A REPORT OF ONE MONTH TRAINING

at

OOPSINFOSOLUTIONS, CHANDIGARH

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF

BACHELOR OF TECHNOLOGY

(Computer Science and Engineering)

JUNE – JULY, 2025

SUBMITTED BY:

NAME: RIDA

UNIVERSITY ROLL NO: 2302647

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

(An Autonomous College Under UGC ACT)

Certificate By Company

Oops InfoSolutions

Oops InfoSolutions Pvt. Ltd.

Regd. Under Ministry of Corporate Affairs GOVT. OF INDIA

Ref No: CGFP-8212-2025

Date: 01/08/2025

Certificate of Completion

This is to certify that Ms. **Rida** student of B.Tech (CSE) , URN:- 2302647, Guru Nanak Dev Engineering College, Ludhiana has successfully completed industrial training in Web Development from 20th June 2025 to 1st August 2025. During the training she is trained under the guidance of Mr. Manjit Singh. Her overall performance during the training is Excellent.

We recommend Rida for her outstanding performance and the skills she has developed during this period. We believe these experiences will significantly contribute to her future endeavors. We extend our best wishes for Rida continued success and professional growth.

OOPS INFOSOLUTIONS PVT. LTD. S.C.O. 80-81-82, 2nd Floor, Sector 34-A, Chandigarh Ph: 5009244

Manjit Singh

(Director)

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

CANDIDATE'S DECLARATION

I RIDA hereby declare that I have undertaken one month training at OOPsInfoSolutions, Chandigarh, during the period from June 20, 2025 to August 1, 2025, in partial fulfillment of the requirements for the award of the degree of B.Tech (Computer Science and Engineering) at GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA. The work which is being presented in the training report submitted to the Department of Computer Science and Engineering at GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA is an authentic record of the training work.

Rida

Signature of the Student

The one month industrial training Viva-Voce Examination of _____ has been held on _____ and accepted.

Signature of Internal Examiner

Signature of External Examiner

ABSTRACT

This training report presents the work undertaken during a one-month industrial training at OOPsInfoSolutions, Chandigarh, focused on the development of an "Alumni Management Portal" using PHP and MySQL. The objective of this project was to design a web-based system that facilitates seamless communication and interaction between alumni and the institution. The portal allows alumni to register, update their information, view institutional news and events, and connect with fellow graduates through a centralized platform.

The training experience offered a comprehensive introduction to full-stack web development. On the frontend, HTML, CSS, and JavaScript were used to create an interactive and responsive user interface. On the backend, PHP was used as the server-side scripting language to handle logic and functionality, while MySQL was used for designing and managing the database structure. Emphasis was placed on creating a modular and secure system with proper user validation and data handling techniques.

The development process followed a structured life cycle: beginning with requirement gathering and planning, followed by wireframe design, frontend and backend development, testing, and final deployment. The training also involved working with tools such as XAMPP, phpMyAdmin, and Visual Studio Code, which enhanced the understanding of project development in a local server environment.

This report outlines the tools and technologies used, the development methodology followed, and the results achieved. It also includes screenshots of the working portal and highlights the key functionalities implemented, such as alumni registration, admin login, event display, and secure data access. The training provided hands-on experience and significantly contributed to my understanding of web technologies, teamwork, and real-world problem-solving in software development.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to OOPsInfoSolutions, Chandigarh, for giving me the opportunity to undergo one month of industrial training and gain practical exposure in the field of web development. This training was an enriching experience that helped bridge the gap between academic knowledge and industry practices.

I am especially thankful to my mentors and instructors at OOPsInfoSolutions for their constant guidance, support, and encouragement throughout the training period. Their deep expertise, valuable feedback, and professional insights played a key role in helping me understand the core concepts of web development and successfully complete my project titled "Alumni Management Portal "

I would also like to convey my heartfelt thanks to the Department of Computer Science and Engineering, Guru Nanak Dev Engineering College, Ludhiana, for incorporating industrial training into the academic curriculum and providing continuous academic support. I am grateful to my training coordinator and faculty advisors for their guidance and encouragement throughout the training and report preparation.

A special thanks to my peers and friends who collaborated and shared knowledge during the training phase. Their presence made the learning environment more enjoyable and effective.

Last but not the least, I am deeply thankful to my parents and family members for their unwavering support, patience, and motivation during the training period and throughout my academic journey.

ABOUT THE COMPANY

OOPsInfo Solutions

SCO-110-111, Top Floor, Sector 34A, Chandigarh.

Contact No.: **0172-5009244, 9855222244**

COMPANY PROFILE:

OopsInfo Solutions was established in 2009. Its foundation and purpose is to provide and construct programs for existing companies and provide new and exciting updates to primitive bases technology. Opps InfoTech started in Mohali which is situated in Punjab India and was the one of the first to be opened in the vicinity. OopsInfo Solutions first started with the education in India, through their curriculum we were able to negotiate a service that was accessible to all students and post Graduates (this continued with great success). We also provide study materials i.e. program languages C, C++, Visual C++, PHP, VB, VB.Net, ASP.Net, XML, Oracle 9i, Sql Server 2000, ASP, Java, and Advance Java, Multimedia (Flash MX, Director MX, Fireworks MX, and Dreamweaver MX). We now expand our network to other countries such as England, USA. This has been met with much appreciation & support. OopsInfo Solutions now in entering its 1st successful year.

LIST OF FIGURES

FIGURE CAPTION Page No.

Figure 3.1 Data Flow Diagram (DFD)……..... 20

Figure 3.2 Login Form……..... 20

Figure 3.3 Feedback……..... 21

Figure 3.4 Administrator……..... 21

Figure 3.5 Member……..... 22

Figure 3.6 Find Members……..... 22

Figure 3.7 View Profile……..... 23

Figure 3.8 View Member Feedback……23

Figure 3.9 View Guest Feedback……..24

Figure 3.10 User Profile Information……24

Figure 3.11 Send Feedback……..25

Figure 3.12 Change Password……..25

Figure 3.13 User Interface……27

Figure 3.14 Login……27

Figure 3.15 About Us……28

Figure 3.16 Staff……28

Figure 3.17 Services……...29

Figure 3.18 Contact Us……...29

Figure 3.19 New User……30

Figure 3.20 Admin Section……30

Figure 3.21 Users……31

Figure 3.22 User Modified……...31

Figure 3.23 Student Registration……..32

Figure 3.24 Student Feedback…….32

Figure 3.25 Notices…….33

Figure 3.26 Member Edit……33

Figure 3.27 Member Section……34

Figure 3.28 My Profile…….34

Figure 3.29 Give Feedback……...35

Figure 3.30 Change Password……...35

Figure 3.31 Student Section……...36

Figure 3.32 Give Feedback……36

Figure 3.33 Change Password……37

LIST OF TABLES

Table 3.1 Challenges and Resolutions……..... 35

DEFINITIONS, ACRONYMS AND ABBREVIATIONS

HTML - HyperText Markup Language

CSS - Cascading Style Sheets

PHP - Hypertext Preprocessor

MySQL - Structured Query Language (Database Management System)

UI - User Interface

UX - User Experience

CRUD - Create, Read, Update, Delete

DBMS - Database Management System

HTTP - HyperText Transfer Protocol

XAMPP - Cross-Platform, Apache, MySQL, PHP, Perl

VS Code - Visual Studio Code (Source Code Editor)

API - Application Programming Interface

MVC - Model View Controller

SQL - Structured Query Language

OOP - Object-Oriented Programming

CONTENTS

Certificate by Company/Industry/Institute i

Candidate's Declaration ii

Abstract iii

Acknowledgement iv

About the Company/Industry/Institute v

List of Figures vi

List of Tables vii

Definitions, Acronyms and Abbreviations viii

CHAPTER 1: INTRODUCTION 12

1.1 Background 12

1.2 Objective of the Project 12

1.3 Scope of the Project 13

1.4 Technologies and Tools Used 13

CHAPTER 2: TRAINING WORK UNDERTAKEN 17

2.1 Introduction 17

2.2 Week 1 – Introduction to Web Development 17

2.3 Week 2 – Backend Development Using PHP 17

2.4 Week 3 – MySQL and Database Integration 18

2.5 Week 4 – Project Development 18

CHAPTER 3: RESULTS AND DISCUSSION 19

3.1 Overview of the Project Output 19

3.2 Key Functionalities and Screenshots 19

3.3 Performance and Usability Discussion 37

3.4 Challenges Faced and Resolutions 38

CHAPTER 4: CONCLUSION AND FUTURE SCOPE 39

4.1 Conclusion 39
4.2 Future Scope 39

REFERENCES 41
APPENDIX 42

CHAPTER 1

INTRODUCTION

1.1 Background

In the digital age, alumni management has become a critical component of educational institutions looking to maintain strong relationships with former students. Alumni serve as valuable assets who contribute to the growth of an institution through mentorship, industry connections, donations, and brand value. However, without a centralized system to manage alumni data and interactions, institutions often struggle to stay connected with their graduates.

To address this challenge, web-based Alumni Management Portals have become an essential tool. These portals allow institutions to collect, store, and manage alumni records in a structured manner, while also offering a platform for alumni to update their information, connect with peers, participate in events, and contribute to institutional development.

1.2 Objective of the Project

The primary objective of this training project was to design and develop a dynamic, responsive, and user-friendly Alumni Management Portal using PHP and MySQL. The portal aims to:

Provide a centralized platform for storing alumni records

Allow alumni to register and update their personal and professional details

Enable administrators to manage alumni data effectively

Facilitate event sharing and news updates for alumni engagement

Support secure login and access control for admin and users

1.3 Scope of the Project

The scope of this project includes the development of the following modules:

Alumni Registration: Allows users to create accounts and submit details

Admin Login: Enables administrator access to manage alumni records

Dashboard Interface: Displays statistics and database insights

Event Section: For sharing news and event invitations

Database Connectivity: CRUD operations using MySQL

Authentication & Validation: Basic input validation and session handling

The system is designed as a web-based platform deployable on a local or hosted server. It is scalable and can be extended with features such as chat support, file uploads, and real-time notifications in future versions.

1.4 Technologies and Tools Used

During the course of this training project, the following tools and technologies were used:

Frontend: HTML, CSS, JavaScript

Backend: PHP

PHP (Hypertext Preprocessor) is a widely-used open-source server-side scripting language that is especially suited for web development and can be embedded into HTML. It is executed on the server, and the result is returned to the browser as plain HTML. PHP was created in 1994 by Rasmus Lerdorf, and since then it has become one of the most popular languages for dynamic web content and applications. It powers major content management systems like WordPress, Joomla, and Drupal, and is supported by almost all web hosting providers.

<u>Key Features of PHP:</u>

Open Source: Freely available and regularly updated by a large community.

Simple Syntax: Easy to learn, especially for beginners with HTML knowledge.

Cross-Platform: Runs on various operating systems like Windows, Linux, and macOS.

Server-Side Execution: PHP code is executed on the server, keeping it secure and efficient.

Database Integration: Seamlessly connects with databases like MySQL, PostgreSQL, Oracle, and more.

Extensive Library Support: Offers built-in functions and supports external libraries for tasks like image manipulation, email sending, file handling, and encryption.

Common Uses of PHP:

User registration and login systems

Content management systems (CMS)

Online forms and data processing

E-commerce websites

Forums, blogs, and social platforms

Backend APIs for mobile or JavaScript apps

Basic PHP Syntax Example:

```
<?php
echo "Welcome to PHP!";
?>
```

This simple code outputs the message “Welcome to PHP!” to the browser.

PHP in the Alumni Management Portal:

In this project, PHP was used to:

Handle form data submitted by alumni

Connect to the MySQL database using mysqli_connect()

Perform CRUD operations (Create, Read, Update, Delete)

Manage user sessions and login security

Display dynamic content such as user records and events

Redirect users and display messages upon successful actions

The use of PHP made the portal interactive and data-driven, enabling real-time updates to the alumni database through a web interface.

Database: MySQL

MySQL is a popular open-source Relational Database Management System (RDBMS) that is widely used for storing, managing, and retrieving structured data. It is based on Structured Query Language (SQL), the standard language for interacting with relational databases. Developed by MySQL AB and now maintained by Oracle Corporation, MySQL is used in millions of applications—from small dynamic websites to large-scale enterprise systems. It is the preferred database system for many PHP-based applications, including content management systems like WordPress, Joomla, and Drupal.

Key Features of MySQL:

Open Source: Free to use with active community support.

Cross-Platform Support: Runs on various platforms such as Windows, Linux, and macOS.

High Performance: Efficient in handling large volumes of data with quick read/write operations.

Security: Offers user access control, password encryption, and data integrity.

Scalability: Suitable for both small projects and large applications with millions of records.

Data Recovery: Supports backup and recovery tools for data protection.

Support for ACID Properties: Ensures consistency and reliability of transactions.

