

Eventify : A College Event Organizer App

Prof. Rupali Jadhav¹, Jayesh Patil², Kaushal Nemade², Swamini Hulawale², Soham Padale²

¹Assistant Professor, Zeal College of Engineering and Research, Pune, Maharashtra, India

²Student, Zeal College of Engineering and Research, Pune, Maharashtra, India

ARTICLE INFO

Article History:

Accepted : 10 April 2025

Published: 29 April 2025

Publication Issue :

Volume 12, Issue 2

March-April-2025

Page Number :

1208-1216

ABSTRACT

Eventify, a platform transforming event coordination within academic institution. Crafted to empower educators, Eventify simplifies the event planning process by facilitating effortless event creation, details of event specifics. With an intuitive interface, educators can quickly invite attendees, gather responses[1]. Prioritizing ease of use for learners, Eventify removes the need for manual enrolment, enabling participation with a single swipe on event listings. Students can easily submit feedback surveys and stay updated on event-related information. Eventify serves as a dynamic platform that fosters collaboration and engagement. The backend is powered by Firebase, providing secure and scalable real-time services. Firebase Authentication handles user sign-ins via email or Google accounts, and Firestore efficiently manages data related to events, users, and notifications. Firebase Cloud Messaging (FCM) enables push notifications to keep users informed about the changes[7].

Keywords : Seamless Collaboration, Feedback, Real-Time Updates, Event Listing, Invite Attendees, Notifications.

I. INTRODUCTION

In the lively and engaging world of higher education, organizing and managing events plays a vital role in enriching students' overall learning experience. Understanding the importance of smooth and efficient event coordination, our college is excited to introduce the **Eventify: College Event Organizer App** -a smart and intuitive platform designed to simplify event planning and execution within the campus community[5]. This application empowers faculty

members to effortlessly plan and manage events, from creating and updating event schedules to tracking student participation. Once registered, students gain access to real-time updates on current, upcoming events. They can filter and view events they have participated in, providing a more personalized and relevant experience[3].

Beyond student engagement, the platform also supports faculty by providing insights through student

feedback, attendance records, and participation data. These metrics help assess the effectiveness of each event and enable continuous improvement in college event management[1]. By bridging the gap between students and faculty, the system fosters a more connected, interactive, and organized event experience, making campus activities more engaging and efficient.

By bridging the gap between event organizers and participants, Eventify brings much-needed structure and clarity to campus events[6]. Organizers get an all-in-one toolkit to schedule, update, and track engagement with ease—while students enjoy simple registration, real-time updates, and easy access to event details. It's a platform built to foster transparency, smooth communication, and a more engaging campus environment. As colleges move toward smarter, tech-driven solutions, Eventify steps in as the right innovation at the right time—designed to meet the growing expectations of today's students and institutions.

II. LITERATURE SURVEY

[1] In their 2023 research paper titled "A Novel Mobile App based College Event Management System," Geerja Lavania, Neeraj Kumar, Vivek Arya, Meet Kumari, Neha Sharma, and Pardeep Singh highlighted the development of a digital platform designed to keep students updated about college events. The system allows students to track and view all activities happening across the campus through the mobile application.

[2] In the 2022 paper titled "A Web-based College Event Management System and Notification Sender," Dr. J.R.V. Jeny, P. Sadhana, B. Jeevan Kumar, Leela Abhishekh, and T. Sai Chander emphasized the importance of a notification feature to ensure students are informed about upcoming events. Their research

focused on building a web application to simplify both the organization and attendance of college events.

[3] In their 2022 study titled "AI-Based Event Management Web Application," Praddumn Singh Hada, Yogesh Humar, Bhupen Singh, and Prince Sarohal described the creation of an online event management system that uses AI to automate, optimize, and personalize the event registration process. The application also provides users with easy access to a list of events they recently viewed.

[4] In the paper titled "Online College Event-Hall Booking Reservation System" (2022), authors Lalitha V, Magesh K, Selvanarayann A, and Keetheshwaran G discussed a system that sends confirmation details for new event hall reservations. The system also enables recipients to review and verify event details after booking.

[5] In their 2021 paper titled "Android Application on e-notifier for College Events Management using Firebase," K. Sai Lakshmi, Ch. L. P. Sai Sudha, M. Divyanjali, and Dr. M. Suneetha explained the development of an e-notifier system. This system uses Firebase technology to send instant, real-time notifications about college events directly to students.

