COLLEGE EVENTS NOTIFICATION SYSTEM

Ms. SOWMYA PANDA[1], Mr. BARLA MANOJ KUMAR[2], Ms. RAJANA JAHNAVI [3],Mr. PALAVALASA PAVAN KALYAN[4], Mr. REDDY NAGA VENKATA SIVA[5], Mr. Dr V. SREERAMA MURTHY

1. BTECH, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY, SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA - 531173
2. BTECH, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY , SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA - 531173
3. BTECH, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY , SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA - 531173
4. BTECH, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY , SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA – 531173
5. BTECH, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY , SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA - 531173
6. Professor COMPUTER SCIENCE AND ENGINEERING, NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY, SONTYAM, VISAKHAPATNAM, ANDHRA PRADESH, INDIA-531173

ABSTRACT

The project's main goal is to replace the current paper-based event notification system and other processes. Institutions currently employ wooden notice boards that hang on walls to post notifications, but this procedure presents difficulties because it necessitates maintaining the display and personally visiting the notice board. As a result, the notice board system needs to be updated to include digital notice boards. The widespread use of mobile devices, especially among young people, highlights their significance for both recreational and educational purposes in higher education. The College Events Notification System is suggested in this context to improve communication between colleges and students. This technology enables professors to distribute academic notifications more rapidly and effectively by utilising SMS and email systems. Furthermore, it gives students access to information about university events. The main goal of this project is to develop a mobile app that lists all activities occurring inside and outside of the university and allows users to sign up for relevant conferences, workshops, placements, technical and non-technical events. The project will adopt a waterfall methodology, starting with the creation of a prototype that gives users a glimpse of the full system.

1 INTRODUCTION

In schools, colleges, universities, and the workplace, "mobile learning" is an emerging and quickly growing area of educational research and practise. Through a mobile device, college and students can remain in touch anytime, anywhere with the College Events Notification System. New forms of communication are now possible thanks to the widespread use of mobile and wireless technology and the availability of cheap cell phone and internet services. In this project, we hope to make better use of these features to improve communication between college personnel and students about future activities on campus.

This method's goal is not to compete with or supplant more conventional means of communication, such in-person conversations in classrooms or online learning environments. Instead, it is an additional technique that can improve and supplement the notification procedure. This system's implementation might be advantageous for colleges. It enhances rather than replaces the current techniques of academic event announcement. Students' mobile devices are used by this online event notification system to receive SMS and email notifications. By implementing this method, the university might improve its standing and do away with laborious paperwork.

The College Event Notification System, a system that would enable improved academic information dissemination in colleges, will be covered by the project. Using this platform, the college will be able to distribute notices via a college event notification system.

These elements must be part of the system:

1. The professor can inform the students of academic deadlines like midterms and placement exams.

2. Students can be alerted and given the option to see study materials or information concerning exams, quizzes, or projects that the lecturer publishes in the application.

3. Lecturers may add notices and events, which students may view and register for.

4. Lecturers have the ability to control events and student information. Students may talk about any recent occurrence in the discussion box.

Students and college students will be the application's primary users. The users will require a smartphone or laptop in order to use this programme. The Android Software Development Kit (SDK) platform, which is a collection of tools for developing applications and utilities, Visual Studio Code, a web server, and the free and open-source MySQL database will be used to develop the system.

2. LITERATURE SURVEY AND RELATED WORK

1. Prof. Vaishali R. Surjuse,Nikita M. Bawankar, Ankita T. Tembhurne et al..(2021) They claimed that PHP, HTML, and CSS were used in the development of this application in their paper named "Event Management System." In this system, data is saved in the database and related to all files after just one entry by the user. This method reduces the user's effort while saving time. The suggested research activity uses SQL database administration for all data retrieval and interpretation. But because no aspect, such as the whole data of the event and the event timeframes, is reviewed, this project might not fully satisfy its functionalities. using few resources, lacking features like data from prior years' events or winner details [1]

2. In their article titled "College Event Web Application," Kumar Mishra et al. (2022) describe the system in such a way that a logged-in user may use the programme while new users are allowed to register. The project provides the majority of the essential tools required for a certain event type. The data is then sent to the administrator, who may then pass it along to the client as necessary. can be used for online registration or participant use. judicious planning and application of internet resources. shorten the college enrollment process. Have a GUI that is easy to use.Students from other colleges are not permitted to attend the events. [2]

3. An android software was created by Shiv Kumar, Shrawan kumar Sharma, et al. (2018) in their article named "Android Based College Campus App" for better organising college activities. The software is created with state-of-the-art tools like Android and SQLite. The displays were made using XML, while the business logic was done in Java. Students can get placement advice via this app. Students can prepare appropriately when they become aware of the various businesses that will be visiting their campus. Mailing students is made simple. Only name and password are used for authentication; a college email address, which is not safe, is not used. Due to less secure authentication methods, students from other colleges might access the app. [3]

4. The authors of the paper "Android Application for College Events" by S. Sangeethaa, G. Kirubhakar, et al. (2020) indicate that this app uses Firebase for the backend and Flutter for the frontend. The suggested system has three crucial characteristics: Bookmarks, an electronic board, and urgent alerts. All of the events featured in our application are described in depth in the Events page. Students can communicate crucial messages to one another using the Notices tab. Users can save announcements and events that interest them using the bookmarks tab. This programme performs much better than other Android or web-based alternatives in terms of functionality and student needs [4].

5. In their study titled "Development of a Hybrid Mobile App for Student Management System," Ali Ahmed Abed Ali, Mohammed Dauwed, et al. (2018) employ a hybrid mobile application to manage student registration activities in schools. The Flutter framework and the Firebase database were used to create the hybrid app. This project can be used in any school or institute to assist teachers, administration, and students in choosing and identifying an appropriate time for their courses as stated by the timetable. This project gives administrators a variety of significant benefits when it comes to managing student registrations and data. A database module and a student management module are also features of this application [5]

6. In the article "Notification System to Students Using an Android Application" by May H. Riadh et al. (2016), the authors claimed that their goal was to create a notification system using an Android application and connect it to the university's instructional website. It provides the instructor with a variety of information on education, courses, and college students in general that helps him or her choose who to send warnings to. Sending reminders, monitoring attendance, and viewing academic information like exam results are also provided.[6]

3 Implementation Study

Modules

Admin

The admin will log in here and post various events and announcements for the college. All of the events, students, registration data, and alerts are also managed by the admin. As it is, the Admin Module is implemented.