Common SQL Commands in MySQL:

CREATE – to create a new table or database

INSERT – to insert new records into a table

SELECT – to retrieve data from one or more tables

UPDATE – to modify existing records

DELETE – to remove records

JOIN – to combine rows from multiple tables based on a related column

Basic MySQL Query Example:

```
SELECT name, email FROM alumni WHERE graduation_year = '2022';
```

This query retrieves the name and email of all alumni who graduated in 2022.

MySQL in the Alumni Management Portal:

In this project, MySQL was used as the backend database to:

Store alumni information including names, contact details, graduation year, etc.

Manage admin login credentials securely

Support all CRUD operations from the PHP interface

Handle relational data efficiently

Enable fast retrieval and display of records on the portal

The phpMyAdmin interface was used for database creation and testing, while all backend interactions were carried out using SQL queries through PHP scripts.

Editor: Visual Studio Code

Database GUI: phpMyAdmin

Other Tools: Git (for version control), Google Fonts, Bootstrap (for responsiveness)

CHAPTER 2

TRAINING WORK UNDERTAKEN

2.1 Introduction

The one-month industrial training at OOPsInfoSolutions, Chandigarh, focused on practical exposure to full-stack web development, with emphasis on PHP and MySQL. The training followed a structured approach beginning with theoretical learning and moving into hands-on project development. This chapter outlines the weekly learning progress and project development phases.

2.2 Week 1 – Introduction to Web Development

During the first week, the basics of web development were introduced, focusing on the following:

HTML structure and semantic elements

CSS for styling and layout control

Introduction to responsive design using Bootstrap

Basics of JavaScript for interactivity

Understanding client-server architecture

Overview of full-stack development

Sample web pages were designed using HTML and CSS to build familiarity with tags, forms, buttons, tables, and layouts.

2.3 Week 2 – Backend Development Using PHP

The second week was dedicated to backend development using PHP:

Introduction to PHP syntax, variables, loops, and functions

Form handling and GET/POST methods

Connecting PHP to MySQL using mysqli_connect()

Data insertion, retrieval, updating, and deletion

Session management and login/logout functionality

Error handling and input validation

Mini projects were created to practice form submissions and CRUD operations.

2.4 Week 3 – MySQL and Database Integration

This week covered database management and linking the frontend with backend logic:

Creating and managing databases in MySQL

Writing SQL queries: SELECT, INSERT, UPDATE, DELETE

Normalization and relational schema design

Using phpMyAdmin for GUI-based database operations

Integrating database with HTML forms using PHP

Developing dynamic pages for displaying stored data

This phase marked the beginning of the actual Alumni Management Portal development.

2.5 Week 4 – Project Development: Alumni Management Portal

In the final week, all the learning was combined to build the Alumni Management Portal:

Login System: Admin login with password protection

Alumni Registration Form: Allows alumni to sign up and submit details

Admin Dashboard: Enables management of records and user data

Event Posting Module: Admin can add/update alumni events

Database Connectivity: Linked each form to the MySQL database

UI Enhancements: Improved layout using Bootstrap for responsiveness

CHAPTER 3

RESULTS AND DISCUSSION

3.1 Overview of the Project Output

The final outcome of the training was a fully functional Alumni Management Portal developed using PHP and MySQL. The system allows alumni to register and update their information, while the admin can log in to manage user data and post updates. The portal was tested in a local server environment using XAMPP, and all modules worked as expected. The user interface is simple, responsive, and designed with a focus on usability and accessibility.

3.2 Key Functionalities and Screenshots

Below is a summary of the core functionalities developed during the training :

