PROJECT REPORT

ON

ALUMNI TRACKING SYSTEM

Submitted to Punjabi University, Patiala

In fulfillment of the requirement for the degree of

Master of Computer Applications

MCA 3rd SEMESTER SESSION (2020-21)

SUBMITTED TO **SUBMITTED BY**

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CERTIFICATE

This is to certify that this project “ALUMNI TRACKING SYSTEM” submitted to Punjabi University Patiala in fulfillment of the requirements for the degree of Master of Computer Applications is carried out by LOVEDEEP KAUR under my guidance and supervision and no part of this work has been submitted for any other degree. The assistance and help received during the course of work has been fully acknowledged.

PROJECT GUIDE

Dr. Gurpreet Singh Josan

ACKNOWLEDGEMENT

The author would like to take this opportunity to express gratitude to all those people without whom this project could have never been completed. First and foremost author would like to express deep sense of thanks and gratitude to his mentor, teacher and guide DR. GURPREET SINGH JOSAN, his dedication and keen interest above all his overwhelming attitude to help his students had been solely and mainly responsible for completing this work.

The author thanks profusely to other faculty members of computer science department of Punjabi University Patiala for their intellectual support throughout the project.

Last but not the least author would like to thank his parents for their inexhaustible source of inspiration.

Lovedeep Kaur

25/12/2020

ABSTRACT

This project is aimed at developing a repository and each engine for alumni of the Punjabi university, which is of importance to a university. The alumni tracking is web based application that can accessed throughout the world.

This system can be used as an application for alumni information database to manage the department information and student information .Student logging should be able to upload the information of the employee.

The project is envisaged to be completed in two phases. The initial phase will be the creation of a simple system that will be used to capture data from current final year students before the end of term. The second phase of development will extend the functionality of the system to allow past alumni to register.

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INTRODUCTION

1.1 Purpose

This system can be used as an application for the Alumni Information Database to manage the Department information and student's information. The system is an online application that can be accessed throughout the organization.

1.2 Intended Audience:

1.2.1 Administrator Module: The administrator is responsible for maintaining information of students. When a student submits the personal information form, administrator will complete the verification process and, if successful, the student details are added into the database. The administrator maintains the passwords of himself.

SUB MODULES

- Add course details
- Update course details
- Delete course details
- Delete student details

1.2.2 Alumni & Student Module: The Alumni/Students can register themselves and after the approval from the administrator, they can logon into their account and can update their profiles.

SUB MODULES

- Add personal details
- Update information personal details

1.3 Product Scope:

This system can be used as the Office of Alumni and Department Relations seeks to protect the privacy of its alumni and friends, and thus, endeavors to safeguard the use of information in its custody. To that end, the Office of Department Relations provides constituent information to requestors only under the conditions.

1.4 Project Features

1.4.1 CROSS PLATFORM SUPPORT:

Offers operating support for most of the known and commercial operating systems. Ex Linux, windows 7,8,10 etc.

1.4.2 INTERACTIVE:

Provides easy interactive interface.

1.4.3 EASY:

Simple to understand.

1.5 Feasibility

1.5.1 TECHNICAL FEASIBILITY:

During this study, it was found that the organization has enough resources to implement the new system. There already exists a computer system with suitable hardware and software in the concerned organization. Technical feasibility includes two main aspects:

1.5.1.1 Hardware feasibility

To implement this project we need different types of hardware configuration for server and client.

1.5.1.2 Software feasibility

This system is developed using PHP and Oracle. All the resources used for the development of the project are available. The system can be expanded as required in future and modified with the change of acts and rules. Accuracy, reliability, ease of access and security of the system is maximum. The tools to be used are highly reliable, updated and efficient. Thus the proposed system is technically feasible.

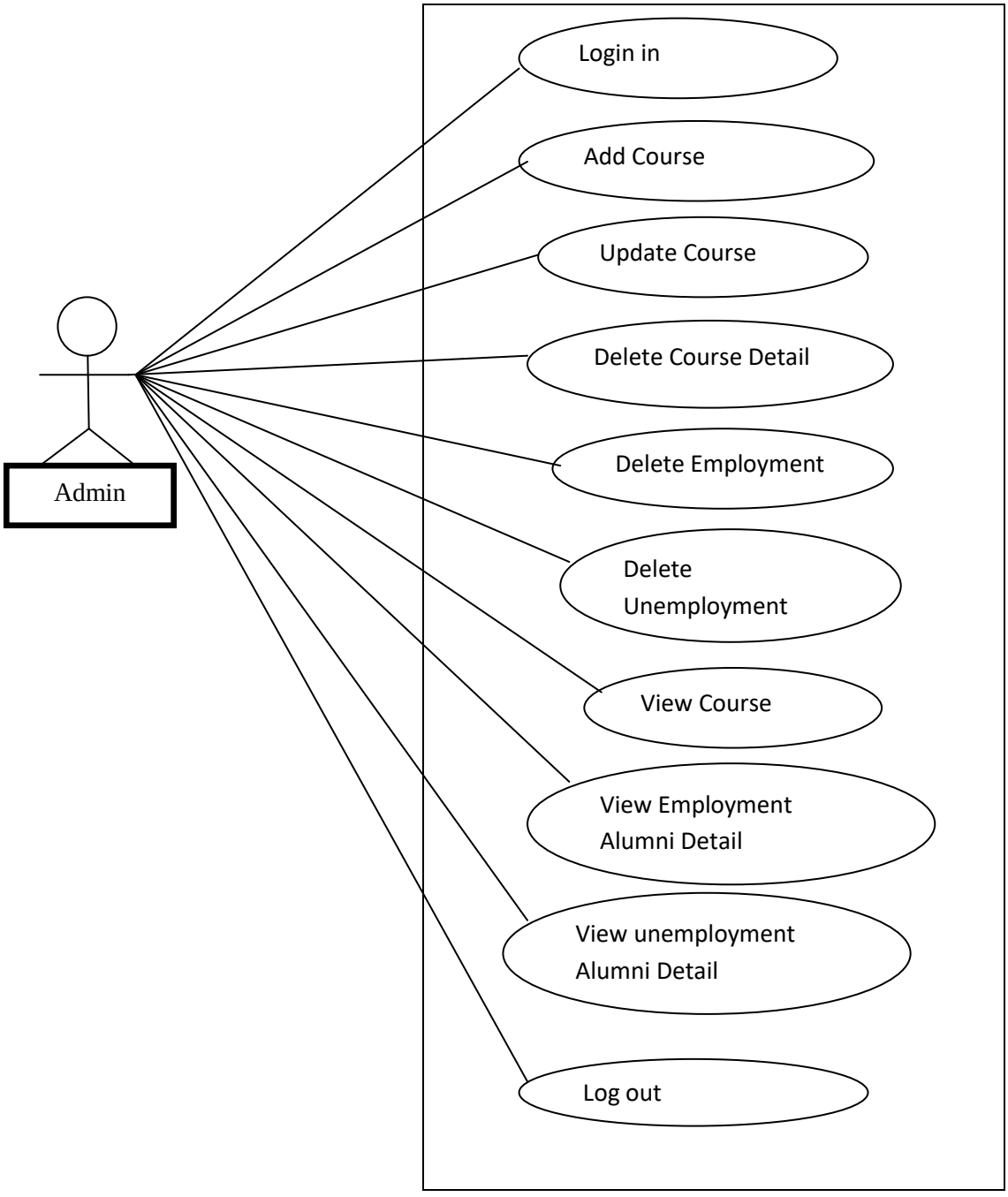
1.5.2 Economical Feasibility

Economical feasibility is the most important study that determines the cost and benefits of the proposed system and compares with the budget. The cost of the new system does not outweigh the budget. The cost of the project includes the cost of hardware, software, development and implementation. The cost of the project includes the cost of hardware, software, development and implementation. The new system also provides benefits that are expected from the proposed system and compare these with costs expected to spend on development of the system. Benefits are found to be more than costs, thus it is decided to develop new system. The new system provides both tangible and intangible benefits in a formal way. Thus the new system is economically feasible.