Using MySQL, a well-liked relational database management system (RDBMS), a college events notification system is put into place. MySQL is used to store event data, including the event name, description, date, time, fee, and further specifics like registration information. Within the database, this information can be arranged into one or more tables.

Data retrieval: To get data from the database, MySQL offers a robust query language (SQL). For instance, SQL is used to retrieve a list of users who have registered for an event or to retrieve all forthcoming events. When an administrator creates new events or updates an existing event, MySQL is utilised to update the data in the database. Database security: MySQL offers security measures to safeguard the data contained in the database, including user authentication and authorization, data encryption, and access controls. Database Design:

The following tables will be included in the database for the College Events Notification System:

1. The events table will hold all information pertaining to events, including names, descriptions, dates, times, images, and prices.

#	Name	Type	Collation	Attributes	Null	Default
1	admin_id 🔑	int(11)			No	None
2	admin_name	varchar(255)	utf8_general_ci		No	None
3	admin_pass	varchar(255)	utf8_general_ci		No	None
4	admin_username	varchar(255)	utf8_general_ci		No	None

Fig-1: Events Table Structure

2. Table for notifications: This table contains data on notifications, including name, description, and file.

Name	Type	Collation	Attributes	Null	Default
not_id 🔑	int(11)			No	None
not_name	varchar(255)	utf8_general_ci		No	None
not_desc	text	utf8_general_ci		No	None
notification_image	varchar(255)	utf8_general_ci		Yes	NULL
Date	date			No	current_timestamp()
not_status	int(11)			No	1

Fig-2: Notifications Table Structure

3. All administrative information, including login and password, is kept in the Admin Table.

#	Name	Type	Collation	Attributes	Null	Default
1	admin_id 🔑	int(11)			No	None
2	admin_name	varchar(255)	utf8_general_ci		No	None
3	admin_pass	varchar(255)	utf8_general_ci		No	None
4	admin_username	varchar(255)	utf8_general_ci		No	None

Fig-3: Admin Table Structure

User

In order to view the events and notifications, the user must first log in. Users can check notifications and registered events or register for events.

The user module is put in place as follows:
A common relational database management system (RDBMS), called MySQL, is utilised to construct a system for notifying students about college events. Data retrieval: To get data from the database, MySQL offers a robust query language (SQL). For instance, SQL is used to retrieve a list of users who have registered for an event or to retrieve all forthcoming events. Data updating: When a user updates their profile or registers for an event, MySQL is utilised to update the data in the database.

Database security: MySQL offers security measures to safeguard the data contained in the database, including user authentication and authorization, data encryption, and access controls. Database Design:
The following tables will be included in the database for the College Events Notification System:
1. Students Table: This table will house all information pertaining to students, including names, roll numbers, college names, passwords, and emails.

#	Name	Type	Collation	Attributes	Null	Default
1	student_id	int(11)			No	None
2	student_email	varchar(255)	utf8_general_ci		No	None
3	student_pass	varchar(255)	utf8_general_ci		No	None
4	student_name	varchar(255)	utf8_general_ci		No	None
5	student_roll	text	utf8_general_ci		No	None
6	student_college	varchar(255)	utf8_general_ci		No	None
7	student_phone	varchar(255)	utf8_general_ci		No	None
8	student_status	int(11)			No	1

Fig-4: Students Table Structure

2. Comments Table: This table will contain all of the remarks that the students have posted along with their data.

#	Name	Type	Collation	Attributes	Null	Default
1	comment_id	int(11)			No	None
2	comment_event	int(11)			No	None
3	comment_user	int(11)			No	None
4	comment_status	int(11)			No	1
5	comment_name	mediumtext	utf16_general_ci		No	None

Fig-5: Comments Table Structure

3. Orders Table: Data about which people have signed up for which events will be kept in this table.

#	Name	Type	Collation	Attributes	Null	Default
1	orders_id	int(11)			No	None
2	orders_name	varchar(255)	utf8_general_ci		No	None
3	orders_student	varchar(255)	utf8_general_ci		No	None
4	orders_txnno	varchar(255)	utf8_general_ci		No	None
5	orders_price	int(11)			Yes	NULL
6	orders_image	varchar(255)	utf8_general_ci		Yes	NULL
7	orders_type	varchar(255)	utf8_general_ci		No	None
8	orders_status	int(11)			No	1
9	orders_approve	int(11)			No	0
10	orders_stuid	varchar(255)	utf8_general_ci		No	None

Fig-6: Orders Table Structure

4 PROPOSED WORK

We suggested an instantaneous college event notification system that would let students view any organisation-related emails or messages on their smartphones, saving them time from having to visit the notice board or open Whatsapp, which could divert their attention and also eliminate the instructor's pen and paper work. Additionally, the teaching staff will have no trouble understanding loading notices or any other organisational information. Without going to the notice board, the suggested solution allows students to receive their pertinent notices wherever they are. In the suggested approach, where students receive their notices instantaneously, the issue of out-of-date notices is resolved. Along with the current notifications, past notifications can be seen at any time. Thus, the pupils' effort can be decreased and their time might be saved, which might then be used more effectively.

