Glue Connect: Student Community Platform

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Abstract –Making the interactions easy between students is essential in order to make it convenient for them to share knowledge, find project partners and find job opportunities. Students need to stay in touch with each other to enhance their skills, gain knowledge, find job opportunities and project partners if required. Students might also need to contact their professors regarding the academic activities and the placement opportunities. The process of doing these activities might require using different apps to perform them. However, our idea includes all of these features in a single platform. To get benefited from the platform, the students should be active and showcase their skills which are going to help them get hired for project and placement opportunities, some students might also want to gain and share knowledge which is helpful for students. Students will be able to upload their resumes which are required by recruiters in which they can get to know about the student's skills and projects they worked on. The platform can help the students succeed academically since the students will be able to contact their professors whenever required. Students will be able to create and join clubs which help them socialize and stay in touch with each other.

Keywords:- Learning, skills, placement opportunities, guidance, android-based

I. INTRODUCTION

Currently the interaction between students regarding the various activities that can be performed such as finding project partner, sharing and gaining knowledge is not easy. "Glue Connect" mobile application is a platform which is going to help students stay in touch, gain knowledge and share experience. Finding project partners from other departments has been an issue for many students since it is not easy for students to do the same. In this platform, finding project partners will be convenient since the students will be able to search for a project partner based on the skills required for the project and they can contact the person regarding the same. "Glue Connect" also enables the students to chat with each other whenever required to stay in touch and learn from each other, this platform provides a chat section where you can type a user's name and start a chat with them. Attending webinars is beneficial for students to gain knowledge, this platform provides a solution for the same since students will be able to conduct webinars and invite participants for the same. Knowledge sharing is also helpful for students since they can easily share and gain knowledge which might be helpful for students during the interviews and to enhance their skills.

The main goal of this platform is to make it convenient for students to communicate with each other, find project partner, share and gain knowledge, find job opportunities, conduct and attend webinars and create and join clubs.
"Glue Connect" intends to help students find job opportunities since the students' resumes will be accessed by employers so that they can check the projects that the students worked on, the skills they have whether they meet their requirements or not and the achievements they have made.

II. LITERATURE SURVEY

'Xin Dong, Xiangjie K, Fulin Z, Zhen C and Jualing K' [1] proposed a platform to create a smart campus environment. It is a mobile application that was built to enhance the campus experience by providing several features such as integrating the academic resources, administrative services and social networking features.

'Hua Li, Lina Zhou and Yueming Yuan' [2] suggested a communication tool which can be used to improve the management of college students, it makes it easier for students to stay in touch since the users can create chat group easily and broadcast messages. It simplifies administration tasks such as attendance tracking, payment reminders and even registration.

'Meng Yu' [3] proposed a social media platform that can be used to manage students, it enables faster communication since information can be shared in groups chats and social media pages for

making announcements. It supports students participation in school activities, discussions and engage with other students.

'Alexandar Emmanuel, Kyle Scharf and Jarred S' [4] presented their idea which is an application that helps the students collaborate on projects, share resources and engage in discussions since student cam post questions, share ideas and answer common questions, students can also create and join study groups which can be helpful to answer to answer the assignments and collaborate on projects.

'Heather A Johnson' [5] presented the idea which is an application that can be used to improve the communication and collaboration between teams. It can also be used to manage projects, it enables direct messaging and it can be integrated with other tools.

'Jovica Stanković Slavoljub M and Ognjen R' [6] presented their idea which is a platform that can be used to conduct self-assessment for students in online. It enables the students to examine their understanding so that they can improve themselves. This platform includes some educational activities such as quizzes, assignments and interactive content.

'Tami Seifert and Smadar Bar-Tal' [7] this study was done to check the satisfaction of students and professors of the online classes or not and how the students interact with each other to enhance the quality of the learning process.

'Jiang, L, Zhou, N. and Yang Y' [8] presented about examining the effectiveness of online classes for learning a new language and whether the virtual classes will maintain the students interest or not and measuring the engagement of students in classes or by doing the assignments.