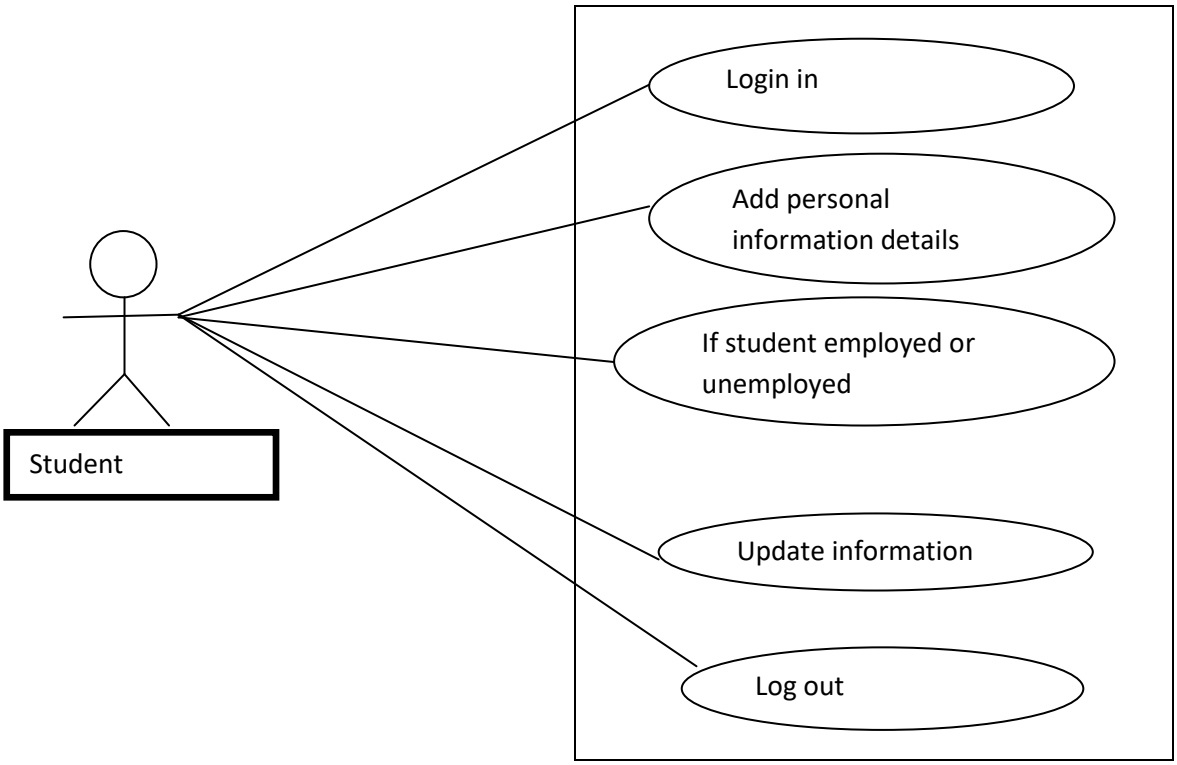
1.6 SYSTEM REQUIREMENTS

1.6.1 Functional requirement

Use case Diagram for Admin:



Use case diagram of Student:-



1.6.2 Non-functional requirements

1.6.2.1 User Interface Requirements

The user interface of the application must be user-friendly, intuitive and easy to use, implementing the ergonomics standards.

1.6.2.2 Performance Requirements

The system shall function in real-time: any operation on the stored information, triggered by the Alumni, shall complete in less than 10 seconds.

1.6.2.3 Availability & Reliability

The software system could provide automatically generated backup (on external hard drives) containing all the stored information at the time the backup is taken. The system shall allow authorized users to restore the data from an existing backup.

1.6.2.4 Security Requirements

In order to use certain features of the system, users must first authenticate themselves by name and password. The system shall not allow access if the user fails to provide correct log in information. The system should automatically perform log out if the user has been idle for a specific period .Physical access to the computer(s) storing the Alumni Database shall be restricted to authorized personnel.

1.7 Hardware / Software Requirements

1.7.1 Hardware Requirements

1.7.1.1 The Client Machines ---

Processor : Intel Pentium IV or more

Ram : 512MB

Cache : 512 KB

Hard disk : 80 GB

Speed : 2.2 GHz

Keyboard : Standard

1.7.1.2 The Server Machines –

Processor **:** Intel Pentium IV or more

Ram **:** 512 MB or more

Cache **:** 512 KB

Hard disk **:** 80 GB

1.7.2 Software Requirements

This project was developed by using different types of software which have listed below:

Operating system : WINDOWS XP /WINDOWS10 or more

Front end : PHP and HTML

Back end : Oracle-18g

SELECTED SOFTWARE

FRONT END : PHP using HTML and CSS

DATABASE : Oracle-18g

SYSTEM DEVELOPMENT

2.1 Project Management: Gantt chart

Phases	Day 1-3	Day4-7	Day 8-10	Day 11-14	Day 15-19	Day 20-24	Day 25-28	Day 29-31
Planning								
Requirements Analysis								
Design								
Coding								
Testing								
Implementation								
Documentation								

2.2 System Analysis and design

2.2.1 General Operations:

Student

- ✓ User can Register to Alumni
- ✓ Students can login to the system
- ✓ Update the Profile

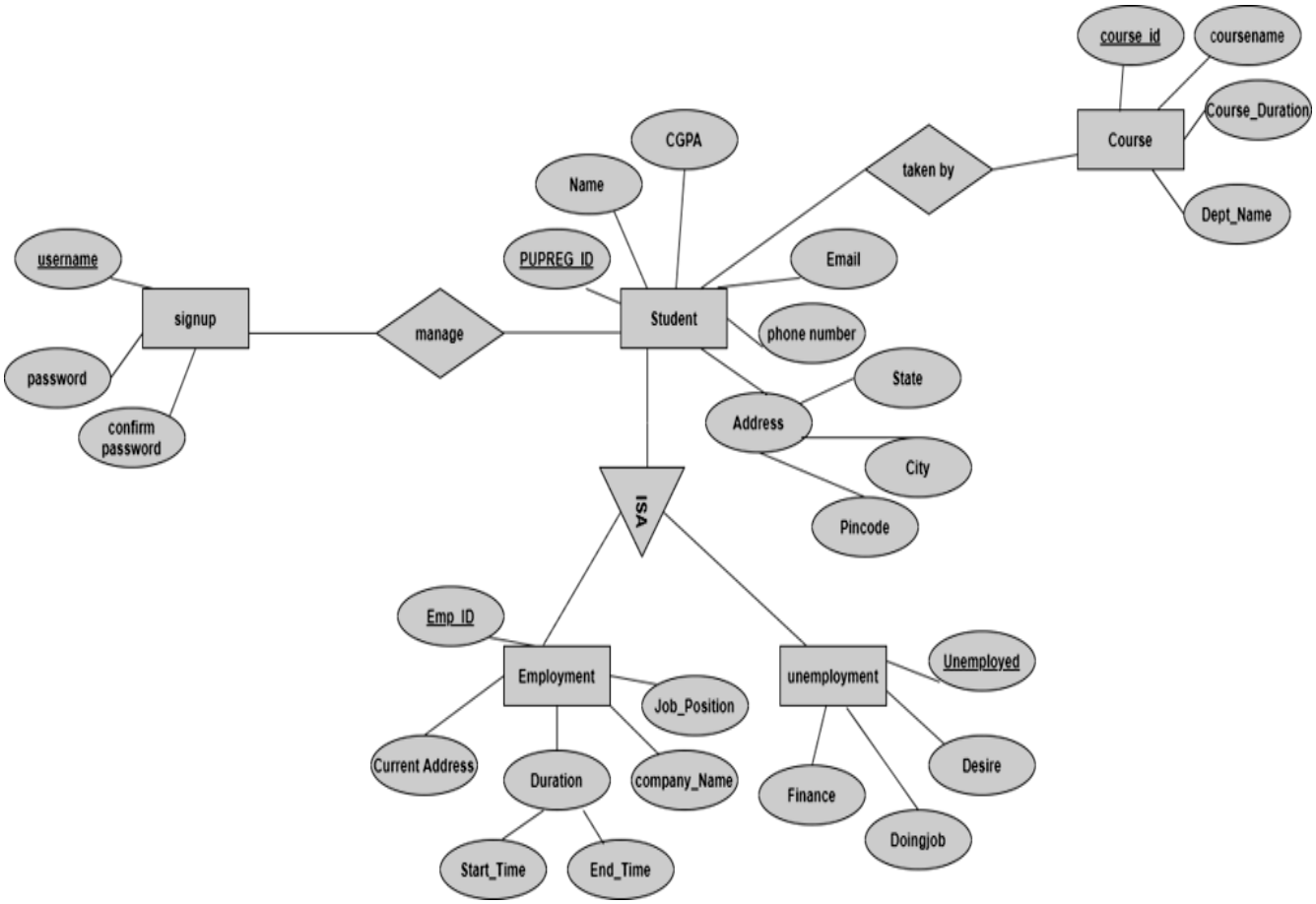
Admin users

- ✓ Has full access to all the modules of this system.
- ✓ Responsible for the accounts of all students.
- ✓ Update, modify or delete course details
- ✓ delete student employment or unemployment details

Normal users:

- ✓ Has restricted access. i.e., Normal users have access to some of the modules only

