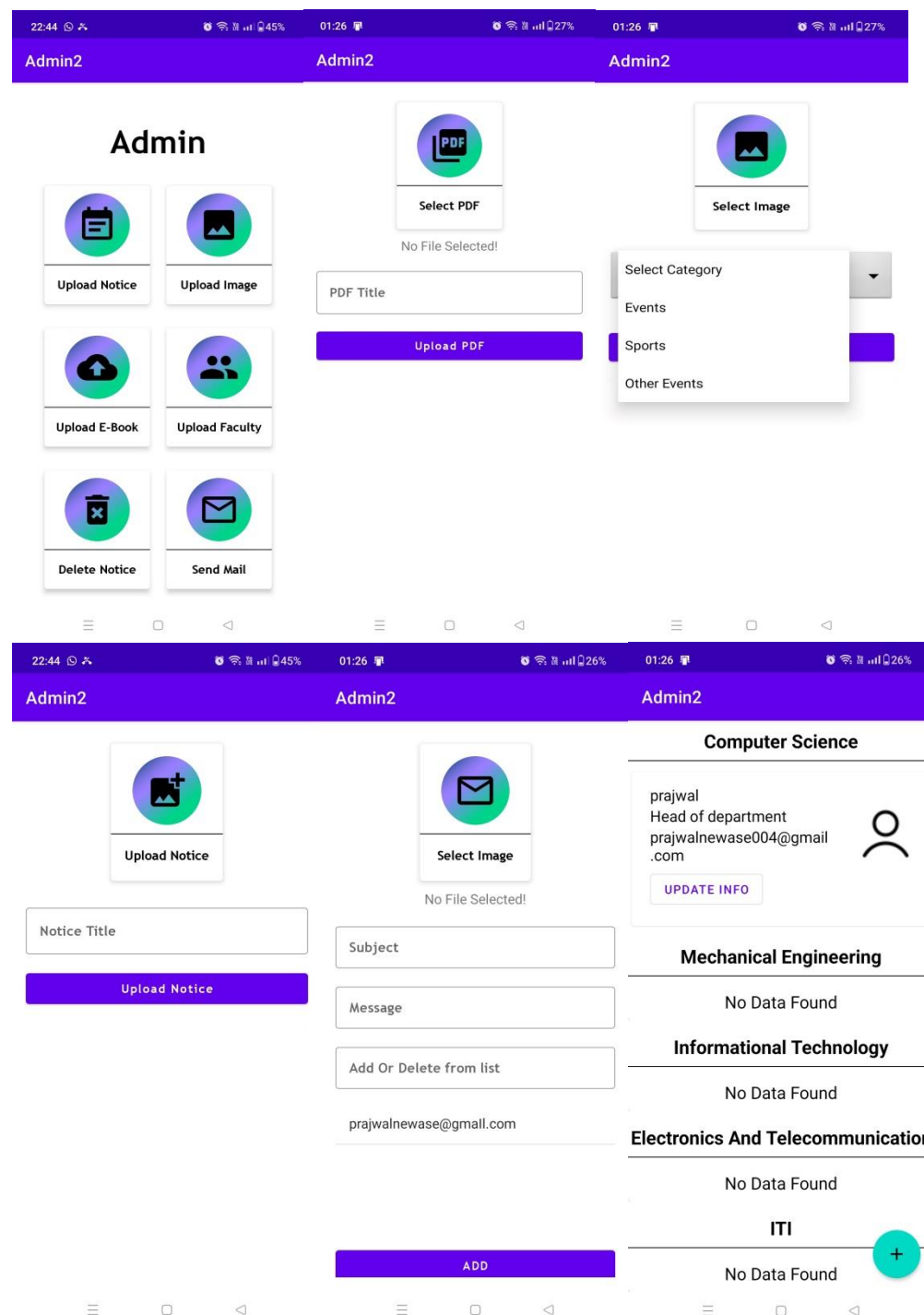
Sequence Diagram:

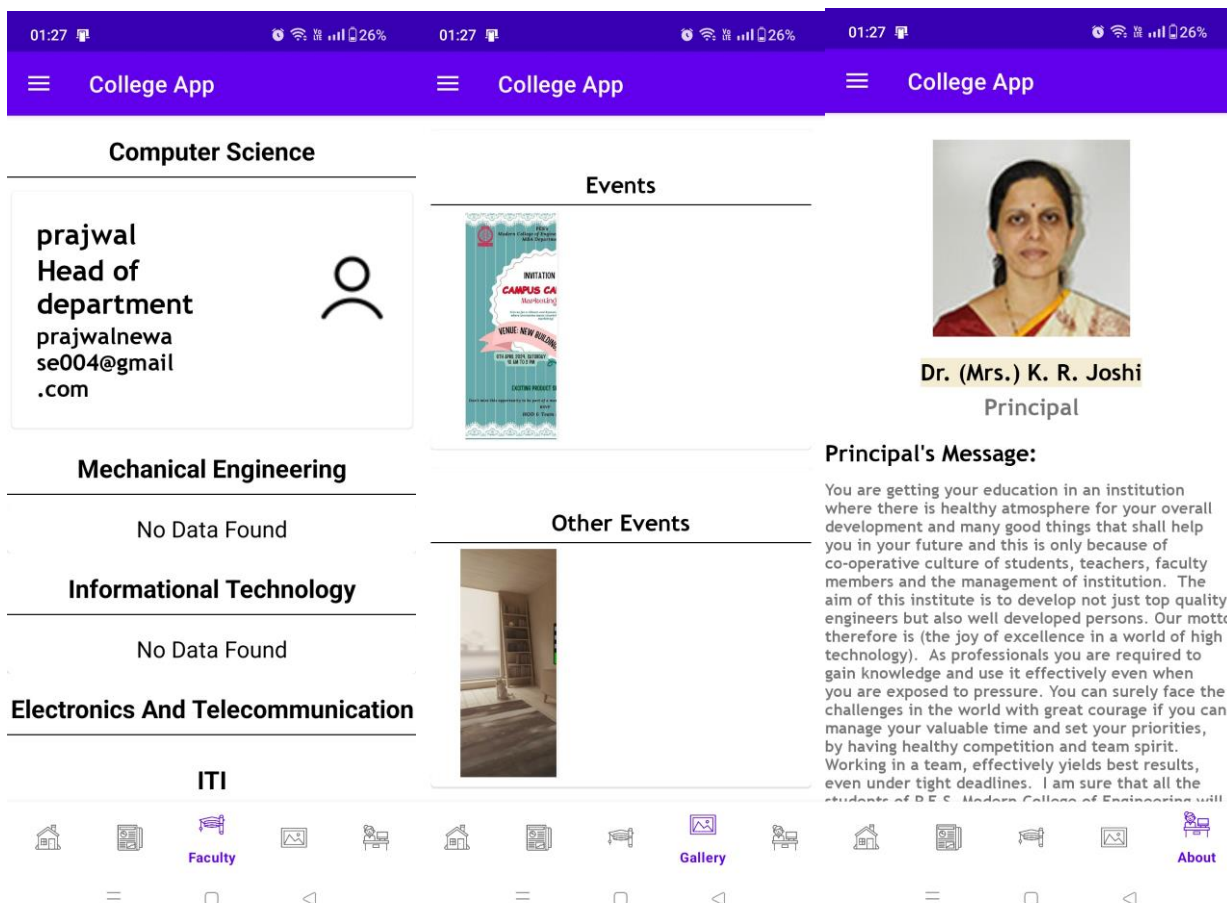
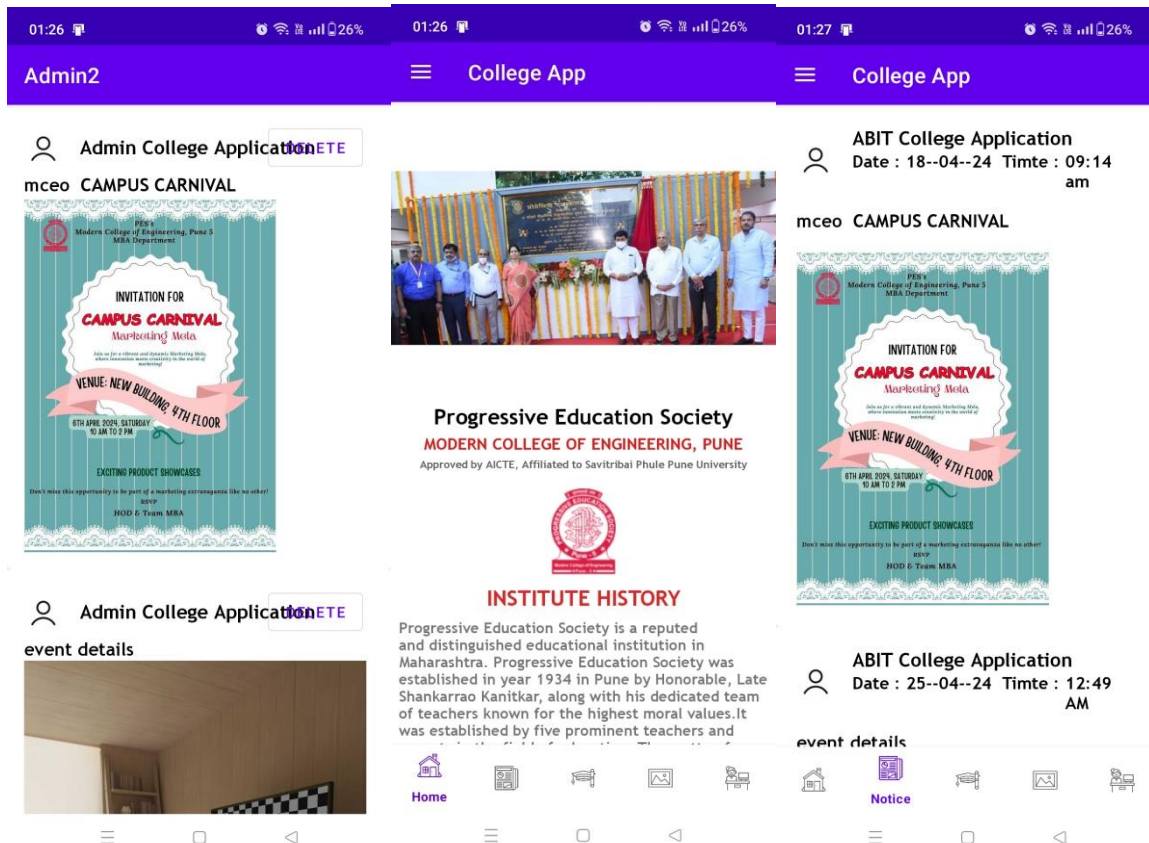