'Ye Chen and Xiaoqun Qin' [9] this study was done to examine how exhausted the students can get during online classes and it if affects the student's performance or not. Students might get exhausted due to extended screen time.

'Zolkefley, M K I, Aziz, M E S A and RausM, I M' [10] proposed a system that can be used to enhance the registration process and overall management, It can be used to manage the details of the students, enrolment and fee payment processing.

III. PROPOSED METHODOLOGY

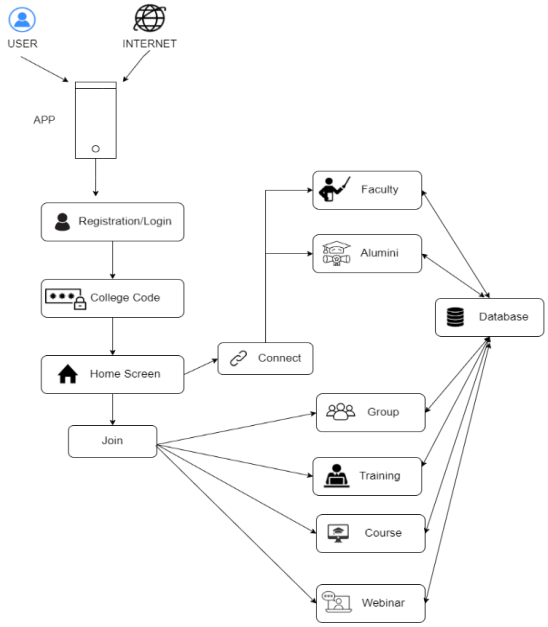

Figure 1. Architecture Diagram

Figure 1 starts with user registration/login and proceeds to college code verification, leading to the home screen where users can join and connect with different entities such as faculty, alumni, and groups. The system also includes functionalities like training, courses, webinars, and a database for managing information.

Glue Connect aims to help the students stay in touch with each and enhance their skills by working on different projects. The application contains multiple features which are going to help the students achieve better results.

First the user needs to enter their phone number to login, once they enter it, they will receive an OTP number which is required to login, once the user logs in, home page will be shown where users can check their profile and edit it by adding name, description, about, skills and their role, students can also upload their resumes which are required for job opportunities. Users can also chat with other users either by using their contacts and start a chat with other users or by search for another user in the search bar provided in the home page user in the search bar provided in the home page, users will also be able to view other user's profile if the user has entered their details in the profile section and they can send them a request to chat with them.

Creating a group is a feature where users need to mention the group's name and add users to it. In this feature conducting and attending webinars is possible is possible since users can make video calls. This app provides another feature which is creating and joining a club, if a user wants to create a club, they can provide the details such as name, description, about the club, users can also search and join existing clubs easily.

Users can also find project partners easily since they can search for the required skills in the search bar provided in the home page and a list of users who have mentioned those skills in their profile will be shown and users can contact them regarding the project.

Finding job opportunities will also be easy since recruiters can access any user's resume by typing the user's name in the search bar provided in the home page, if the user exists, then their profile can be accessed and their resume can be downloaded.

IV. IMPLEMENTATION

The application is created using Jetpack Compose for the frontend, Room Database as a client side database to persist offline data, WebRTC for video and audio calling, web socket for real time communication, google vision API to check and remove explicit content, Firebase Cloud messaging to send chat notification and Node.js for the backend

