VNR CONNECT – A MOBILE APPLICATION FOR INTEGRATED COLLEGE EVENTS

Mrs. Prasanna Pabba[1], B. Viswadha [2], P. Srivani [3], P. Rajashree [4], S. Vinay Kumar [5]
[1]Assistant Professor, Department of CSE, VNR Vignana Jyothi, Institute of Engineering and Technology
[2,3,4,5] B. Tech, Department of CSE, VNR Vignana Jyothi, Institute of Engineering and Technology.

Abstract:
There are different fests and events organized in the college every year. Currently all the work is done manually. This project "VNR CONNECT" will help to override the problems prevailing in practicing the manual system. This project helps the event organizers to organize the events in a much easier way. The organizers can add all the details of the events and open it for registrations in this app. The participants can get all the details and register for the events in a much simpler way. This project also includes details of all the clubs and student chapters that we have at VNR VJIET. Participants can receive any last-minute changes such as those about the date, time, or order of the programs without confusion. Students can also register for these clubs and get all the details about events that are being organized by each club. Post event activities like result announcements, photos are showcased on this application.

Keywords: Flutter, Dart, Firebase, Events, Clubs, Fests, Student Chapters

1.0 INTRODUCTION

Every time a college or university hosts an event, there are more tasks that must be completed, such as organising the event, keeping track of the plan, sticking to a strict budget, informing the students of the event's specifics, disseminating invitations, managing registration, advertising among colleges, and occasionally lacking live audience interaction. College events draw a large audience, and students who participate in college activities often miss the chance to represent their institution, and students should have easy access to information about college groups and how to register for them. Students can get urgent or important messages via online communication. Clubs and student chapters each have their own websites. If new students need to sign up for a club or student chapter, they must do so using the unique Google forms that were distributed to the WhatsApp groups. If a club or student chapter is hosting an event. Club members stop by each class to spread the word about their event. Any event-related updates will be posted in distinct WhatsApp groups. Convergence, Sintillashunz, Ecficio, and other fests are among the annual events held at VNR. Few of the fests have websites. Since they are not all unified, it is challenging to learn about the numerous clubs, student chapters, and fests. Due to scattered registration links and the groups' lack of recognition, new students may find it challenging to join any clubs or student chapters. They might have trouble locating those links. Participants sometimes are not aware of what is going on throughout the fest. Due to the existence of distinct divisions, it is challenging to follow the updates regarding the happenings.

Since different clubs are not affiliated with one another, it is challenging to keep up with their activities. It could be challenging to learn about and keep up with all the events in the festivals because some festivals have distinct websites while others don't.

The majority of students could use an android app. It would expand the audience for messages and could reveal the precise number of recipients, which could aid in predicting event attendees. For every student chapter and club, there isn't a single application, and the ones that are available are static websites. There is a need for a better application so that students may live their college lives with more options and event organisers can manage the attendees of the events more effectively.

The objectives of this work include:

- The primary objective is to maintain a common platform for all the clubs and fests.
- To reduce the manual work and make it more collective.
- To make it easy for the organizers to organize the events.
- To make it simple for the participants to know about the events and to register and participate in the events.

To make it easy for freshers to know about different student chapters and clubs in VNR and join them.

2.0 RELATED WORK

Online Event Management is an application that is created for organising the events in the various colleges, according to **Sonal Sawant**, **Pooja Jamdhade, et al. [1]** in their article titled "App for Organizing Alumni Event". This application uses MongoDB, a NoSQL database, and Firebase. Since all the data is encrypted and saved, the system is both straightforward and safe. Less manual labour is required to organise the event. It's possible that students from other colleges won't be able to use the app to register. primarily unique to a particular user.

S. Sangeethaa, G. Kirubhakar et al. [2] in their paper titled **"Android Application for College Events"** states this app uses Flutter for Frontend and Firebase for Backend. The proposed system has three important features: A Virtual Board, Urgent Alerts and Bookmarks. The Events tab contains details on all events listed in our application. The Notices tab is used for sending urgent messages among students. The Bookmarks tab can be used by users to save notices and events that she/he is interested in. In terms of functionality and student needs, this software outperforms other Android or web-based alternatives significantly.