This programme had to be created in order to do away with manual pen and paper operations. Staff and students are receiving notices on time. Using their smartphones and our app, students can view events, sign up for them, and interact with their classmates about the event in the discussion section while seated in one place. Making it simple for the college organisation to quickly distribute all the warnings is our aim. We are attempting to improve the system's drawbacks. We utilise the internet as a tool for communication. Our system will be straightforward to use and keep up with.
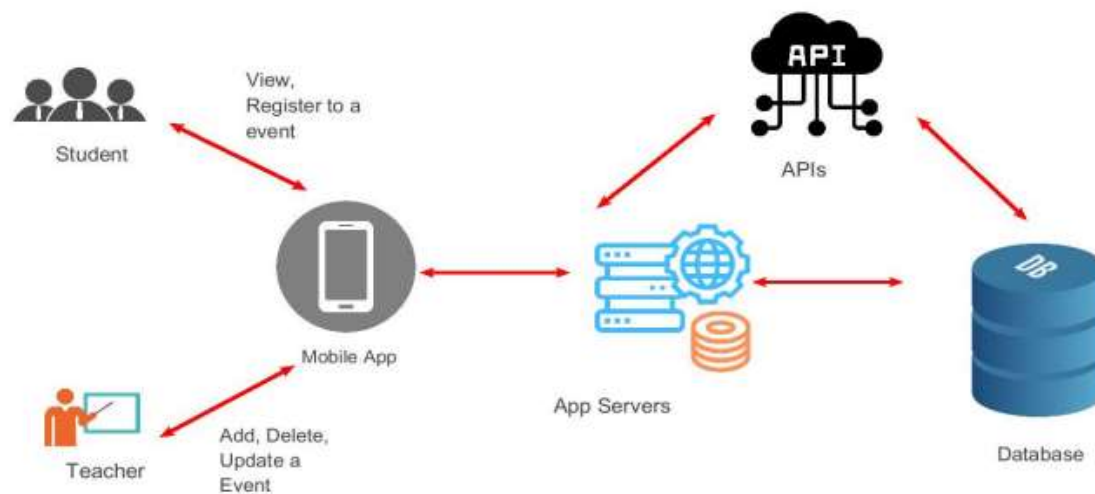
Fig-7: System Architecture of College Events Notification Management System

5 METHODOLOGIES

The project will use the Waterfall Methodology, which contains four phases of the system development life cycle, as well as the Agile and Prototype Software Development Methodologies.(SDLC). Additional information is given within the project, and a Gantt chart illustrating the project's development is also included.

Agile technique works effectively for application development because it prioritises customer satisfaction, focuses on providing working software frequently, and adapts to changes and user feedback. Teams may respond to shifting requirements and market situations by working cooperatively and iteratively with agile. Agile also promotes continual improvement, which may result in better goods and outcomes for customers. Because it allows for flexibility and makes it possible for teams to quickly provide value to clients, the Agile methodology is generally a preferred choice for application development.

The project will adhere to the planning, analysis, design, and execution phases of iterative development.
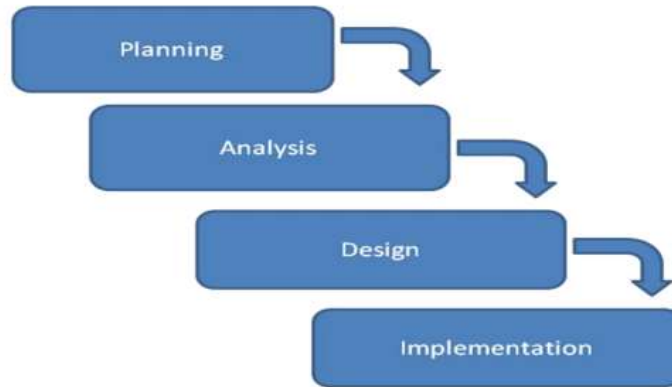
Fig-8: System Development Prototype

The major phases of the system development life cycle leading up to the creation of the prototype are depicted in the above diagram. We'll go over each stage in turn below.

Planning
A feasibility study is carried out during this phase to guarantee that the project will be successful and finished within the allotted time. To ensure the project ran smoothly, activities and milestones were identified.

To pinpoint the project's primary issues and specify appropriate remedies, a thorough analysis of the project is conducted. Similar systems that have previously been deployed in other educational institutions were included in the research done on similar systems. Since students are one of the system's primary target users, a poll was undertaken to ascertain their opinions.

Analysis
Gathering pertinent information to support the project's development was part of the analysis phase. By giving both teachers and students a questionnaire, a thorough analysis was carried out. The purpose of the questionnaire was to assess the importance of putting the system in place. Through a brief questionnaire, the students were also asked if they would be interested in such an application. The table below shows their responses.
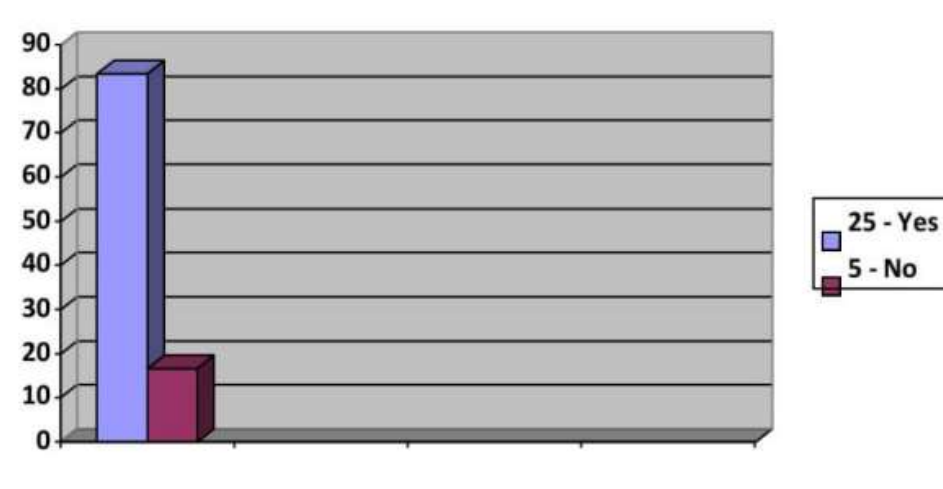
Fig-9: The likeness of the new College Events notification system

The comments from students who took part in the initial survey given to teachers and students is shown in the chart below. The number of students who responded to the survey is shown on the vertical line, while their opinions of the suggested system are shown on the horizontal line. Even if not all college students participated in the survey, it is still important for the study. In contrast, a wider range of pupils were covered in the second questionnaire. Making knowledgeable judgements for the project's progress will benefit from the information acquired from both questionnaires. The deployment of this system could improve interactions between college students and faculty, which would be advantageous for everyone involved.

