Unified Web Portal-A Common Website for all Educational Institutions

[1]S.Lakshmi Tirupatamma, [1]M. Sarvari, [1]B. Jaswanth Reddy, [1]B. Prem Reventh, [2]D.V. Subbarao

[1] Final year students, Department of Computer Science and Engineering, SRK Institute of Technology, Vijayawada, Andhra Pradesh, INDIA

[2] Associate Professor, Department of Computer Science and Engineering, SRK Institute of Technology, Vijayawada, Andhra Pradesh, INDIA, [1] vedhasrisandhaka@gmail.com

ABSTRACT:

The proposed project aims to develop a comprehensive platform facilitating interaction between college organizations and students. It includes modules for College Users, Students, and Admin. College users register, post multimedia content, and manage their profiles. Students register, follow colleges, create community groups, and receive post notifications. Admin oversees the system, verifying colleges and managing users. Future enhancements may include advanced analytics for user engagement and targeted content delivery. The project seeks to bridge the gap between colleges and students, fostering communication and collaboration within the educational community.

Keywords: Student, College organization, posts, Groups, Communication.

INTRODUCTION:

In today's digital age, fostering effective communication and collaboration within educational communities is more important than ever. However, existing platforms often fail to provide tailored solutions for facilitating interaction between college organizations and students. To address this gap, we propose the development of a comprehensive web-based platform designed to bridge the divide between colleges and students. This platform features distinct modules catering to the specific needs of College Users, Students, and Admin. College users are empowered to register, share multimedia content, and manage their profiles, while students can register, follow colleges of interest, create community groups, and receive timely post notifications. Meanwhile, the Admin module ensures the smooth functioning of the system by overseeing college verification and user management.

OBJECTIVE OF THE PROJECT:

- Facilitate seamless communication between college organizations and students.
- Enhance student engagement with college activities and events.
- Simplify administrative tasks related to user verification and management.
- Foster a sense of community within the educational ecosystem.
- Lay the groundwork for future enhancements and scalability.

LITERATURE WORK:

1.A Skulmowski and GD Rey, "COVID-19 as an accelerator for digitalization at a German university: Establishing hybrid campuses in times of crisis", *Human Behaviour and Emerging Technologies*, vol. 2, no. 3, pp. 212-216, May 2020. The proposed system involves a thorough examination of the digitalization initiatives undertaken by the German university, including the adoption of online learning platforms, virtual collaboration tools, and innovative pedagogical approaches.

2.R. Anand, N. Sindhwani and A. Saini, "Emerging Technologies for COVID-19", *Enabling Healthcare 4.0 for Pandemics: A Roadmap Using AI Machine Learning IoT and Cognitive Technologies*, pp. 163-188, 2021. The emergence of COVID-19 has underscored the critical importance of harnessing technology to address public health emergencies. Traditional healthcare infrastructures have faced unprecedented strain, highlighting the necessity for agile, data-driven solutions. By integrating cutting-edge technologies, such as AI, machine learning, IoT, and cognitive computing, this project seeks to revolutionize the way we approach pandemic management.

3."COVID-19 Educational Disruption and Response", *UNESCO*, March 2020. The proposed system comprises a user-friendly online platform equipped with a range of features to support remote learning. Key components include a centralized repository of educational resources, such as e-books, videos, and interactive simulations, accessible to both students and teachers. Additionally, the platform hosts virtual classrooms equipped with video conferencing tools, chat functionalities, and collaborative whiteboards to facilitate real-time interaction and discussion.

4.R. Anand, G. Shrivastava, S. Gupta, S. L. Peng and N. Sindhwani, "Audio Watermarking With Reduced Number of Random Samples", *In Handbook of Research on Network Forensics and Analysis Techniques*, pp. 372-394, 2018. In the realm of digital multimedia, ensuring the authenticity and integrity of audio content is paramount, particularly in applications such as copyright protection, authentication, and forensic analysis. Anand et al. addressed this challenge by presenting a novel approach to audio watermarking in their work published in 2018.b

EXISTING METHOD

The existing system for college-student interaction suffers from limitations in communication channels, lacks personalization, entails complex manual verification processes, lacks comprehensive analytics, and results in a fragmented user experience. These drawbacks hinder effective communication, engagement, and administrative efficiency, leading to decreased user satisfaction.