Shiv Kumar et al. [3] in their paper titled **"Android Based College Campus App"** designed an android app for better organization of college activities. The software is built using cutting-edge technologies like SQLite and Android. The business logic was built in Java, while the displays were created using XML. This app provides guidance for students regarding placements. As students understand about different companies visiting their campus they can prepare accordingly. Sending mails to students is made easy. Authentication is based only on name and password, but not college email id which is not secure. Students from other colleges might access the app due to less secure authentication mechanisms.

Reetu Malhotra, Dev Priya Gupta, et al. [4] in their paper titled "An Android Application for Campus Information System" the primary motivation behind developing the app was to combine the needs of students, instructors, and administrative personnel at a school into a single application. With the aid of SQLite Database and Android Studio, the application is created. This application has undergone Robotium testing. The app helps teachers to update

attendance and marks of students. The app helps students to check attendance and marks. Authentication is based only on name and password, but not college email id which is not secure. Students from other colleges might access the app due to less secure authentication mechanisms.

Renfei Liu1, et al. [5] in their paper titled **"Application Strategy of Big Data in College Student Association Activities"** explains how the use of big data technologies can change the management of student clubs and associations from static and result-based to dynamic and process-oriented. According to a survey, the efficiency of resource sharing in student club management is comparatively low, accounting for 52.35 percent of the total quantity of resources. Thus, as big data application approaches, student club administration systems, club evaluation mechanisms, student activity needs, community resource sharing, and intercommunication are explored.

Sandeep Misal, Sagar Jadhav, et al. [6] in their paper titled **"Review on College Event Organizer"** describes that This paper's application is a communication and management tool that will be useful for event planning. It is used to communicate the event timing scheduling, sending various important documents such as an event poster, certificate demo, payment receipt, etc.; setting up and administering groups for campaigning or delegating specific responsibilities; altering the calendar; and alerting the changes in the programme, etc. There will be less of a communication gap between students and event coordinators. Students get access to all events and can take part. Changes to the schedule will be simply communicated to everyone. Day to day reminders to participants.

Mrs. Sheetal, S. Patil et al. [7] in their paper titled **"Chatbot for college website"** uses Artificial intelligence and natural language processing. The system will simply accept the user's question, which may be from a student or parent, and respond in line with it. query. The system will compare the user question with the knowledge base to determine the best answer. Through the use of the login system, administrators may view incorrect responses and delete them. We have 24x7 availability for all student and parent queries. To reach college administration easily and reduce visits to college administration for every enquiry. If no Internet is available, it does not function. If a bot is misused, the administrator has to put in additional effort.

 Wang Wei, Xuan Lingqiang et al. [8] In their paper titled **"Design and Implementation of Small and Medium Sports Events Management Platform for Colleges"** effectively integrates the management system for medium- and small-scale sports events. In order to implement the management system of competition rule changes in sporting competitions, this article also modifies key functions. Along with managing background data in the system and on the website for sporting events, it also groups and verifies athletes' identities. They use RDBMS-based information exchange so that system data may be shared for system administration. The technology may be widely advertised and used in school sports events since it is easy and easily controlled.

Kumar Mishra et al. [9] in their paper titled" COLLEGE EVENT WEB APPLICATIONS" explains the system in such a way that a logged-in user may use the programme while new users are permitted to register. The project offers the majority of the fundamental capabilities needed for an event type. The information is subsequently forwarded to the administrator, who may then share it with the client as needed. can be utilised for participant usage or online

registration. proper scheduling and usage of online resources. shorten the time it takes to enrol in college. Have a User-Friendly GUI. The events are not open to students from other colleges.

