ALUMNI PORTAL

Report submitted in fulfillment of the requirements
for the B.Tech Project of

Fourth Year B.Tech.

by

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Under the guidance of

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November 2018

Dedicated to

My parents, teachers,Friends

Declaration

I certify that

1. The work contained in this report is original and has been done by myself and the general supervision of my supervisor.

2. The work has not been submitted for any project.

3. Whenever I have used materials (data, theoretical analysis, results) from other sources, I have given due credit to them by citing them in the text of the thesis and giving their details in the references.

4. Whenever I have quoted written materials from other sources, I have put them under quotation marks and given due credit to the sources by citing them and giving required details in the references.

Place: IIT (BHU) Varanasi
Date:24/11/2018

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Certificate

*This is to certify that the work contained in this report entitled "**ALUMNI PORTAL**" being submitted by **[Anuj Kumar]** (**Roll No. [15075006]**), carried out in the Department of Computer Science and Engineering, Indian Institute of Technology (BHU) Varanasi, is a bona fide work of our supervision.*

Place: IIT (BHU) Varanasi
Date:24/11/2018

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Acknowledgments

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Place: IIT (BHU) Varanasi

Date:24/11/2018 [Anuj Kumar]

Abstract

Alumni portals is providing common platform for every Institute. Owing to the need to have all the Alumni (already passed out students) must be connected to the Institute,resulted in sharing their experiences,views,ideas,guidance,motivations and strategies. The objective of Alumni portal application is to allow old and new students of the college to communicate with each other. This allows students to know about each other and their current activities. This portal highlights the feature of communication, which will enable the current students to have interaction with the alumni of the college for getting various updates on current industry trends,internship opportunities,sponsored projects and various referral opening in the corporate world. This portal will serve the cause of integrating all the stakeholders of Institute such as alumni,college students,faculties to avail the guidance and knowledge sharing on various domains. In this project we proposed the dynamic architectural design of the Alumni portal which enable the two way communication between all stakeholders.

Contents

Chapter 1

Introduction

1.1 Overview

We are formulating the best alumni web portal which will facilitate effective communication platform through online chatting,profile viewing and personal messaging within three stakeholders of the institute viz- College staff,college students and alumni.

This portal will be provide direct contact of the alumni with the students as well as the staff members. The desired query of the existing students will be answered faster.This keeps the students updated with the current updates and demands of the industrial market. Students can directly chat with any of the alumni and staff members.

This portal highlights the feature of communication which will enable the current students to have interaction with the alumni of the college for getting various updates on current industry trends, internship opportunities,sponsored projects and various referrals opening in the corporate world.

1.2 Motivation of the Research Work

- Although our college website is quite attractive but it lacks the feature of com-

munication with the alumnus.

- This creates a problem for the current students in terms of guidance,internships,industrial knowledge.
- It also lacks the instant solution to the problem which are related to education and career.

1.3 Organisation of the Report

The remaining part of the project is organized as follows.

Chapter 2 presents a review of related work.

Chapter 3 introduces the Languages and Frameworks used in the project.

Chapter 4 Results and Discussions

Chapter 5 Conclusion

Chapter 2

Project Work

2.1 Proposed System Architecture

This proposed system architecture consists of three layers in which user interface acts as a middle-ware.The user can interact with the system with the help of user interface.

The explanation of the above architecture is as follows: User first interacts with the system through the web address of alumni portal.

Dynamic architecture: It consists of application server which is used to facilitate the application management in terms of interest matching area,interactive communication mechanism and special interest group that is connected to the web application and indirectly to the web cache. After login of any member, their user name and password are authenticated by the authentication module. The authentication module first verifies from the web application and then gives the access to the user.

Interest matching area: Based upon the question that rises from both the sides (Students/Expertise/Alumni)about their interest area, it shows the list of expertise in the particular area and user will be able to know as per the requirement.

Database: Database is used for storing the details fetched from the different modules of the website by the admin.

2.2 Software Architectural Designs

Our system follows the three tier architecture :

First tier: The GUI(Graphical User Interface) in our project deals with the interface for the user where the user can fire a query and get the desired answers from the alumni. The GUI provides a platform for the user to communicate with the database.