[6] Mansi Maurya, Saket Lokhande, Vinod Patil, Sanket Kedar, Prof.Mrs.Manisha Patil(2023) in their paper titled “Review on Event Management App for college” states that implementing Firebase for real-time attendance tracking and ensure accurate record keeping.

[7] Akansha Pansare, Athang Patil, Nikita Patil, Yatin Patil, Mrs.Aparna Bhonde(2023) in their paper titled “Smart College Event Management System using the MERN Stack” describes that system is built using the MERN Stack(MongoDB, Express.js, React, and Node.js). It is used to automate and centralize the management of college events, improving efficiency.

[8] Gaurav Thombare, Pavan Jadhav, Sachin Dhere, Prasad Jadhav, Dr.K.N.Honwadkar (2023) in their paper titled “College Event Management: A Survey of Analytics And Personalization” stated that purpose of application is to provide a user-friendly interface and efficient back-end functionality to streamline event planning and management within educational institutions. The system's front-end focuses on to simplify event registration process, information display, and enhancing student-admin engagement during an event.

[9] Nitesh Shivnath Ray, Yash Sunil Jejurkar, Ravi Ramesh Pandey, Yogesh Liladhar Baviskar, Prof.V.B. Ohol in their paper titled “EManager College Event Management Android App” stated that it uses agile methodology with steps like requirements gathering, design, development. App to streamline college event management, improve communication, and boost student engagement.

[10] Mrs.Prasanna Pabba, B.Viswadha, P.Srivani, P.Rajashree, S.Vinay Kumar in their paper titled “Mobile Application for College Event Management” describes that to develop VNR CONNECT, a mobile app to streamline college event management. Flutter for the front-end and Firebase for the back-end, enabling real-time updates

III. SOFTWARE REQUIREMENTS

Flutter SDK :

It provides the libraries, tools, and commands needed to build and run Flutter apps on Android and iOS.

Android Studio or Visual Studio Code :

These are code editors used to write, debug, and test the Flutter app, offering plugins and emulators for easy development.

Android SDK :

It contains the tools needed to compile Flutter apps into Android applications and test them on devices or emulators.

Firebase SDK :

It connects the app to Firebase services like authentication, database, notifications, and cloud storage for backend support.

IV. PROPOSED METHODOLOGY

Requirment Analysis:

Gatherand analyze the needs of different users (Admin, Facult, and Students) to define the core functionalities like event creation, event registration, user authentication, and notifications.

System Design:

Create wireframes, system architecture diagrams, and ER diagrams to model the relationships between entities and plan the app's navigation and database structure.

Frontend Development:

Build the user interface using Flutter, ensuring a responsive, intuitive, and cross-platform design suitable for both Android and iOS devices.

Backend Integration:

Integrate Firebase services, including Firestore for database management, Authentication for secure login, and Firebase Cloud Messaging (FCM) for sending real-time event notifications.

Testing and Deployment:

We have conducted thorough manual testing to ensure Eventify functions as expected, identifying and fixing any issues that arose during the process. The app will only be published once it is fully approved, ensuring it meets all requirements and provides a

seamless user experience. After approval, the app will be deployed, and ongoing monitoring will ensure its continued performance and reliability.

V. SYSTEM ARCHITECTURE

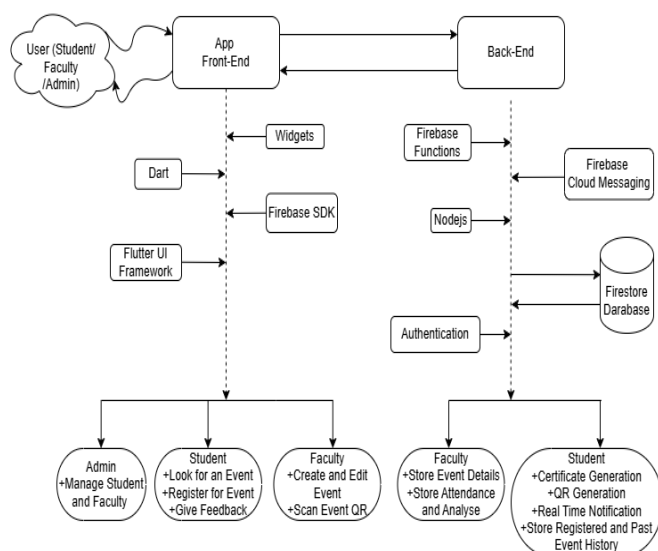


Fig 1 : System Architecture

System Architecture Overview :

The system architecture depicted in the above figure illustrates the flow and interaction of components in an event management application built using Flutter and Firebase. The architecture is divided into three main sections: User Interaction, App Front-End, and Back-End Services.