Design
Analyzing, designing, and modelling are all part of this process. Choosing where to position the system's components should be done at this step. The application's objectives should be taken into account in order to complete this process. 3.4

Application
The project's final phase entails the system implementation, which entails coding, and the eventual testing of the application. The prototype will be made during this phase, and the majority of the fundamental functions will be completed. The first prototype will aid in choosing the additional features and enhancements for the final prototype.

Mission Activities
Several tasks must be completed throughout the project development process. The initial phase is made up of research and data collecting; these tasks are crucial for gathering data that will be relevant for the project. The following are the tasks that will be completed throughout the project.

project:
Planning the system's specifications
Project activities and significant milestones were identified during this phase.

Data collection, surveys, and research
Data Evaluation
Before moving on to further operations, it is important to perform multiple analyses on the data after it has been acquired in order to get correct information.

Design of the System
The system's workflow and the proposed interface will both be completed at this phase. Additionally, it will describe the system architecture and how it is intended to function.

Development of Systems
The system's components will be assembled as a whole at this phase to produce the prototype application.

Testing
There will be a number of tests during the testing phase, such as:

Testing for Usability and Functionality - to ensure that the key features operate as intended. Users Graphical User Interface Testing - This test will ascertain whether users are happy with the system interface and whether users fully comprehend the interface. This test will aid in the project's clear feedback and upcoming interface changes.

The purpose of the usability test is to ascertain whether students will find the mobile notification system useful. Users will find it easier to explore the programme with the aid of the system functionalities. The system's potential for success will next be evaluated, along with what modifications might be made to make it better. Performance testing - this kind of testing will focus on how well the application works. Response time, scalability, and dependability factors will be

carefully monitored and noted for later analysis. Application Installation Testing - With regard to the application installation testing, it will be identified what sorts of setup are required for the application to execute in mobile or desktop devices.

