Event Management Android Application for College Events

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Abstract: Event management is a crucial part of organizing successful events, and with the advancement in technology, mobile applications have become a popular tool for event management. In this paper, we present our research on the development of an Android application for managing college events. Our application aims to simplify the event management process, making it easier for organizers to plan, promote, and execute events. We have conducted a thorough analysis of the existing event management applications to identify the gaps and shortcomings. Based on our research, we have designed and developed an application that incorporates the essential features required for event management. We have also evaluated the application's effectiveness by conducting user testing, and the results indicate that our application significantly improves the event management process.

Keywords: Event Management, Android Application, College Events, Execution.

I. INTRODUCTION
Event management is a complex process that involves planning, organizing, and executing events to achieve specific goals. The success of an event largely depends on the efficiency and effectiveness of the event management process. In recent years, mobile applications have become a popular tool for event management, providing a convenient, accessible, and real-time solution for event organizers. The use of mobile applications in event management has been widely adopted in commercial events, such as conferences, trade shows, and concerts. However, college events, which involve a range of stakeholders, including students, faculty members, and other stakeholders, have not received much attention in terms of mobile application development for event management.

In this paper, we present our research on the development of an Android application for managing college events. The purpose of our research is to design and develop an application that simplifies the event management process, making it easier for organizers to plan, promote, and execute events. The development of this application aims to bridge the gap in the event management process for college events and provide a convenient and effective solution for event organizers.

We have conducted a thorough analysis of the existing event management applications to identify the gaps and shortcomings in their features, functionality, and usability. Based on our research, we have designed and developed an Android application that incorporates essential features required for effective event management. Our application offers a user-friendly interface, which simplifies the event management process, making it easy for organizers to create, manage, and promote events.

II. LITERATURE REVIEW
a. AkshayKumbhar[1]
The research paper titled "Evento: A College Event App " aims to develop an Android application to simplify the process of managing events. The paper discusses the various stages of event management and the challenges faced by organizers. It also provides an overview of existing event management applications and their limitations. The authors have designed and developed an Android application, which offers essential features required for effective event management. These features include event creation, promotion, and management, attendee registration, real-time messaging, and feedback collection. The application is user-friendly and offers a simple and intuitive interface.
b. HOD. Dr R Juliana [2]
The authors have developed a Flutter-based application that provides essential features such as event creation, promotion, and management, attendee registration, real-time messaging, and feedback collection. The application integrates with Firebase to provide cloud-based storage, authentication, and real-time database services. The application is user-friendly and offers a simple and intuitive interface. Overall, the paper provides valuable insights into the development of smart event management applications using Flutter and Firebase technologies. The system presented in the paper offers a useful solution for event organizers to manage events efficiently and effectively, while also providing real-time data analytics for decision-making.

c. Harika [3]
The authors have developed an Android-based application that simplifies the process of managing events. The application offers essential features such as event creation, promotion, and management, attendee registration, real-time messaging, and feedback collection. The application integrates with Firebase to provide cloud-based storage, authentication, and real-time database services. Overall, the paper provides valuable insights into the development of event management systems using Android and Firebase technologies. The system presented in the paper offers a useful solution for event organizers to manage events efficiently and effectively. The use of Firebase for cloud-based storage and real-time database services provides scalability and flexibility to the application.

d. Rupesh Deshmukh [4]
The authors have developed a system that integrates IOT sensors to monitor and automate event management tasks such as attendee tracking, queue management, and asset tracking. The system also uses blockchain technology to provide secure transparent data storage, authentication and transaction management. The system is user-friendly and offers a simple and intuitive interface. Overall, the paper provides valuable insights into the development of smart event management systems using IOT and blockchain technologies. The system presented in the paper offers a more secure and efficient solution for event organizers to manage events. The use of IOT sensors for automation blockchain technology for security and transparency provides a promising approach to event management.

III. PROBLEM STATEMENT & OBJECTIVE

3.1 Problem Statement
The current event management system used in many educational institutions lacks efficiency and automation, leading to several challenges for event organizers. These challenges include manual registration and tracking of attendees, ineffective communication channels, and difficulty in collecting feedback. In addition, the traditional event management system is often paper-based, making it difficult to manage and store event-related data securely. Therefore, there is a need for an efficient and effective event management system that leverages modern technologies such as mobile applications, cloud-based storage, and real-time data analytics to streamline the event management process and provide a seamless experience for event organizers and attendees.

3.2 Objectives
The objectives of developing an event management android application for college events are:
1. To provide a user-friendly interface for stakeholders to manage college events efficiently.
2. To automate the event management process and reduce manual errors.
3. To provide a centralized platform for event creation, registration, ticketing, and evaluation.
4. To improve the overall efficiency and effectiveness of college events.
5. To enhance the user experience for event organizers, attendees, and other stakeholders.

IV. PROPOSED WORK
The proposed work for developing an event management android application for college events includes the following steps:
1. Requirement gathering: Identify the stakeholders, their needs, and the application's scope. Conduct interviews, surveys, and focus groups to gather requirements.

2. Architecture and UI design: Design the application's architecture and user interface. Develop wireframes and mock-ups to ensure that the application's design meets stakeholders' requirements.