User Interaction Layer :

The application serves three categories of users: Students, Faculty, and Admins, each with distinct functionalities. Admins are responsible for managing student and faculty data. Students can browse upcoming events, register for them, and provide feedback. Faculty members can create and edit events, as well as scan QR codes during event attendance.

App Front-End Layer :

The front-end is developed using the Flutter UI framework, which leverages the Dart programming language. It uses prebuilt and custom Flutter widgets along with the Firebase SDK to connect with backend

services. This ensures a responsive and interactive user experience across Android and iOS platforms.

Back-End Layer :

The back-end functionality is implemented using Firebase services. Firebase Authentication manages user access and identity. Core application logic and event handling are written in Node.js and deployed as Firebase Functions. Event data, user interactions, and feedback are stored securely in Firestore Database, a scalable NoSQL cloud database. Firebase Cloud Messaging is integrated to send real-time notifications about event updates, reminders, and confirmations.

Key back-end features include:

- Event details storage
- Attendance tracking and analysis
- Real-time QR code generation for events
- Certificate generation for participants
- Retrieval of registered and past event history

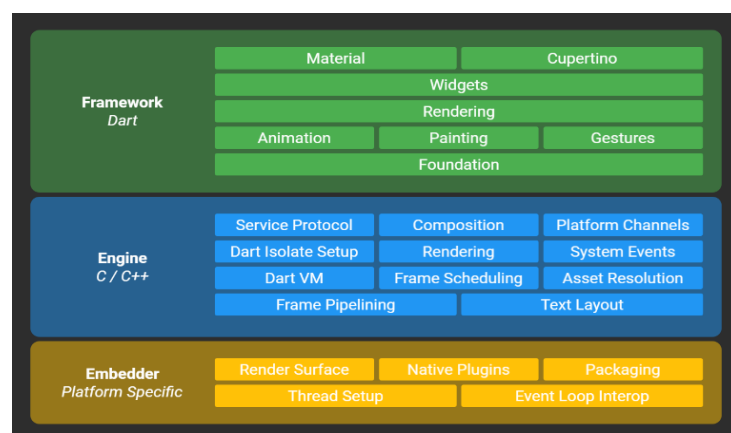


Fig 2 : Flutter Framework

VI. UML DIAGRAM

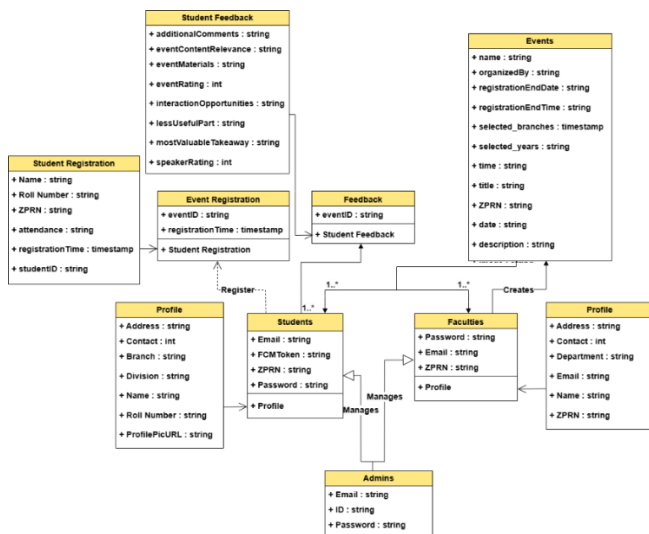


Fig 3 : UML Diagram

The above use case diagram represents the core functionalities of the event management application from the perspective of its primary users: Students, Faculties, and Admins. It outlines the interactions between these users and various system operations in a structured and intuitive manner.

Students are the primary users of the application who interact with features such as:

- **Profile Management:** Allows students to manage and update their personal details.
- **Event Registration:** Enables them to browse and register for available events.
- **Feedback Submission:** After attending events, students can provide feedback through the application.

