



IJIRCCCE

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 12, Issue 2, February 2024

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.379



9940 572 462



6381 907 438



ijircce@gmail.com



www.ijircce.com

College Forum

Aniruddha Kadam, Anish Dharap, Vishakh Shetty, Omkar Gundale, Neelam Kawale

Developer, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,
Tathawade, Pune, Maharashtra, India

Designer, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,
Tathawade, Pune, Maharashtra, India

Database administrator, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering,
Polytechnic, Tathawade, Pune, Maharashtra, India

Developer, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,
Tathawade, Pune, Maharashtra, India

Co-ordinator, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,
Tathawade, Pune, Maharashtra, India

ABSTRACT: In the dynamic environment of higher education, effective communication and problem solving are critical to creating a healthy, collaborative learning environment. The School Forum is intended to be a platform designed to improve communication and collaboration between students, faculty and staff. The forum combines three important functions: Question solution: This not only provides users with a private place to post specific questions regarding training, management process and outside work, but also encourages community collaboration where members can help their friends. Event Announcements: Announcements allow authorized users (such as teachers and administrators) to post important information, upcoming events, and events. Complaint Register: The Complaint Register allows anonymous users to submit complaints about various aspects of school life, including facilities, procedural work and personal problems.

KEYWORDS: Queries, Announcements, Complaint, College, Forum, App, etc.

I. INTRODUCTION

In the changing world of higher education, effective communication and support is essential to building a successful community. We recognize the need for a framework to meet the diverse communication needs of students, faculty and staff, and we have launched Forum Conversation at the University. This new digital space operates as a one-stop shop, combining our core functions – query resolution, event announcements and complaint registration – to deliver solutions to dynamic and interrelated challenges in the learning environment.

University Discussion Forum is more than a digital magazine; is a collaborative environment designed to bridge communication gaps and encourage users to collaborate in creating their own learning. This orientation outlines the three core missions that define the Forum and how each position contributes to a more transparent, inclusive and supportive school community.

As we delve deeper into problem solving, reporting and complaint logging, we invite users to discover a platform that goes beyond the traditional, offers integrated solutions to solve problems, shares important information and provides structure for support and troubleshooting. channels. The University Conference is more than a tool; It is the catalyst for creating a connected and responsive learning ecosystem.

II. METHODOLOGY

2.1. Research Needs:

- Conduct research and focus groups to understand specific communication issues and problems among students, teachers, and staff.
- Problem solving, media management, complaint resolution etc. Determine the community's mission and user needs and focus on the domain.

2.2. Literature Review and Critical Review:

- This is a combined in-depth review of existing literature on academic conferences, communication and technology.
- Analyze best practices from similar organizations to learn about success and user engagement strategies.

2.3. User-Centered Design:

- Uses user-centered design techniques to create a user-centered and user-centered experience.
- Conduct usability tests and collect feedback from agents to refine the platform design and improve user experience.

2.4. Technology Stack Selection:

- Evaluate the technology and select an appropriate stack that meets the functionality, security and integration of the University network.
- Consider issues such as database management, front-end and back-end technology, and relationships with existing companies.

2.5. Feature Development:

- Create different models to resolve issues, reports and complaints to ensure each module is powerful and suitable to user needs.
- A real-time query parsing mechanism that uses features that support efficient communication, including important update notifications and push notifications.

2.6. Integration with key systems:

- Provides effective integration with existing businesses, learning management systems and other relevant platforms to prevent competition and enhance every good work done.
- Create a secure authentication mechanism to protect user information and privacy.

2.7. Training and collaboration:

- Create knowledge and conduct training to familiarize users (such as students, teachers, and staff) with the University's meeting chat.
- Provide ongoing support and resources to address questions or concerns at the beginning of training.

2.8. Pilot Testing:

- Run a trial period with a group of users to gather feedback, identify potential problems, and make any necessary adjustments before full implementation.
- Analyze user interaction and physical activity during the pilot to suggest final improvements.

2.9. Overall Success:

- Publish the University Discussion Board for the entire academic community based on feedback and ideas received during the pilot.
- Monitor system usage, collect feedback and use feedback to improve performance and user satisfaction.