Second tier: The middle tier is the block where the actual processing of our project is done.This block connects the GUI to the database i.e. It acts as a connector as well as communicator which connects the database and helps in transfer of data between the GUI and the database. Its main function is to take the input in terms of queries or views of the user and give it to the database.

Third tier: Database tier is the tier used for the storage of data. This tier contains all the data that is needed for the processing of the whole project. The data about the alumni including their name,address,designation and other related information is stored. The querying process gets completed by obtaining the data from the data collection database. Other dynamic features are fetched from the database.

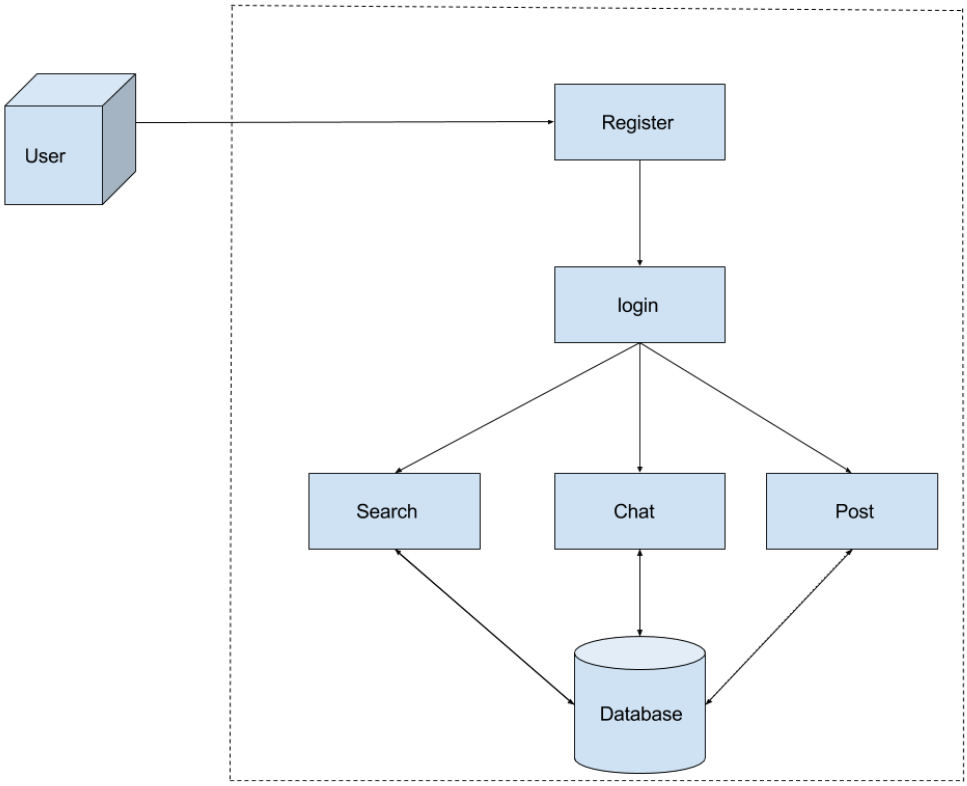


Figure 2.1 Software Architectural Design

2.3 Work-flow Design

2.3.1 Data Flow Diagram