6   RESULTS AND DISCUSSION SCREENSHOTS
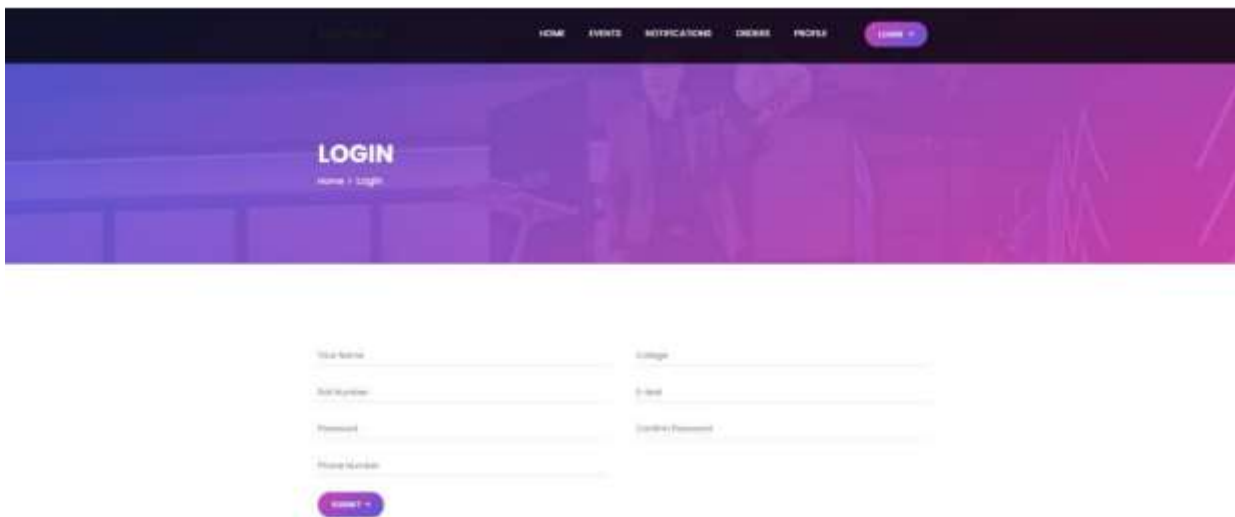

Fig-10: Home Page of User
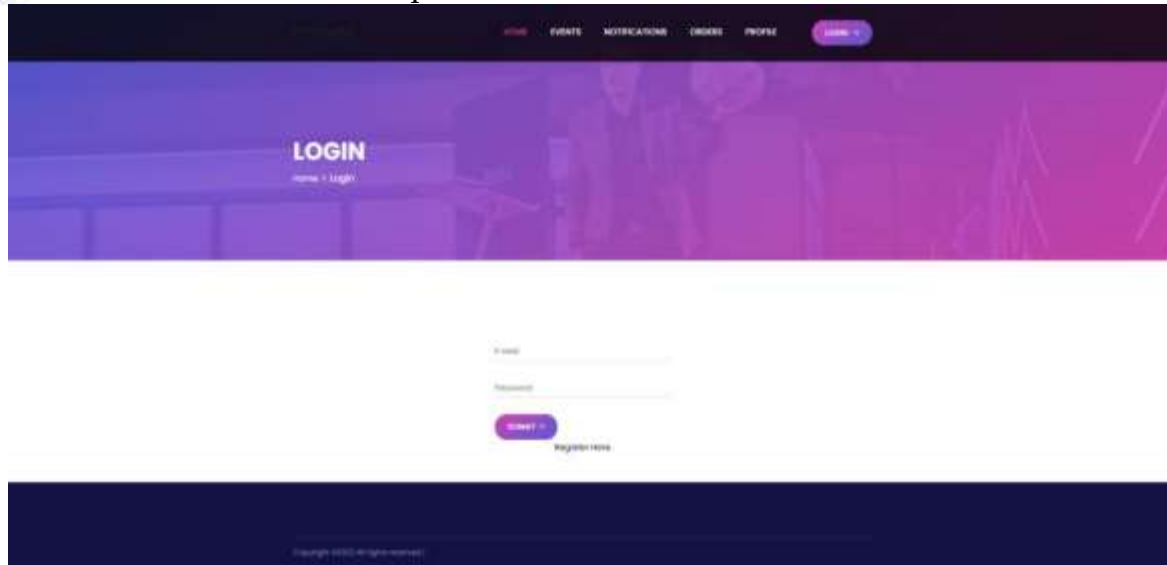

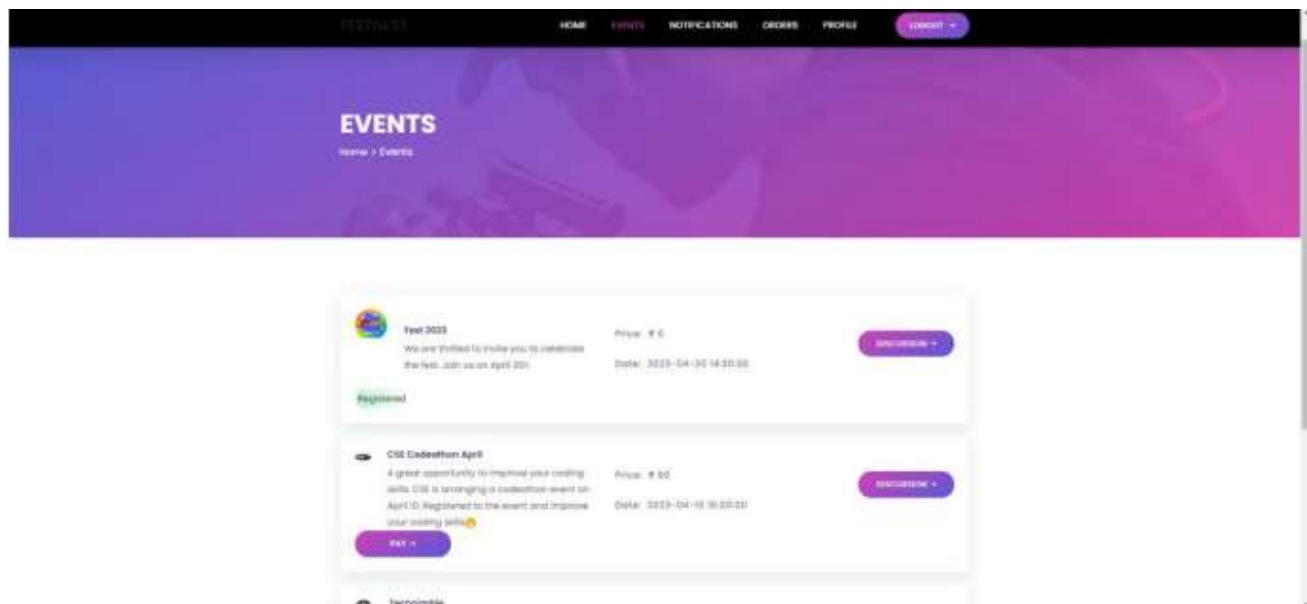**Fig-11:** Register Page of User

Fig-12: Login Page of User

Fig-13: Events Page of User
