

MINI PROJECT
(2020-21)
“RECORD MANAGER”
Project Report



Institute of Engineering & Technology

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Declaration

I/we hereby declare that the work which is being presented in the Bachelor of technology. Project “**RECORD MANAGER**”, in partial fulfillment of the requirements for the award of the *Bachelor of Technology* in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of my/our own work carried under the supervision of **Mr. Mandeep Singh, Technical Trainer, Dept. of CEA, GLA University.**

The contents of this project report, in full or in parts, have not been submitted to any other Institute or University for the award of any degree.

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Certificate

This is to certify that the project entitled “RECORD MANAGER”, carried out in Mini Project – I Lab, is a bonafide work by APARNA SINGH, CHANCHAL and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (ComputerScience & Engineering).

Signature of Supervisor:

Name of Supervisor: Mr. Mandeep Singh



Department of Computer Engineering and Applications

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ACKNOWLEDGEMENT

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us the instructor Mr Mandeep Singh, our technical trainer and supervisor.

He has been helping us since Day 1 in this project. He provided us with the roadmap, the basic guidelines explaining on how to work on the project. He has been conducting regular meeting to check the progress of the project and providing us with the resources related to the project. Without his help, we wouldn't have been able to complete this project.

And at last but not the least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training.

Thanking You

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ABSTRACT

Over the years the manual teacher's record management has been carried across most educational institutions all over India. To overcome the problems of manual record management, We have developed a “web-based RECORD MANAGER”. which is based on a web server, which can be implemented on any computer. This project is aimed at developing a “Record Manager” that is of importance to either an educational institution or a college. As it will provide ideal support for all the actor’s i.e. Teachers, Admin, departments for better management when providing the facility to submit records of teacher's documents. In this application, FIREBASE is used as back-end design, and HTML, CSS, and JavaScript are used as front-end tools. It helps teachers and departments to maintain their records on a website without any manual paper-based work. The Admin and department can directly have the teacher's collection of all their documents through this website.

CONTENTS

| | |
|--|------|
| Cover Page | i |
| Declaration | ii |
| Certificate | iii |
| Acknowledgement | vii |
| Abstract | viii |
| Content | ix |
| Chapter 1 Introduction | 1 |
| • 1.1 Context | 1 |
| • 1.2 Objective | 1 |
| • 1.3 Purpose | 2 |
| • 1.4 Sources | 3 |
| Chapter 2 Software Requirement Analysis | 4 |
| • 2.1 Intended Audience | 4 |
| • 2.2 Scope | 4 |
| • 2.3 Hardware and Software Requirements | 5 |
| • 2.4 Modules and Functionalities | 6 |
| • 2.5 Application implementation | 7 |
| Chapter 3 Software Design | 9 |
| • 3.1 Use Case Diagram | 10 |
| • 3.2 Data Flow Diagram | 11 |
| 3.3 Sequence Diagram | 13 |

| | |
|---|----|
| Chapter 4 Specific Requirements... | 16 |
| • 4.1 Functional Requirements... | 16 |
| • 4.2 Non Functional Requirements | 17 |
| • 4.3 Tools and Languages | 18 |
| Chapter 5 Implementation and User Interface | 19 |
| • 5.1 Implementation | 19 |
| • 5.2 User Interface..... | 23 |
| Chapter 6 Conclusion | 30 |

LIST OF FIGURES

| | |
|----------------------------|----|
| 1. Use Case Diagram | 10 |
| 2. Data Flow Diagram..... | 14 |
| 3. Sequence Diagram | 15 |
| 4. Home Page..... | 19 |
| 5. About Section | 19 |
| 6. Login Page | 20 |
| 7. Admin Module..... | 20 |
| 8. Add Department..... | 21 |
| 9. Remove Department... .. | 21 |
| 10. Department List | 22 |
| 11. Generate Record | 22 |
| 12.Department Module | 23 |
| 13.Add Teacher..... | 23 |
| 14.Remove Teacher | 24 |
| 15.Teacher Module | 25 |
| 16. Add Record..... | 26 |