Faculties play a dual role of users and event organizers. Their responsibilities include:

- **Creating Events:** Faculties can design and manage events, entering essential details like title, date, and venue.
- **Profile Management:** Similar to students, faculties can maintain their profiles.

Admin serve as system supervisors with broader privileges:

- **Manage Students and Faculties:** Admins are responsible for registering and maintaining the details of both student and faculty users.
- **Monitor Event Activities:** Although not explicitly shown, admins typically have oversight over event-related data and system-wide logs.

VII. WORKING ARCHITECTURE

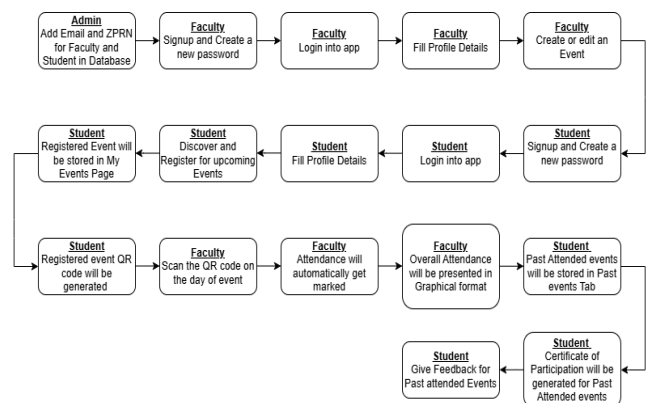


Fig 4. Working Architecture

The image illustrates the step-by-step functionalities and user interactions within the Event Management Application for three main roles: **Admin**, **Faculty**, and **Student**.

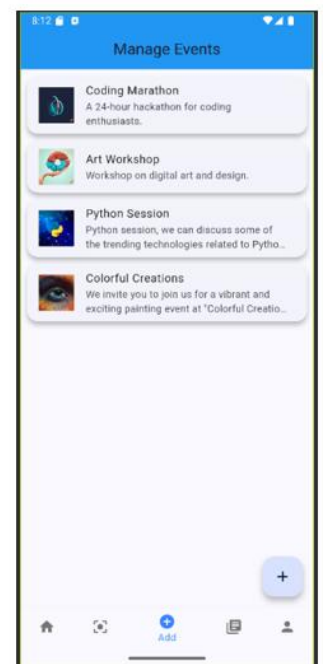
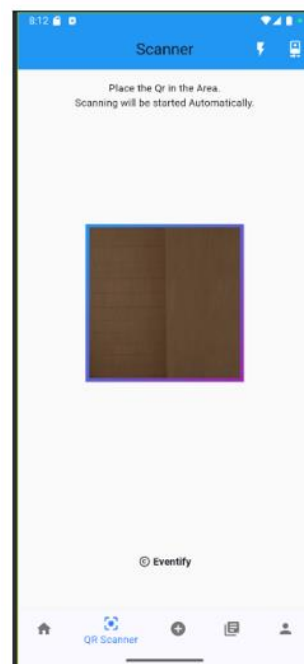
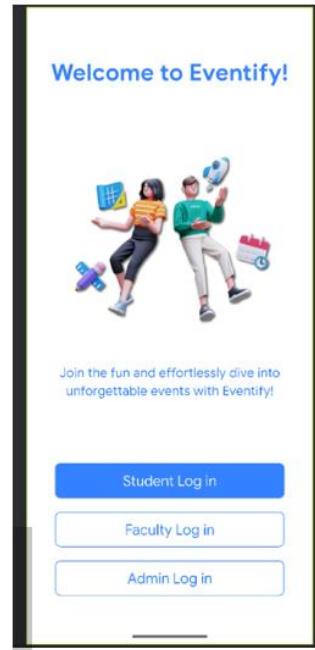
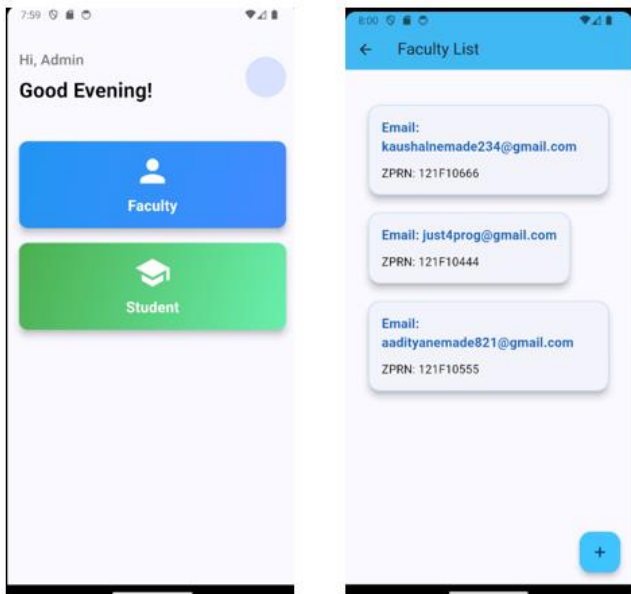
- The **Admin** starts by registering users by adding their email and ZPRN to the database.
- Both **Faculty** and **Students** can sign up, create new passwords, log in to the application, and complete their profile information.
- **Faculty** members have the ability to create or edit events, scan student QR codes on the day of the event, and automatically track attendance. Attendance records are visually displayed in a graphical format for easy understanding.
- **Students** can explore upcoming events, register for them, and view their registrations in the “My Events” section. Upon registration, a QR code is generated for each event.