2.10. Continuous evaluation and improvement:

- Establish regular evaluations to evaluate the forum's effectiveness in resolving communication problems.
- Implement updates and continuous improvements based on user feedback, technological advances, and the changing needs of the organization.

III. MODELING ANALYSIS

3.1. Google SMS-MO Authentication:

Another authentication method is SMS, Transaction Termination, One-Time Password (SMS-MT OTP). This system uses the user's phone number to send the one-time password for authentication purposes. Once the user receives the OTP, Google requires the aggregator to send the OTP to the user's phone number; they enter the Google interface to verify the user.

This involves the following steps:

1. Google's user interface (UI) prompts the user to enter the phone number registered with the collective author.
2. The user enters the phone number into the Google interface.
3. Google allows users to share (call the `sendOtp` method) to send a one-time password (OTP) to the user.
4. User receives SMS message with OTP.
5. The user then enters the OTP (used as the login for capture, association and `verifyOtp`) and enters the Google interface which authenticates the user. This is proof.

In standalone mode, only the `verifyOtp` method is called to verify the OTP value.

The names of the objects in the diagram and what they represent are given below:

- a. **User:** The individual seeking to add a payment method to their Google Account.
- b. **Google User Interface:** The website or mobile app where Google customers initially set up their payment methods. If the Google UI is a mobile app, some initial steps may be skipped as the phone already possesses the user's phone number.
- c. **Google Server:** Google's backend server responsible for handling authentication and related processes.
- d. **Payment Collector Server:** A backend server dedicated to storing user data.

Given that this is an OTP verification process, let's assume the user is utilizing the Google mobile app or website (Google UI) to add a payment method. This marks the starting point.

1. The Google user interface (phone or web) enables users to input their phone numbers.
2. The user enters the phone number into the Google interface.
3. The Google user interface forwards the number to the Google server (`sendChallenge(phoneNum)`).
4. The Google server sends a request to the Payment Integrator server to generate a one-time password (`SendOtp(phoneNum)`).
5. The Payment Integrator Server dispatches a one-time password, providing the user with a temporary password (OTP).
6. The shared account user acknowledges Google's fifth request, confirming successful OTP transmission.
7. The user inputs this OTP in the Google user interface (phone or web).

Google UI transmits the OTP to Google servers for the final verification of the payment combination, thereby authenticating the user.

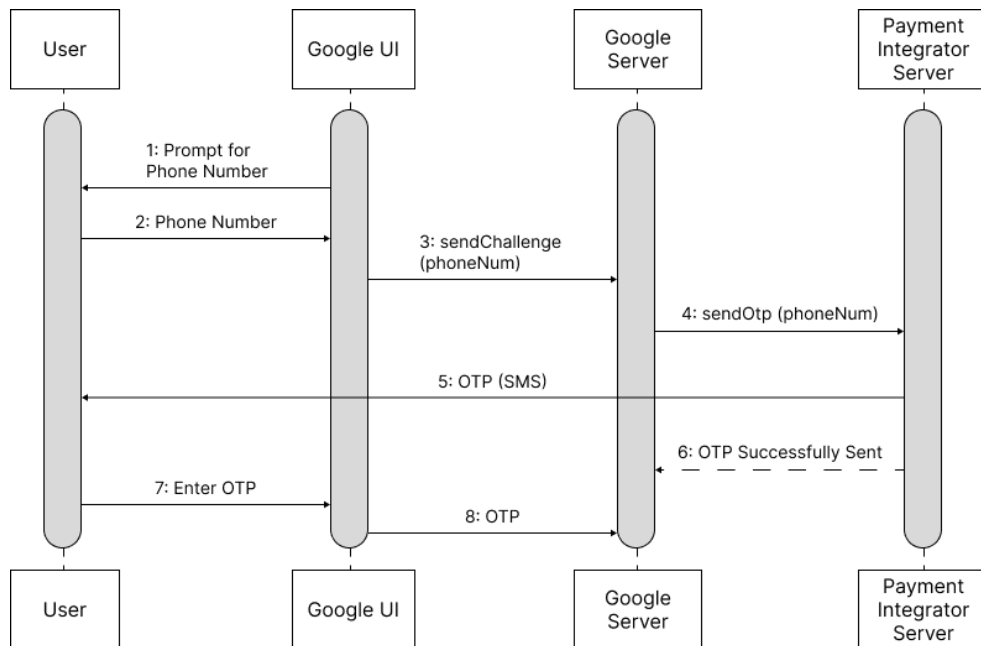


Fig. 1. Google SMS-MO Authentication

IV. RESULTS AND DISCUSSIONS

4.1. Sign up Page:

When you first download and open the College Forum app, you will be greeted with a ‘Sign up Page’ in the fig.4.1 where one should provide their correct credentials to move to the ‘Log in Page’.