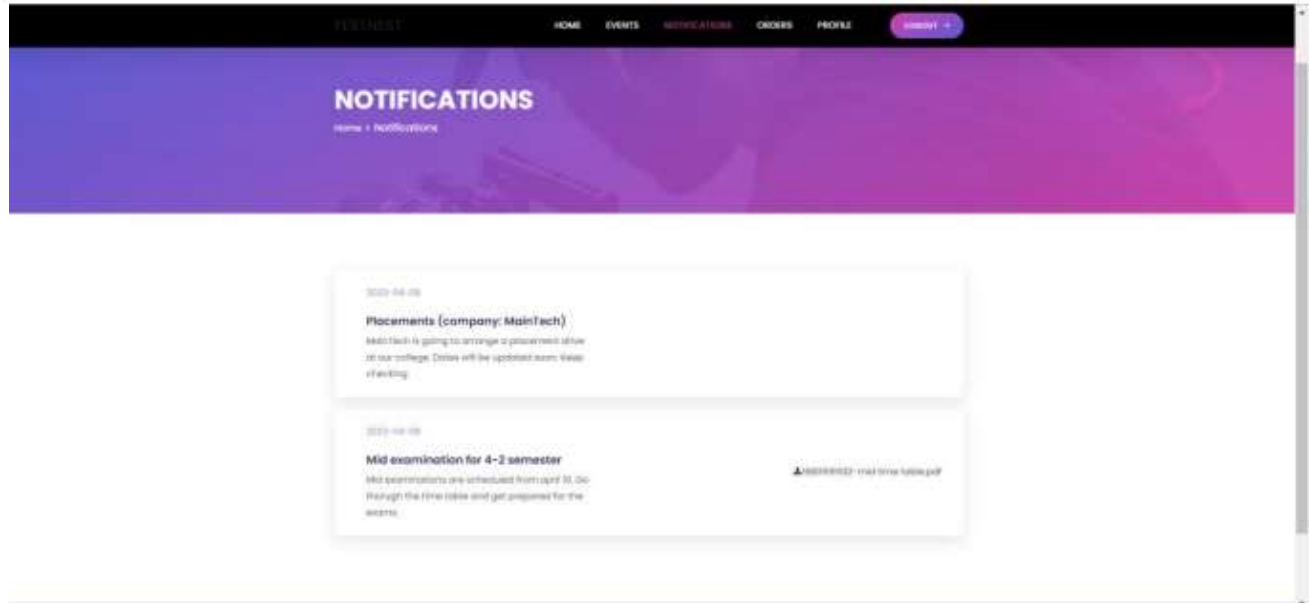
Fig-14: Notifications Page of User
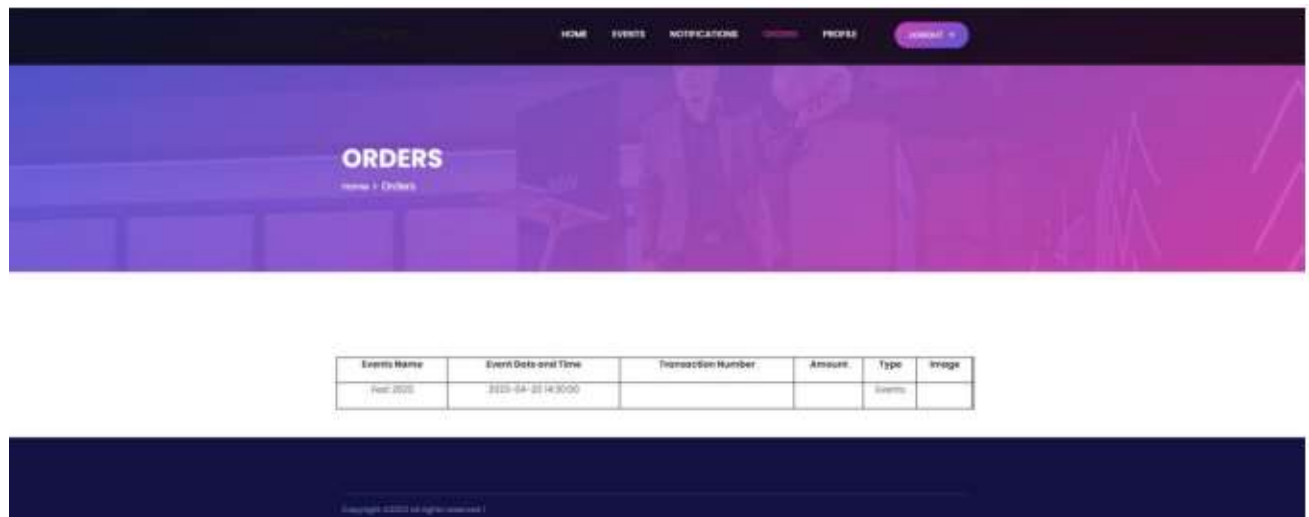
Fig-15: Orders Page of User
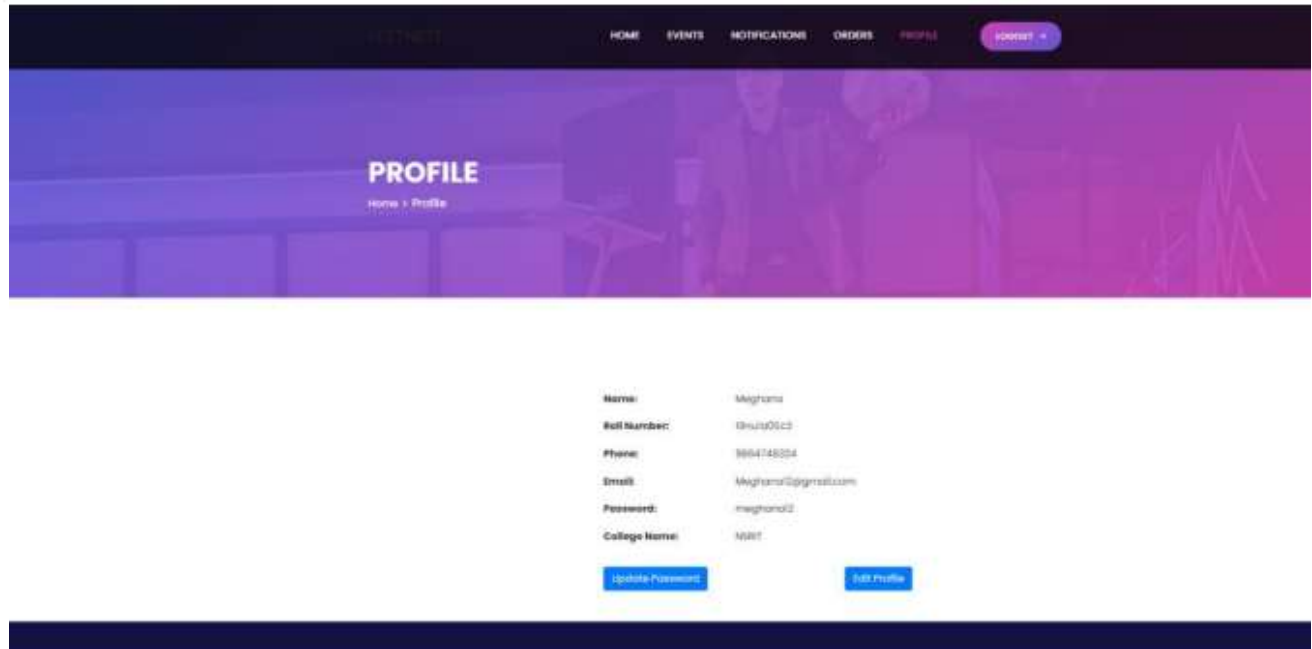
Fig-16: Profile Page of User
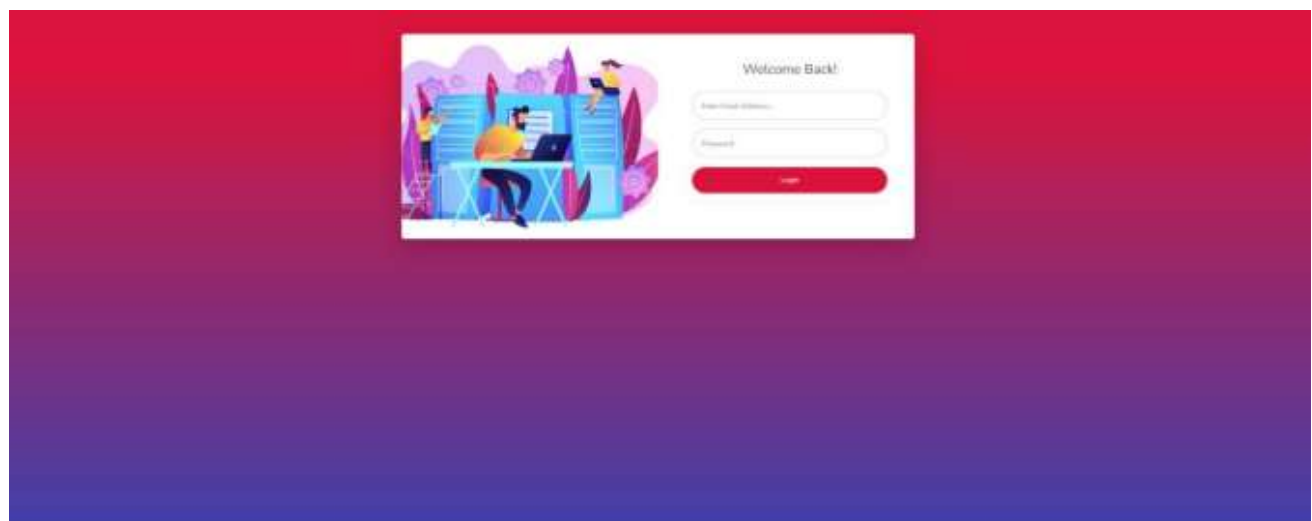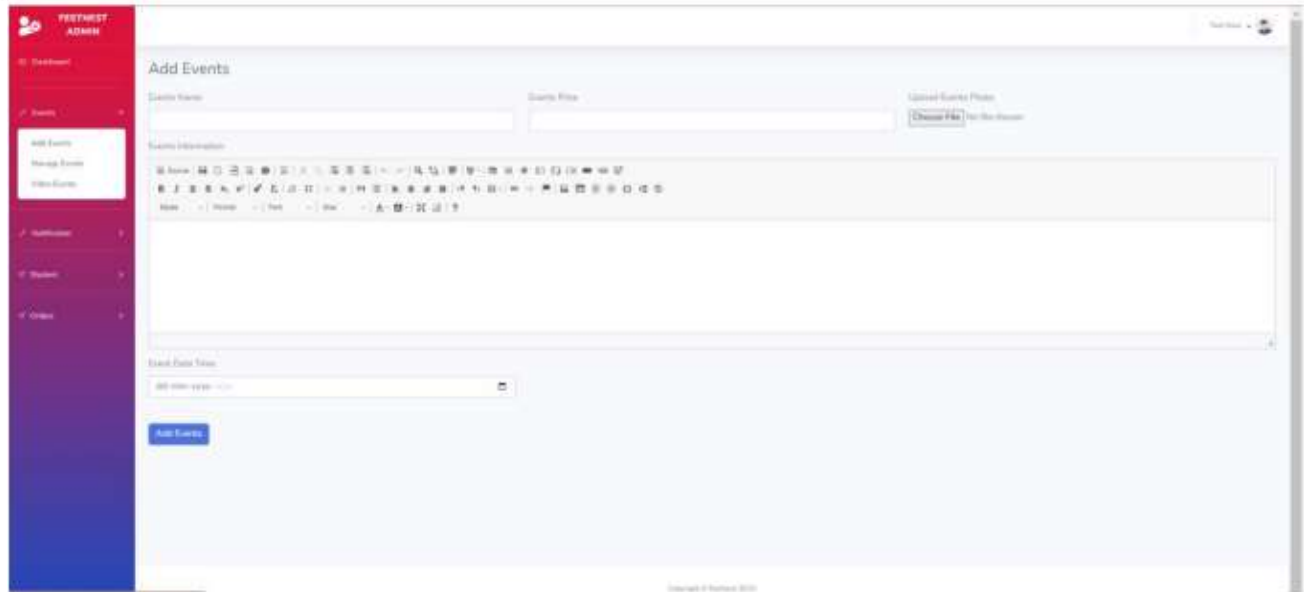