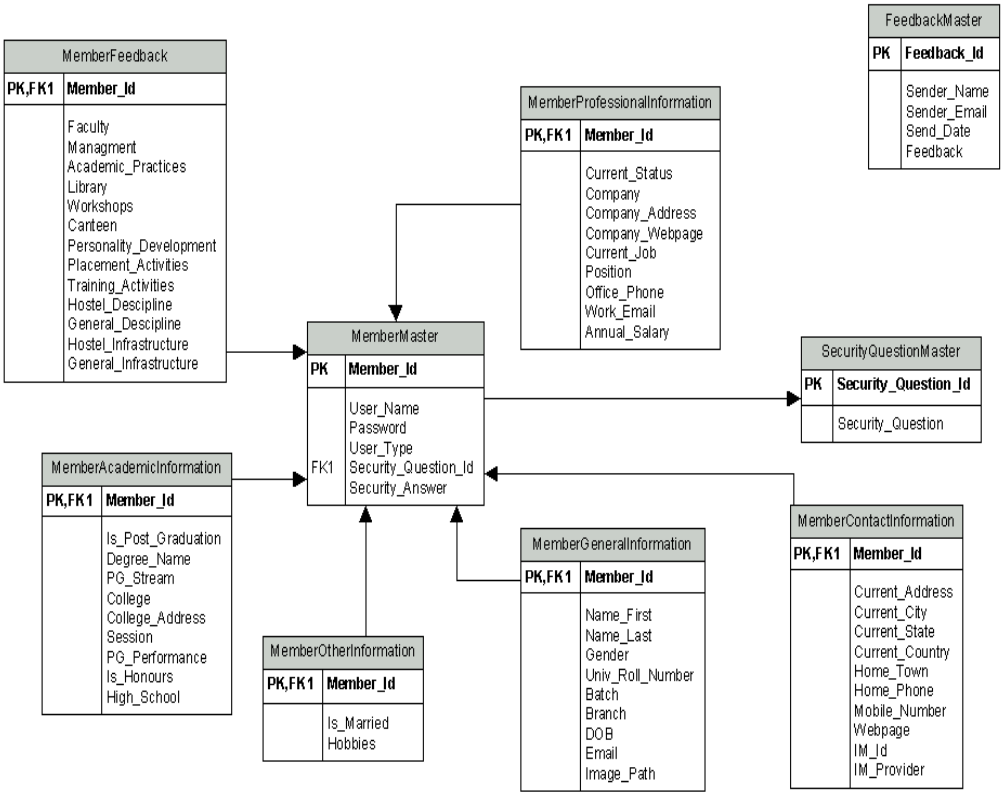

Figure 3.1 DFD

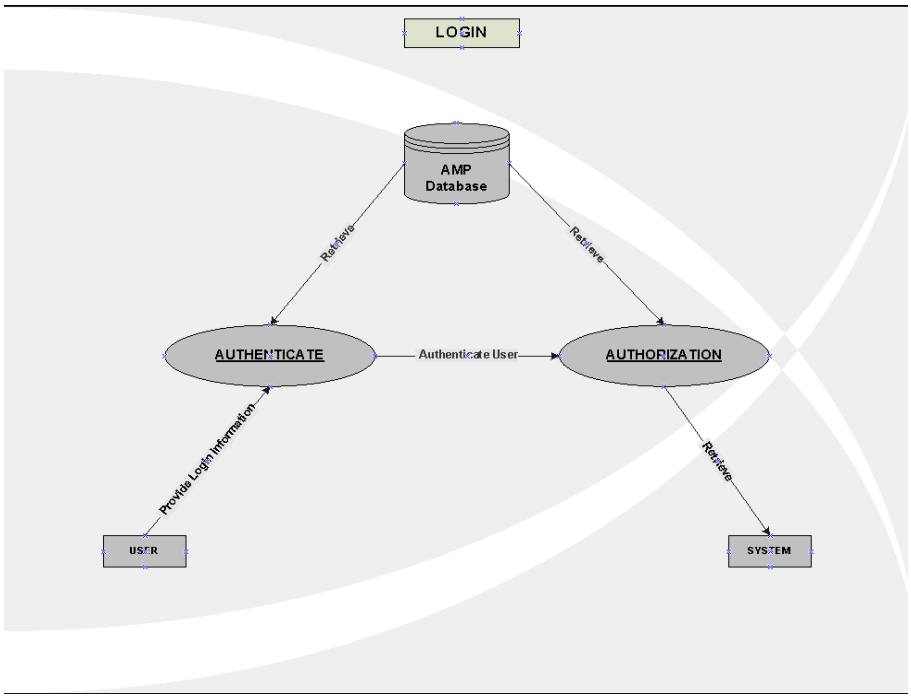

Figure 3.2 Login Form

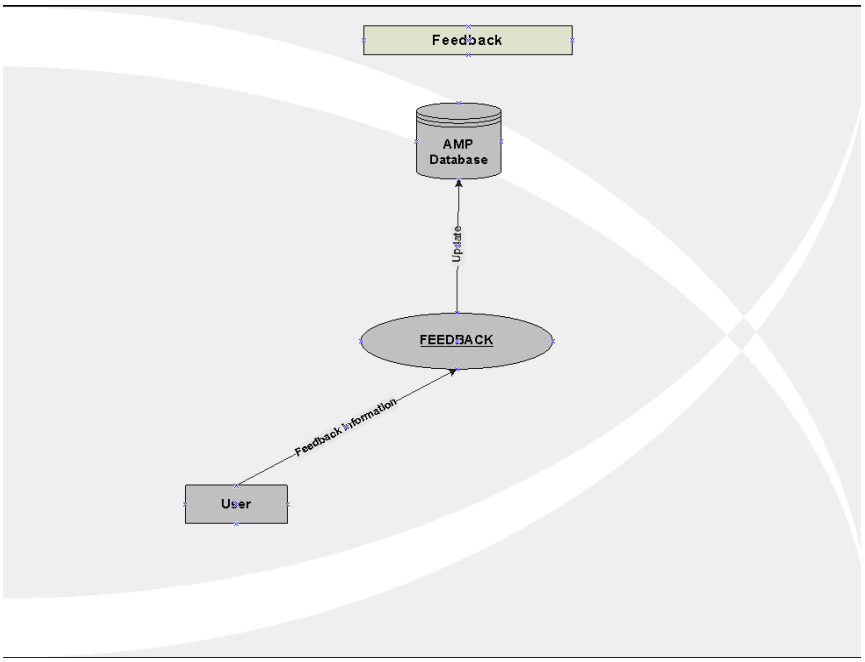

Figure 3.3 Feedback

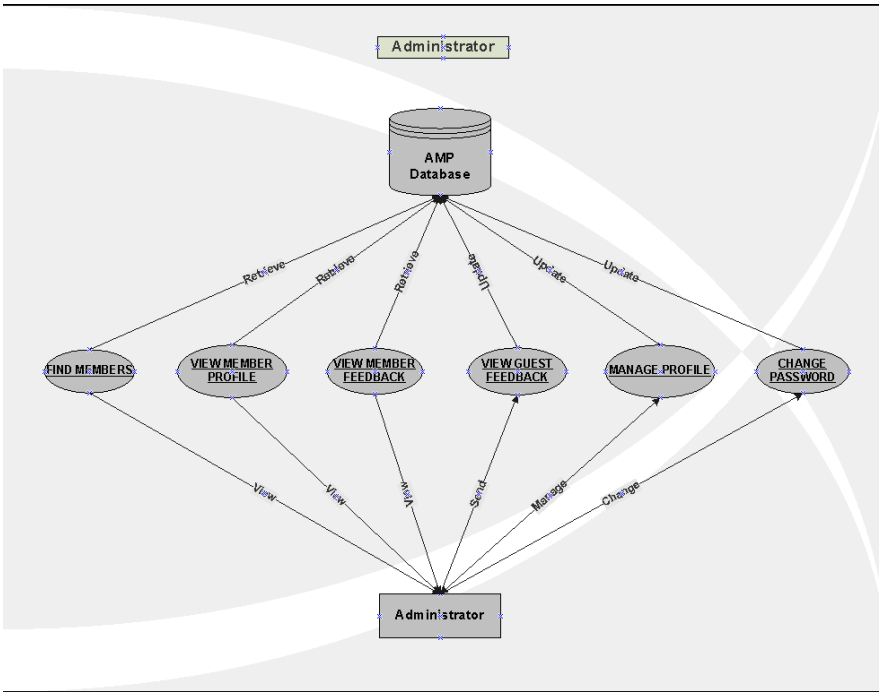

Figure 3.4 Administrator

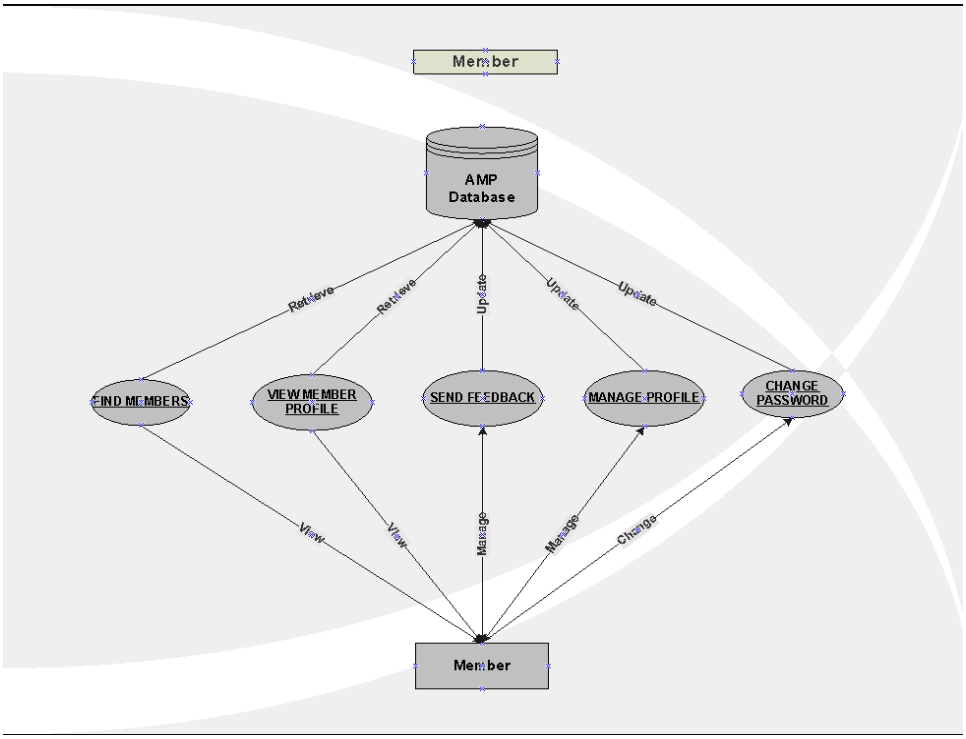

Figure 3.5 Member

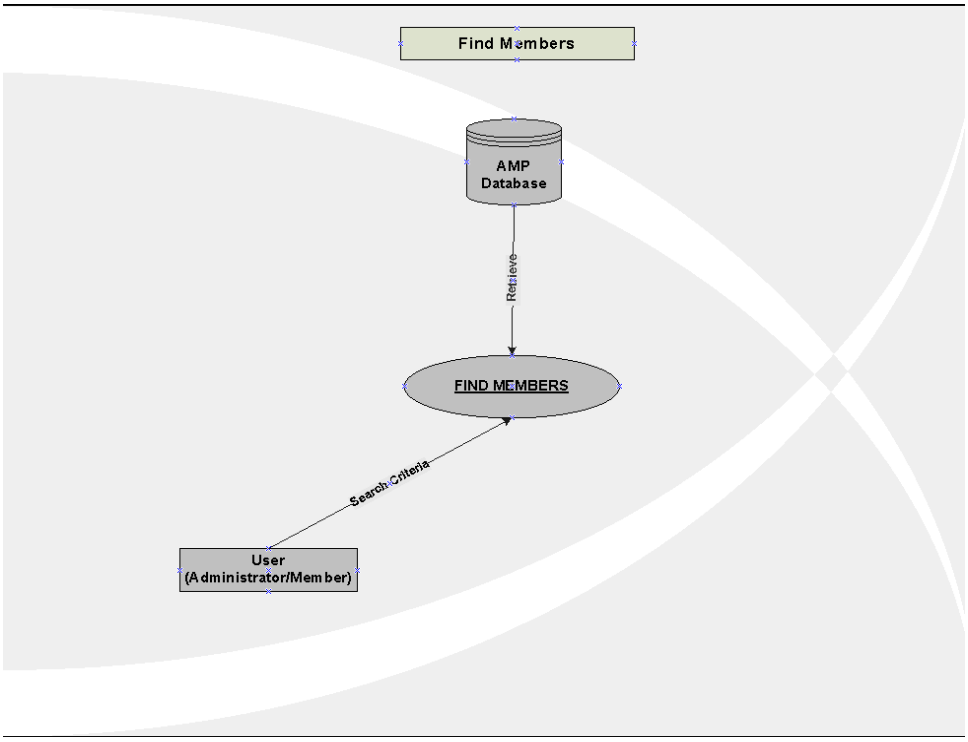

Figure 3.6 Find Members

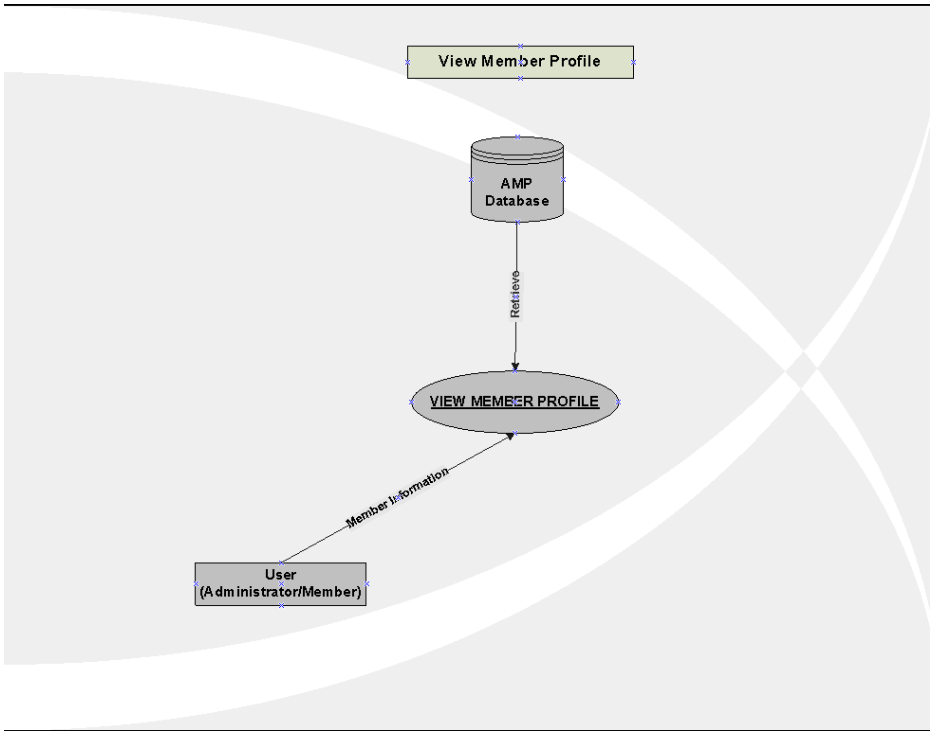

Figure 3.7 View Profile

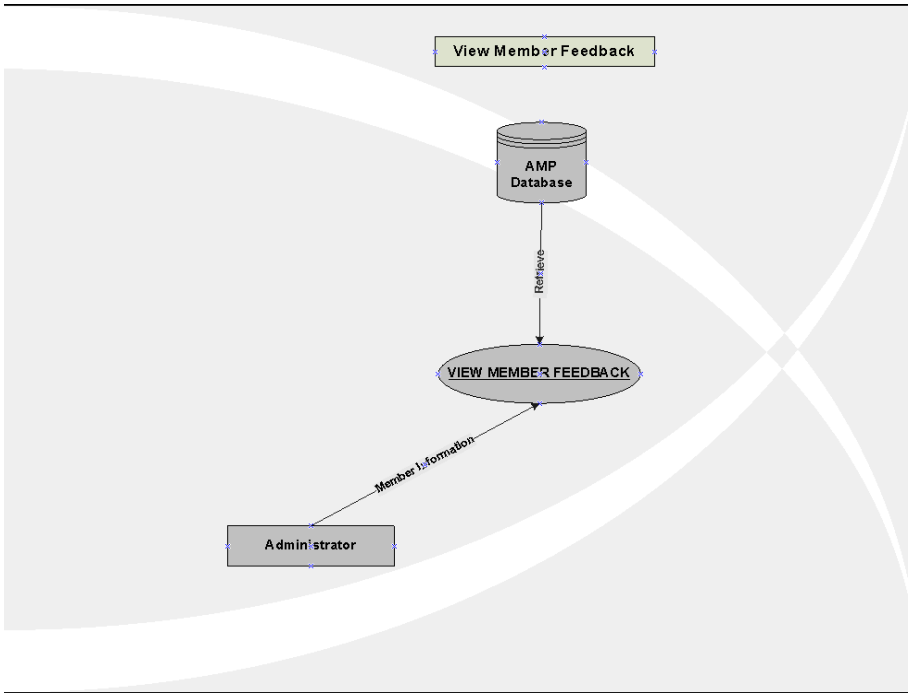

Figure 3.8 View Member Feedback

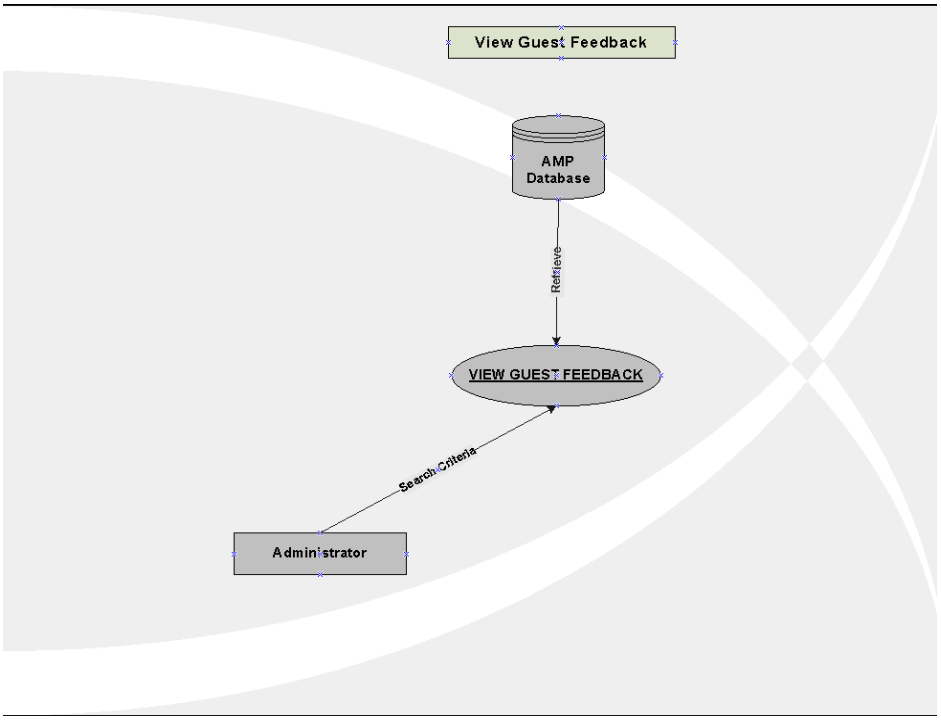

Figure 3.9 View Guest Feedback

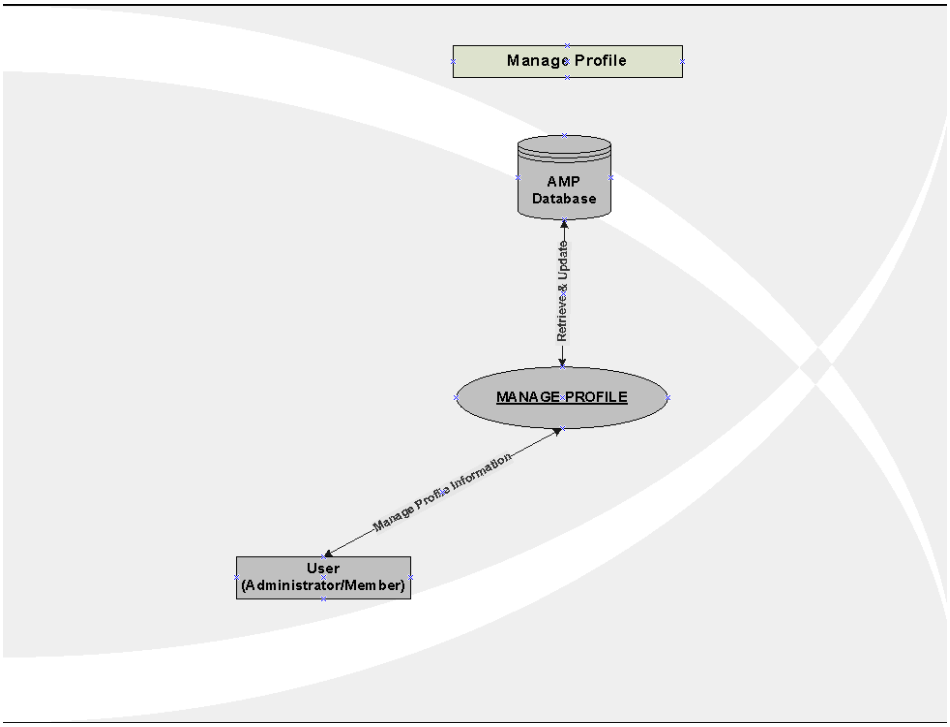

Figure 3.10 User Profile Information

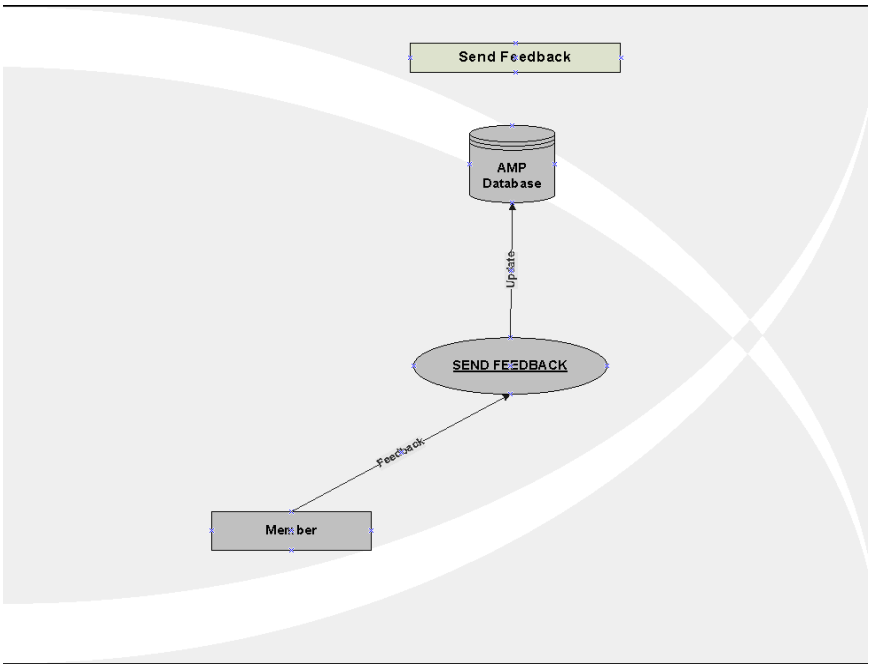

Figure 3.11 Send Feedback

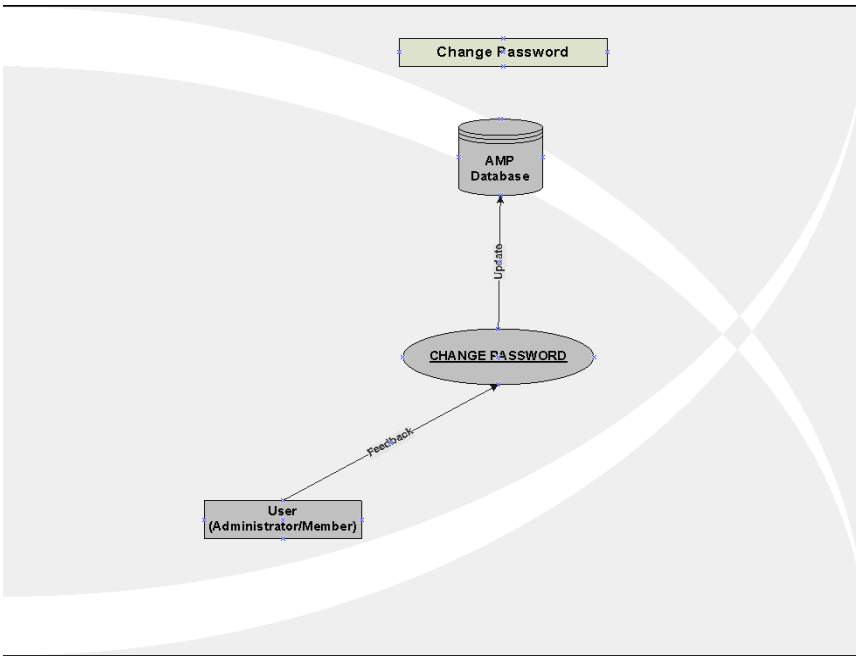

Figure 3.12 Change Password

Alumni Registration Page:

A form where alumni can enter their name, email, phone number, course, year of graduation, and other details. Data is submitted to the backend and stored in the MySQL database.

Admin Login Page:

A secure login form that restricts access to the admin panel using a predefined username and password. Sessions are managed to prevent unauthorized access.

Admin Dashboard:

Once logged in, the admin is directed to a dashboard that displays the total number of alumni, registered users, and allows the admin to manage entries.

Manage Alumni Records:

Admin can view, update, or delete alumni information directly through an interface linked to the database.

Event Management:

The admin can post upcoming alumni events which are visible to all registered users.

Data Connectivity:

All forms are dynamically connected to the database. Any changes made from the admin panel are immediately reflected in the portal.