DISADVANTAGES

1. Limited Communication Channels: Existing systems often lack diverse communication channels, restricting interaction opportunities.
2. Lack of Personalization: Without personalized features, users may find it challenging to discover relevant content.
3. Complex Administrative Processes: Manual verification processes can be time-consuming and prone to errors.
4. Ineffective Engagement Metrics: Existing systems may lack comprehensive analytics, making it difficult to measure user engagement effectively.
5. Fragmented User Experience: The absence of a unified platform results in a fragmented user experience, leading to decreased user satisfaction.

PROPOSED SYSTEM:

The proposed system introduces enhanced communication channels with multimedia posts, community groups, and notifications, fostering seamless interaction. It offers a personalized experience through tailored post notifications and user preferences. Administrative processes are streamlined with automated verification and comprehensive admin tools, enhancing efficiency. Robust analytics provide insights into user engagement, facilitating informed decision-making and content optimization. With a unified user experience, the platform cultivates a sense of community, boosting user satisfaction.

PROJECT FLOW:

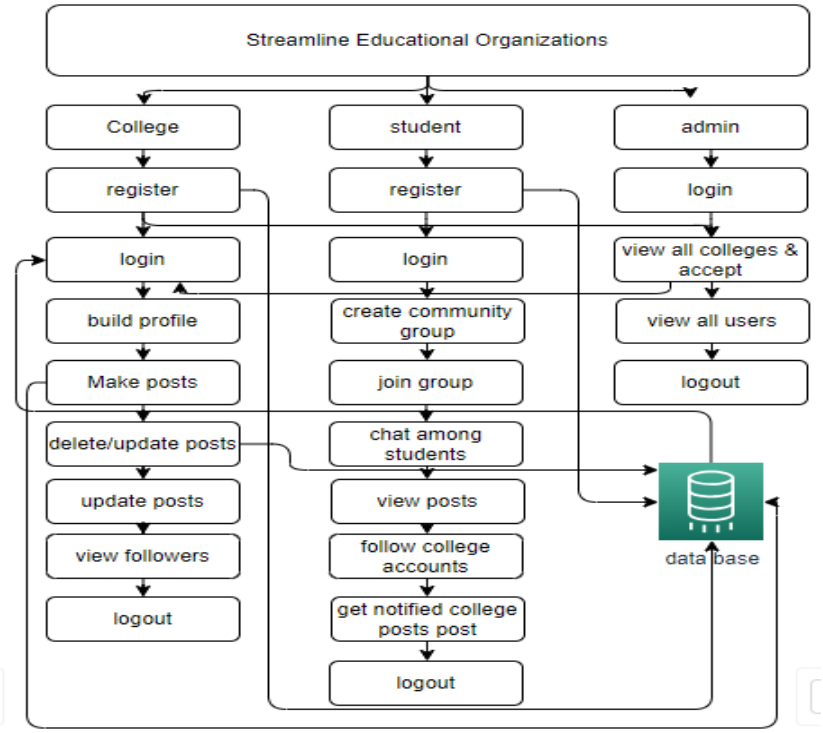

Fig1:Unified web portal project flow

ADVANTAGES:

1. Enhanced Communication Channels: Our platform offers diverse communication channels, including multimedia posts, community groups, and notifications, facilitating seamless interaction.
2. Personalized Experience: Through features like post notifications and user preferences, our system delivers a personalized experience tailored to each user's interests.
3. Streamlined Administrative Processes: Automated verification processes and comprehensive admin tools simplify administrative tasks, improving efficiency.
4. Robust Analytics: Advanced analytics provide insights into user engagement, enabling informed decision-making and content optimization.
5. Unified User Experience: Our platform provides a cohesive user experience, fostering a sense of community and increasing user satisfaction.