Fig-17: Admin Page of User
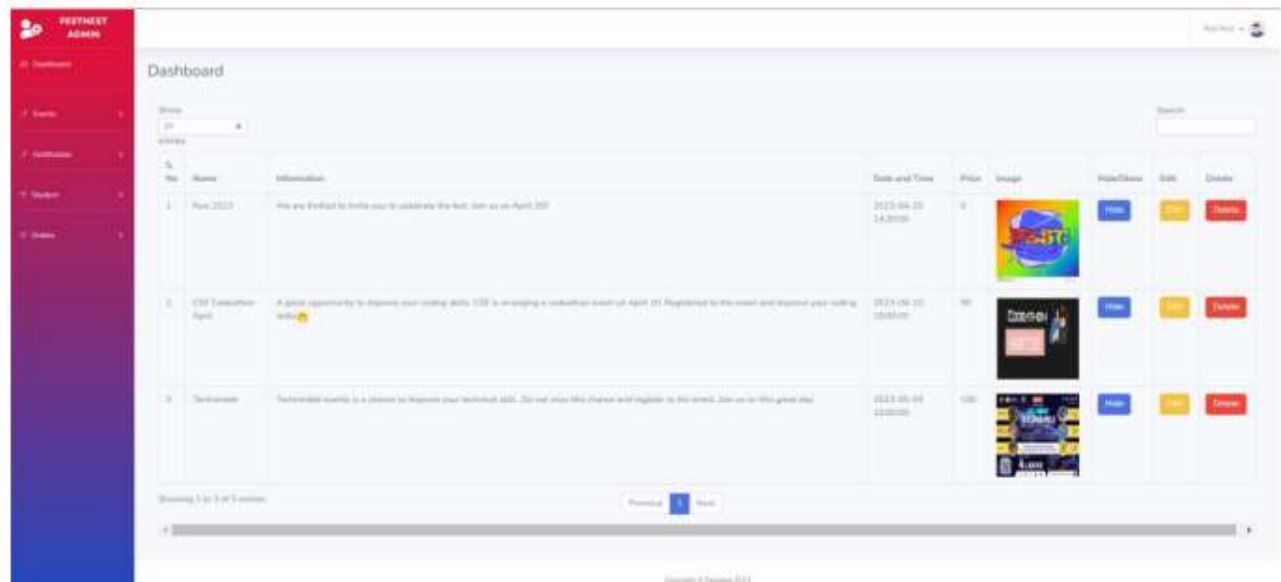
Fig-18: Add Events Page of User
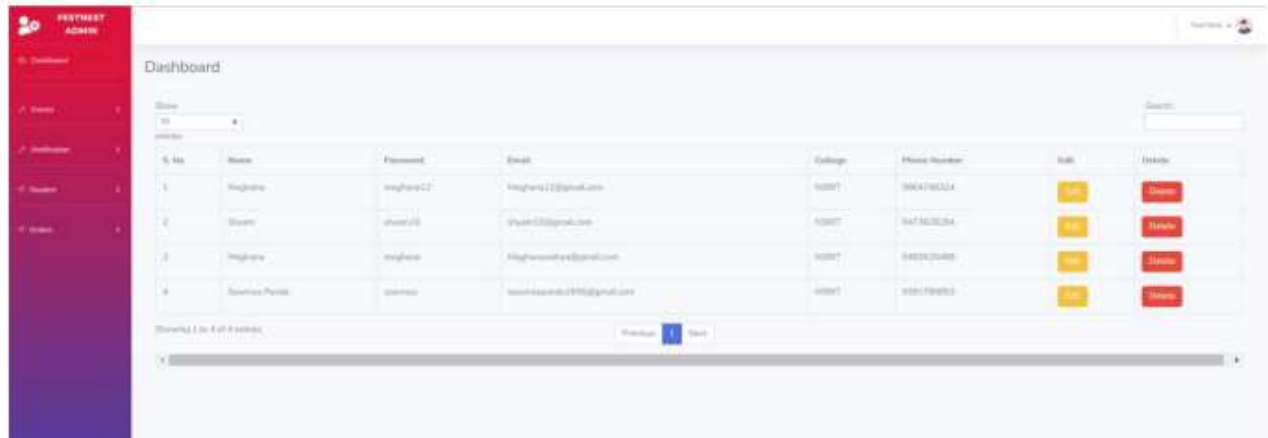