Figure 3.13 User Interface

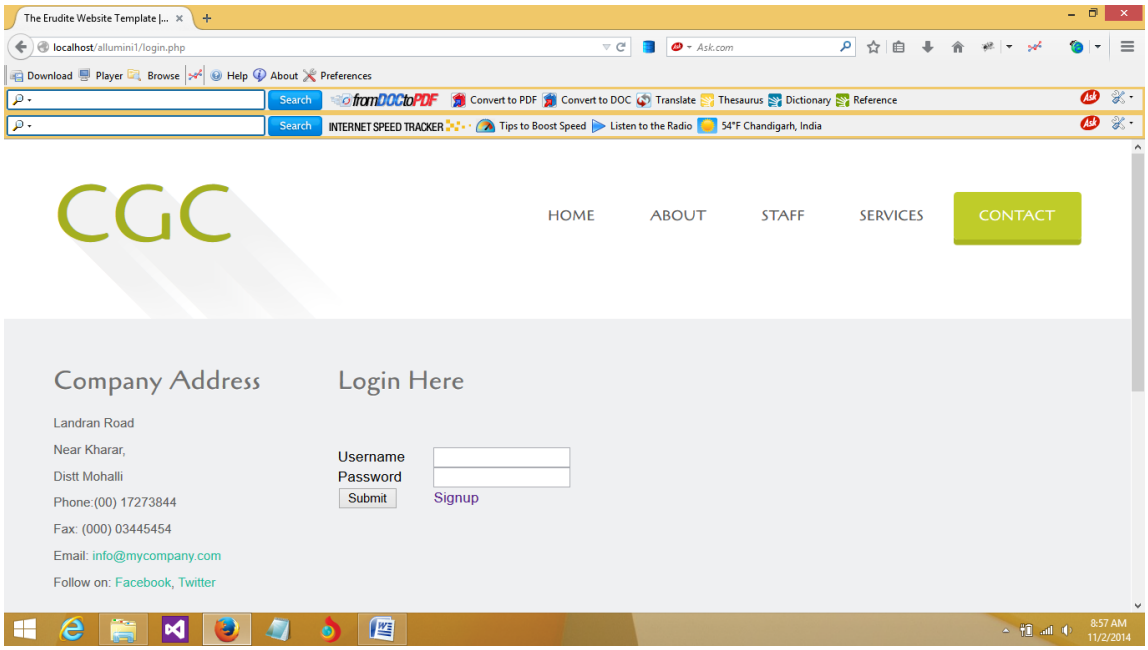

Figure 3.14 Login

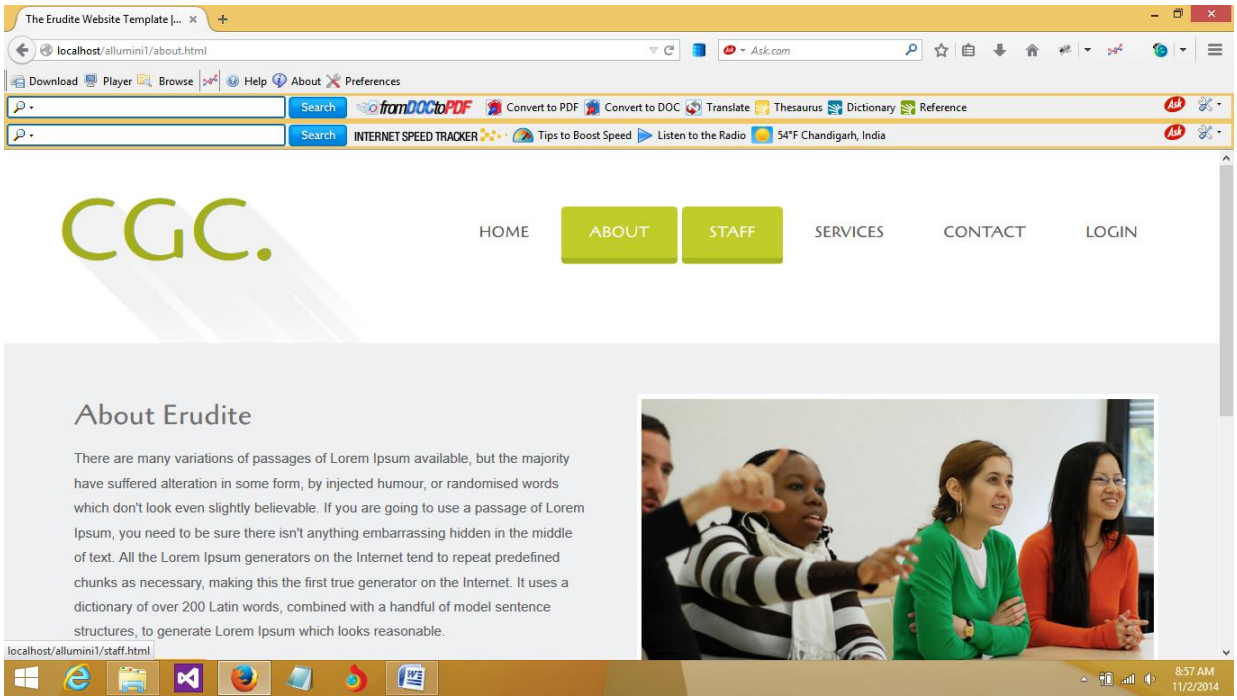

Figure 3.15 About Us

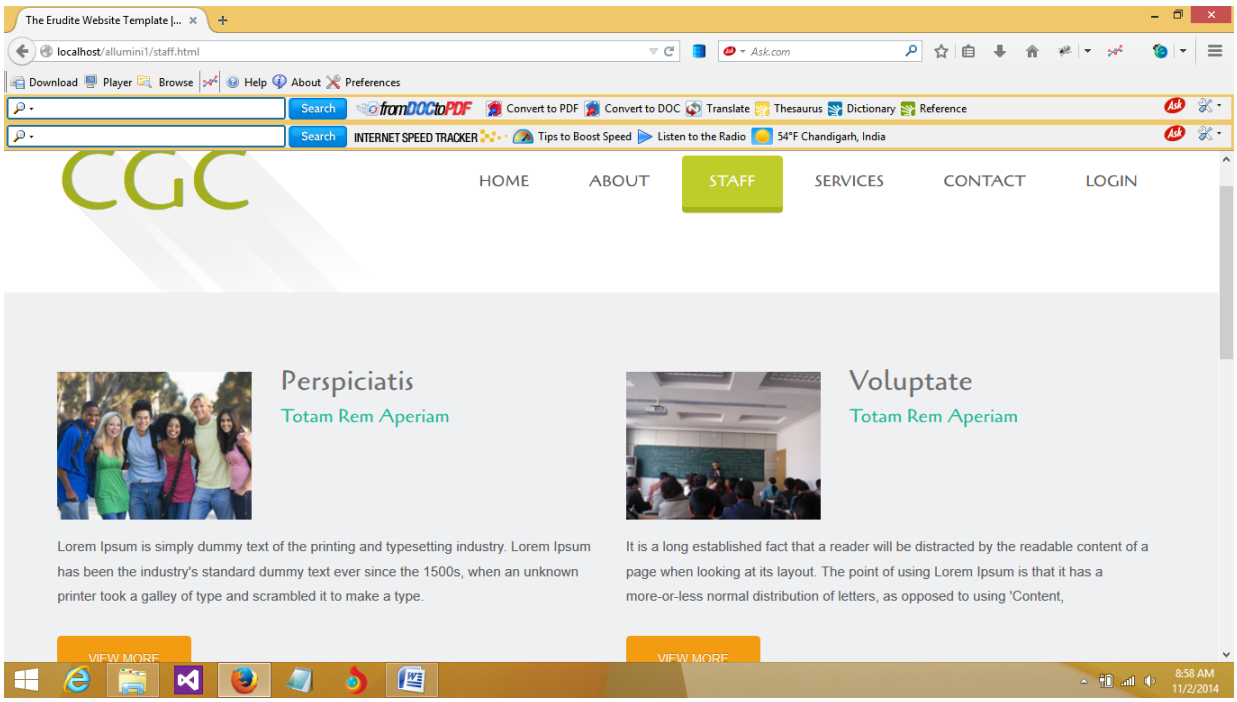

Figure 3.16 Staff

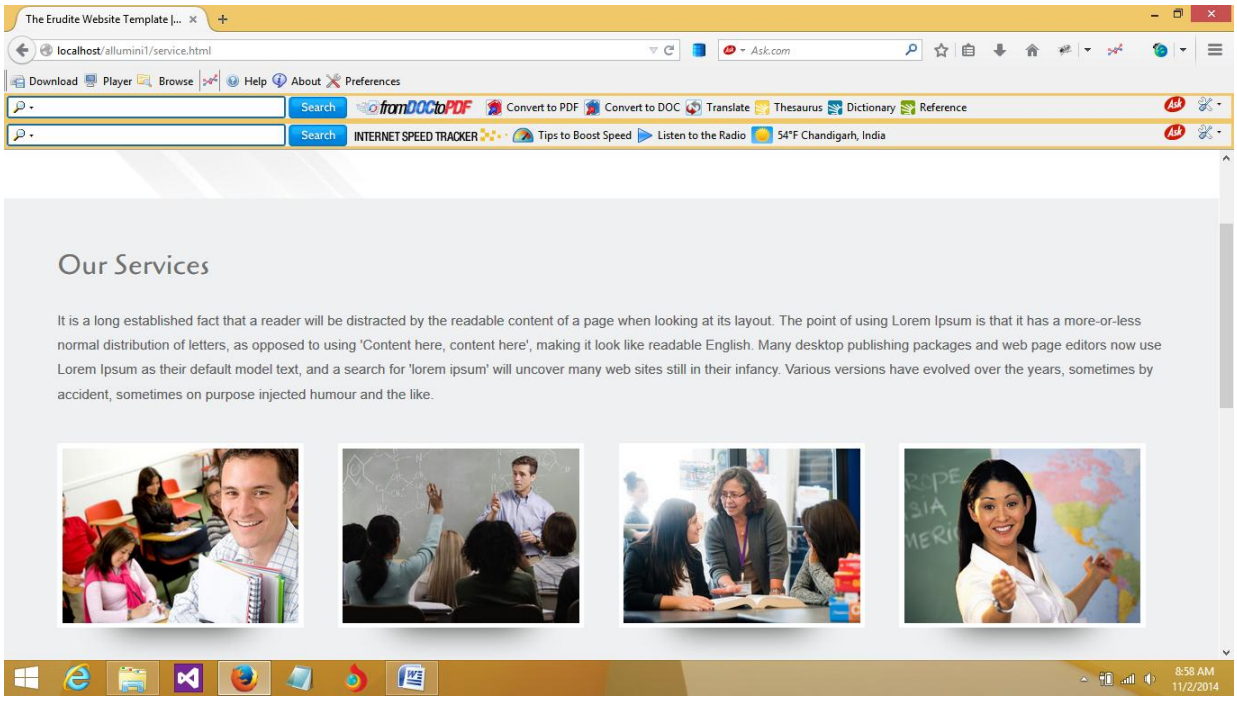

Figure 3.17 Services

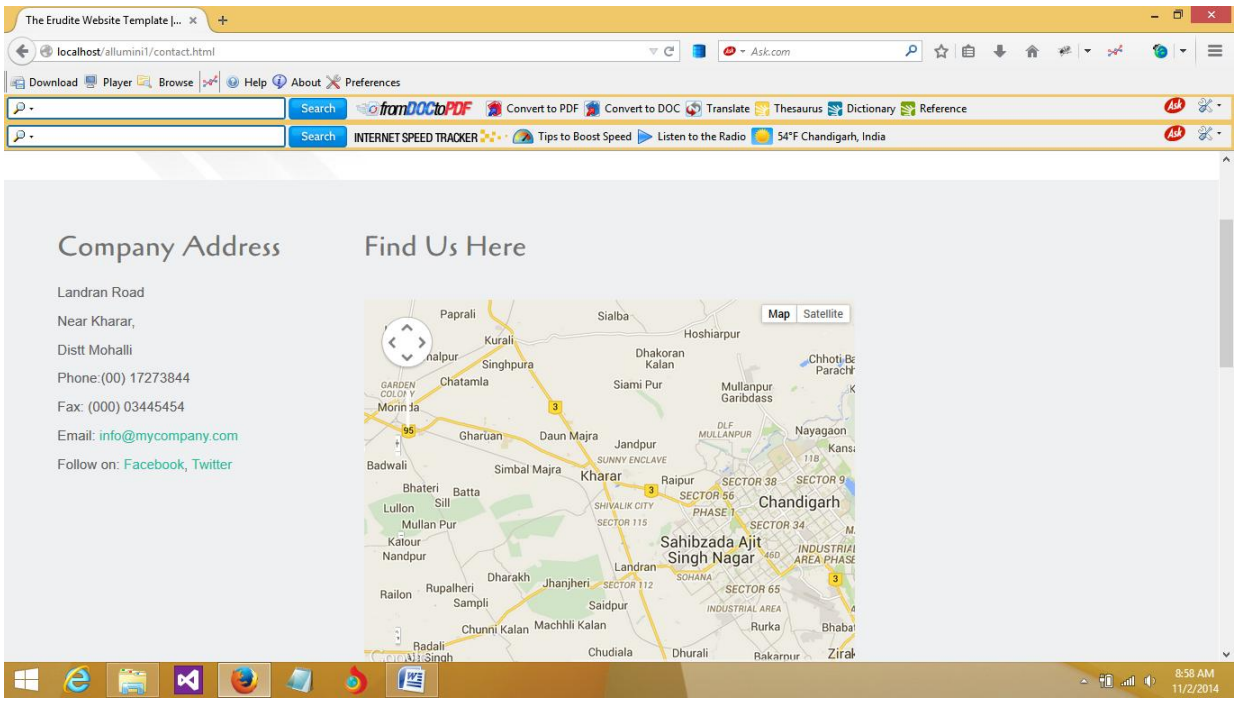

Figure 3.18 Contact Us

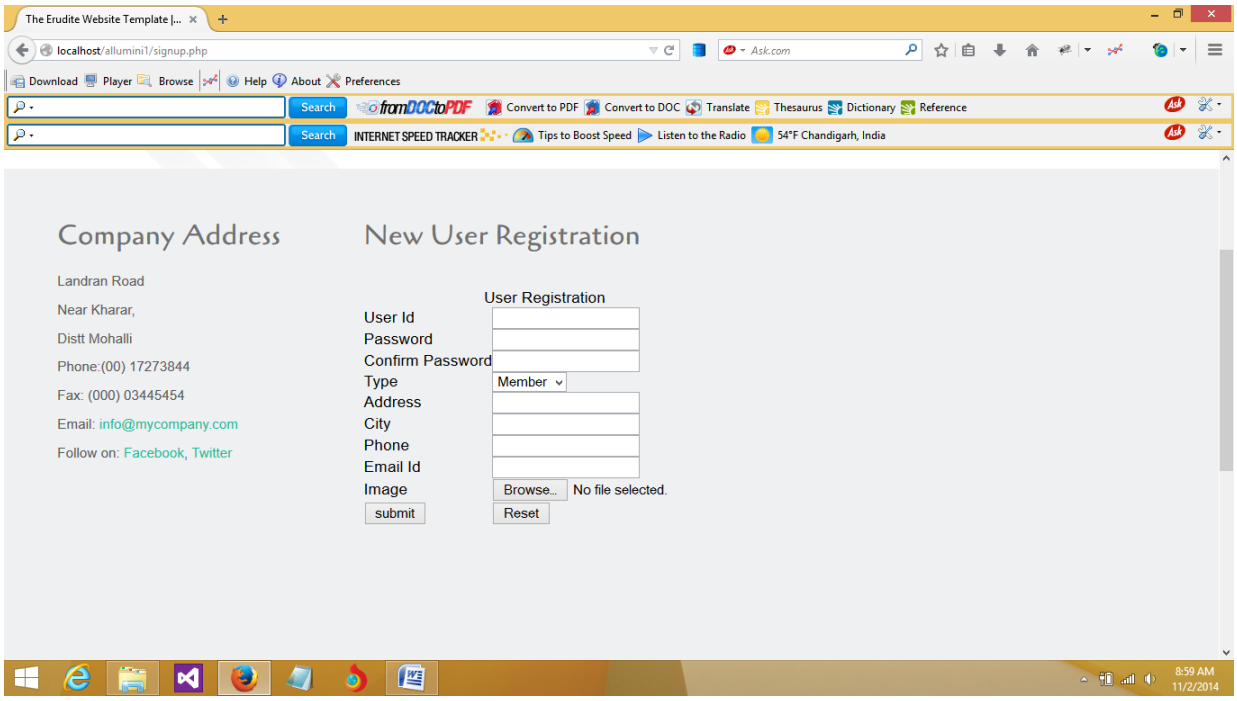

Figure 3.19 New User

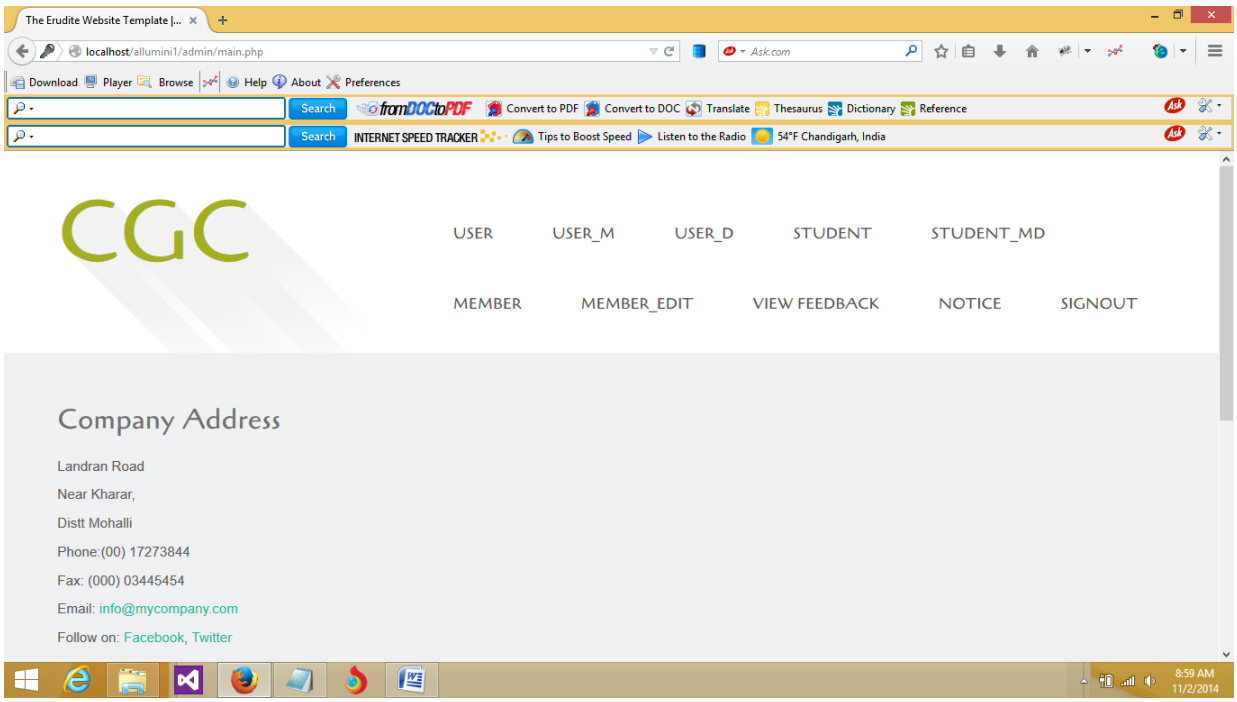

Figure 3.20 Admin Section

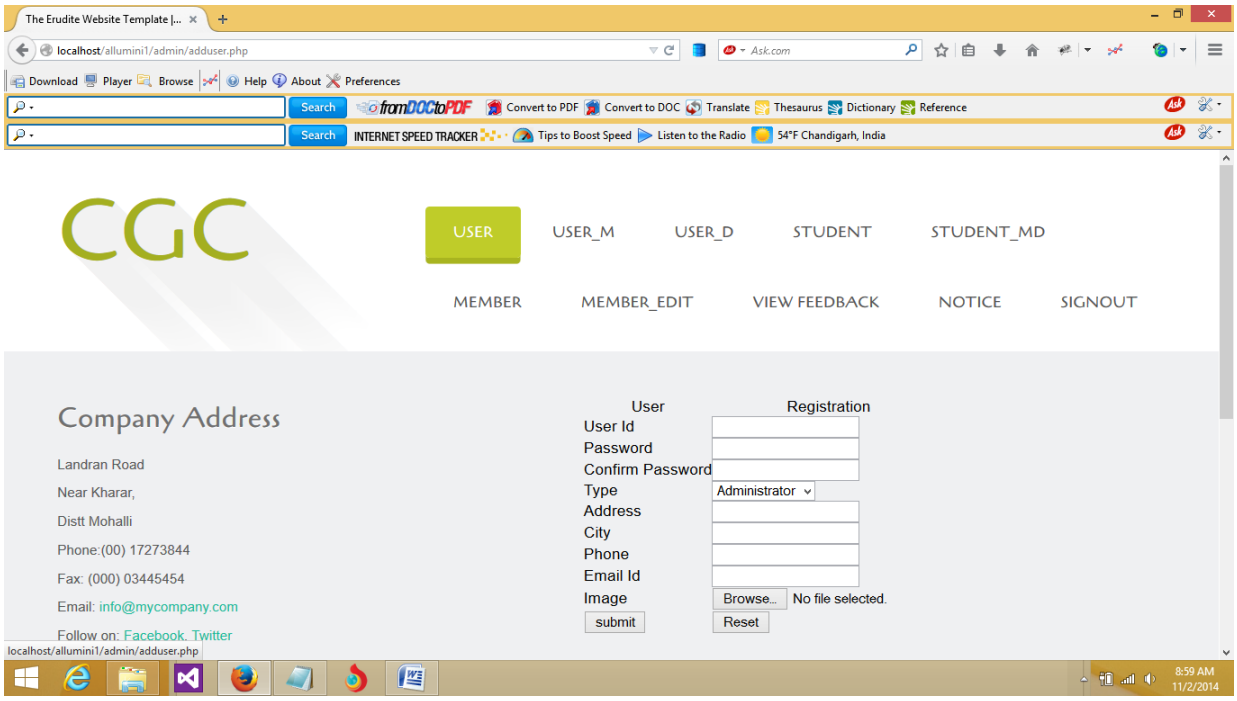

Figure 3.21 Users

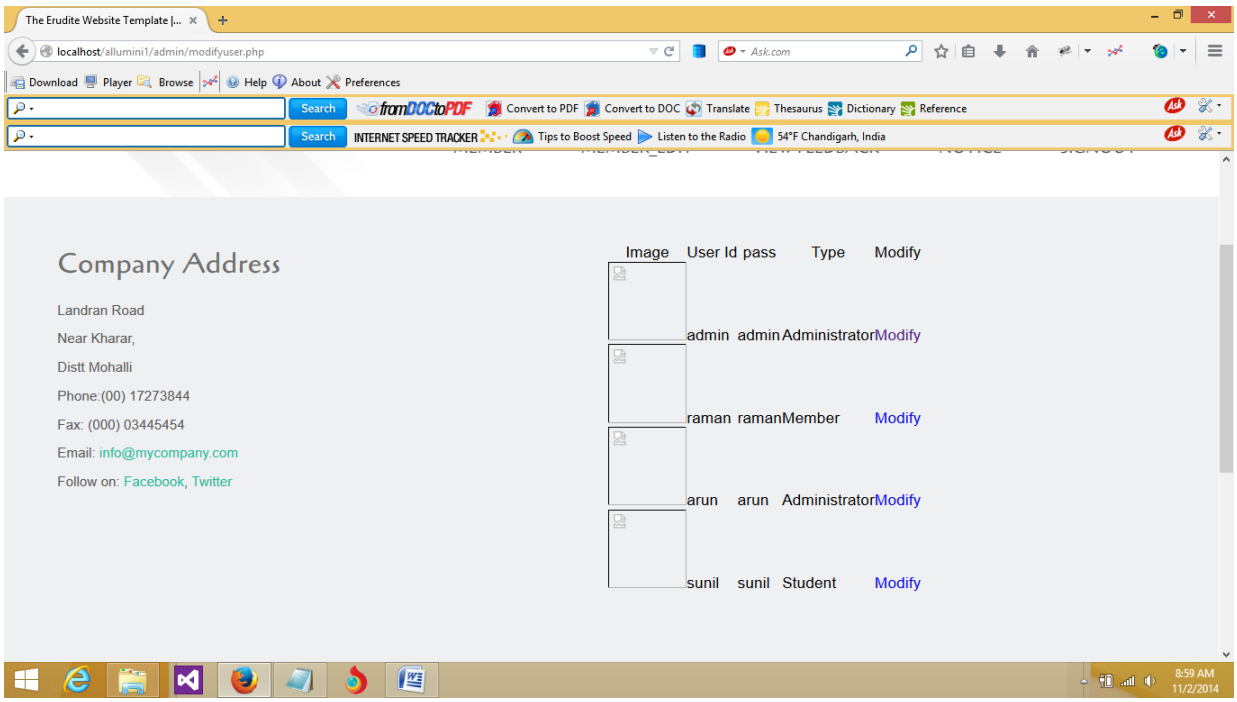

Figure 3.22 User Modified

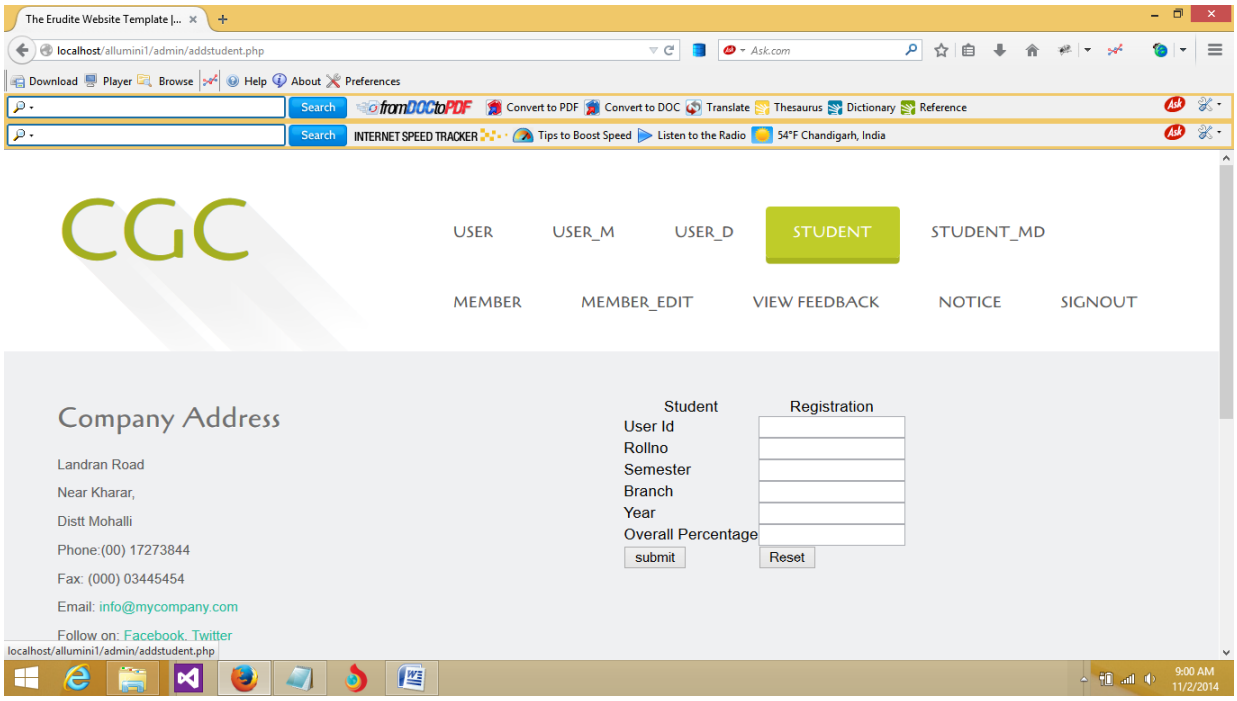

Figure 3.23 Student Registration

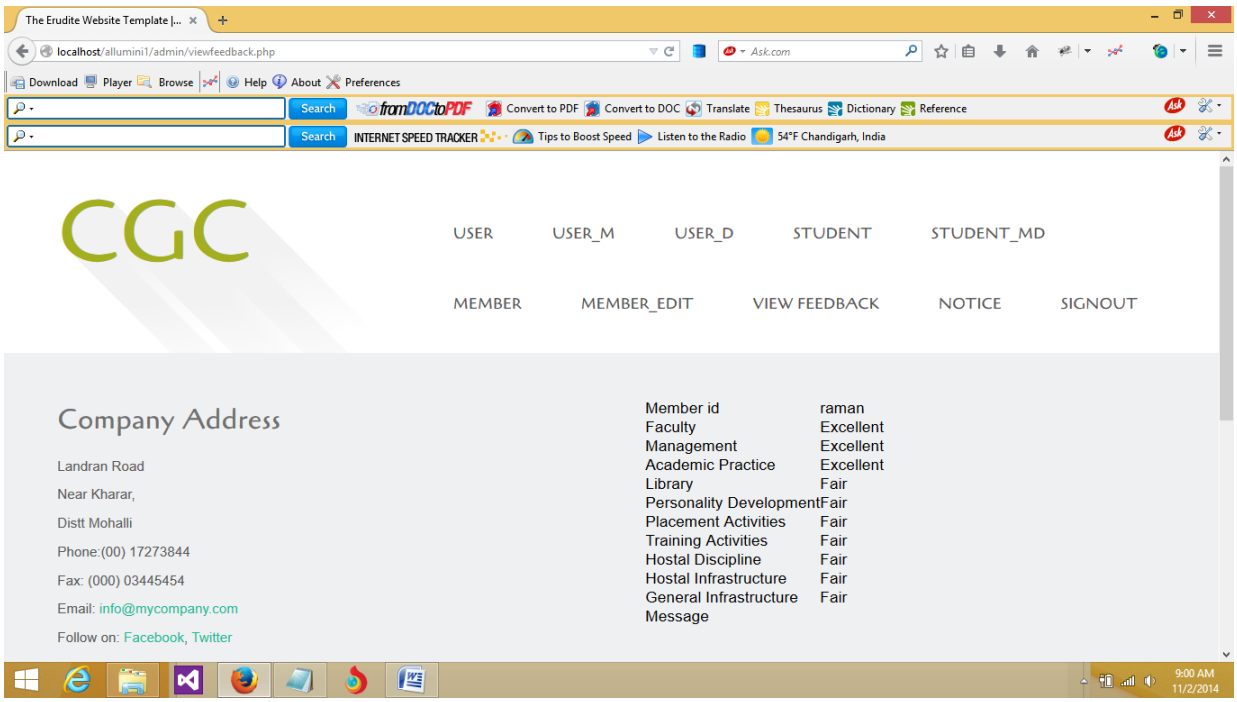

Figure 3.24 Student Feedback

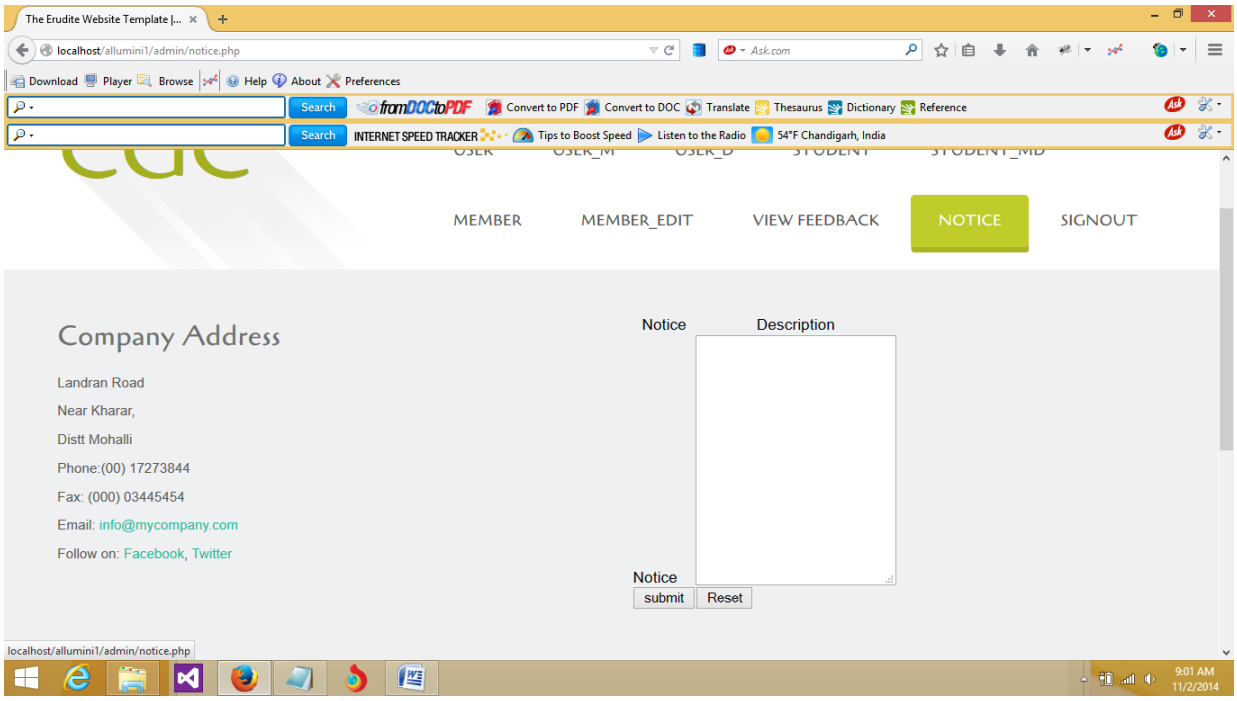

Figure 3.25 Notices

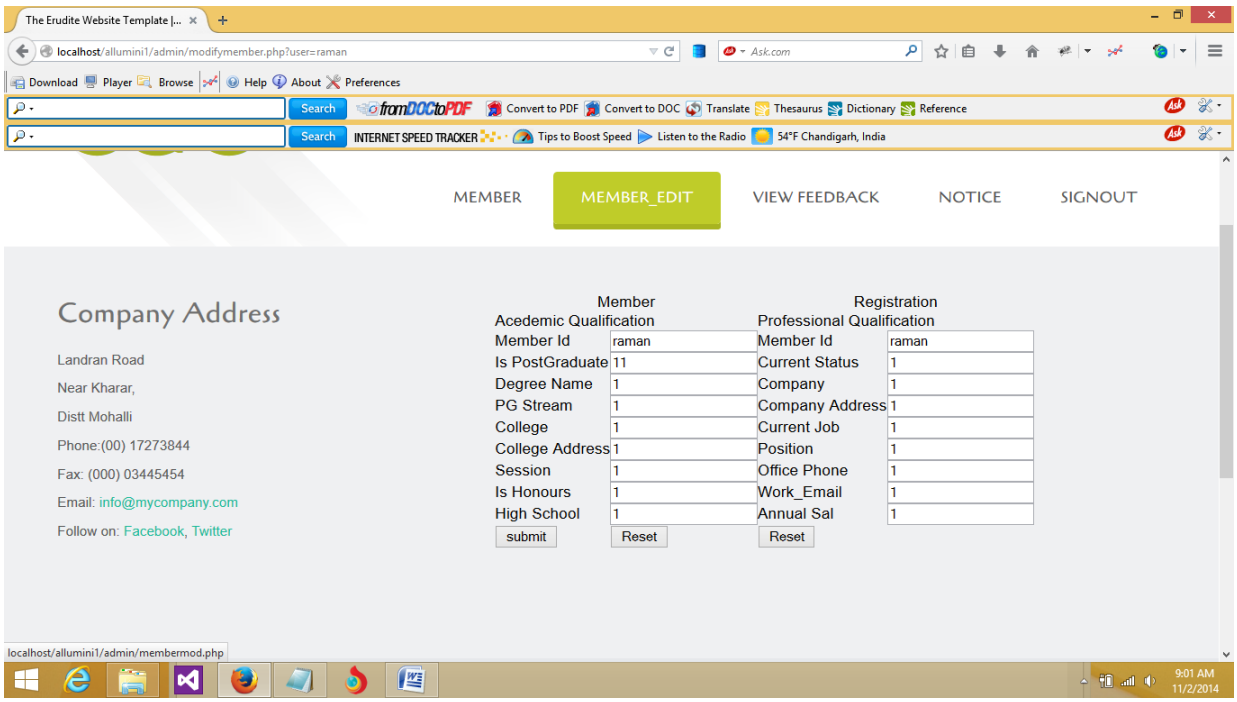

Figure 3.26 Member Edit

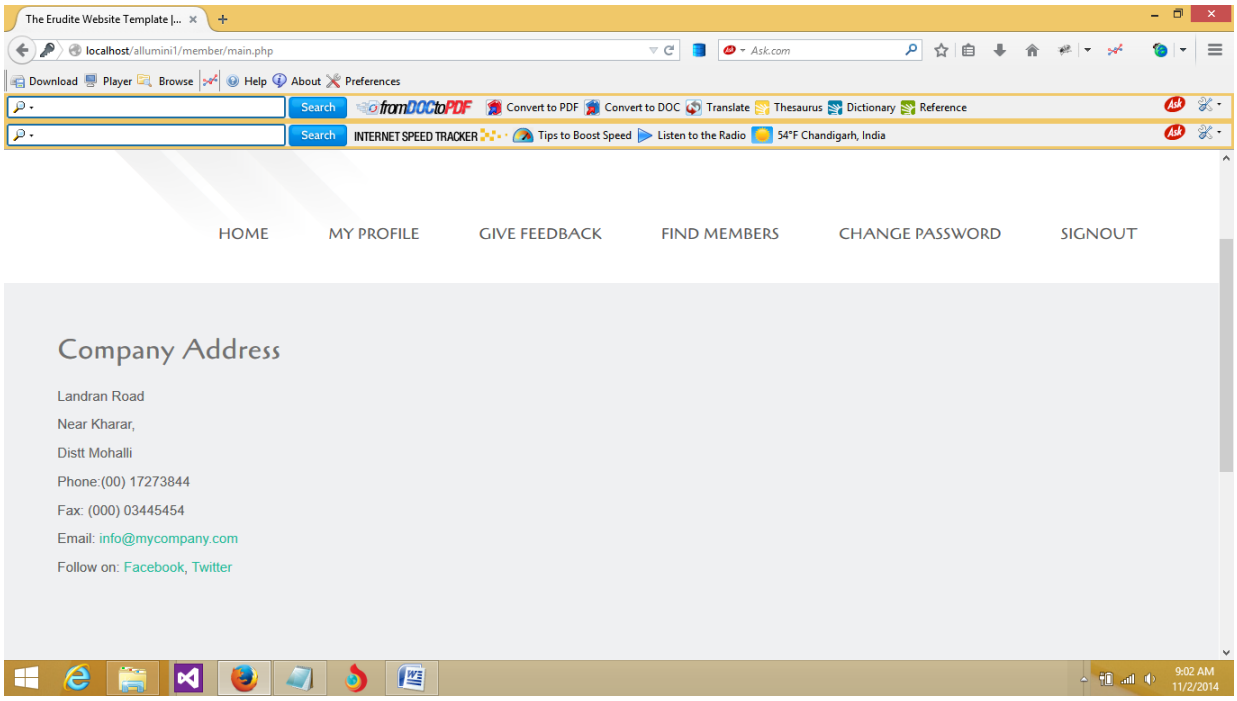

Figure 3.27 Member Section

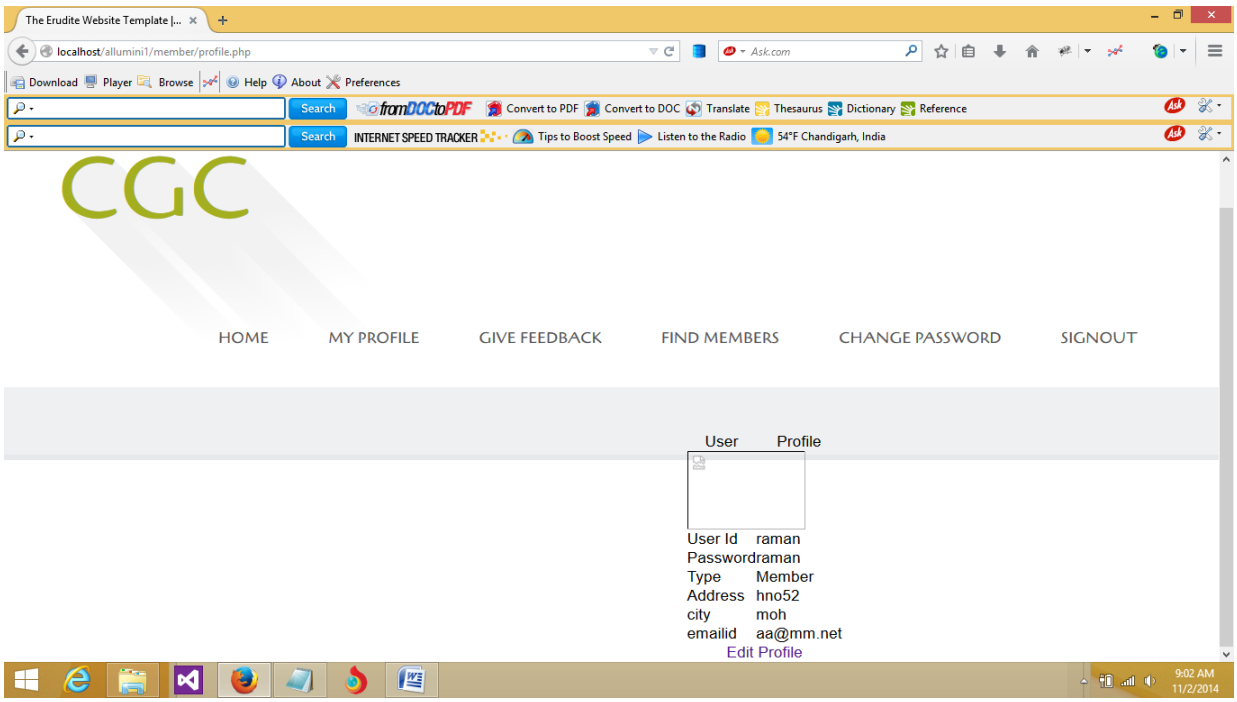

Figure 3.28 My Profile

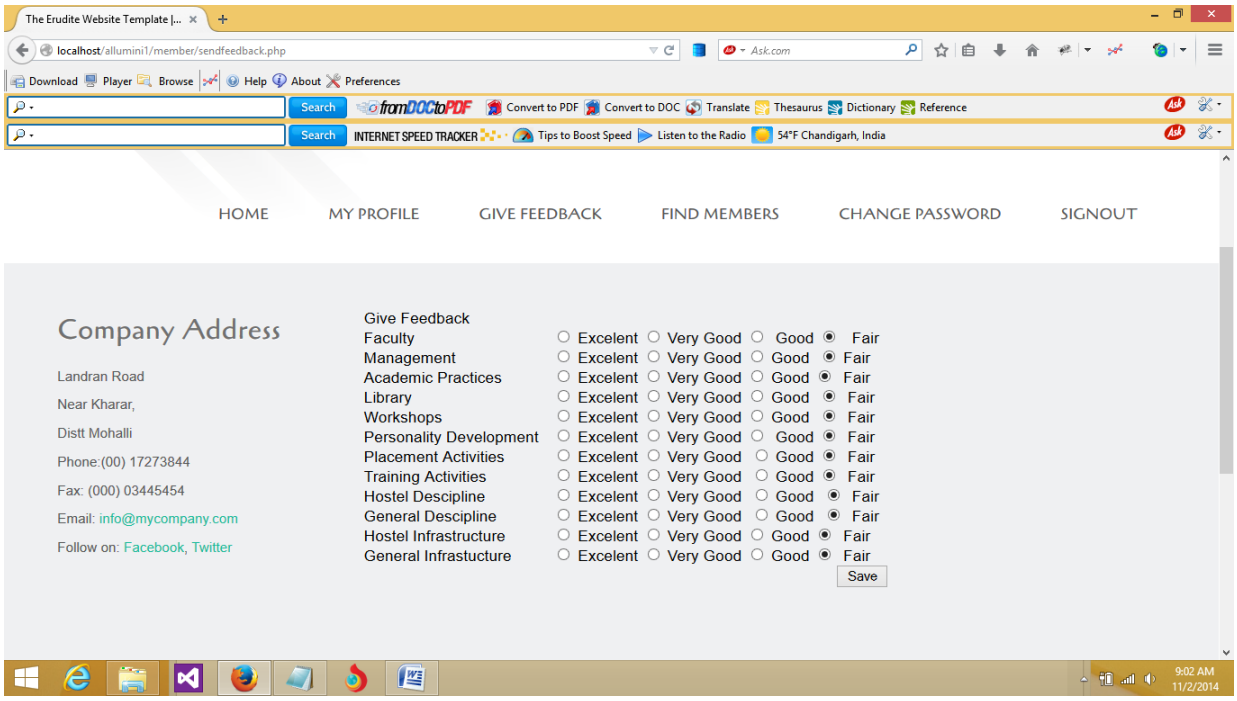

Figure 3.29 Give Feedback

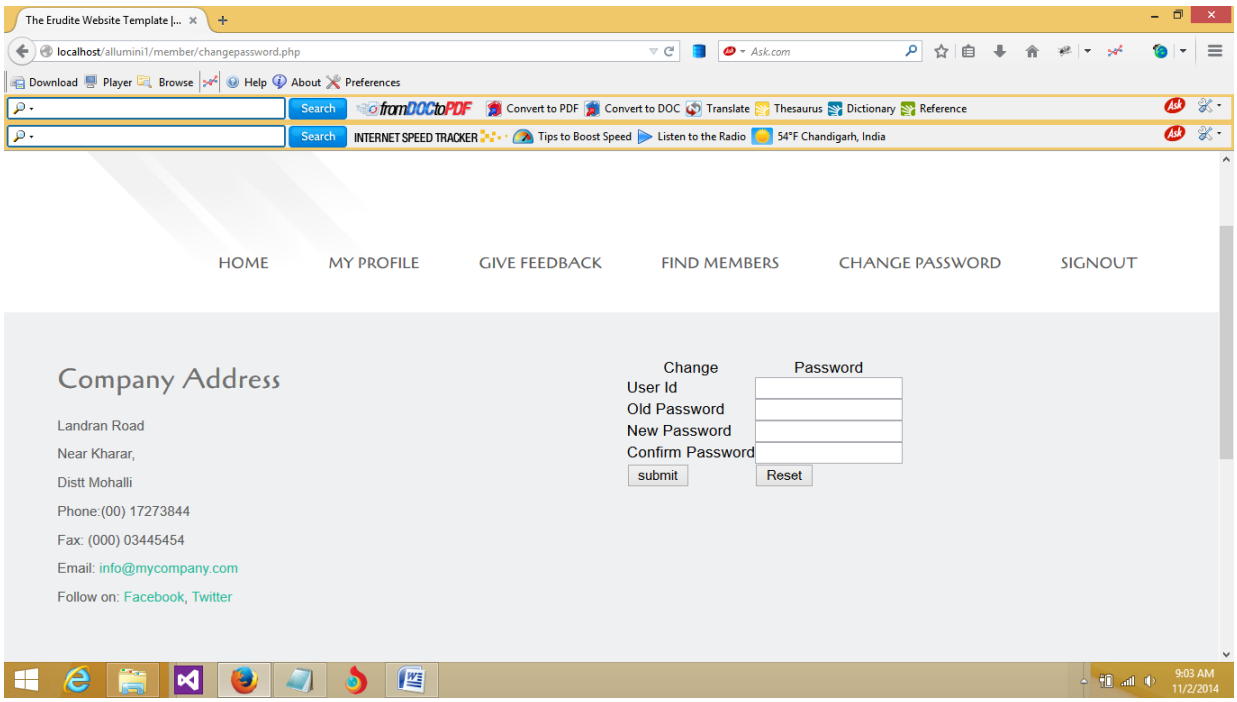

Figure 3.30 Change Password

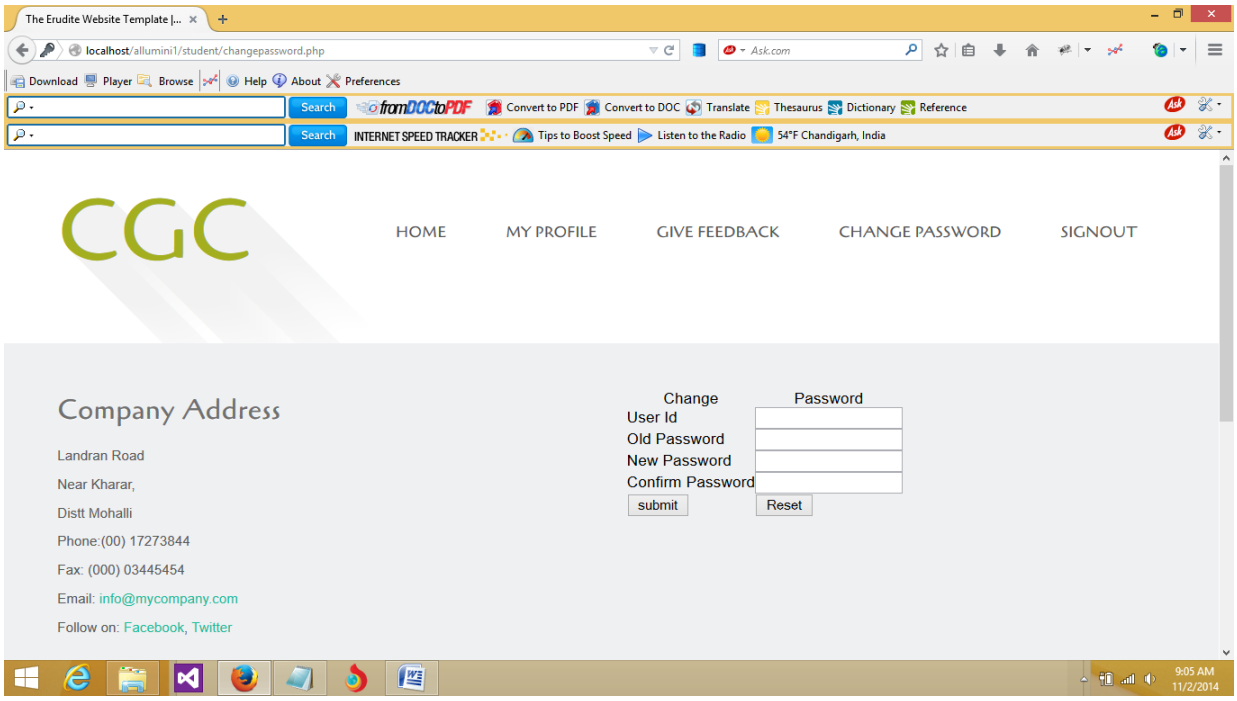

Figure 3.31 Student Section

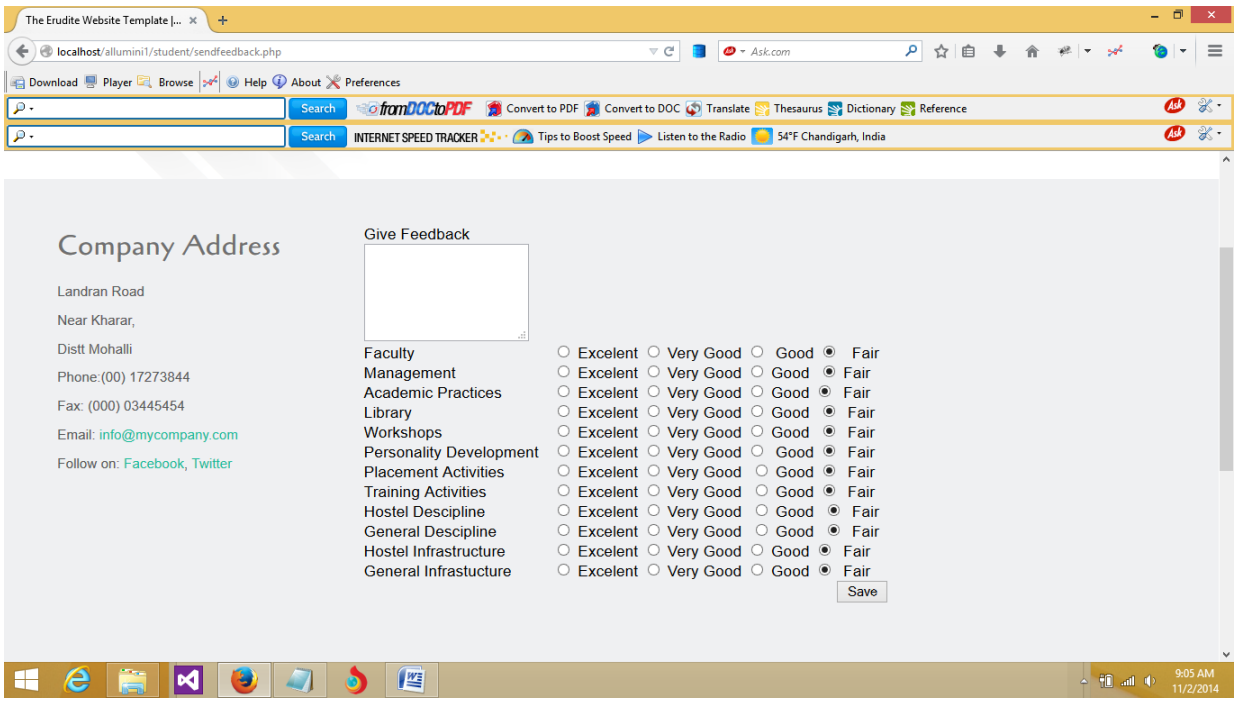

Figure 3.32 Give Feedback

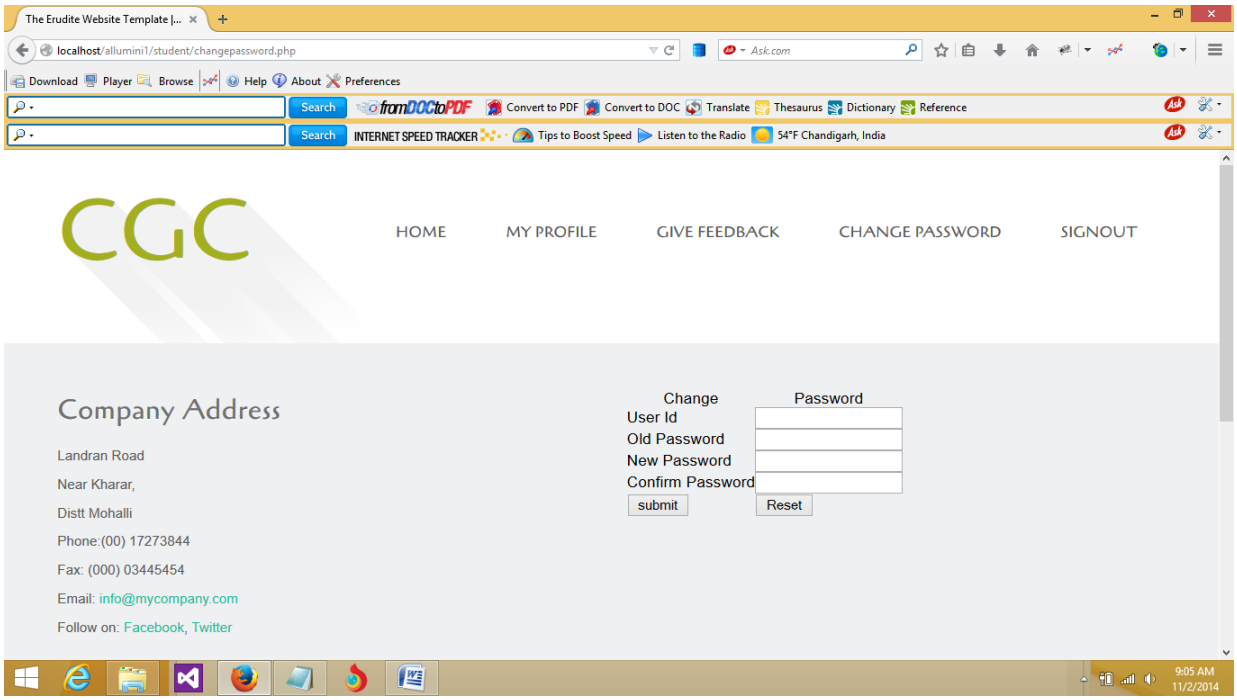

Figure 3.33 Change Password