CHAPTER-1

INTRODUCTION

1.1 CONTEXT

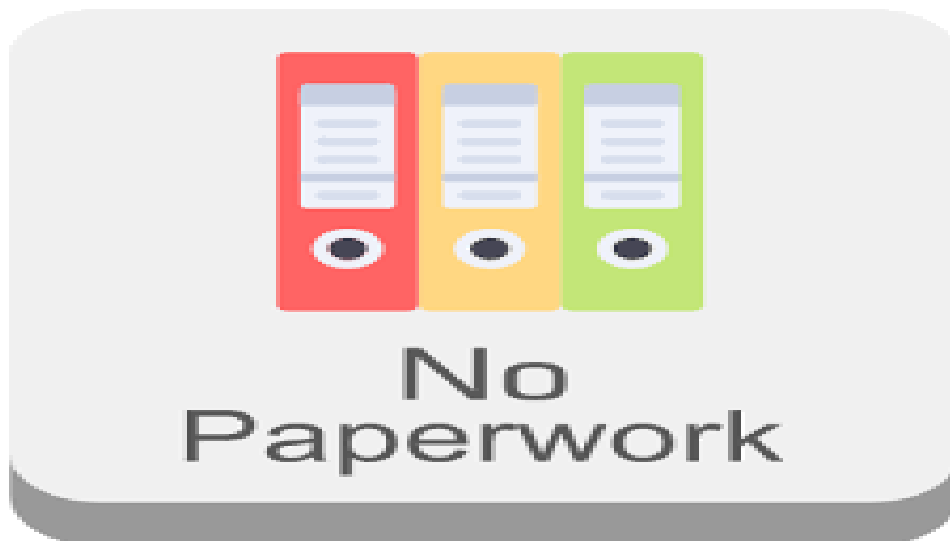
This web Application “Record Manager” has been submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura supervised by Mr.Mandeep Singh. This project has been completed approximately one month and has been executed in modules, meetings have been organised to check the progress of the work and for instructions and guidelines.

1.2 OBJECTIVE

Over the years the manual teacher's record management has been carried across most educational institutions all over India. To overcome the problems of manual record management, We have developed a “web-based RECORD MANAGER”. which is based on a web server, which can be implemented on any computer. This project is aimed at developing a “Record Manager” that is of importance to either an educational institution or a college. As it will provide ideal support for all the actor’s i.e. Teachers, Admin, departments for better management when providing the facility to submit records of teacher's documents. In this application, Node JS and MySQL are used as back-end design, and HTML, CSS, and JavaScript are used as front-end tools. It helps teachers and departments to maintain their records on a website without any manual paper-based work. The Admin and department can directly have the teacher's collection of all their documents through this website.

1.3 PURPOSE

The purpose of this document includes an overview of the “**RECORD MANAGER**” web application, detailed information about the requirements including functional requirements, interface requirements, non-functional requirements, and additional constraints of the system. This Software Requirement Specification will provide a complete description of all the functions and specifications. This document will let know the reader about every detail of our product like its functionality, uses, problems, etc.



1.4 SOURCES

The source of our project (including all the project work, documentations and presentations) will be available at the following link

<https://github.com/chanchal231/Miniproject2021>

CHAPTER -2

SOFTWARE REQUIREMENT ANALYSIS

2.1 Intended Audience

This document is written for the researchers, software developers, practitioners, testers, users

and clients of this web application.

The developers will use this document for the specifications of the project.

This will also help the testers to check if the software meets the user's requirements or not. The users will get to know about the fulfillment of their requirements. It will act as an agreement between the developer and the client.

2.2 SCOPE

- The scope of this project majorly focuses on organizations of the world.
- Initially, the project is intended to work for an organization and later on can be used by other organizations of the world.
- The system can handle large volumes of data(provided large database supported)

This project on completion will be verified by the internal panel and supervisor of GLA UNIVERSITY and will be approved by the co-ordinator.