Level 0 DFD

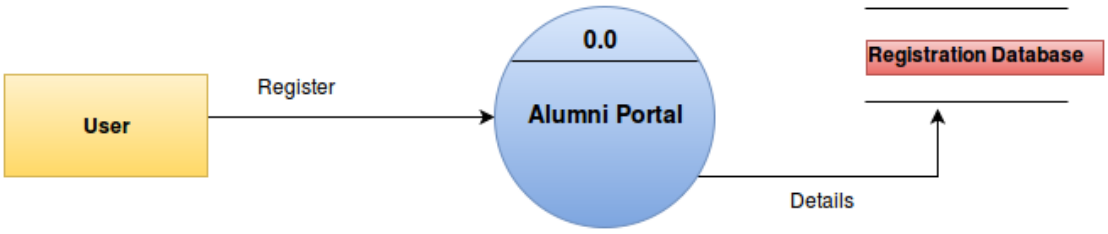


Figure 2.2 Level 0 DFD

Level 1 DFD

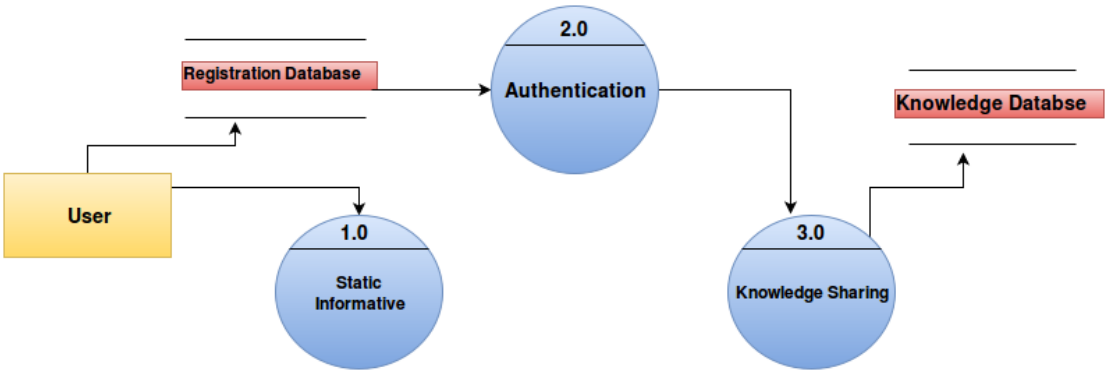


Figure 2.3 Level 1 DFD

Level 2 DFD

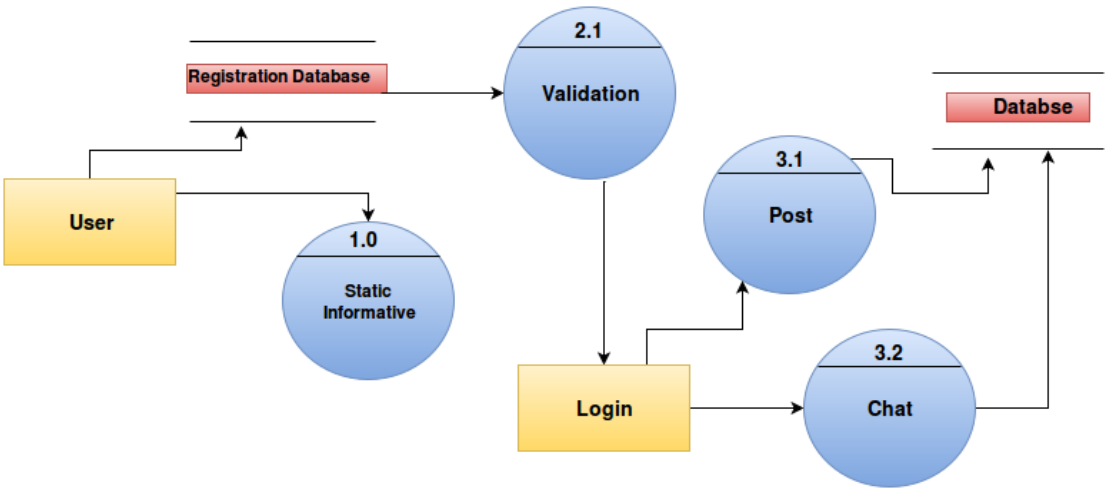


Figure 2.4 Level 2 DFD

2.4 Detailed Analysis and Description of Project

Registration Module: In this module, the user can register onto the portal.The GUI is made attractive with the help of CSS. Javascript is used for validating the input fields which is filled by the user.

Chat module: The chat module allows the users to chat directly with the online users on the website. They can share and exchange their views and ideas. Enquiries and doubts on jobs,internships can be well clarified.

User Search: Whenever user searches for the alumni in the search bar, the database is queried in order to retrieve the accurate results. One can search the name of any alumni just by entering their first name.