3.3 Performance and Usability Discussion

The portal performed efficiently in the local development environment without any significant lag or delay in data processing.

Validation checks on form inputs helped avoid incorrect data submissions.

Basic error handling for empty fields and incorrect credentials ensured better security.

The design was kept responsive using Bootstrap to ensure compatibility across devices.

The implementation met the objectives laid out at the beginning of the training and offers a scalable foundation for future improvements.

3.4 Challenges Faced and Resolutions

Table 3.1 Challenges and Resolutions

Challenge	Resolution
Connecting PHP to MySQL and displaying dynamic data	Solved through repeated practice with SQL queries and using mysqli_fetch_assoc()
Handling user session securely	Used session_start()
Page layout breaking on mobile	Resolved by using Bootstrap grid system and media queries
Data not storing in database initially	Fixed by debugging form action and name attributes and checking query syntax

These challenges provided a great learning experience and helped in strengthening debugging and problem-solving skills.

CHAPTER 4

CONCLUSION AND FUTURE SCOPE

4.1 Conclusion

The one-month industrial training at OOPsInfoSolutions, Chandigarh, proved to be a highly valuable learning experience. During the training, I gained practical exposure to full-stack web development with a focus on PHP and MySQL. As part of the training, I successfully designed and developed an Alumni Management Portal that allows educational institutions to manage their alumni data efficiently and maintain effective communication.

The training helped bridge the gap between theoretical knowledge and practical implementation. I learned to create and connect frontend and backend components, manage a relational database, and ensure secure data handling. All key features planned at the beginning of the training—such as user registration, admin login, data management, and event posting—were successfully implemented and tested.

Overall, this training strengthened my foundation in web development and enhanced my confidence in building real-world applications.

4.2 Future Scope

While the current version of the Alumni Management Portal is functional and meets basic requirements, there is considerable scope for enhancement:

Email Notifications: Automated emails to alumni for event updates and announcements.

Search and Filter Options: Allowing admin to search and filter alumni based on batch, department, or location.

Password Reset Mechanism: Enabling users to recover or reset their login credentials.

User Profile Pictures: Adding file upload functionality for profile images.

Responsive Charts and Statistics: Visual representation of alumni data for better analysis.