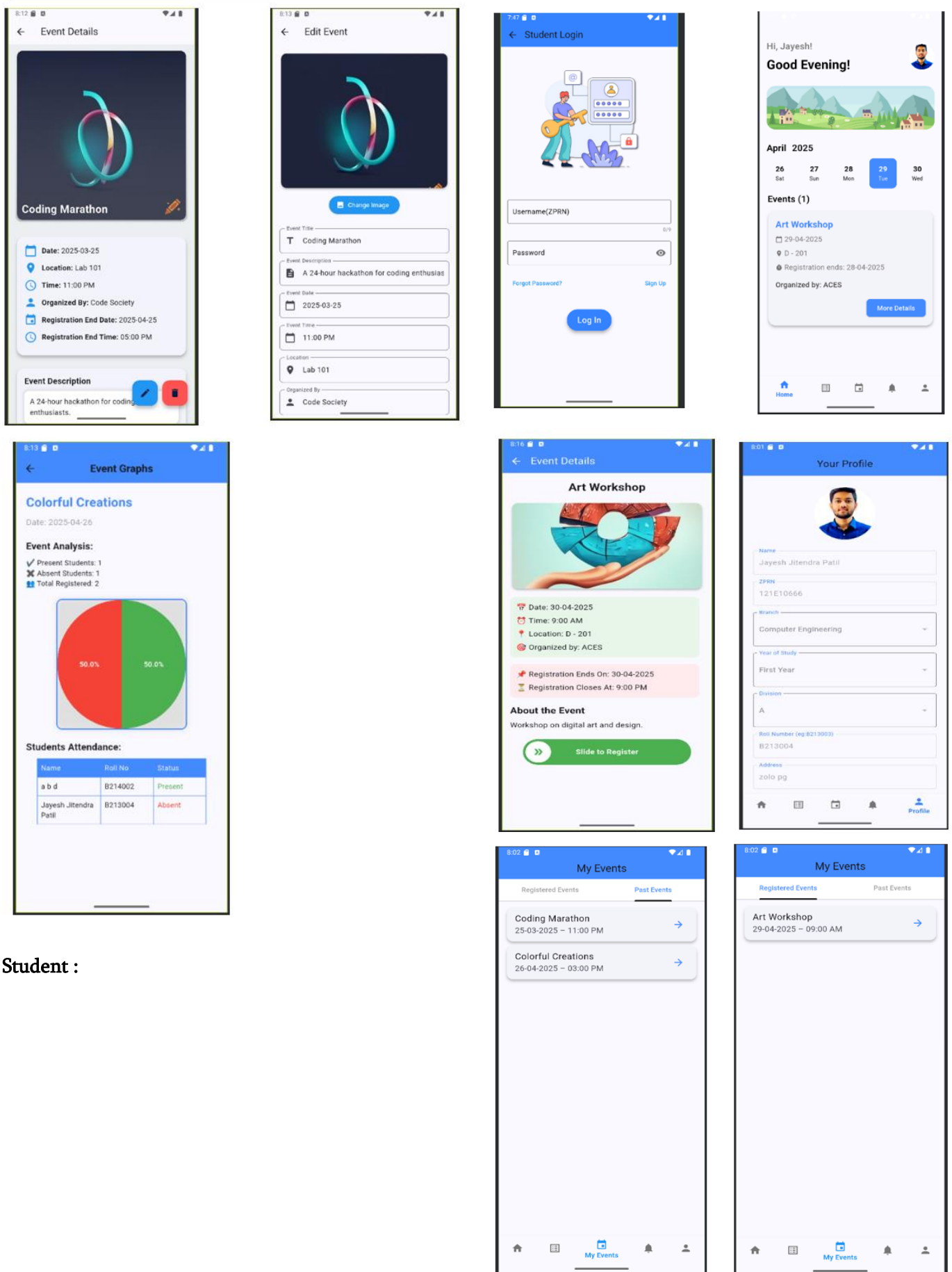
- After attending events, students can view their history under the “Past Events” tab, give feedback, and receive automatically generated participation certificates.