2.3 HARDWARE AND SOFTWARE REQUIREMENTS

Technologies Used

- **Frontend:** -HTML5, CSS3, JAVASCIPT
- **Backend:** -FIREBASE

2.3.1 Minimum Requirements

● Server Side:

- **Hardware Requirement:**

Processor : Intel core i3 or onwards
RAM : 4GB
HDD : 10GB (recommended)

- **Software Requirement:**

OS : Window 8 or Window 10
Front end : Microsoft Visual Studio 2010+
Back end : FIREBASE

● Client Side:

- **Hardware Requirement:**

Processor : Intel Core i3 or onwards
RAM : 1GB
HDD : 2GB(recommended)
Network Interface Card

- **Software Requirement:**

Browser : Internet Explorer 7+ onwards, Mozilla Firefox 46+, Google
Chrome version 49+ onwards Operating System :Any Operating System

- RAM : 8 GB (or higher)
- Hard disk : 256GB

2.4 MODULES AND FUNCTIONALITIES

2.4.1 Product Perspective

It will provide ideal support for all the actors i.e. Admin, Department, and Teachers for better management in storing their documents and also in getting a permanent copy of these documents.

2.4.2 User Characteristics

- **Admin**-Admin is superior to all other users. Admin can add departments and generate the report of the records maintained by teachers.
- **Department**-They have the authority to add or remove the teachers. They can also generate the report of all the records maintained by the teacher and will send the same to the superior authority i.e., admin.
- **Teacher**- They will maintain their records like research papers, conferences, and many more to make their report submission task easier.

Functionality of Admin Module

➤ **Department Details**

Display the list of all departments with their details, provides the facility to modify the list of departments.

➤ **Teacher's Details**

Display the list of all teachers with their details of records.

➤ **Search**

Display the list of all departments and teachers searched through various search filters (project, conference, books, etc).

➤ **Generate Report**

Generate the report of teachers and departments according to their given criteria (projects, conference, books, etc).

Functionality of Departmental User

➤ **Teacher's Details**

Display the list of all teachers with their details of records, provides the facility to modify the list of teachers.

➤ **Search**

Display the list of all teachers searched through various search filters (project, conference, books, etc).

➤ **Generate Report**

Generate the report of teachers according to their given criteria (projects, conference, books, etc).

Functionality of Teachers

➤ **View**

Teachers can view their records like conferences, projects, books, etc.

➤ **Add**

Teachers can add their records like conferences, projects, books, etc.

➤ **Update**

Teachers can update their records like conferences, projects, books, etc.

➤ **Delete**

Teachers can delete their records like conferences, projects, books, etc.

2.4.3 Definitions

- **Login:** It allows the admin, departments, and teachers to access the website as per their requirements.
- **Forgot password:** It allows to recover the account by using e-mail and reset the password.
- **Generate report:** It allows the admin and department to display the report of the teacher.
- **Dashboard:** It provides a GUI for admin and users to perform their corresponding tasks.

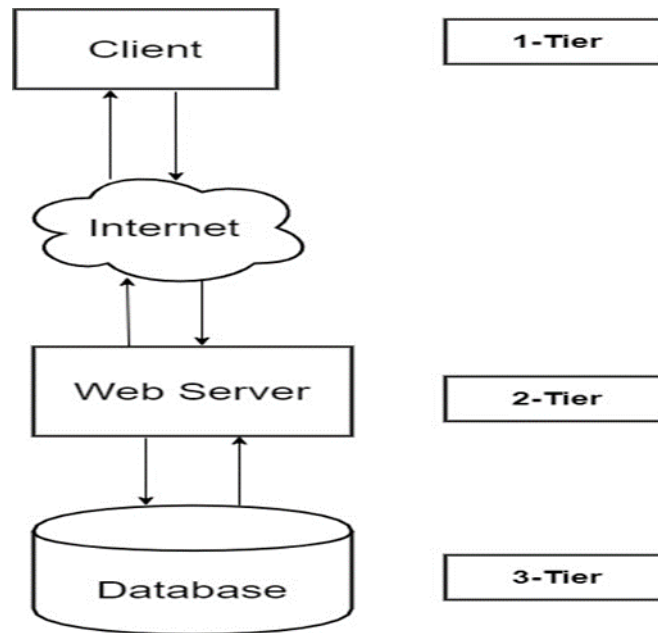
2.4. Constraints

- Admin can only generate the report of the teacher, it cannot modify it.
 - A teacher cannot view each other records.
 - Each department and teacher will be issued an identification number which will be necessary during the login process.
 - For security purposes, a user id and password are required.
 - The interface is in the English Language.
 - The operating system on the server-side is window-based.
-