Ali Ahmed Abed Ali et al. [10], in their paper titled "Development of a Hybrid Mobile App for Student Management System" uses a hybrid mobile application to manage student registration activities in schools. The hybrid app was made using the Firebase database and the Flutter framework. Any school or institute can use this project to help teachers, management, and students set, pick, and identify an appropriate time for their courses, as indicated by the timetable. When it comes to handling student registrations and information, this project offers managers a number of important advantages. This application has a Database Module and Student Management Module.

3.0 METHODOLOGY

The goal of this project is to develop a single application capable of managing all clubs, student chapters, and extracurricular activities at a college or university. By developing this application, the event planners can efficiently plan an event that attracts lots of attendees and enables online communication of the specific event details. Student chapter or club leaders can modify the application servers using the mobile app interface. It is easy for event planners to promote their events. Users of this application can view events and register for certain events, clubs, or student chapters via the mobile app. Due to the fact that they are all in one place, users may learn about different clubs, student chapters, and activities. Firebase Metabase is used for backend storage, and Flutter is used for the front end. The code is presented in dart.
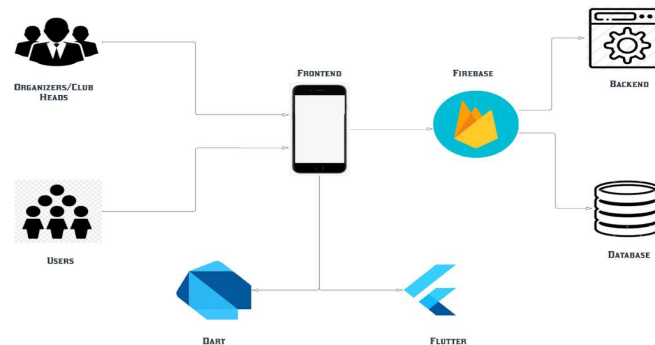

Fig 1: System Architecture

The modules present in this application are:

User Module: This module may be used to store user information such as name, profile picture, and email address. These are the ones who use the application for a variety of purposes, including seeing event details and registering for events. Users can access it from two different perspectives: as a VNR student and as a student outside of the organization.

Organiser Module: This module could be used to list users who arrange specific events as well as the clubs to which they belong. These are those that increase the application's events. They make any necessary updates to the event details, which is then automatically updated in the app. Even joining requests provided by attendees for a particular event are acceptable.

Club Module: This module maintains information about club leaders, an event calendar, and club registrations. For students who have just joined the club, this module aids in familiarising them with its members.

Student Chapter Module: This module offers information on club leaders, an event calendar, and registrations for new members. Student chapters share similarities with clubs but are connected to different colleges.

Fest Module: This module contains information about fests, including a calendar of events, registration information, and event evaluations. Technical and non-technical fests are the two sorts. Fests typically take place in an organisation and invite individuals from other institutions.