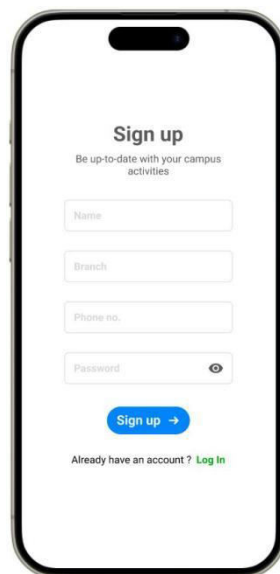


Figure 4.1.1: Sign up Page

4.2. Log in Page:

After Signing up for your account, one should see the ‘Log in Page’ in the fig.4.2 which authenticates the user for an already created account and after the right credentials are provided, it would redirect you to the main or ‘Home Page’ of the app.

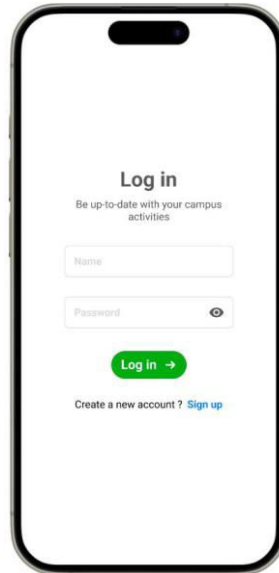


Figure 4.2.1: Log in Page

4.3. Home Page:

Finally after Logging in to your account, one will be greeted with the ‘Home Page’ (fig.4.3) of the app where you could see the ongoing or upcoming ‘events’ in the automatic slider on top of the page, and below it would be a quick glimpse of the latest ‘queries’ asked by the student of the campus where one could also sort them accordingly and reply to those queries with their solutions or look at the replied solutions.

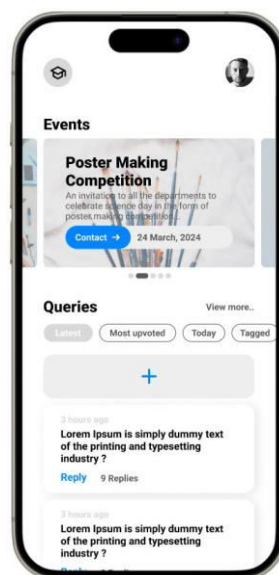


Figure 4.3.1: Home Page

4.4. Event Card:

The 'Event' Slider at the top of the 'Home Page' will display the basic information of the Event like Event -name, Event-description, Event-date, and a quick Call-to action button which would suggest you to get in touch with the Event coordinator and register yourself for the Event.

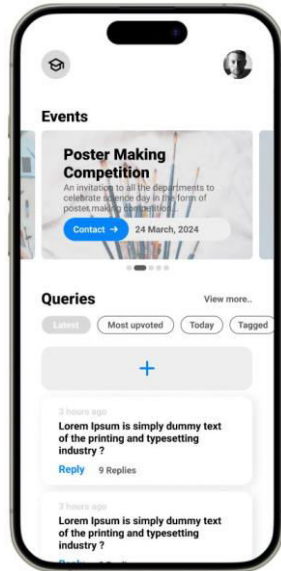


Figure 4.4.1: Home Page

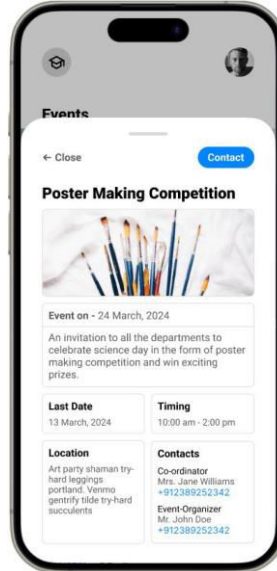


Figure 4.4.2: Event Card

4.5. Query Page:

When clicked on the 'View more' option on the 'Home Page' beside the 'Queries' title, one should be redirected to a new page called 'Queries' where one could look at all the queries asked and answered by the students withing the campus, here you could sort them accordingly and also take a look at the replies to the queries and also reply them yourself.