2.4.1 Use Case

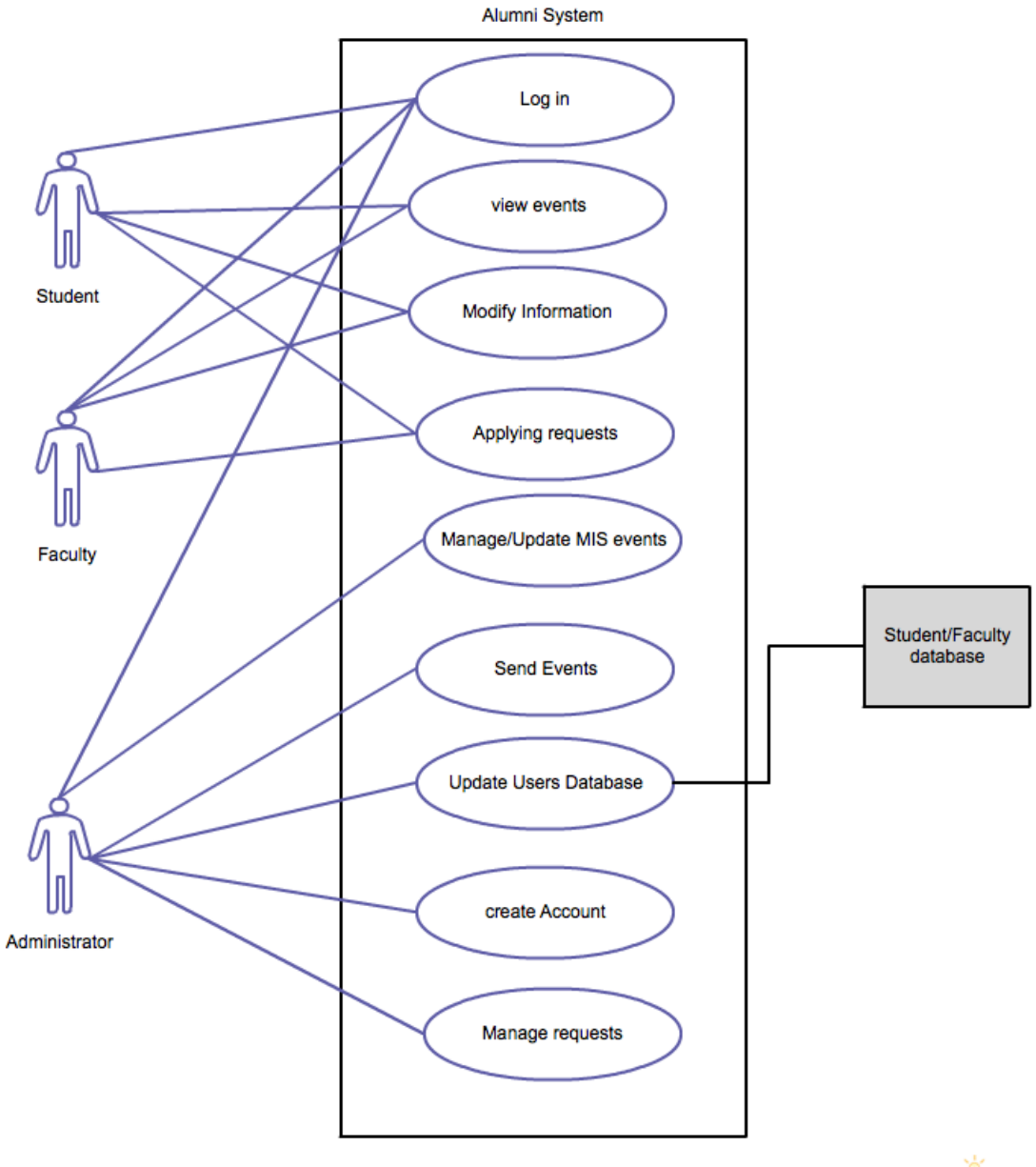


Figure 2.5 Use Case Diagram

Chapter 3

Languages And Framework used

HTML/CSS

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. Along with CSS and JavaScript, HTML is a cornerstone technology used to create web pages as well as to create user interfaces for mobile and web applications.[1] Web browsers can read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically and before the advent of Cascading Style Sheets(CSS), included cues for the presentation or appearance of the document (web page), making it a markup language rather than a programming language.