4.0 EXPERIMENTAL SETUP AND RESULTS
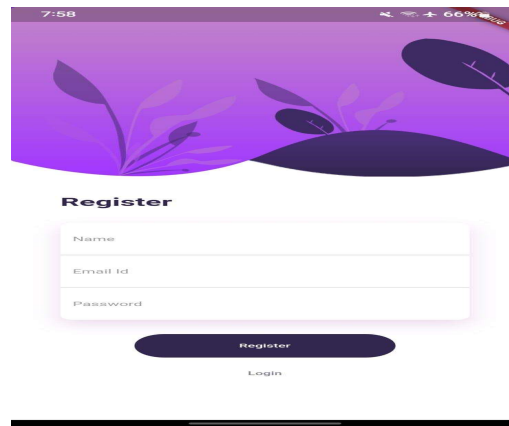
Fig 2: Register Screen

If the user is not already registered, he gets the option to register himself into the application. Then the email verification is sent to the particular user. Users next log in to the application using their credentials. The user is then verified by having their name cross-checked against those in the database, which already contains information about them from when they signed up. The successful login is indicated if the user has been validated.
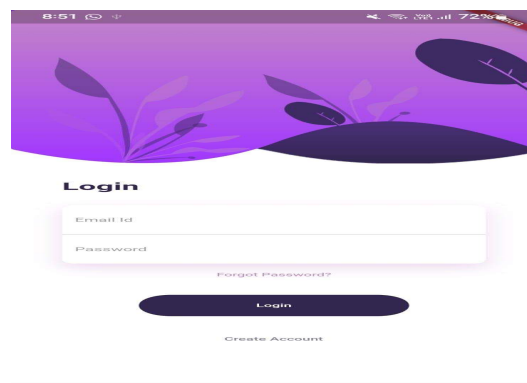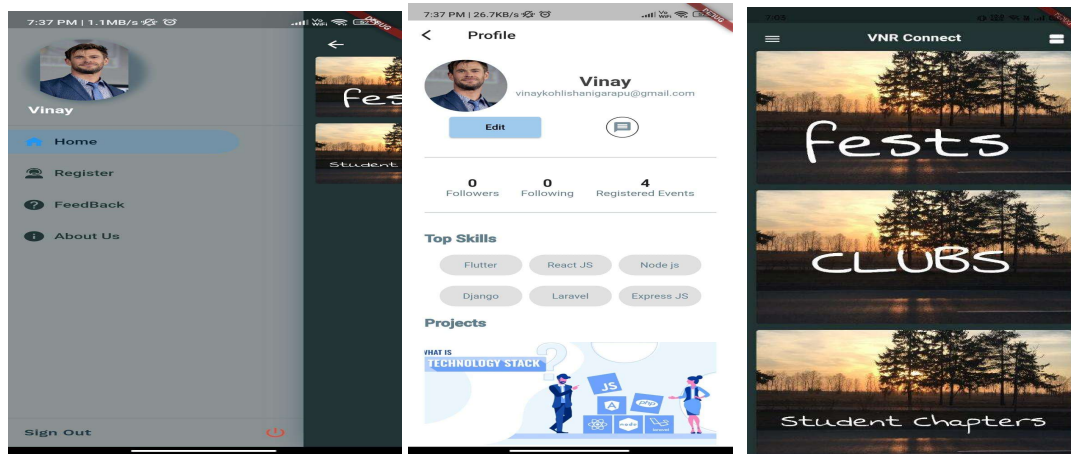

Fig 3: Login Screen

The user is then verified by being compared to names in the database, which already contains information about them from when they registered. It displays successful login if the user has been validated. The user can examine a list of the clubs currently active in the organisation after successfully logging in.

Fig 4: a) User Menu (Side Toggle) b) User Profile Screen, c) Home Page (just after login)
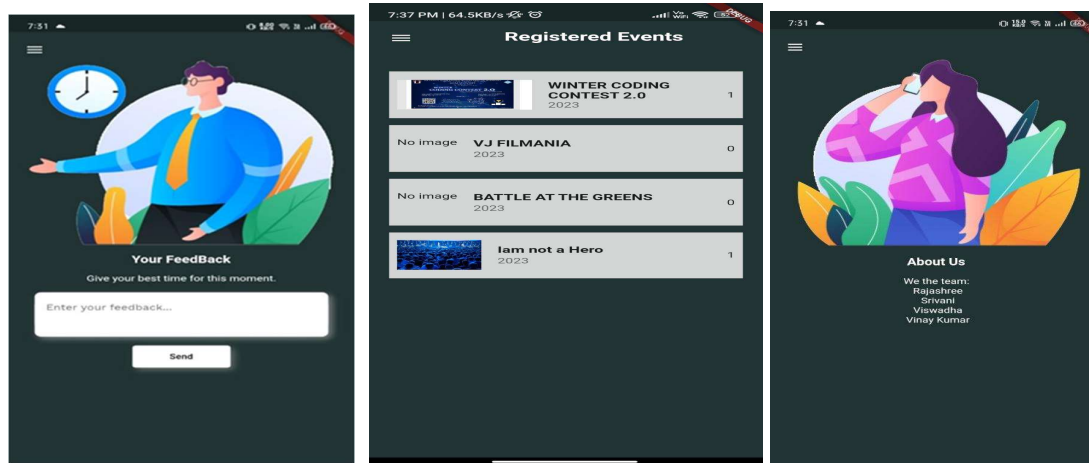
Fig 5: a) Feedback form (for user) ,b) Registered Events of a user c) About us Screen

The user can review a list of the clubs that are currently active inside the organization after successfully checking in. With just one click, the user can view each club's details. The user has access to all events and can sign up for any of them. It shows that registration for the event was successful after submission. The users can also view all the details of the club like the Club heads, members and events. The club heads can add the Event details and Update the Club information. Administrators will overall manage the application. Administrators of the club and members can log out frequently.