Faculty :

VIII. IMPLEMENTATION

Admin :





Student :

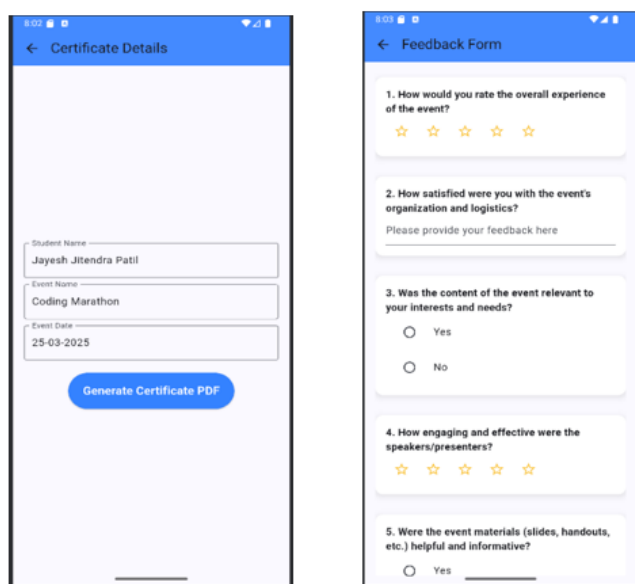
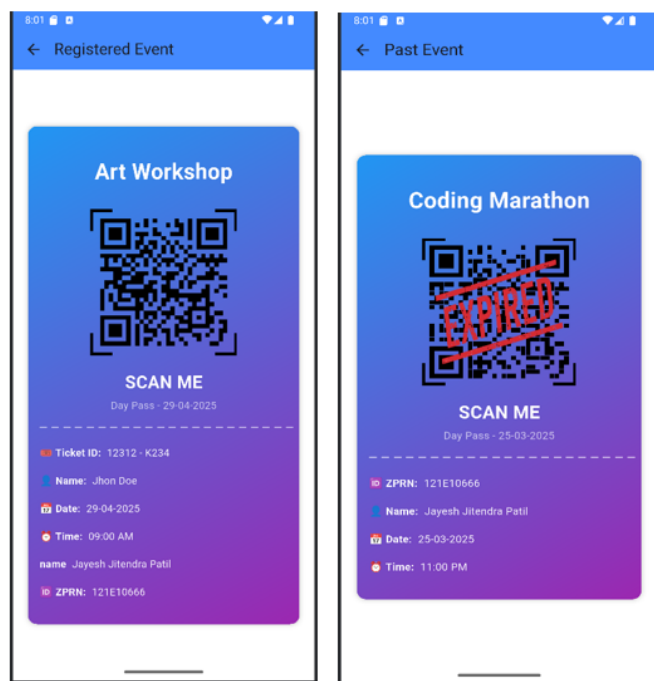


Fig 5 : Output of Project

IX. CONCLUSION

The development of this event management application successfully addresses the need for a centralized, efficient, and user-friendly platform to organize academic events. By leveraging Flutter for cross-platform development and Firebase for secure and scalable backend services, the system ensures real-time interaction, seamless user experience, and

streamlined event workflows for students, faculty, and admins.

The application allows students to easily register for events, provide feedback, and access their participation history. Faculty members can create, manage, and monitor events, while admins oversee user management and ensure the smooth operation of the system. The integration of features like QR code scanning, certificate generation, and real-time notifications significantly enhances automation and reduces manual efforts.