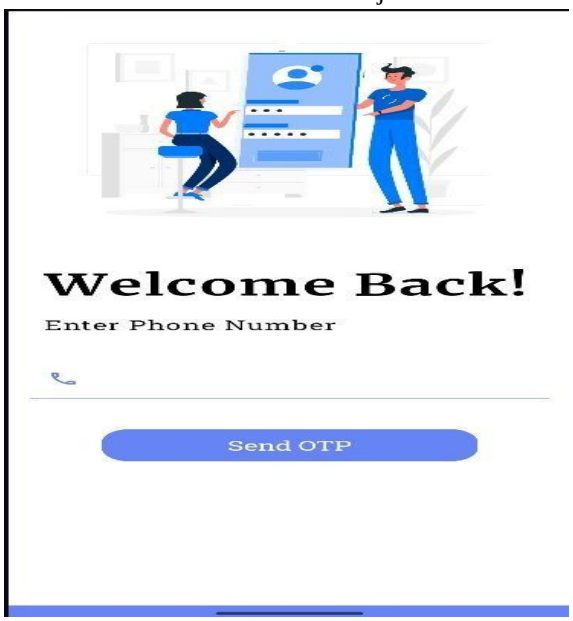

Figure 2. Login Page

Here users can enter their phone number to login, once they enter it, they will receive an OTP number which is required to login.

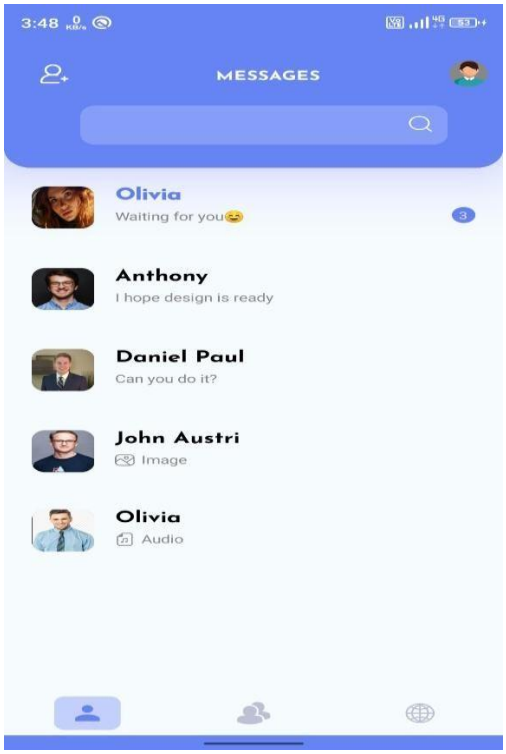

Figure 3. Home Page

This is the main page which shows the users that we contacted and we can easily navigate through the other features, users can also contact other users through their contacts.

Figure 4. Profile Page

Here users can add their details which can help other users to find them and stay in touch, find project partners and job opportunities, users can add their skills to work on different projects with other users since other users might need a project partner, users can also upload their resumes which can be accessed by recruiters and faculties, resumes can be accessed from the home page by typing the user's name and downloading the resume.

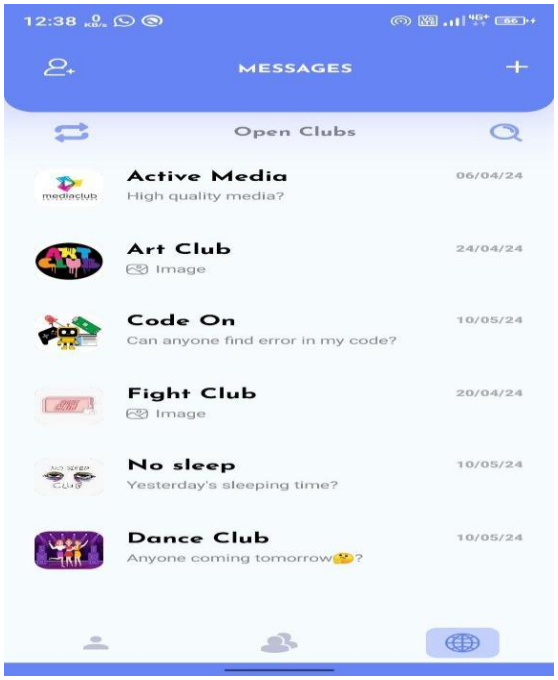

Figure 5. Club Page

Here users can join existing club or create a new club by adding the required details for the club. Clubs help students interact with each other, participate in multiple projects and enhance their skills.

