Abstract- Conveying important messages to the students in an Institution is a very big challenge. Because, only very few students check their E-mail account daily and they find it very uninteresting. Therefore, here we propose a mobile application that can help to overcome from this problem. Today everyone have a smart with them with internet and people feel more comfortable to communicate with a messenger than emails. This habit of messaging lead us to create such application through which professors and students can communicate to each other, can share data (files like pdf, word, excel, etc.), student can ask questions to their faculty if they have any doubts in any regards, important information and messages related to the academics, and many other facilities.

Changes in the schedule are notified to staff and students also, so that proper utilization of the time is achieved. Whereas it becomes easy for faculty to convey the digital content related to the academic like attendance-sheet, results etc. In this application not only students but also faculties of department also communicate to each other. The best thing about this application is, the contact details of a person can be only accessible by faculty members of that department. The registration is to be needed once after installing this application and hence according to the details filled in the online form the user is categorized and authenticated for the use of this application. This application can help to reduce the communication gap between students and faculties of the department.

1. INTRODUCTION

1.1 PROJECT IDEA
The project idea is to develop a system which will useful for any academic Institution to communicate with students and staff, managing the timetable According to changes done in it, and conveying important messages.

1.2 MOTIVATION OF THE PROJECT
The motive behind the project is to develop an application which will dedicated for the academic purpose, to reduce the efforts of the staff to convey Important messages and students to get help in the academic issues. Also, to utilize the free time from the schedule by notifying changes done in it.

2. LITERATURE SURVEY
1. Instant Messaging Service on Android Smartphone's and Personal Computers
Author: Priya Mehrotra, Payal Jain
Published by: International Journal of Information and Computation Technology.
ISSN 0974-2239 Volume 4, Number 3 (2014), pp. 265-272
Instant messaging is a set of communication technologies used for text based communication between two or more participants over the internet. In the company, colleagues can send and reply instant message in real time without face to face, meanwhile the work report can be shared during the instant chat session; it can make a virtual conference without get all the related people together in a physical meeting room. Using instant messages for interoffice communication is quicker than phone calls or emails. This is a huge benefit of using an instant messenger. In this paper, authors have discussed the pros and cons of BlueStacks Appicatin Player which has been designed to enable Android applications to run on Windows PC Authors have shown and discussed this by using Bluestacks software which will provide an efficient and fast way to perform instant messaging which will further increase the performance.

2. Multifunction Multiplatform Messenger
Author: Sanap Laxman Kacharu, Chavan Rahulkumar Dilip
Published by: International Engineering Research Journal (IERJ) Volume 1 Issue 4 Page 9B-101, 2015, ISSN 2395-1621
In the modern days, Smartphones have built in applications like WhatsApp Viber which allow users to exchange instant messages, share videos, audios and images via Smartphones instead of relying only on Smartphones, they've built a system which will work on any platform. User can use same application on...
multiplatform. This project is messenger application like other android based application such as whatsapp, Viber, LINE but limitations of all those applications are removed in this messenger.

There has been rapid increase in Communication in every Department of Engineering over the years in online communication, especially in mobile communication. Smartphones have taken up the market so well that everybody now can interact, socialize, and can share ideas and Information sitting at any corner in the world. Today's young generation is busy in chatting and messaging every time with friends and with unknowns too. People are continuously exchanging information like images, videos, activities and events. But despite of getting connected with friends for more and more time, Smartphone battery and network problems are also major problems, so to reduce that our project is developed so user can chat with friends from any net cafe or personal computer without limitations. And to avoid unauthorized use on mobile phone built security is given so no need to use app locker application or application hider.

3. PROBLEM DEFINITION AND SCOPE

3.1 PROBLEM STATEMENT
Conveying important messages to the students in an Institution is a very big challenge. Because, only very few students check their E-mail account daily and they find it very uninteresting. Therefore, here we propose a mobile application that can help to overcome this problem. Also, change in schedule is not properly conveyed to students and staff. Sending documents files or study material is also problematic for teachers.

3.1.1 Goals and objectives
The main goals of the project are as follows:
- To reduce the communication gap between students and the faculties of the department.
- Proper utilization of the schedule.
- Ease of sharing of digital contents (i.e. Study material)

3.2 Statement of scope
Our product is a communication application which will useful for academic purpose. Our product will be used to communication purpose, time table scheduling, sending various important documents etc. It is a college level application which will fulfill the communication and time-table scheduling requirements of the staff and students. It is not meant for general social networking use. However, it will not provide all the facilities and services provided by social networking application like facebook, whatsapp but provide enough functionality like messaging, sending files, creating and managing groups, modification in schedule, notifying the changes in schedule etc.

3.3 Methodologies of Problem Solving and Efficiency Issues
- The proposed system will use Google Cloud Messaging (GCM) to establish communication between different client applications and the System server. The GCM handles the messages to be sent to client devices from web server and vice versa. The GCM takes care of all the issues which can be raised in the communication. The GCM uses waiting queues to store messages if the target client device is offline. When the device is online, the messages are sent to it. With the use of GCM, it will increase the efficiency and reduce the complexity of the proposed system. The developer need not to worry about the communication mechanism.

3.4 Outcome
The outcomes of the proposed system will be,
- The communication gap between teacher and student will be reduced.
- The changes in the schedule will be easily notified to all students and staff.
- Exchanging the documents files will be easier.
- Automatic group creation.
- Reminders to staff and students about their lectures/practical.

3.5 APPLICATIONS
The proposed system is dedicated for the Academic purpose. The applications of the proposed system is,
- To communicate/messaging between teacher and student formally.
- To notify the changes done in the schedule.
- To exchange the digital data between students and staff.
- To convey any important message to students.

4. Detailed Design
4.1 ARCHITECTURAL DESIGN
The following diagram shows the architecture of the proposed system. The System web application will run on the cloud platform which will use the PaaS(Platform as Service) of the Cloud. We are using the Google App Engine (GAE) as the Cloud platform to deploy the System web application. The client applications will run on the Android devices. The client application will use Internet to establish the connection with the System web.
application. The Google Cloud Messaging (GCM) is used in between the client applications and the System web application Server. GCM handles all the issues that rise in between the communication of System web application server and client device. The System web application server will store the data in the database provided by the Google App Engine.

5. Summary and CONCLUSION

Summary:  
So, basically main aim of proposed system is to develop a Android application which can be useful for Academic purpose. The proposed system will be useful for communicating with teacher formally, notifying changes in the timetable, exchanging digital data like PDF, Docs, and PPTs etc.

Conclusion:  
Proposed system is based on academics need and user centered. The system will developed in considering all issues related to all users which are included in this system. A dedicated application for the academics will make interaction with teacher and staff more simple and easy.

Thus we will implement AIEM system to address the problem faced by the academics with respect to communication.

REFERENCES


BIOGRAPHIES

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