3. Development: Develop the application's functionalities, such as event creation, registration, ticketing, and evaluation. Use the latest technologies and frameworks, such as Android Studio, Java, and Firebase, to develop the application.

4. Testing: Test the application to ensure that it is functioning correctly. Conduct unit testing, integration testing, and acceptance testing to identify and fix bugs.

5. Deployment: Deploy the application to the Google Play Store or another app store. Ensure that the application meets the store's guidelines and policies.

6. Maintenance and support: Provide on-going maintenance and support for the application. Monitor the application's performance, fix bugs, and provide technical support to stakeholders.

7. Evaluation: Evaluate the effectiveness of the application in improving the event management process. Conduct surveys and collect feedback from stakeholders to identify areas for improvement.

The proposed work will follow the agile methodology, which emphasizes flexibility, collaboration, and continuous improvement. The agile methodology will ensure that the project is delivered on time and within budget while meeting stakeholders' requirements.

V. TECHNOLOGIES USED

Firebase and Android Studio are the primary technologies that will be used in the development of the event management android application for college events.

5.1 Firebase
Firebase is a cloud-based platform developed by Google that provides various services such as hosting, authentication, real-time database, storage, and messaging. Firebase will be used to develop the back-end of the application, which will enable real-time data synchronization between the application and the server. The real-time database will allow the stakeholders to access and update event information in real-time, which will help streamline the event management process. Firebase's authentication service will enable secure access to the application, while the storage service will enable the application to store data, such as event images and documents.

5.2 Android Studio
Android Studio is the Integrated Development Environment (IDE) for developing android applications. Android Studio provides various tools such as a visual layout editor, code editor, and debugging tools. The visual layout editor enables developers to design the user interface of the application visually. The code editor enables developers to write code efficiently, while the debugging tools enable developers to test and debug the application during development.

In the development of the event management android application, Android Studio will be used to develop the front-end of the application. Android Studio will enable the developers to design and develop the application's user interface efficiently. Android Studio's debugging tools will enable the developers to test and debug the application during development.

Overall, Firebase and Android Studio are essential technologies for developing an event management android application for college events. Firebase provides a cloud-based platform for developing an event management android application, while Android Studio provides a powerful IDE for developing the front-end of the application. The use of these technologies will enable the development of an efficient, effective, and user-friendly event management android application.
6.1 Student Module

6.1.1 Student Login
In our application student can login using their email id and password which is entered at the time of registration.

6.1.2 Student Register
At the time of student registration we get the student information like name, email, phone, password, class & division, department.

6.1.3 Student Menu
In the menu student has various options to view the events also the student can see the how many clubs are there in the college and also he can see the members of that club. Student can share the app on various platforms.

6.1.4 Events
Student can see the details of the events like description of the event, Location and fees of that event.

6.1.5 Clubs
In this section the student can see the various clubs in college and also he can see the members of that clubs.
6.2 Admin Module
6.2.1 Admin Login
In our application we are providing login credentials to admin then admin login in the application.

6.2.1 Create Event
Admin can create an event by adding an event image and all the details of event like who is the speaker and location, date and time also the admin can enable the fees option if there is fee for that event.

6.2.2 Listed Events
In this admin has an access of Edit event, delete event, go live and end event. Also the admin can download the list of registered student list and generate the certificate for same.

Fig 3. Listed Events, Event Details, Create Event

6.2.3 Create Clubs
Authorised faculty can create a new clubs with name and also add the members of the clubs.

6.2.4 Add members
Only Authorised faculty can create the clubs and also they can add the members in it.

Fig 4. Create Clubs, Listed clubs, Add members
VII. RESULTS

The event management android application for college events was developed and deployed successfully. The application met all the stakeholder requirements and was developed using the agile methodology. The application's user interface was designed to be modern and user-friendly, providing a seamless experience to all students. The application allowed event organizers to create events, provide detailed information about the events, and manage registrations. The application provided real-time updates to all students regarding event status, registration. Also when event is completed then certificate of participation will be generated and send it to the student email address.

The application was developed using Firebase and Android Studio. Firebase was used to develop the back-end of the application, which enabled real-time data synchronization between the application and the server. Android Studio was used to develop the front-end of the application, which provided a powerful IDE for developing the user interface and debugging the application.

VIII. CONCLUSION

The development of an event management android application for college events is a significant step towards organizing events efficiently. The application will provide a user-friendly interface for the stakeholders to manage their events effectively. The application's development will follow the agile methodology, ensuring that the project is delivered on time and within budget while meeting the stakeholders' requirements. The event management android application will help streamline the event management process, making it more efficient and effective.

IX. FUTURE SCOPE

The event management android application for college events has promising future prospects. It can be further developed by integrating additional features such as personalized event recommendations, advanced analytics, and gamification elements. The application can also explore opportunities in AI-based personalization, IoT device integration, collaboration features, and expansion to other platforms. Integration with online ticketing platforms, smart wearable, and AR/VR technologies can enhance the user experience and provide innovative event management solutions. These future developments will ensure the application remains competitive, user-centric, and adaptable to emerging trends in the event management industry.

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