Mobile App Integration: Developing a companion mobile application using React Native or Flutter.

Security Enhancements: Use of prepared statements and hashing algorithms for stronger data protection.

With these improvements, the portal can evolve into a complete alumni relationship management system suitable for deployment in real-time institutional settings.

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APPENDIX

A.1 Sample Code – Database Connection (db_connect.php)

```
<?php
$host = "localhost";
$user = "root";
$password = "";
$database = "alumni_portal";

$conn = mysqli_connect($host, $user, $password, $database);

if (!$conn) {
   die("Connection failed: " . mysqli_connect_error());
}
?>
```

A.2 Sample Code – Alumni Registration Form (HTML + PHP)

```
<!-- registration.html -->
<form action="register.php" method="POST">
  Name: <input type="text" name="name"><br>
  Email: <input type="email" name="email"><br>
  Graduation Year: <input type="text" name="year"><br>
  <input type="submit" value="Register">
</form>
```

```
// register.php
include 'db_connect.php';

$name = $_POST['name'];
$email = $_POST['email'];
$year = $_POST['year'];

$sql = "INSERT INTO alumni (name, email, year) VALUES ('$name', '$email', '$year')";
if (mysqli_query($conn, $sql)) {
   echo "Registration successful.";
} else {
   echo "Error: " . mysqli_error($conn);
}
```