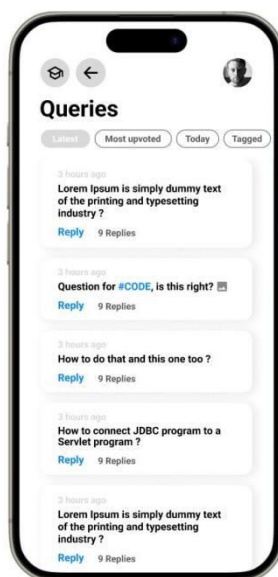


Figure 4.5.1: Queries Page

4.6. Query Replies Card:

Very Query Card has a clear Call-to-action button called ‘reply’ which would allow one to solve one’s query and also provide others with good information to know the frequently asked queries.

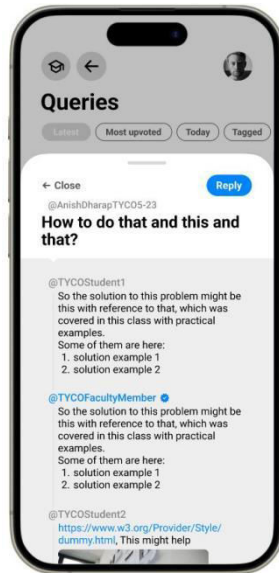


Figure 4.6.1: Query Replies Card

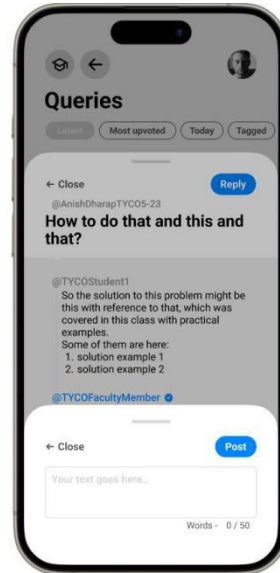


Figure 4.6.2: Query Reply Input Card

4.7. Navigation Card:

When greeted on the ‘Home Page’, one will see a profile place-holder at the top-right corner of the page, and when clicked on it; it will open up a ‘Navigation Card’ where you could navigate through different pages and also look at their ‘Profile data’ will all the information they provided at the ‘Sign up Page’ and also two Call-to-action button that would allow one to provide feedback about the app experience and the other one to ‘Log out’ of the app when needed.

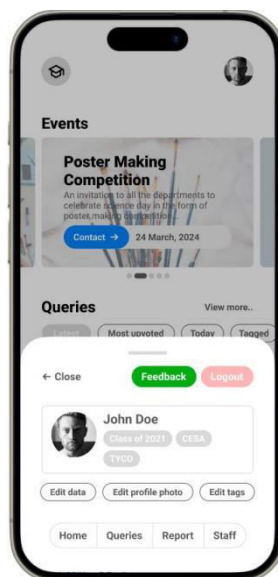


Figure 4.7.1: Navigation Card

4.8. Report Card:

In the 'Navigation Card' there is a specific new Call-to-action button named 'Report' which would allow users to report any issues faced by them in the campus, whether it be broken taps or insufficient parking area or any misbehavior occurred to them within the campus and many more.

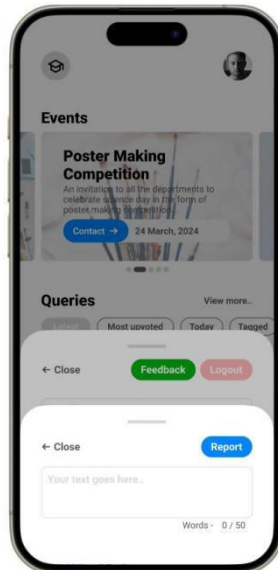


Figure 4.8.1: Report Card

4.9. Feedback:

While the 'Navigation Card' is open, there is a specific Call-to-action button named 'Feedback' beside the 'Log out' button, when clicked on it one could provide a feedback on the user experience whether it be good or back so that the team building this app would know if there are any bugs in the app which they would try to fix.