The user must log into the application as part of the event registration process. The user then searches for the event; if it is located, the page then redirects to the event registration page, where the registration is then considered successful. If the event is located, the search page itself is displayed
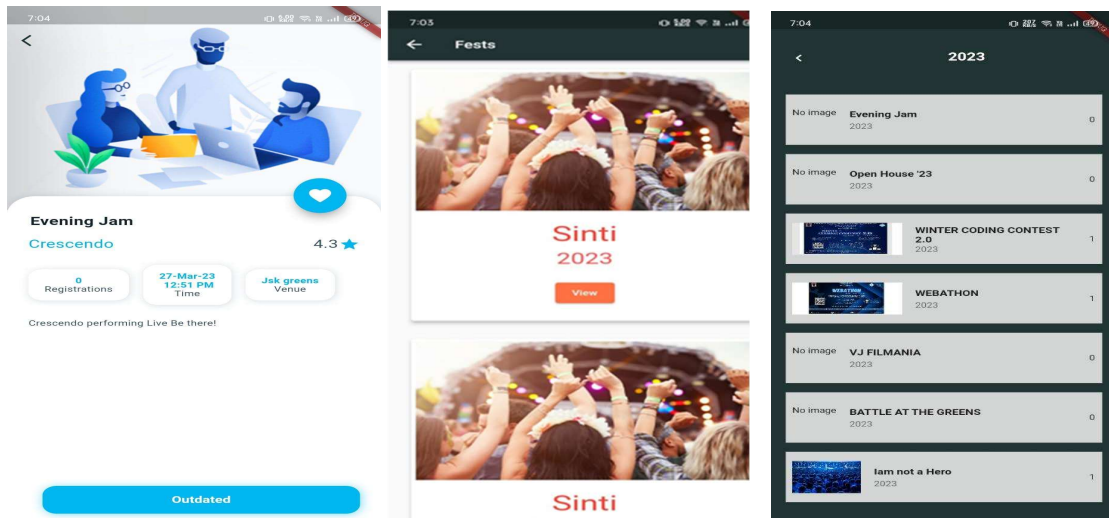
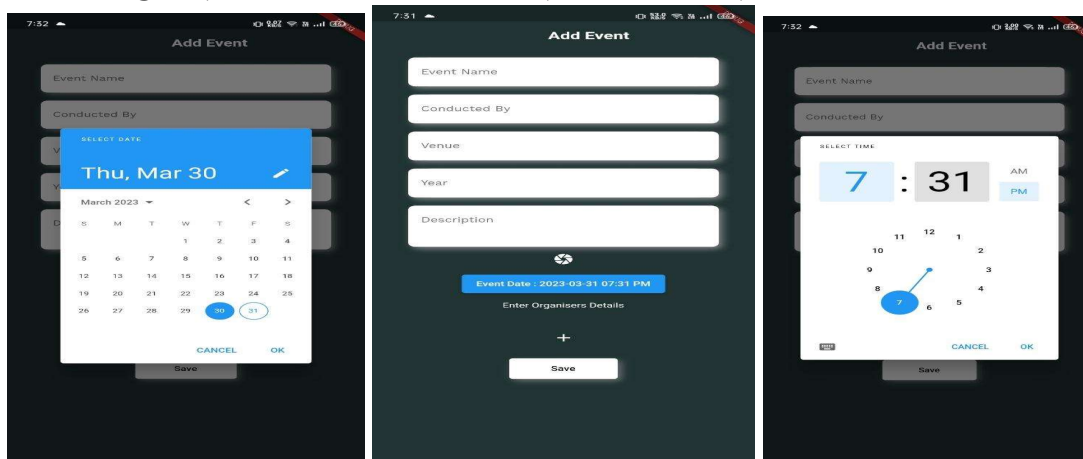**Fig 6: a) Outdated Event Screen b) List of Fests c) List of Events in 2023**