METHODOLOGY

Modules:

1.College Module: Registration: College users can register by providing basic details such as college organization name, official college email, address, website link, etc. Login: College users cannot directly login; verification by the admin is required to ensure the college is from an authorized organization. Profile Building: College users need to create their profiles by providing necessary information. Posting: College users can create multiple posts including images, videos, or audio files .Post Management: College users can update or delete their posts. Viewing Followers: Users can see the list of all followed users. Logout: College users can securely logout from the system.

Unified web portal

2.Student Module:

Registration: Students can register by providing basic details such as name, email, address, profile link, etc. Login: Students can login using their correct credentials. Creating Community Groups: Students can create community groups where joined students can communicate. Viewing Posts: Students can view all posts uploaded by college users. Following College Users: Students can follow college organizations they are interested in. Notification for New Posts: Students can receive email notifications for new posts from followed college organizations. Logout: Students can securely logout from the system.

3.Admin Module:
Login: Admin can login directly using default credentials. Viewing and Accepting Colleges: Admin can view all registered college organizations and accept their requests. Viewing All Users: Admin can view all registered users. Logout: Admin should logout securely.

RESULTS AND ANALYSIS

1.The below page is the Home page for Unified Web Portal.

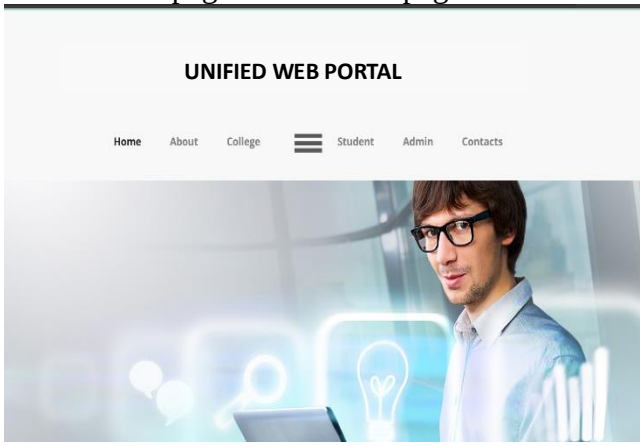

Fig2:Home page of Unified web portal

2.The below page is the college registration by providing basic details such as college organization name, official college email, address, website link.

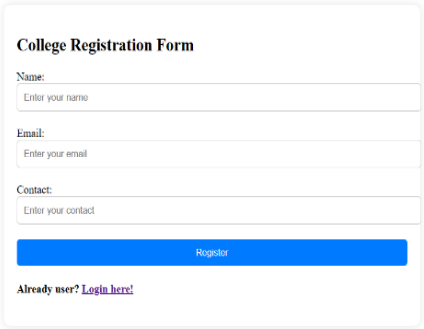

Fig3:College registration form

3.The below page is the student registration by providing basic details such as name, email, college name, contact, address.

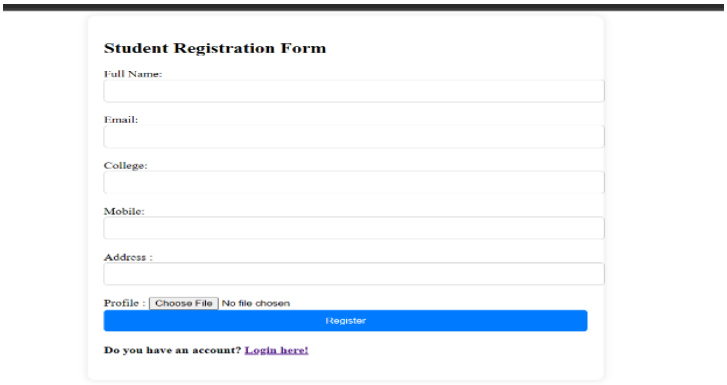

Fig4:Student Registration form

4.The below page is the login page for students, colleges and admin.

Fig5:Login form

5.The below page is the college account where they can build profile , view followers and logout.