2.2.2 ER- Diagram



2.3 System Environment

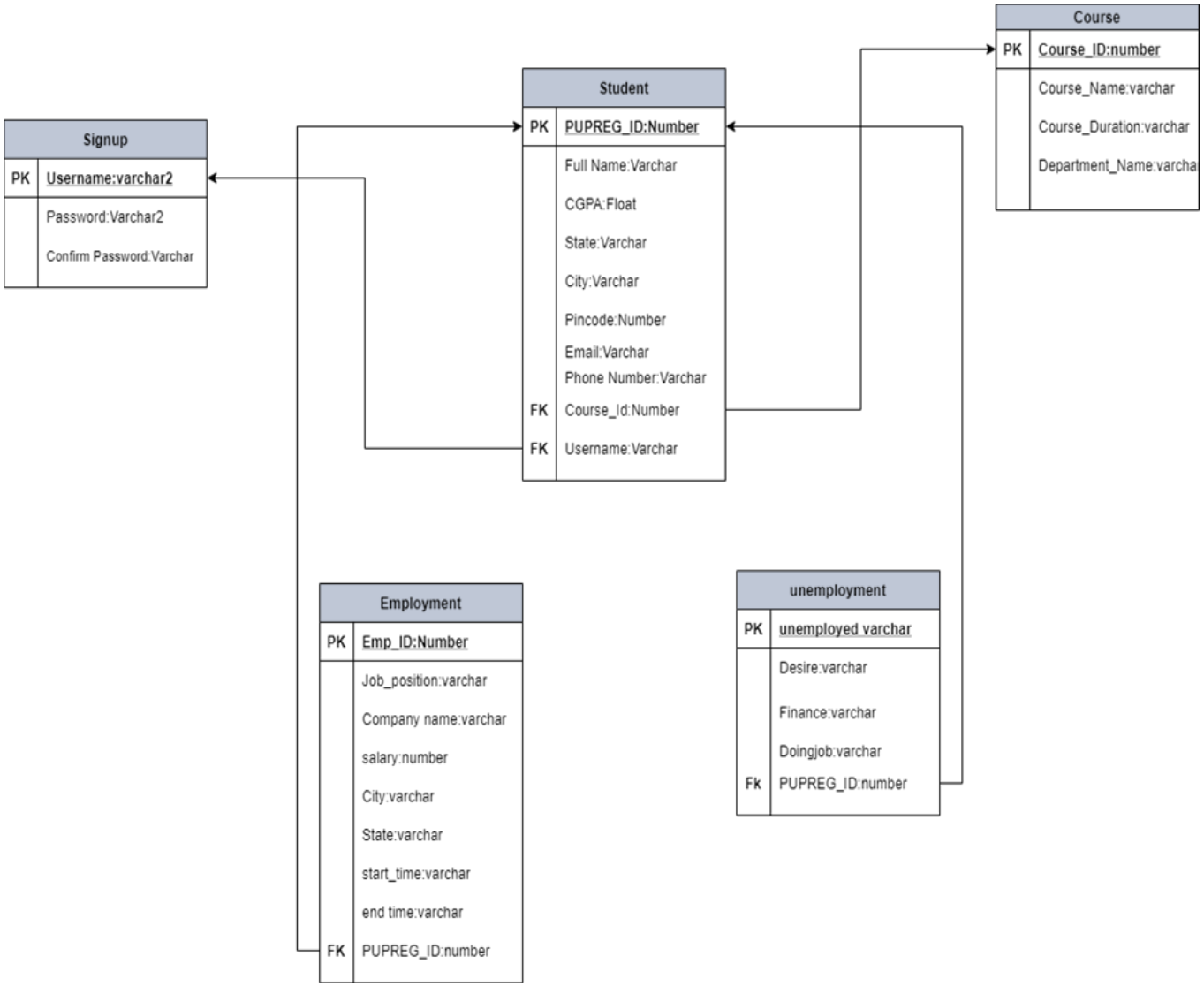
Front end : PHP and HTML respectively

IDE : Xampp

Database : Oracle

DESIGN AND IMPLEMENTATION

3.1 Classes and Variables Used



3.2 Database Design

Table1: Student detail

Column name	Data type	Size	Constraints
PUPREG_ID	Number	38	Primary Key
Alumni Name	Varchar2	20	Not null
CGPA	Float	126	Not null
City	Varchar2	30	Not null
State	Varchar2	20	Not null
Pin code	Number	38	Not null
Country	Varchar2	20	Not null
Email	Varchar2	20	Not null
Phone number	Varchar2	20	Not null

Table2: Course detail

Column Name	Data type	Size	Constraints
Course_Id	Number	38	Primary key
Course_Name	Varchar2	70	Not null
Course_Duration	Varchar2	30	Not null
Dept_name	Varchar2	20	Not null

Table3: Student Employment

Column name	Data type	size	Constraints
Emp_id	Number	38	Primary key
Job_Position	Varchar2	45	Not null
Company_Name	Varchar2	35	Not null
Salary	Number		Not null
Current_city	Varchar2	20	Not null
Current_state	Varchar2	20	Not null
Start_Time	Varchar2	20	Not null
End_Time	Varchar2	20	-

Table4: Student unemployment

Column name	Data type	Size	Constraints
Employed	Varchar2	80	Primary key
Doing job	Varchar2	5	Not null
Desire	Varchar2	20	Not null
Finance	Varchar2	20	Not null

Table5: Sign up detail

Column name	Data type	Size	Constraints
Username	Varchar2	10	Primary key
Password	Varchar2	8	Not null
Confirm Password	Varchar2	8	Not null