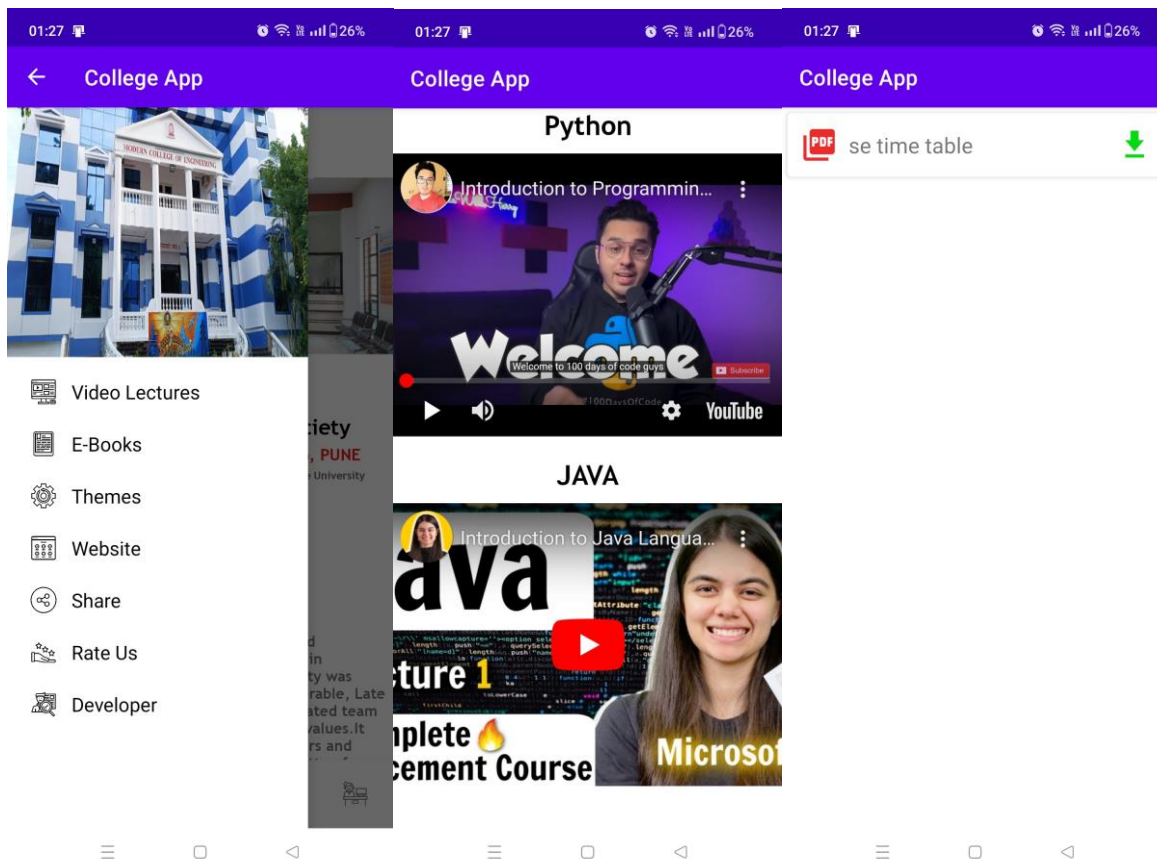
Activity Diagram:



6. Result and Performance Evaluation







7. Applications and Future Modifications

APPLICATION:-

- An Android application for college admissions can provide a convenient and efficient way for students to apply to colleges and universities. With the increasing reliance on technology in all aspects of life, it is natural that the process of applying to college would also become digitized. An Android app can allow students to complete and submit their application forms, upload transcripts and other supporting documents, and track the status of their application all from the convenience of their smartphone or tablet.

FUTURE SCOPE:-

We try to add “Attendance Management system” in Application for maintaining the attendance of the student on the daily basis in the collage. Here the staffs, who are handling the subjects, will be responsible to mark the attendance of the students. Each staff will be given with a separate username and password based on the subject they handle. An accurate report based on the student attendance is generated here. This system will also help in evaluating attendance eligibility criteria of a student. Report of the student’s attendance on weekly and monthly basis is generated.

We also try to add “Video Lecture System”. So student can able to access lectures from Any were. Online education enables you to study or teach from anywhere in the world. This means there’s no need to commute from one place to another, or follow a rigid schedule. On top of that, not only do you save time, but you also save money, which can be spent on other priorities. The virtual classroom is also available anywhere there’s an internet connection, and a good way to take advantage of this is to travel. For example, if you’re studying abroad and want to get a job, online education is a great choice. There’s no reason to give up on working or studying while exploring new and exotic places.

8. Conclusion

The College and Admin Applications are two separate applications that interact with each other through a Firebase database. The College Application provides access to notices, images, ebooks, and faculty data, while the Admin Application allows for the uploading and deletion of this data. The architecture for the College Application includes a Model-View-Controller (MVC) pattern, while the architecture for the Admin Application includes a Client-Server architecture. The DFD diagrams show the flow of data between the different components of the system, while the UML diagrams provide a detailed view of the classes and their relationships. Overall, the system provides a user-friendly interface for college students and staff to access important information and for the college administrators to easily manage and update that information.

9. Reference / Bibliography

Resources

- Android college projects - Preview of College App and Admin App - YouTube
- Firebase Android Tutorial 2 - Firebase User Registration / Authentication using Android Studio - YouTube
- Intelligent Diagramming | Lucidchart
- Firebase (google.com)

Books –

- Android App Development For Beginners
- Android Studio 3.0 Development Essentials
- Head First Java • Mastering Java App Development
- Java Algorithms and Data Structures

Websites –

- Android college projects - Preview of College App and Admin App - YouTube
- Firebase Android Tutorial 2 - Firebase User Registration / Authentication using Android Studio – YouTube
- Intelligent Diagramming | Lucidchart
- Firebase (google.com)