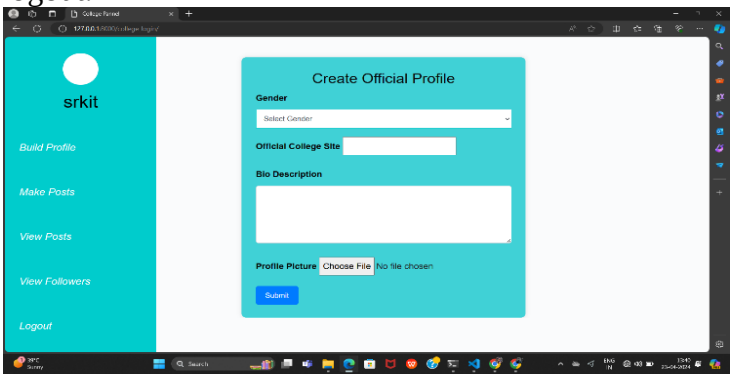

Fig 6:College profile building page

6.in the below colleges can make post and view posts.

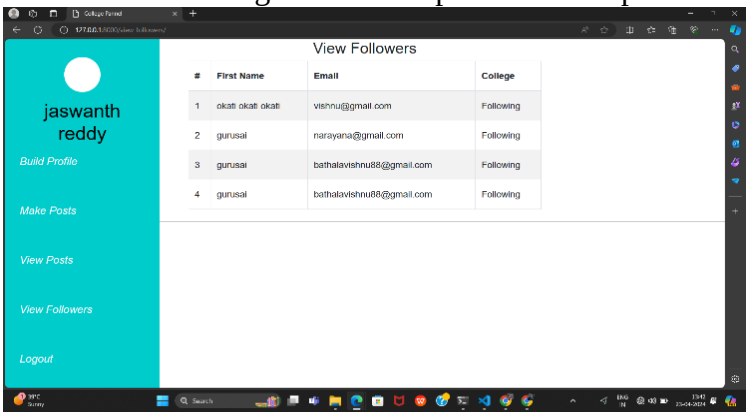

Fig7:College view followers page

7. In the below page students can build profile and logout.

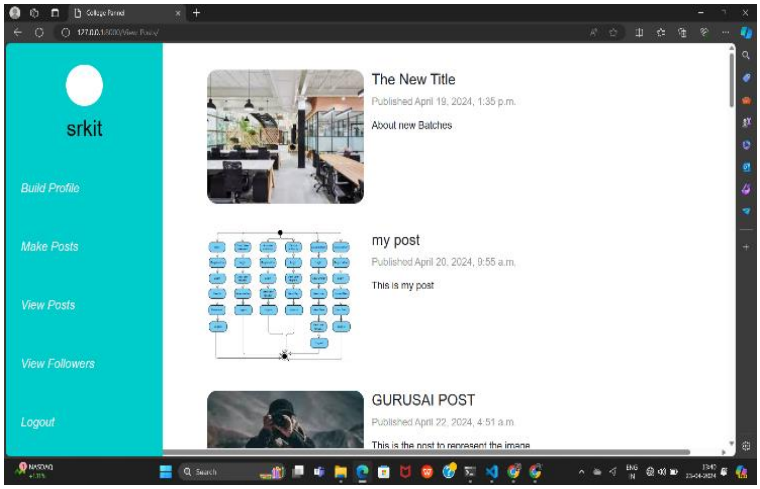

Fig8:College view posts page

8.In the below page Students can create community groups

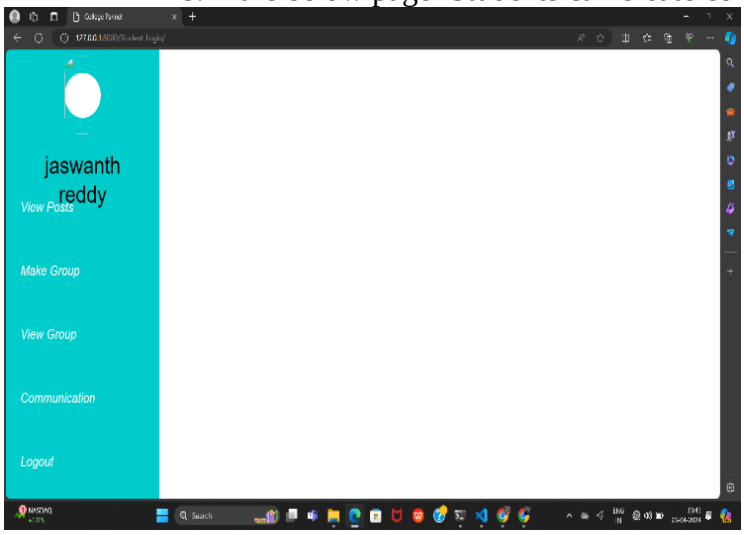

Fig9:Logout page

9.In the below page Students can join community groups and joined students can communicate.