3.3 Snapshots of system:-

Home page:-

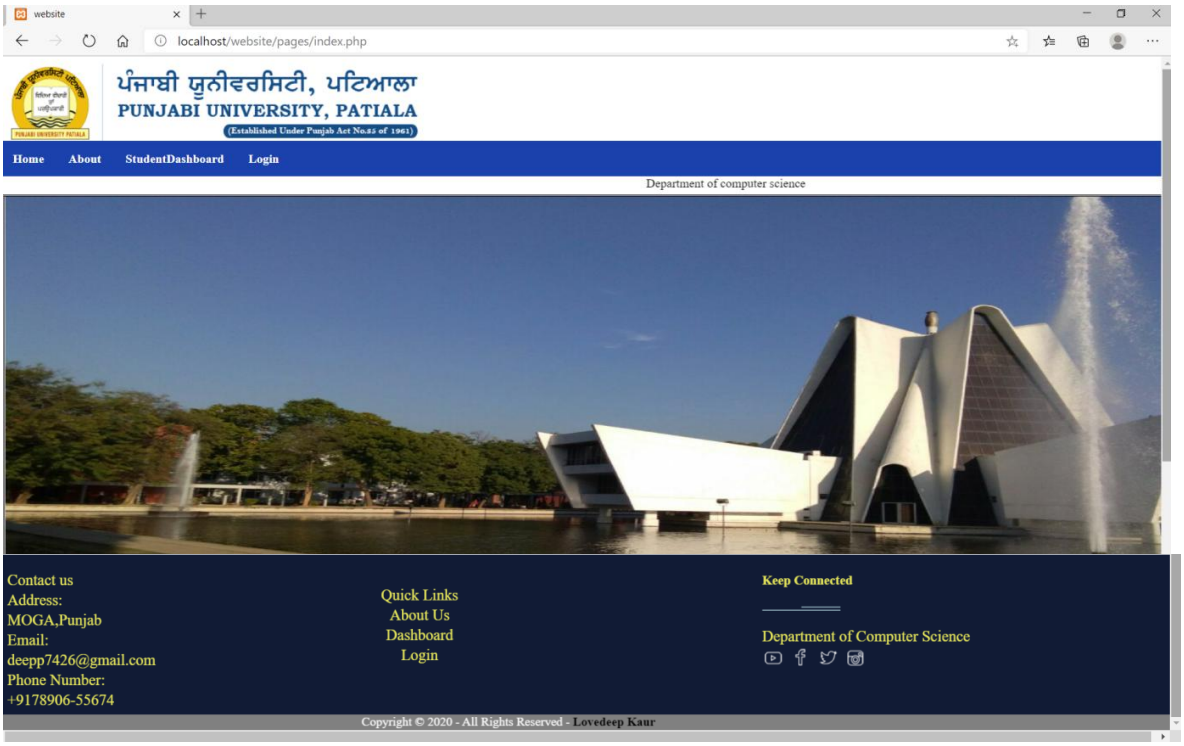


Fig: 1

About page:-

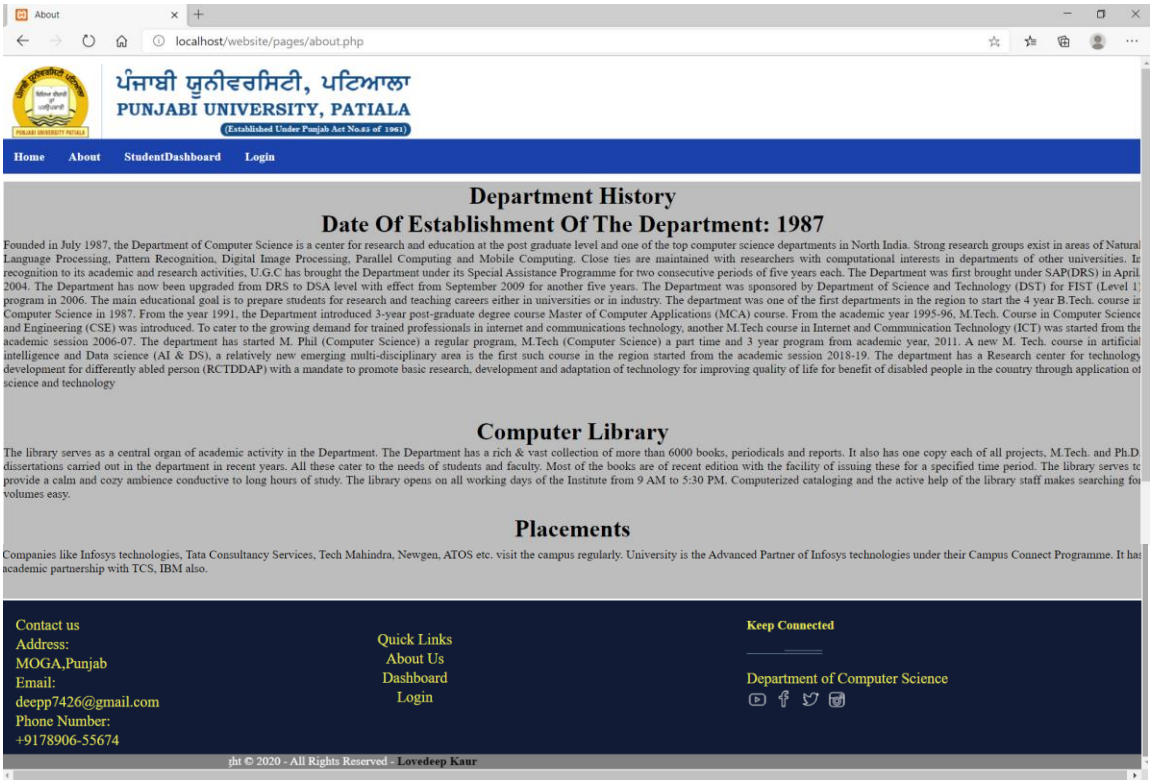


Fig: 2

Student Sign up:-

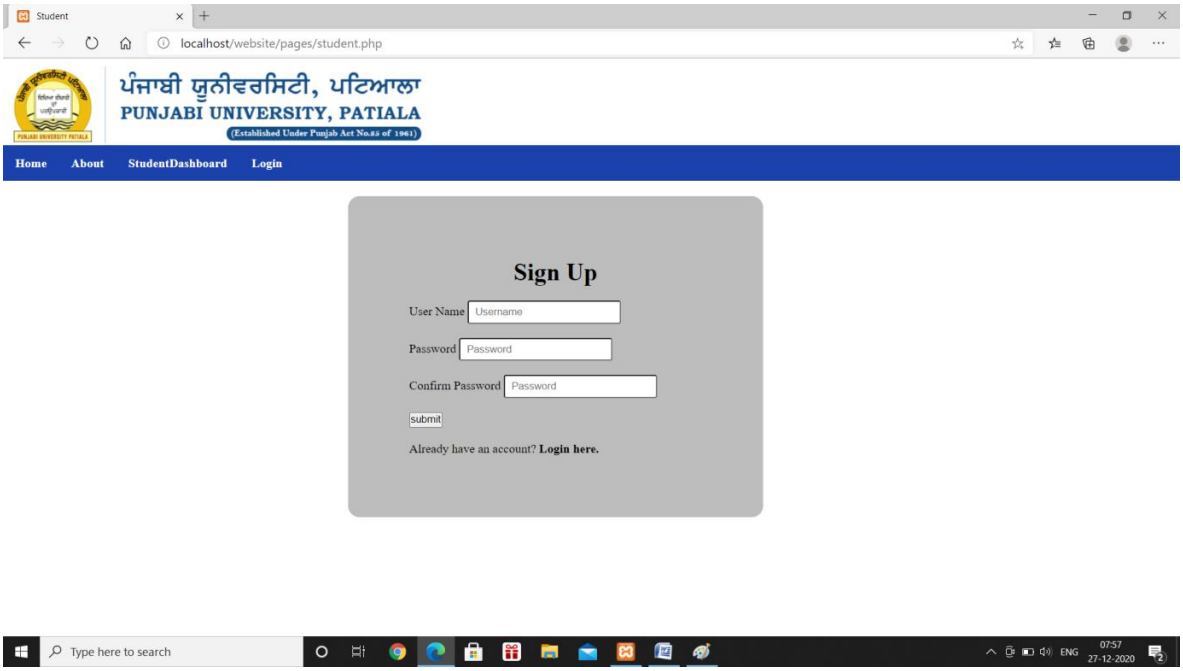


Fig: 3

Student Add personal information:-

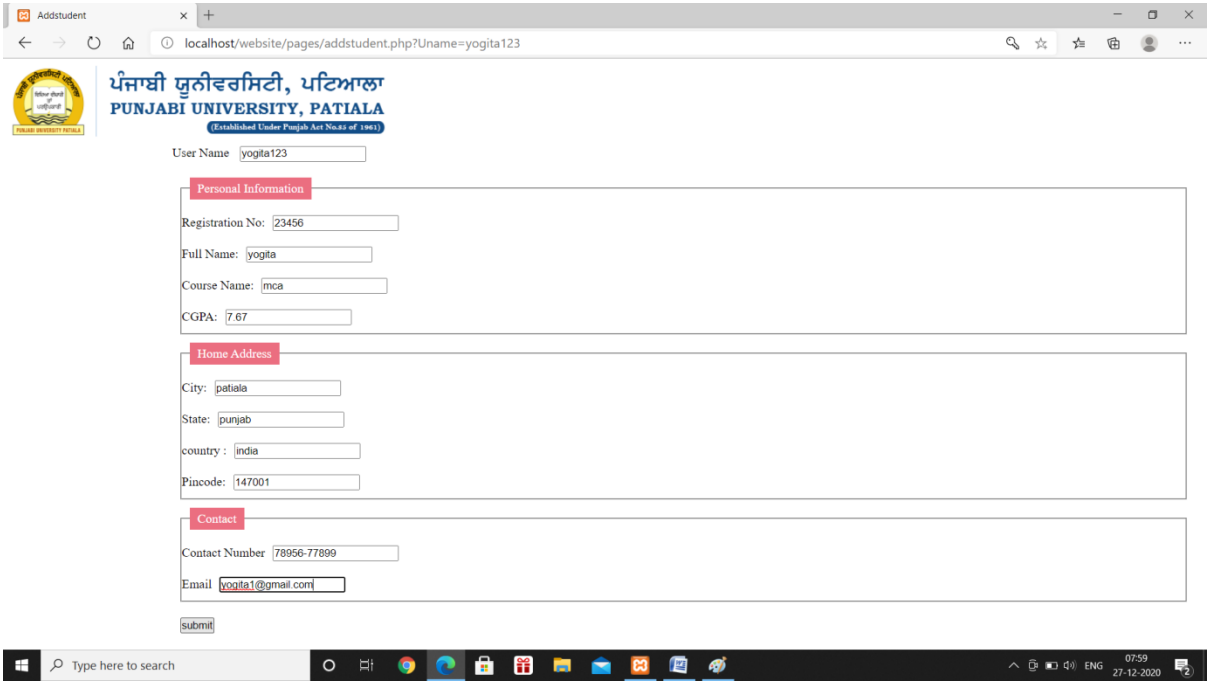


Fig: 4

If student employed or unemployed:-

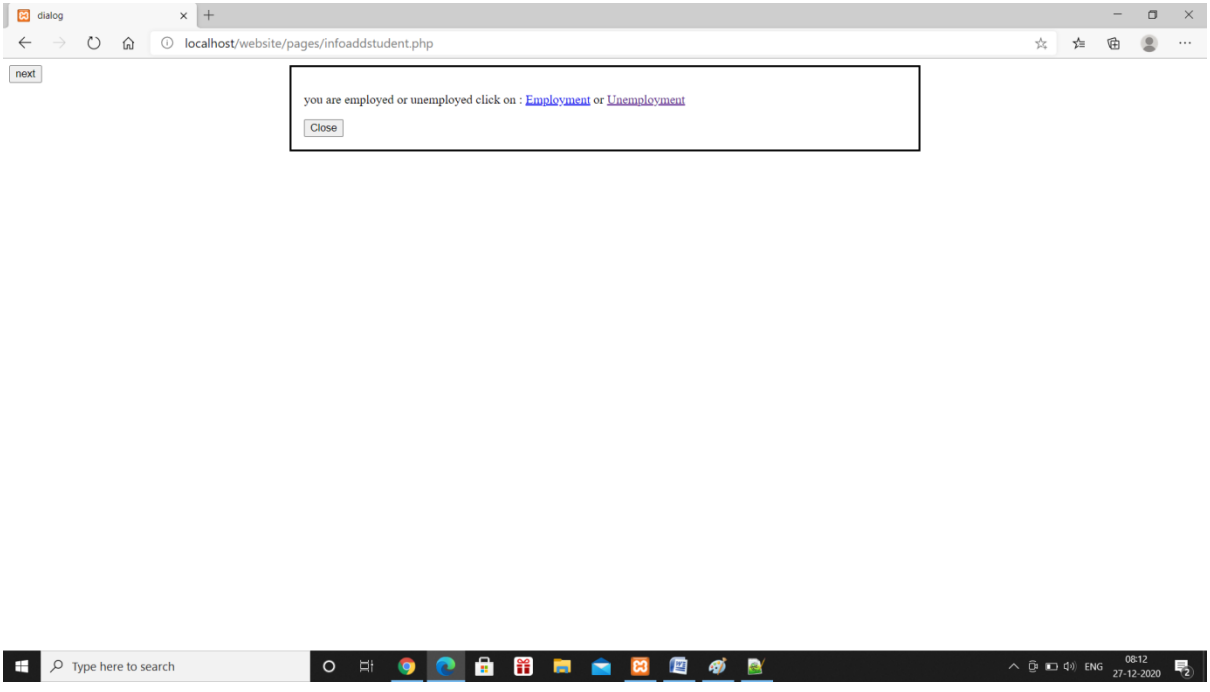


Fig: 5

Employment information:-

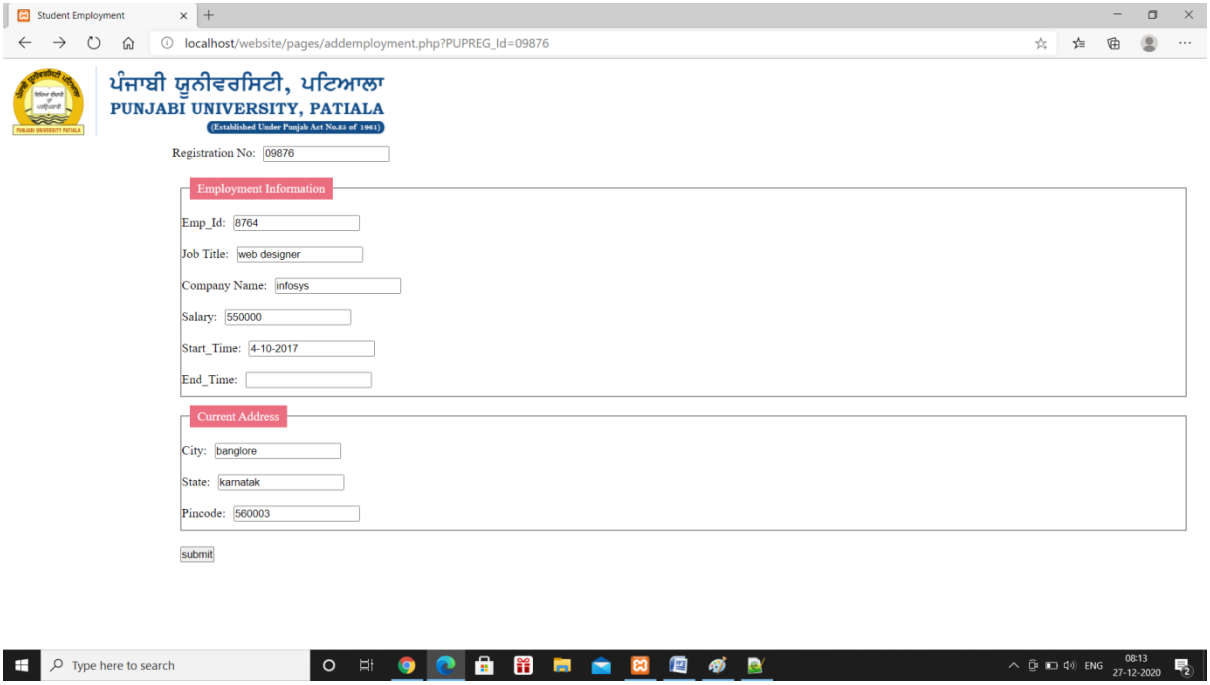


Fig: 6

Admin can only access this login page

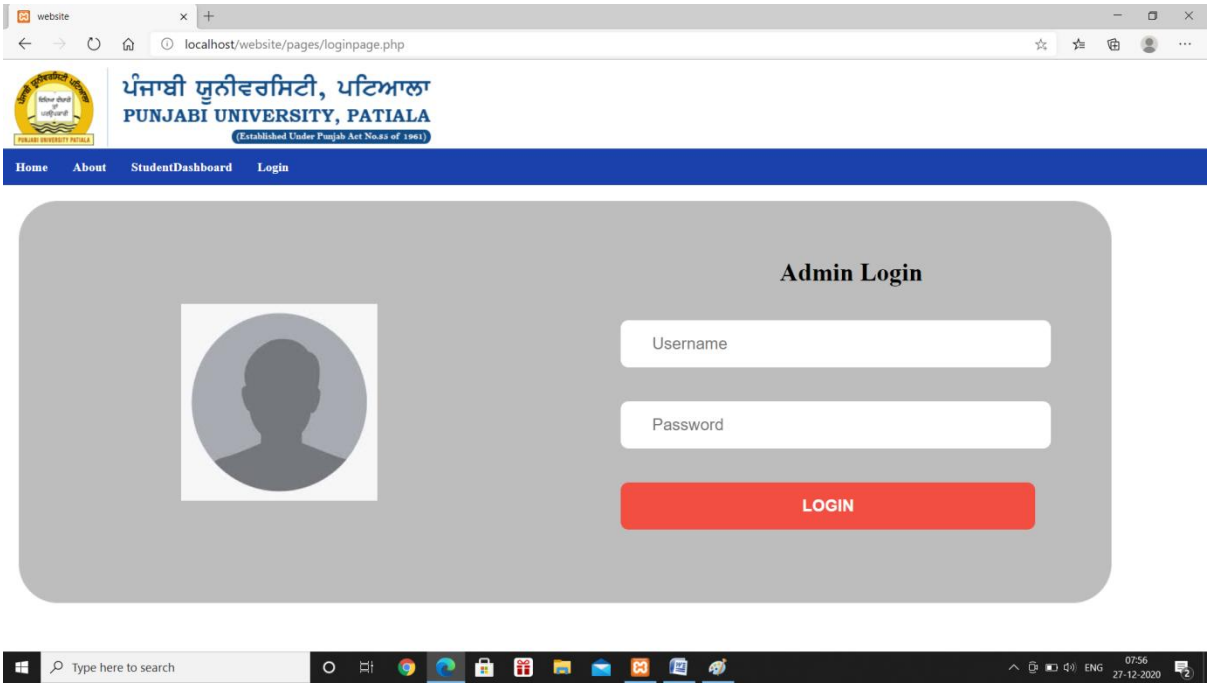


Fig: 7

Dashboard of Alumni information:-

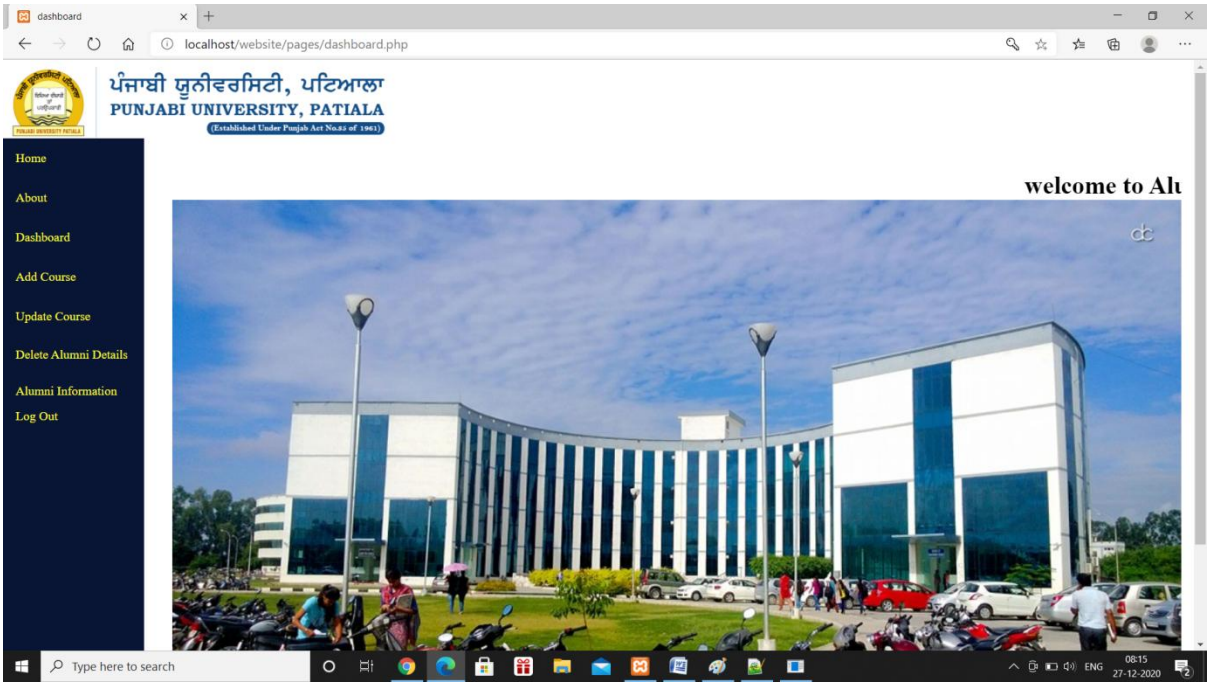


Fig: 8

Add course detail:-

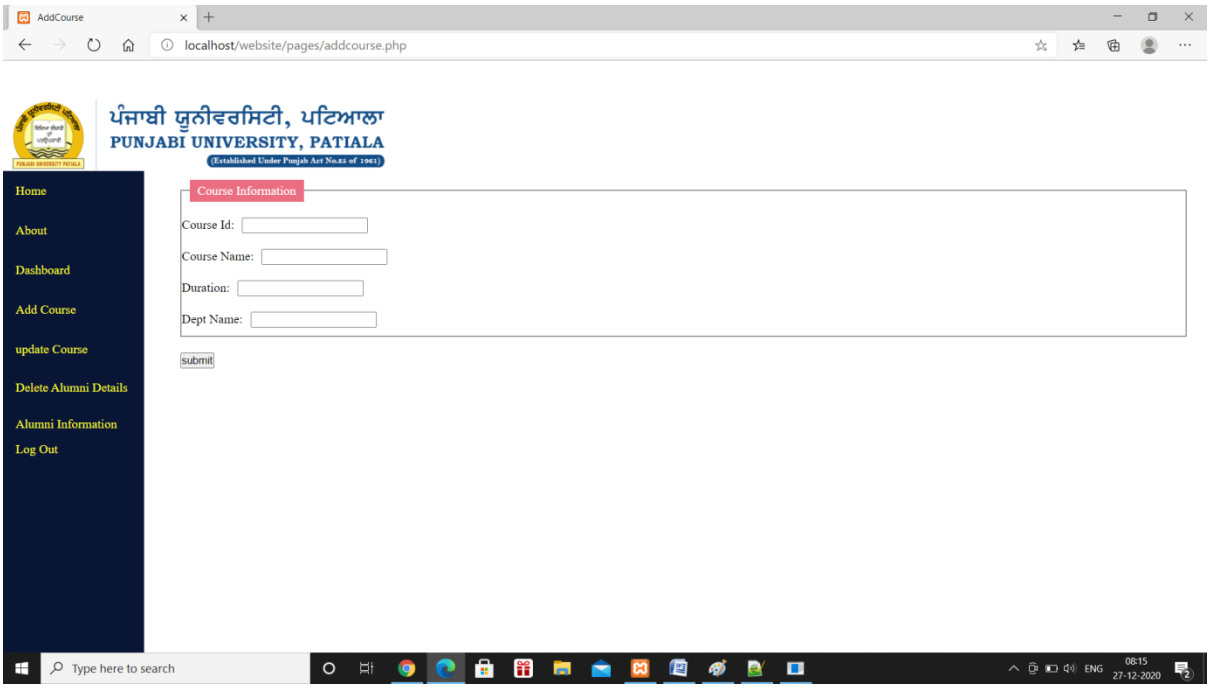


Fig: 9

Update course information:-

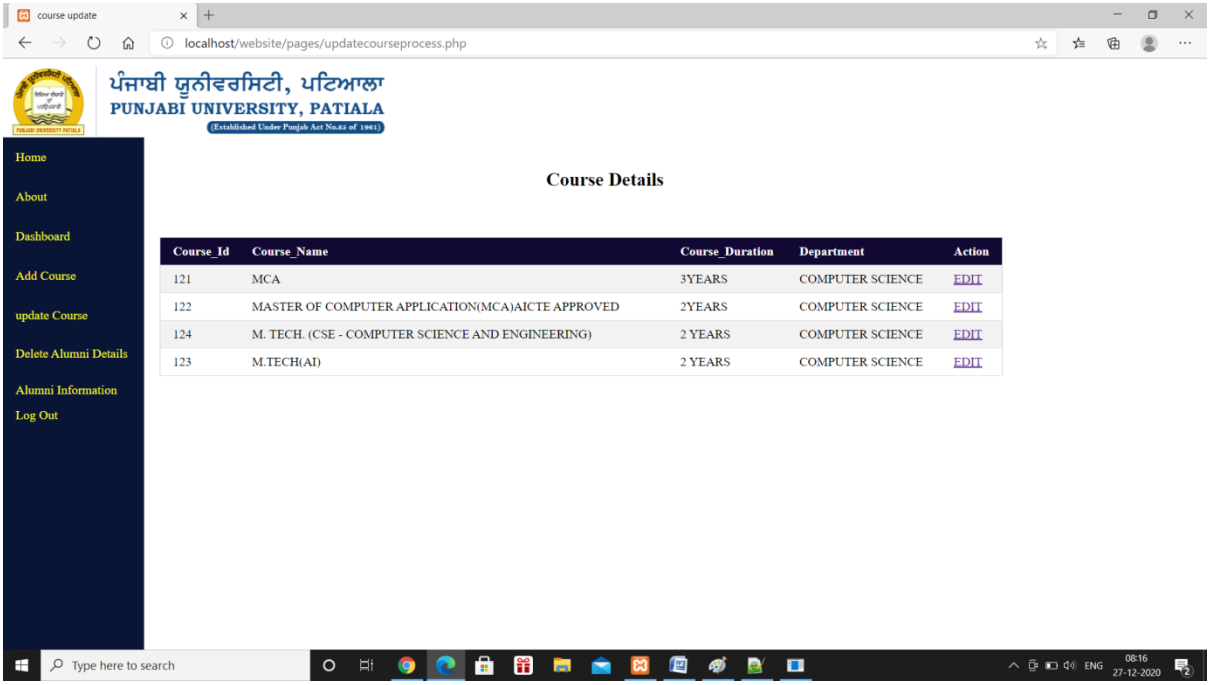


Fig: 10

Delete course details:-

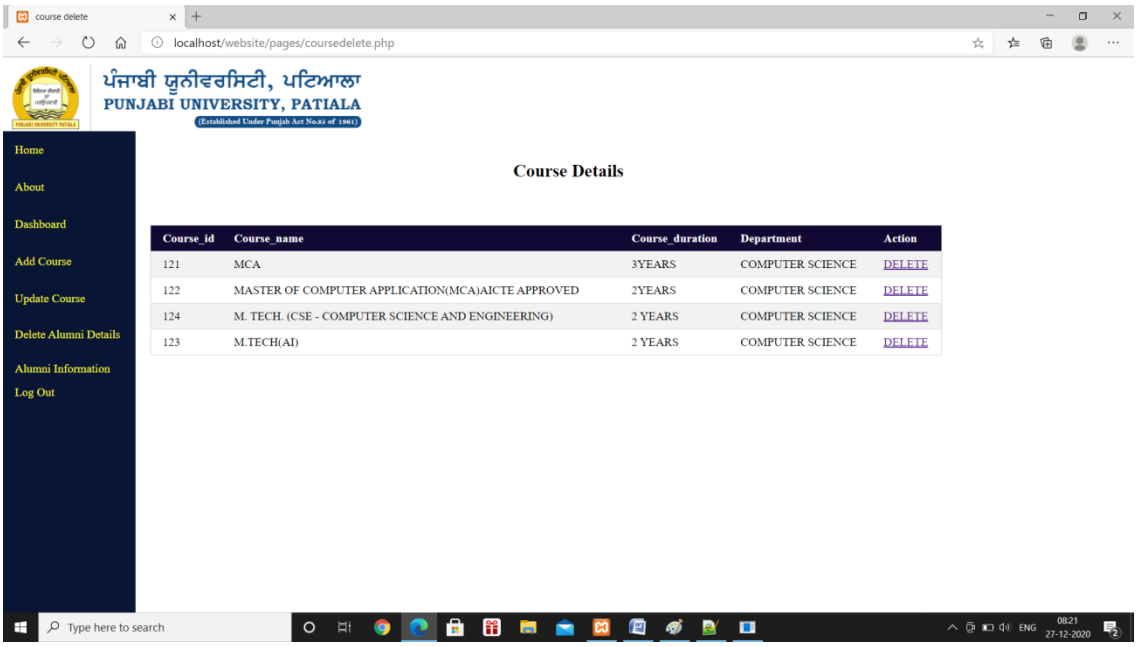


Fig: 11

Delete Employment Student:-

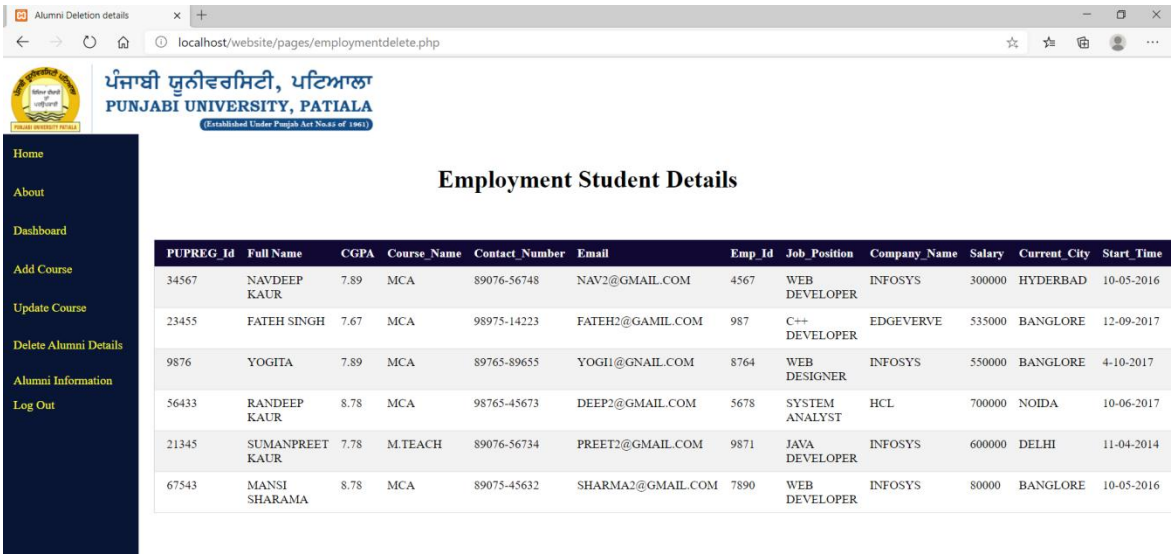


Fig: 12

Delete Unemployment Student:-

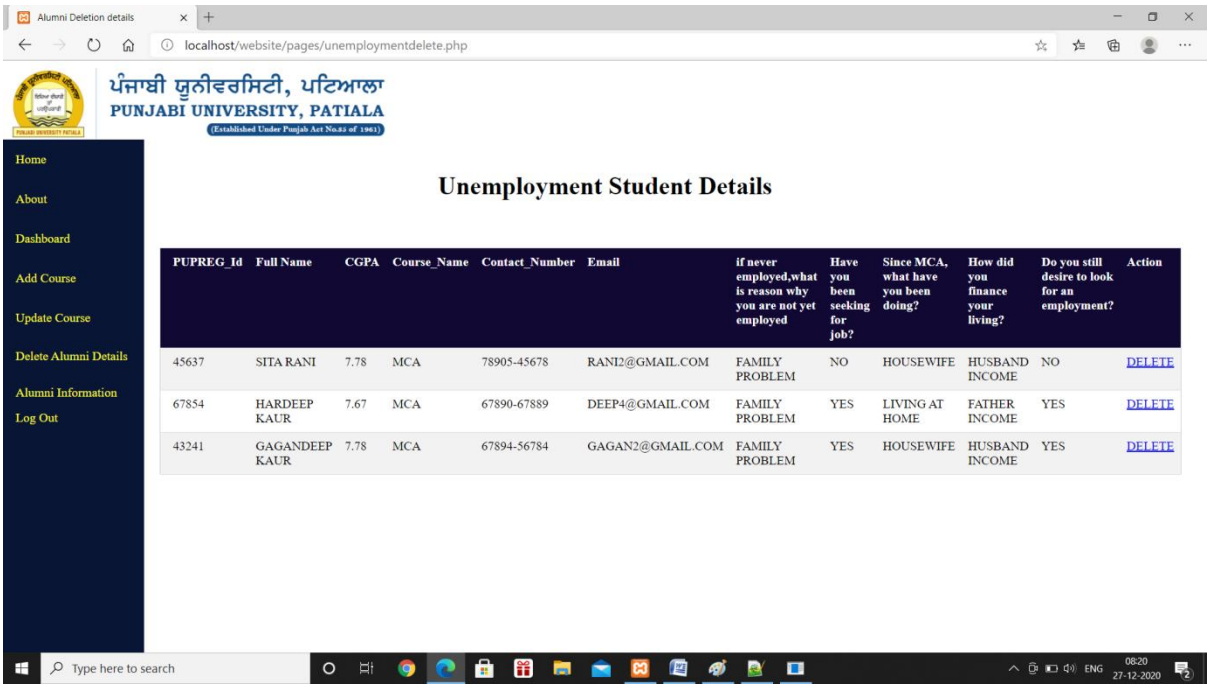


Fig: 13

View Unemployment Alumni:-

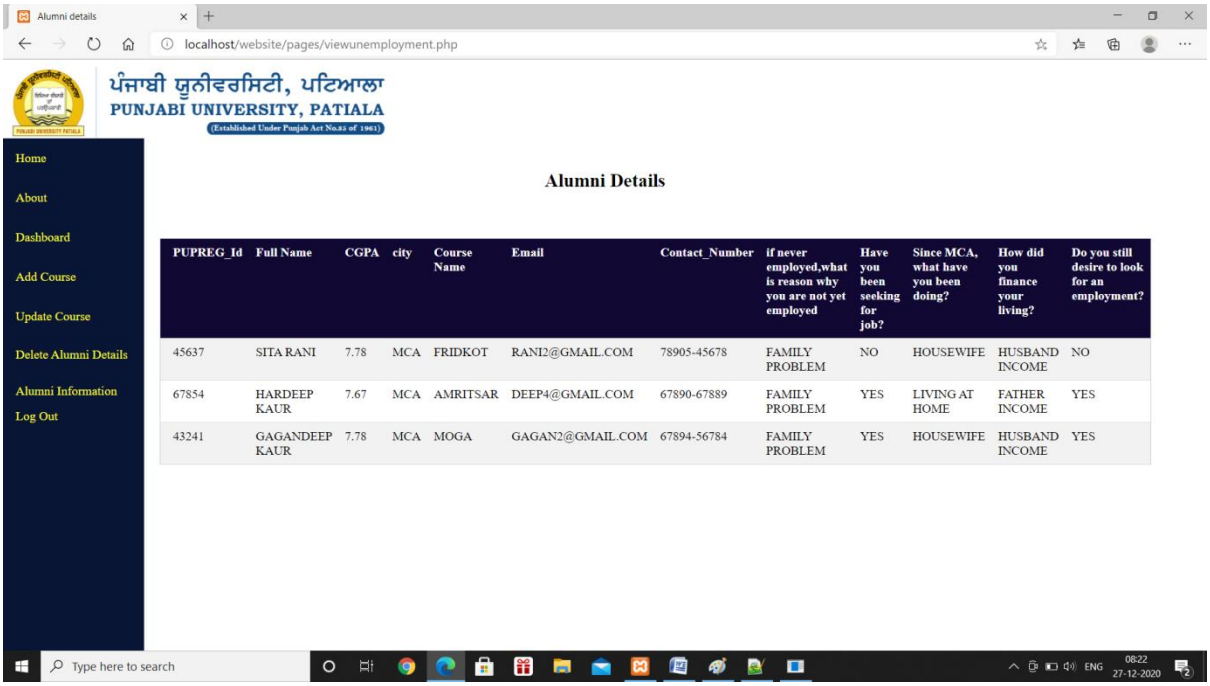


Fig: 14

View Course Details:-

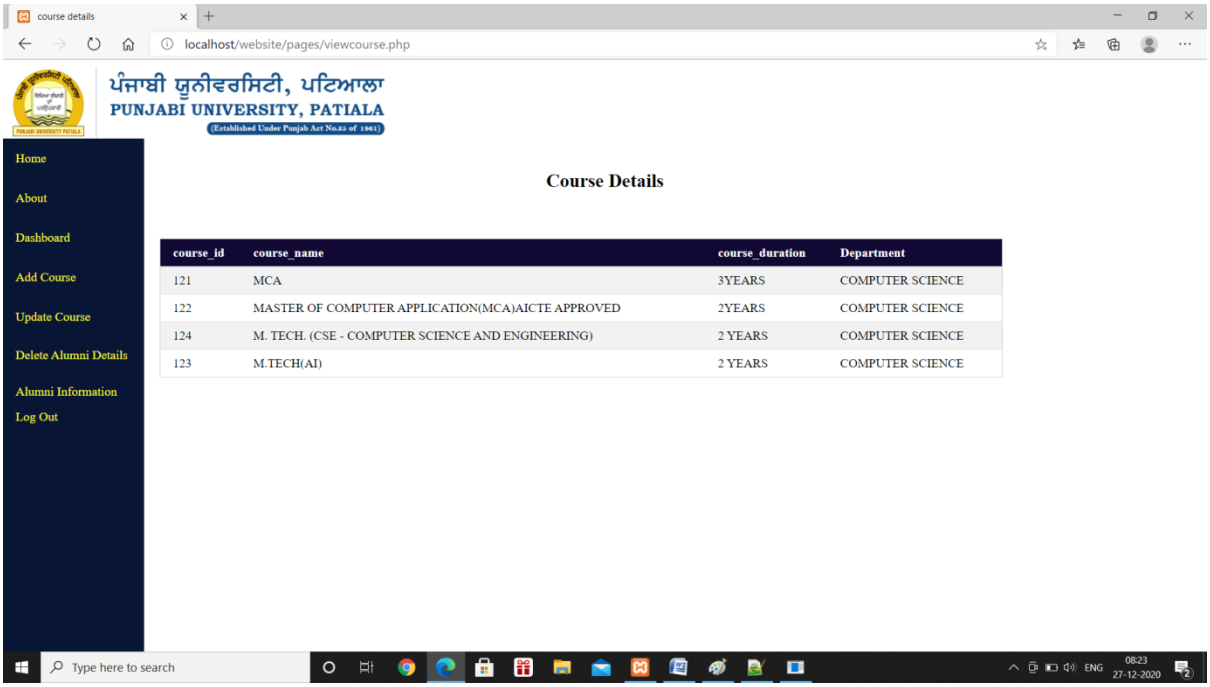


Fig: 15

View Employment Alumni Details:-

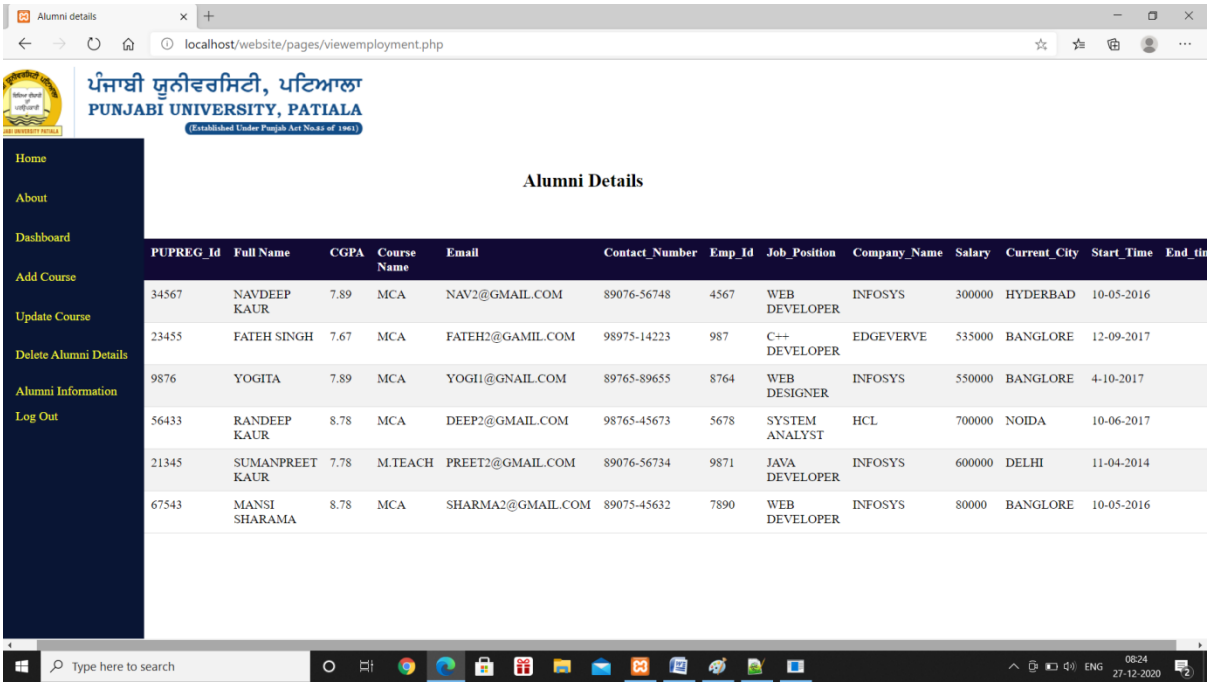


Fig: 16

TESTING