Django

Django is a high-level Python Web framework that encourages rapid development and clean pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development. Django is a free and open-source web framework written in Python which follows the model-view-template architectural pattern.[2]

Javascript

JavaScript is a high-level,dynamic,untyped and interpreted programming language. It has been standardized in the ECMAScript language specification.[3]Alongside HTML and CSS, it is one of the three essential technologies of World Wide Web(WWW) content production; the majority of websites employ it and it is supported by all modern Web browsers without plug-ins .

JavaScript is also used in environments that are not Web-based, such as PDF documents,site specific browsers and desktop widgets. Newer and faster JavaScript virtual machines (VMs) and platforms built upon them have also increased the popularity of JavaScript for server-side web applications.

MySQL

MySQL is an open-source relational database management system (RDBMS) and the most widely used open-source client-server model. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open-source web application software stack (and other "AMP" stacks).[4]

Chapter 4

Results and Discussions

We have tested our web application by considering following test cases:

4.1 Registration

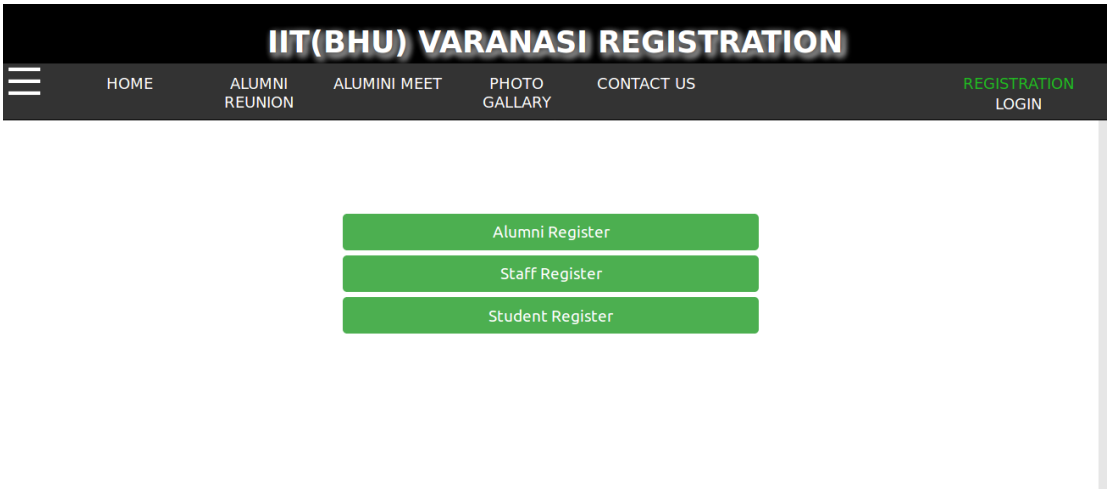


Figure 4.1 Registration

4.2 Login

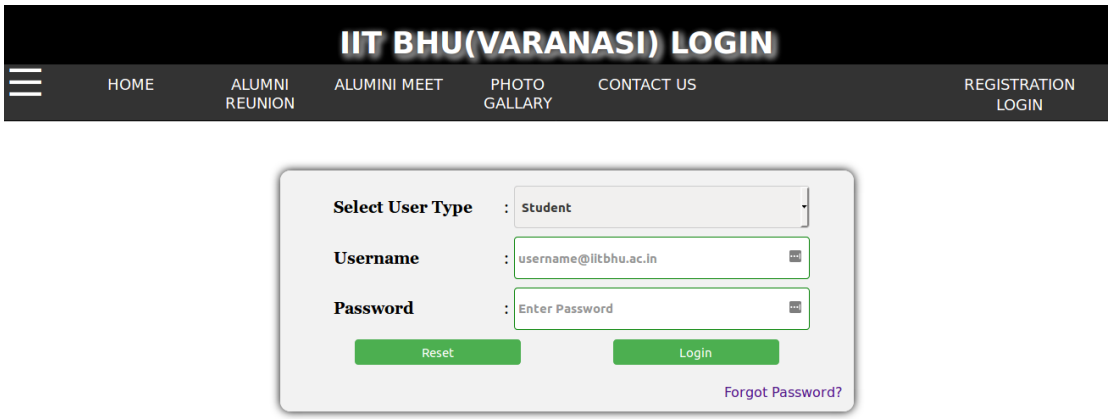


Figure 4.2 Login

4.3 News and Notification

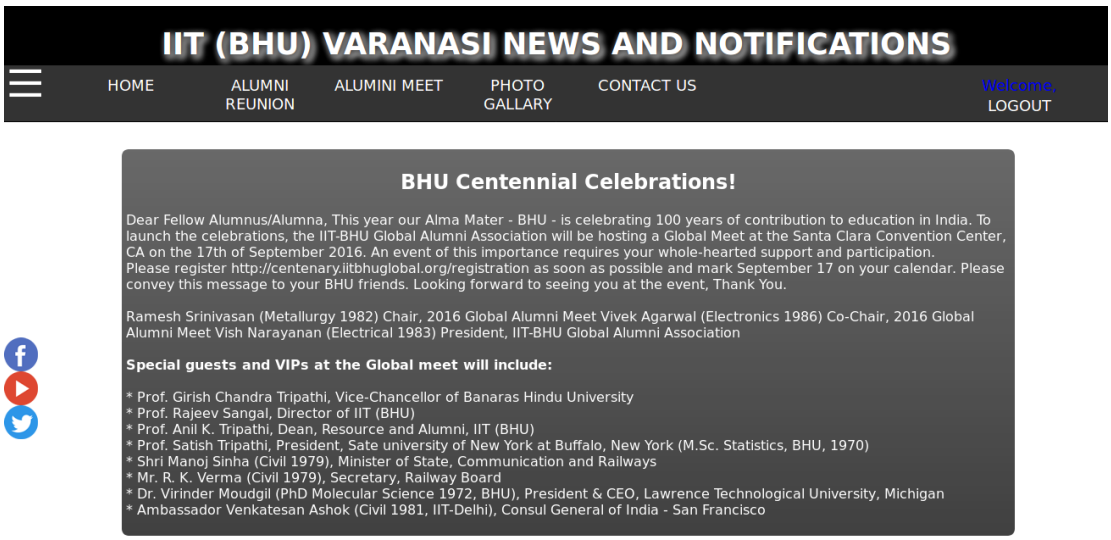


Figure 4.3 News and Notification

4.4 Alumni Reunion

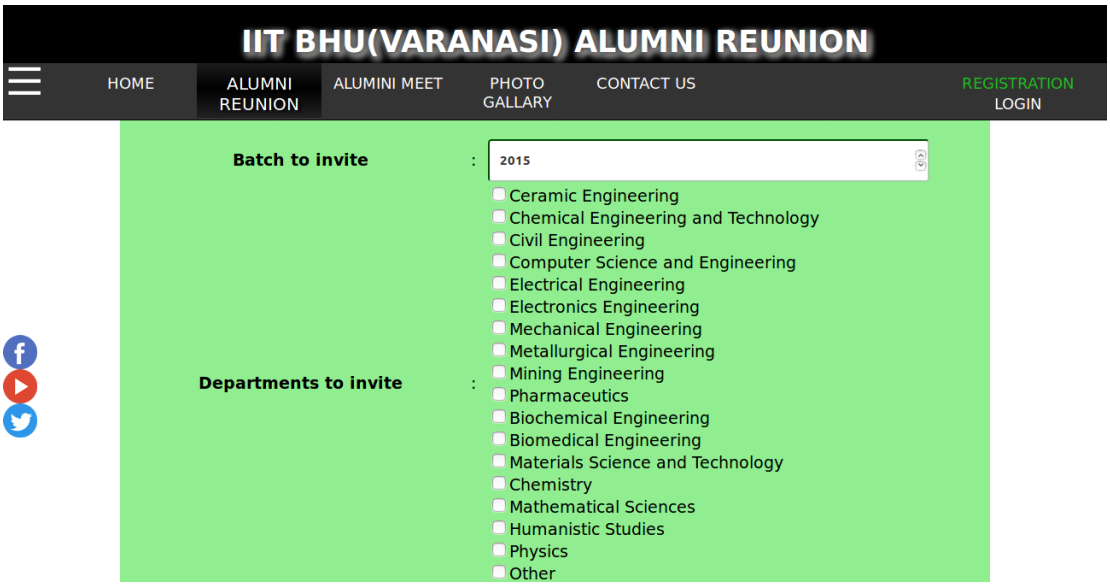
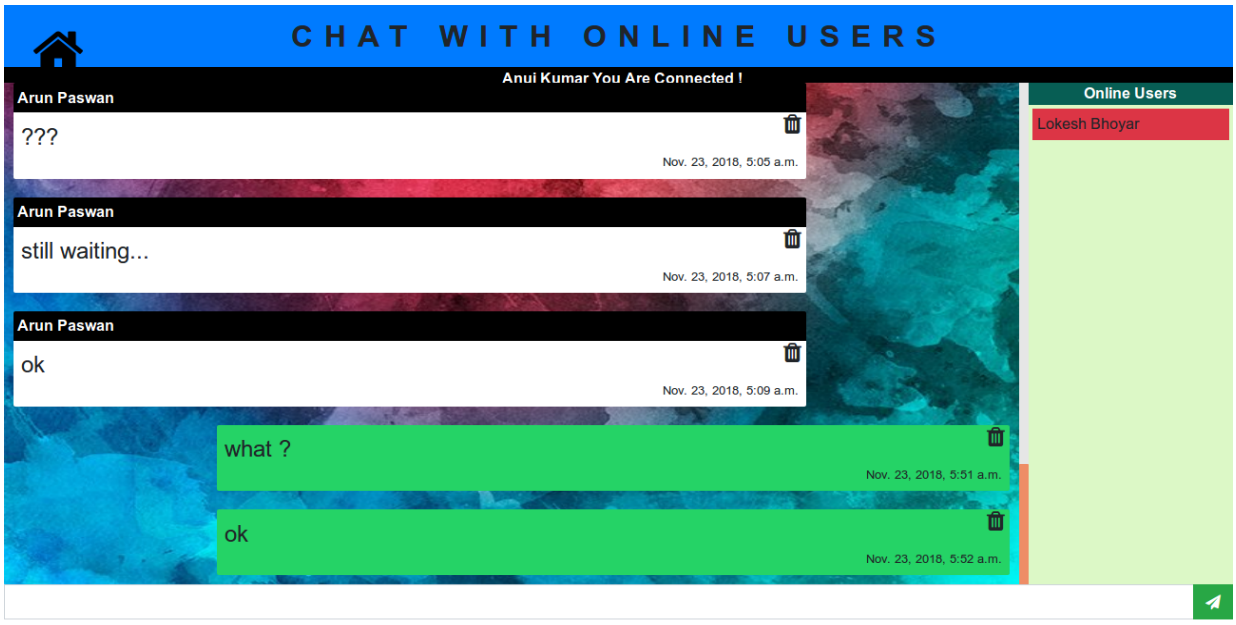


Figure 4.4 Alumni Reunion

4.5 Chatting

In this module, Registered Alumni,students and staff members can interact with each other. They can see all the online users.They can even delete the message that do not want to see anymore. This is implemented using Socket programming.



4.6 Discussion

In Registration module users will have to register and will get their username and password in order to be active on the portal.The value of the feilds provided in the registration form are getting stored in the database.

After successful Registration They can login to the website and access all the functionalities available on the website.

This portal will serve the cause of integrating all the stakeholders of Institute such as Alumni, College students , Faculties to avail the guidance and knowledge sharing on various domains. In this project we proposed the Dynamic Architectural design of the Alumni portal,which enable the two way communication between all stakeholders.

Chapter 5

Conclusions

Alumni Portal for any college website is very important. It has been setup to increase interaction knowledge sharing and networking among the alumni and students and also focuses on bringing together alumni and students of college and the primary goal of this report is to connect the alumni students with the college and existing college students with the help of alumni web portal where they can have communication with existing students.

Future Scope

This report gives rise to a number of important apsects:

- In order to ease the work, an android app can also be built.
- To add certain social networking features such as LinkedIn.
- To involve companies to avail the services of this platform.

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