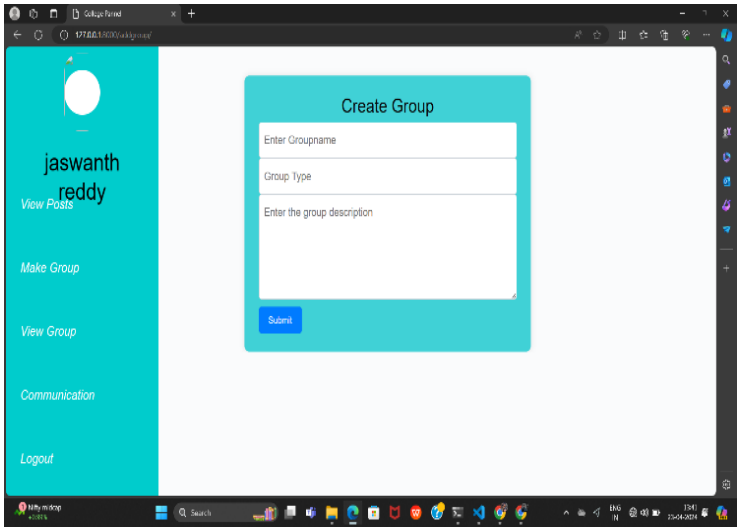

Fig 10:student create group page

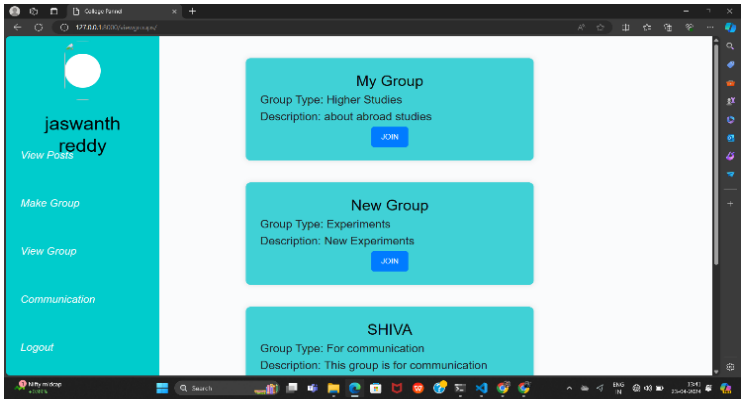

Fig11:students view and join groups page

11.The below page is the admin pannel where admin can validate and accept the registration forms from students ,colleges and provide login credentials.

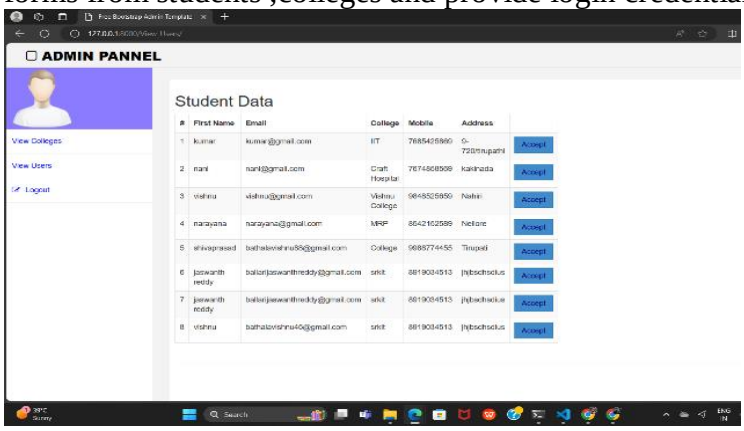

Fig12:Admin student data management page

12.In the below pages we provided code for the user registration and college registration.