CHAPTER- 3

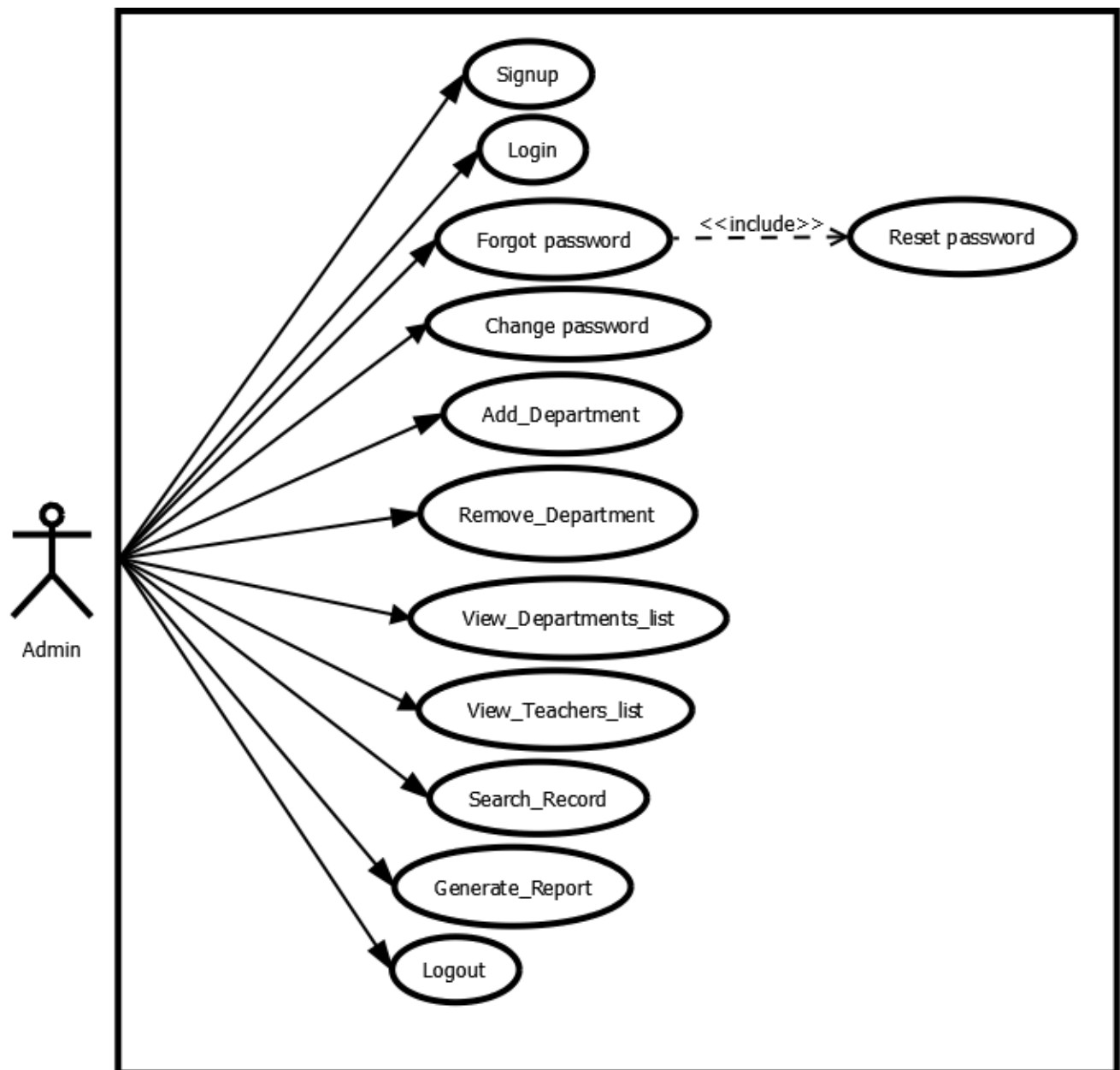
SOFTWARE DESIGN