Fig-19: Manage Events Page of User
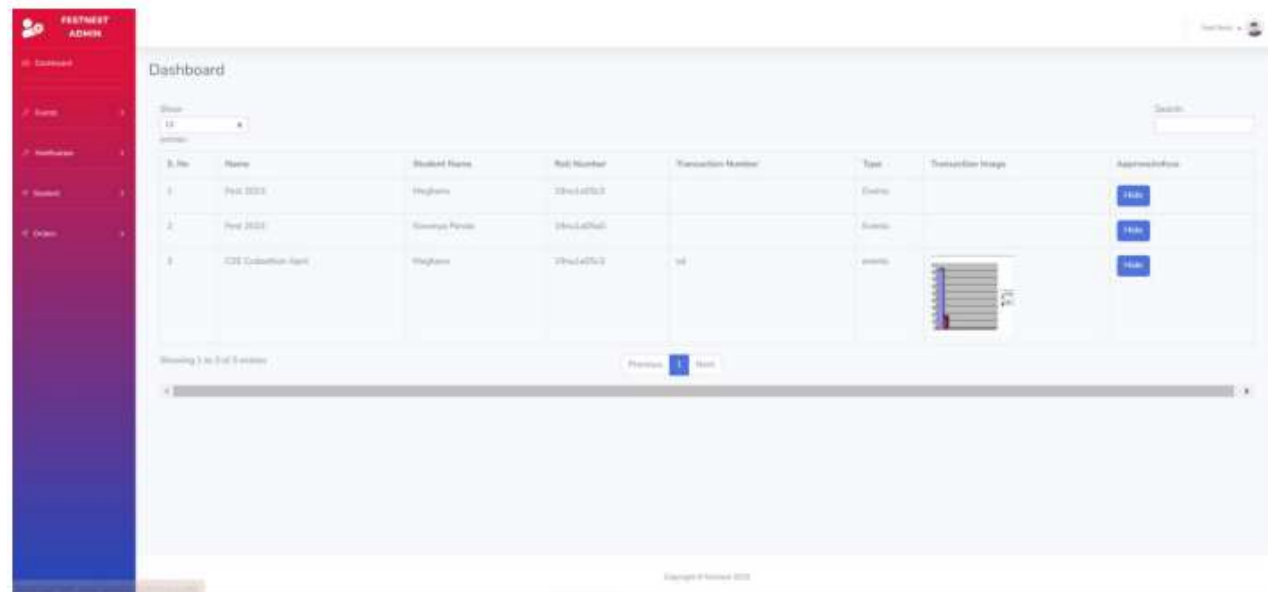
Fig-20: Students Management Page of User

Fig-21: Orders Management Page of User

7. CONCLUSION AND FUTURE WORK

The creation of a College Events Notification System, a platform for communication between the college and students outside of the classroom, has been covered in this project. The main objective of this project was to develop a quick and effective method of establishing communication between the various groups on campus. It also included developing a mobile application that would display activities occurring inside and outside the institution and make sure that everyone would be notified of any pertinent conferences, workshops, placements, technical or non-technical events.

Building the prototype benefited greatly from all of the analysis and research done while the project was being developed. With the help of this application, students and colleges will be able to communicate differently and be informed about events. Hopeful benefits for college and students from this system

UGC CARE Group-1,   857

8. REFERENCES

[1] 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.

[2] Kumar Mishra,COLLEGE EVENT WEB APPLICATIONS Using International Journal of Advance Research and Innovative Ideas in Education(IJARIIE)-2022.

[3] S. Kumar, S. k. Sharma and D. Dagwar, "Android Based College Campus App," 2018 Second International Conference on Computing Methodologies and Communication (ICCMC).

[4] S. Sangeethaa, G. Kirubhakar.Android Application for College Events Using International Research Journal of Engineering and Technology (IRJET)-2020.

[5] A. A. A. . Ali and M. Dauwed, "Development of A Hybrid Mobile App for Student Management System", J. Adv. Sci. Nanotechnol., vol. 1, no. 1, pp. 37–42, Apr. 2022.

[6] Riadh, May. (2016). Notification System to Students using an Android Application. International Journal of Computer Applications