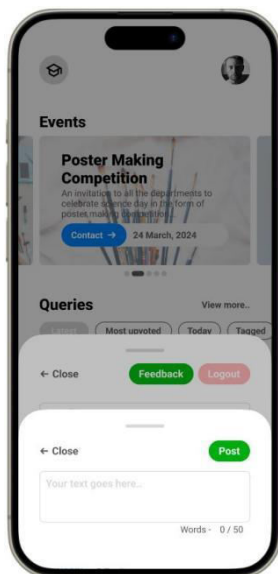


Figure 4.9.1: Feedback Card

V. FUTURE SCOPE

As the Interactive College Forum is implemented and becomes an integral part of the academic community, its future scope extends beyond its initial features. The platform can evolve to meet emerging needs and technological advancements, enhancing its impact on communication, collaboration, and overall user experience within the college ecosystem. Here are potential avenues for future development:

5.1. Advanced Analytics:

Integration of advanced analytics for data-driven decision-making, offering insights into user engagement and customization.

5.2. LMS Integration:

Seamless integration with Learning Management Systems to streamline access to academic content and foster collaboration.

5.3. Multimedia Support:

Enhancement for multimedia content, enriching the learning experience with videos and webinars.

5.4. AI-Powered Assistance:

Introduction of AI-powered chat bots for streamlined query resolution, providing immediate responses and 24/7 availability.

5.5. Mobile App Enhancement:

Continual improvement of the mobile app for a responsive and user-friendly experience, including increased accessibility and push notifications.

5.6. Community Building:

Introduction of features like interest-based forums and gamification elements to strengthen community ties and boost user engagement.

5.7. Accessibility and Blockchain:

Focus on accessibility standards and exploration of blockchain technology for heightened data security.

5.8. Feedback Mechanisms:

Establishment of robust feedback mechanisms for iterative development, ensuring responsiveness to user needs.

In essence, the Interactive College Forum's future lies in agility, user-centric enhancements, and integration of innovative technologies to provide a dynamic and enriched experience for the academic community..

VI. CONCLUSION

In conclusion, the development and implementation of the Interactive College Forum represent a significant stride toward fostering a more connected, transparent, and engaged academic community. The multifaceted platform, integrating Query Resolution, Announcements, and Complaint Registration features, is designed to address the complex communication challenges faced by students, faculty, and staff within higher education institutions.

The forum's foundation lies in a user-centric approach, driven by insights garnered from extensive needs assessments, stakeholder engagements, and a thorough literature review. By placing users at the center of the design and development process, the forum seeks to provide a seamless and intuitive experience, aligning with the diverse needs of the academic community.

However, the success of the Interactive College Forum does not rest solely on its features and functionalities. Ongoing support, training, and a commitment to continuous improvement are crucial elements that will shape the forum's long-term impact. Regular feedback loops, monitoring of user engagement, and swift responsiveness to emerging needs will be integral to the platform's evolution and sustainability.

REFERENCES

1. YouTube:

Look for channels dedicated to user experience, feature implementation techniques, and Design inspirations.

1. Flux Academy:

UI/UX Design: https://youtu.be/HZuk6Wkx_Eg?si=5YCUTiy3UJ7ItRY4

2. Developedbyed:

JavaScript: https://youtu.be/2nZiB1JItbY?si=DrCRSiLAZ74N_Gjk

React: https://youtu.be/OFHAIpw2oZI?si=R_vsNkQF7Pzbw1AR

Etc..



2. **Tech and Development Resources:**

1. **Illustrations:** <https://storyset.com/>

2. **Dribbble:** <https://dribbble.com/>

3. **GitHub Repositories:** <https://github.com/>

Etc..

3. **Design and User Experience:**

Adobe XD or Figma Communities: Join groups or forums where designers share their mock-ups, prototypes, and design resources.

<https://www.figma.com/resource-library/design-basics/>



INNO  **SPACE**
SJIF Scientific Journal Impact Factor
Impact Factor: 8.379



ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

 9940 572 462  6381 907 438  ijircce@gmail.com



www.ijircce.com

Scan to save the contact details