3.1 HIGH-LEVEL DESIGN:

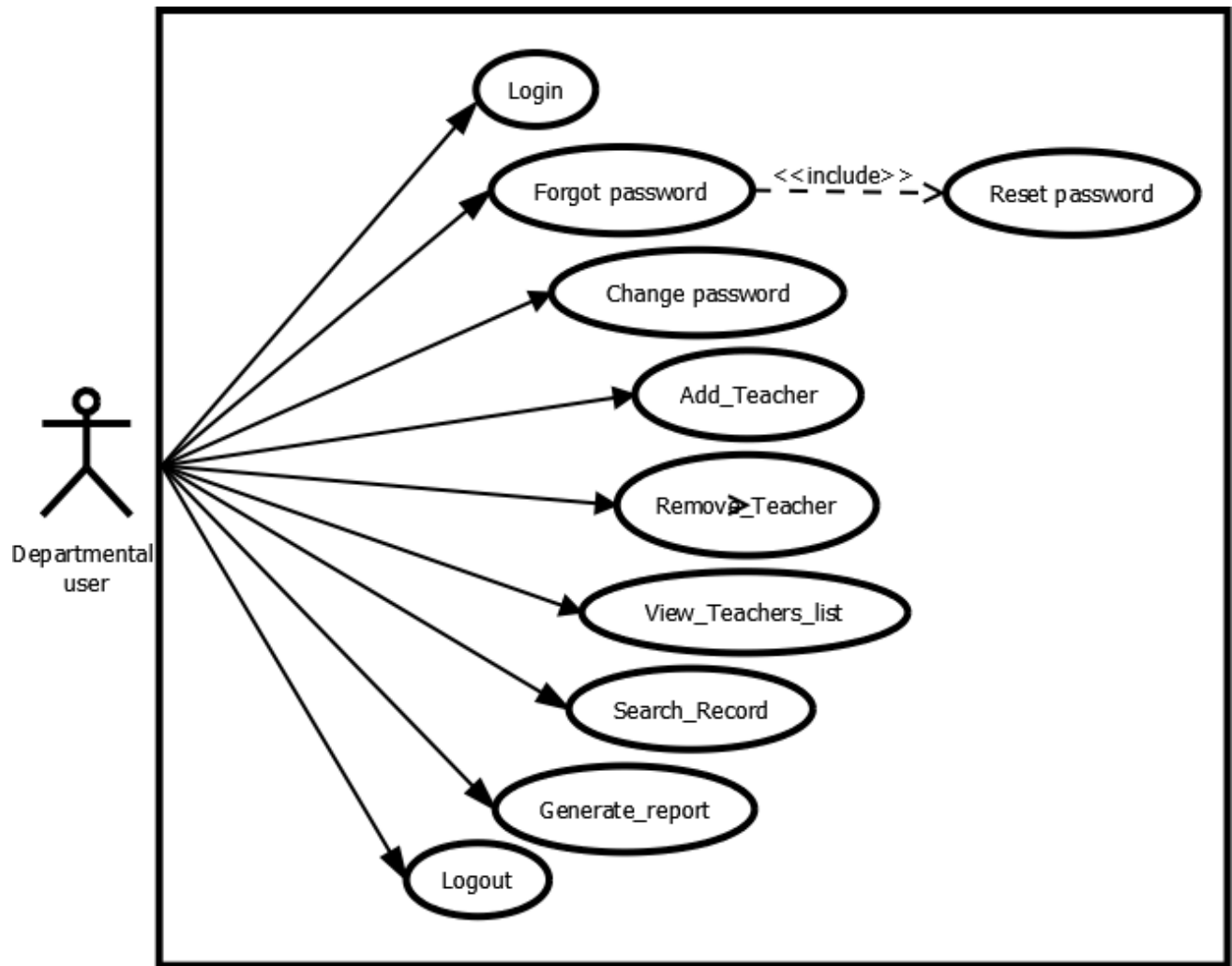


2.2.1 Use Case Diagrams