4.1 Verification

To verify this software goal was to assure that software fully satisfies all the expected requirements. Here author determined whether the products of a given development phase satisfy the conditions imposed at the start of that phase. This was done by Static testing hence, by testing software without executing code such as review and static analysis.

4.2 Validation

To validate this software goal was to assure that software fully satisfies all the specifications or specified requirements. The validation of this system is done with dynamic testing. This is done at unit and then at integration level.

4.3 Test Performed

4.3.1 Black box Test

In Black box testing the method which is used to test the software is Functional testing therefore, the system is tested against the functional requirements/specifications. Various main functions belonging to the software which is to be done by the software as stated in the requirement specifications are taken as test cases. Different test cases are prepared as mentioned here .these test cases are prepared as per functional point of view and equivalence class strategy in which if one set of value qualifies the test it is assumed that all the other same cases will result into same corresponding results.

4.4 Test Results

4.4.1 System Testing

This part of testing is to understand the functionalities of the whole system as a package. If it meets up the user requirements, it will based on black-box testing is testing an application without having the prior knowledge of the internal data requirement of the system. It will involve testing forms for validation and verification.

Login/Logout

Test Id	**User**	**Text Description**	**Flow: As expected**	**Result**
Log1	Student	Allow user to test the right username and password	Key in username and password if login successful, page to display username and personal information.	As expected
Log2	Admin	Allow to user to test the alumni dashboard using the right username and password.	To key in username and password successful, if login successful. system to display dashboard where the admin can have option of managing record of course and student	AS expected
Log3	Student	Using wrong username and password	Redirect user to try again	As expected

Add:-

Test id	user	Test description	Flow: As expected	Result
Add1	student	Allow the student to add personal information into the system	User clicking On system to display details field for user to input, user click on submit button to add information.	As expected