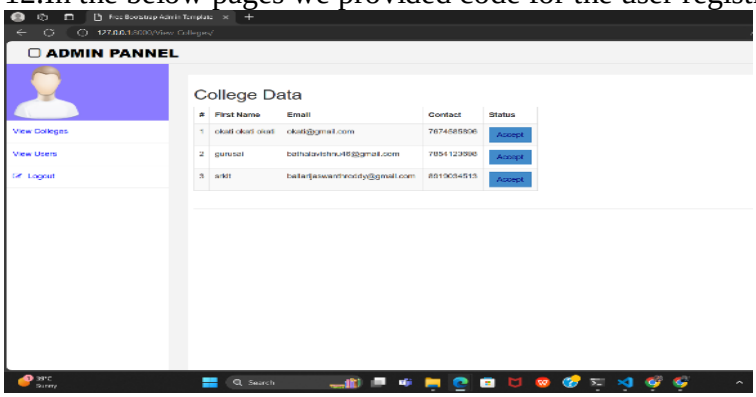

Fig13:Admin college data management page

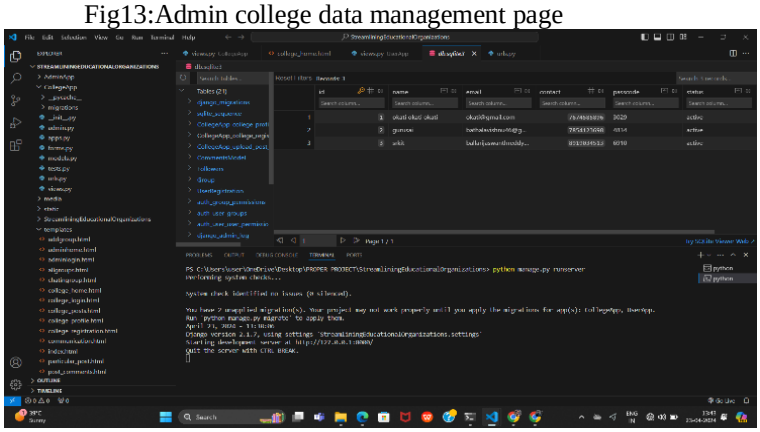

Fig14:User registration sample code

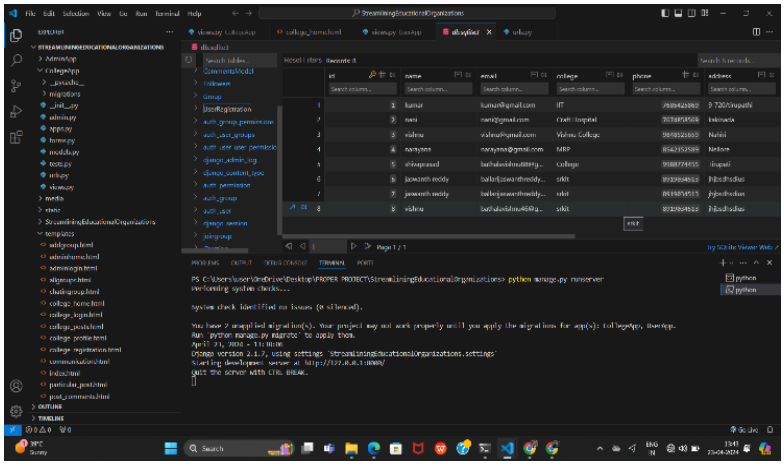

Fig14:College registration sample code

CONCLUSION

In conclusion we can say that Unified Web Portal is a web application that provides enhanced communication channels with multimedia posts, community groups, and notifications, fostering seamless interaction. Administrative processes are streamlined with automated verification and comprehensive admin tools, enhancing efficiency. With a unified user experience, the platform cultivates a sense of community, boosting user satisfaction.

FUTURE ENHANCEMENT

A potential future enhancement for the platform could involve the integration of feedback mechanism, discord space which is a feature of voice chat. By implementing advanced analytics algorithms, the platform could provide insights into which types of content resonate most with students and college organizations, allowing for more targeted content delivery strategies. This enhancement would not only optimize user engagement but also facilitate the creation of more meaningful interactions and discussions within the educational community.

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