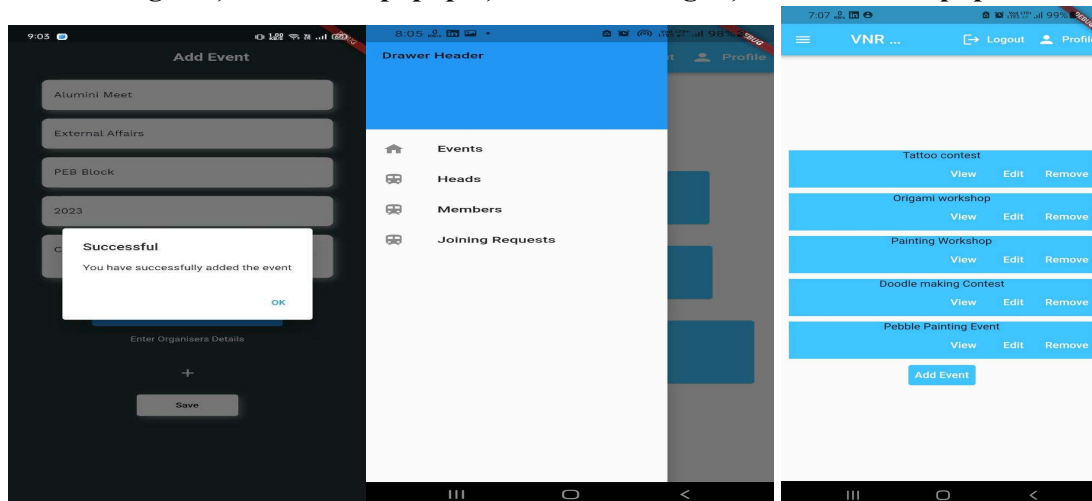**Fig 7: a) Select date popup b) Add Event Page c) Select Time Popup**
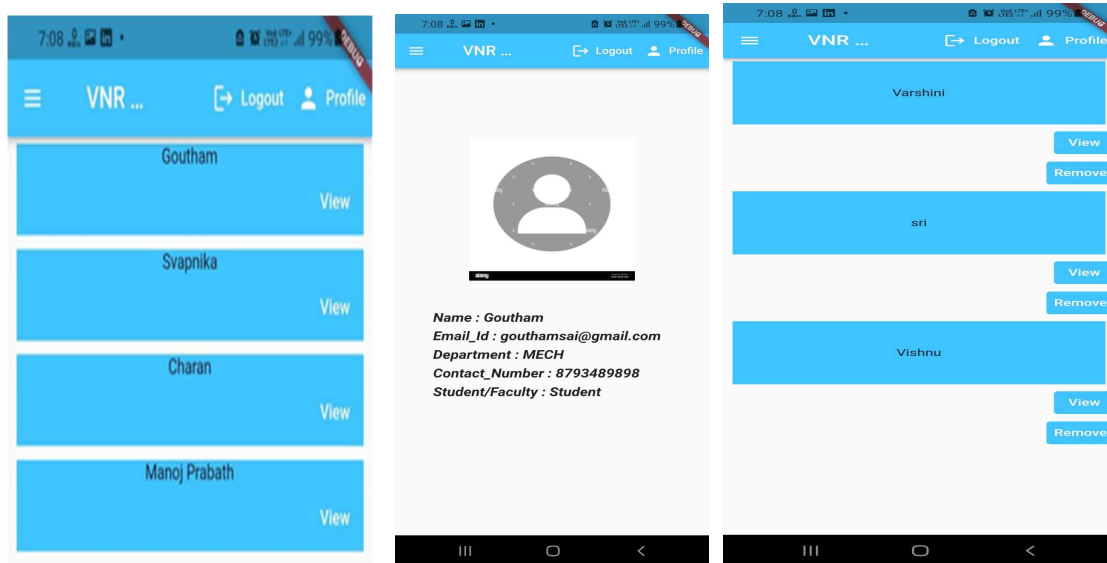