Overall, this project demonstrates how modern mobile technologies can be effectively used to build smart and collaborative systems for academic institutions, promoting engagement, transparency, and efficiency in event management.

X. ACKNOWLEDGEMENT

We would like to extend our sincere gratitude to everyone who made this project possible. We especially thank **Prof. Rupali Jadhav** and our Head of Department, **Prof. Aparna V. Mote**, for their valuable guidance and support throughout the development of this project. We are also thankful to the **Department of Computer Engineering** for providing the resources needed to complete our project, **Event Organizer Application Using Flutter and**

Firestore.

XI. REFERENCES

- [1]. Geerja Lavania, Neeraj Kumar, Vivek Arya, Meet Kumari, Neha Sharma, Pardeep Singh, "A Novel Mobile App based College Event Management System", 2023 IEEE, 4th International Conference on Smart Eelectronics and Communication (ICOSEC), pp. 1090-1094| DOI: 10.1109/ICOSEC58147.2023.10276355
- [2]. Dr.J.R.V.Jeny, P.Sadhana, B.Jeevan Kumar, Leela Abhishekh, T.Sai Chander "A Web based- College Event Management System and

- Notification Sender ” 2022 IEEE, 4th International Conference on Inventive Research in Computing Applications (ICIRCA 2022),| DOI: 10.1109/ICIRCA54612.2022.9985774
- [3]. Praddumn Singh Hada, Yogesh Humar, Bhupen Singh, Prince Sarohal, IEEE “AI based Event Management Web Application”, 2022 International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (COM-IT-CON), pp. 562-566, DOI: 10.1109/COM-IT-CON5460.2022.9850551
- [4]. Lalitha V, Magesh K, Selvanarayann A, Keetheshwaran G, “Online College Event-Hall Booking Reservation System”, 2022 1st International Conference on Computational Science and Technology (ICCST), pp. 972-975| DOI: 10.1109/ICCST55948.2022.10040388
- [5]. K.Sai Lakshmi, Ch.L.P Sai Sudha , M.Divyanjali, Dr.M.Suneetha, “Android Application on e-notifier for College Events Management using Firebase”, 2021 5th International Conference on Electronics, Communication and Aerospace Technology (ICECA) | DOI: 10.1109/ICECA52323.2021.9676084
- [6]. Mansi Maurya, Saket Lokhande, Vinod Patil, Sanket Kedar, Prof. Mrs. Manisha Patil, “Review on Event Management App for college”, International Journal of Science, Engineering and Technology, 2023, ISSN (Online): 2348-4098, pp. 1-6 | ISSN (Print): 2395-4752
- [7]. Akansha Pansare, Athang Patil, Nikita Patil, Yatin Patil, Mrs. Aparna Bhonde , “Smart College Event Management System using the MERN Stack”, 2023 International Journal for Research in Applied Science & Engineering Technology (IJRASET), pp. 2125-2129 | ISSN: 2321-9653
- [8]. Gaurav Thombare, Pavan Jadhav, Sachin Dhere, Prasad Jadhav, Dr.K.N.Honwadkar, “College Event Management: A Survey of Analytics And Personalization”, 2023 International Research Journal of Modernization in Engineering Technology and Science, pp. 343-347, e-ISSN: 2582-5208
- [9]. Nitesh Shivnath Ray, Yash Sunil Jejurkar, Ravi Ramesh Pandey, Yogesh Liladhar Baviskar, Prof.V.B. Ohol , “EManager College Event Management Android App”, 2023 International Journal Of Progressive Research In Engineering Management And Science (IJPREMS), pp. 736-741, e-ISSN : 2583-1062
- [10]. Mrs.Prasanna Pabba, B.Viswadha, P.Srivani, P.Rajashree, S.Vinay Kumar, “Mobile Application for College Event Management”, 2022 International Research Journal of Engineering and Technology (IRJET), pp. 201-207, e-ISSN: 2395-0056
- [11]. Shoma S. Mitkari, Tarangini Bangar, Gayatri Gaikwad, Samruddhi Pachpinde, Isha Vairagar, “Festagram: College Event Management System”, April- 2024, International Journal of Innovative Science and Research Technology Volume 9, Issue 4, ISSN No: - 2456-2165.