Add2	Admin	Allow the admin to add course information into the system	User clicking on add course on system to display details field for user to input, user click on submit button to add course.	As expected

Update:-

Test id	User	Test Description	Flow :As expected	Result
Update1	student	Allow the student to update personal information details	Users clicking edit button, system displaying the student details and user make changes and update the record	As expected
Update2	Admin	Allow the admin	Admin clicking on	As

		to update course details	update button ,system displaying course details, and admin make changes and update the record	expected

Delete:-

Test id	**User**	**Test description**	**Flow: As expected**	**Result**
Delete1	Admin	Allow the admin to delete course record details	Users clicking on delete button, System displaying Course details, and delete course record from a confirmation page.	As expected
Delete2	Admin	Allow the admin to delete Employment student and unemployment student record details	Users clicking on delete button, system displaying student details and delete student record from a confirmation page.	As expected

PROJECT LEGACY

5.1 Current Status

Project is completed as per requirements specifications. All functions specified are well prepared and is in working state at present. Just the number of students included till now is 12. There are many more students still left to be included in this software.

5.2 Problems Faced

Major problem faced during this project was to generate the Student the following Employment and unemployment randomly with both columns showing different results.

5.3 Limitation

- This system cannot maintain regularly.
- There is security and privacy problem may occur.

5.4 Future Enhancements

It is not possible to develop a system that makes all the requirements of the user. User requirements keep changing as the system is being used. Some of the future enhancements that can be done to this system are:

- Based on the future security issues, security can be improved using emerging technologies.
- Attendance module can be added
- sub admin module can be added

5.5 Conclusion

The project “Alumni track system” has been developed as per the requirement specification. It has been developed using PHP and oracle compact, the complete system is thoroughly tested with availability of data and throughput reports which are prepared manually.

Design procedure and output reports are presented in this project report. This design is easy to understand that any new modules can be incorporated easily.

REFERENCE

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