Fig 8: a) Successful Add Event Popup b) Club Menu (Side Toggle) c) List of Events in the Club

Fig 9: a) Club Heads Details b) Club Heads Details c) Club Members Details

Fig 10: Club Member Details

The user will not be able to see the registration option past the event it will be shown as outdated. The organizers can add the event details and set the date and time for it. The organizer can view, edit or remove each event. The organizer can view and remove other members of the club and can view other organizers as well.

CONCLUSION

This app helps students in an organization run events during fests. Registration for clubs and student chapters becomes simple, as does management. Overall, this project will attempt to efficiently and securely spread more information with fewer resources, and even students in the VNR VJIET will get transparency of the events, fests, and competitions held. It will also be simple for the club head to oversee, and event heads will be able to receive participant

feedback. The students that participated in a certain event to showcase their talents might use this app as conduct verification. It also serves as a recall of events and the repository for historical data.

REFERENCES:

1. Sonal Sawant, Pooja Jamdhade.App for Organizing Alumni Event Using International Research Journal of Engineering and Technology (IRJET) Paper-May 2021.
2. Reetu Malhotra, Dev Priya Gupta.An Android Application for Campus Information System Using Procedia Computer Science -2020.
3. Prof.Vaishali R. Surjuse, Nikita M. Bawankar, Ankita T. Tembhurne. EVENT MANAGEMENT SYSTEM Using International Journal of Advance Research and Innovative Ideas in Education (IJARIIE)-2021
4. S. Sangeethaa, G. Kirubhakar,Android Application for College Website,2016 South Asian Journal of Engineering and Technology.
5. Kumar Mishra, College Event Web Applications Using International Journal of Advance Research and Innovative Ideas in Education (IJARIIE)-2022
6. HOD. Dr R Juliana, Naveen Kumar VG, Richard G, Shivadarshini .Evecurate – A Smart Event Management App Using Flutter and Firebase Using International Journal of Scientific Research & Engineering Trends-2020
7. L. Jianglong and X. Min, "A Mobile Social App for College Students Based on Perceived Similarity and Trust," in 2016 8th International Conference on Information Technology in Medicine and Education (ITME)
8. [8] W. Wei and X. Lingqiang, "Design and Implementation of Small and Medium Sports Events Management Platform for Colleges," *2015 8th International Conference on Intelligent Computation Technology and Automation (ICICTA)*.
9. S. Kumar, S. k. Sharma and D. Dagwar, "Android Based College Campus App," *2018 Second International Conference on Computing Methodologies and Communication (ICCMC)*.
10. S. Sangeethaa, G. Kirubhakar.Android Application for College Events Using International Research Journal of Engineering and Technology (IRJET)-2020
11. Bhushan Sonawane, Akash Ombase. CHATBOT FOR INSTITUTIONAL PURPOSE Using International Research Journal of Modernization in Engineering Technology and Science. -July 2020
12. E. Sneiders, "Automated FAQ answering with question-specific knowledge representation for web self-service," *2009 2nd Conference on Human System Interactions*.
13. S. Sangeethaa, G. Kirubhakar. Android Application for College Website Using South Asian Journal of Engineering and Technology-March 2016
14. Prof.K.Bala, Mukesh Kumar, Sayali Hulawale, Sahil Pandita.Chat-Bot For College Management System Using A.I Using International Research Journal of Engineering and Technology (IRJET) - Nov -2017.
15. Shivam, Kumar & Saud, Khan & Sharma, Manav & Vashishth, Saurav & Patil, Mrs.Sheetal. (2018). Chatbot for College Website. 5. 74-77.