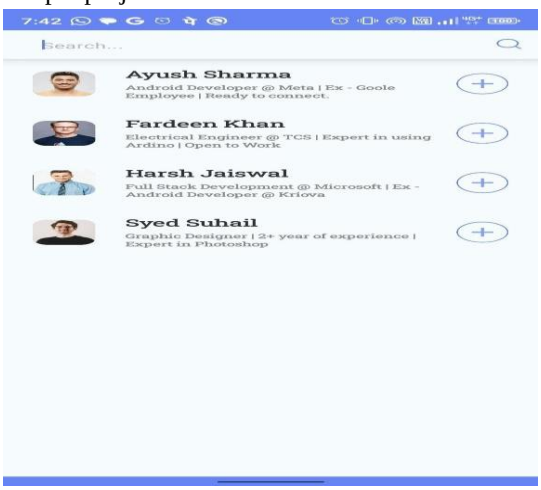

Figure 6. Search Page

Here users can search for other users by name, then they can access their profile and send them a request to connect with them, users can type a required skill for a project and a list of users who have added that particular skill in their profile will be shown, this helps students find project partners since sometimes it is not easy to find students with the required skills, users can also view the resumes of other users which will be available in the user's profile, recruiters can access the required resume and check whether the student is aware of the required technologies or not and the projects they worked on, this helps the recruiters find the best candidate without spending much time by interviewing all the candidates who applied for the job.

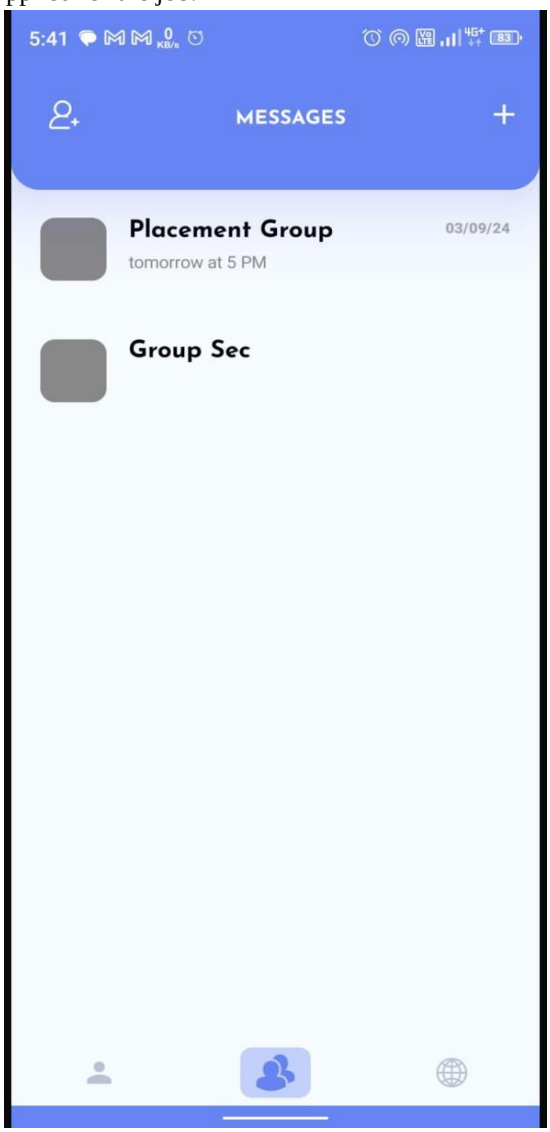

Figure 7. Group Page

Here users can create groups, add users to them, conduct webinars and make video calls. Users can easily share and gain knowledge which help them enhance their skills.

V. CONCLUSION

Students community platforms are solutions that aim to help the students stay in touch and learn from each other. There are various benefits of student community platforms which can help the students find job opportunities, find project partners, share and gain knowledge. The continued development of student community platforms will help the students achieve better results. A student community platform mobile application is an

effective solution for students to communicate. The application should have features like login, profile, chat, group, club and search bar to search for users. The implementation plan involves requirements gathering, maintenance and support. Implementing the student community platform successfully will help the students achieve better results.

VI. REFERENCES

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