ADMIN



DEPARTMENTAL USER



TEACHER

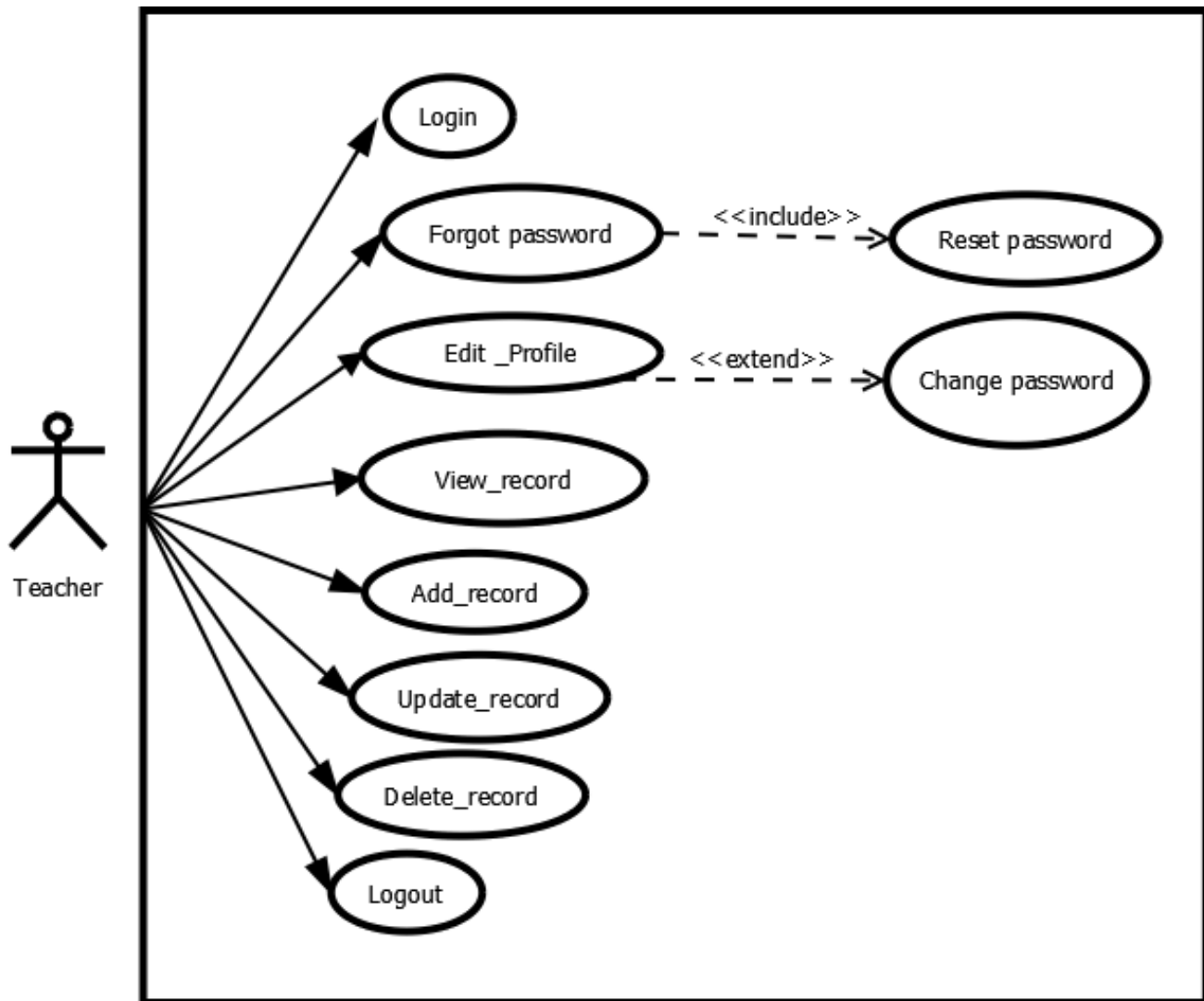
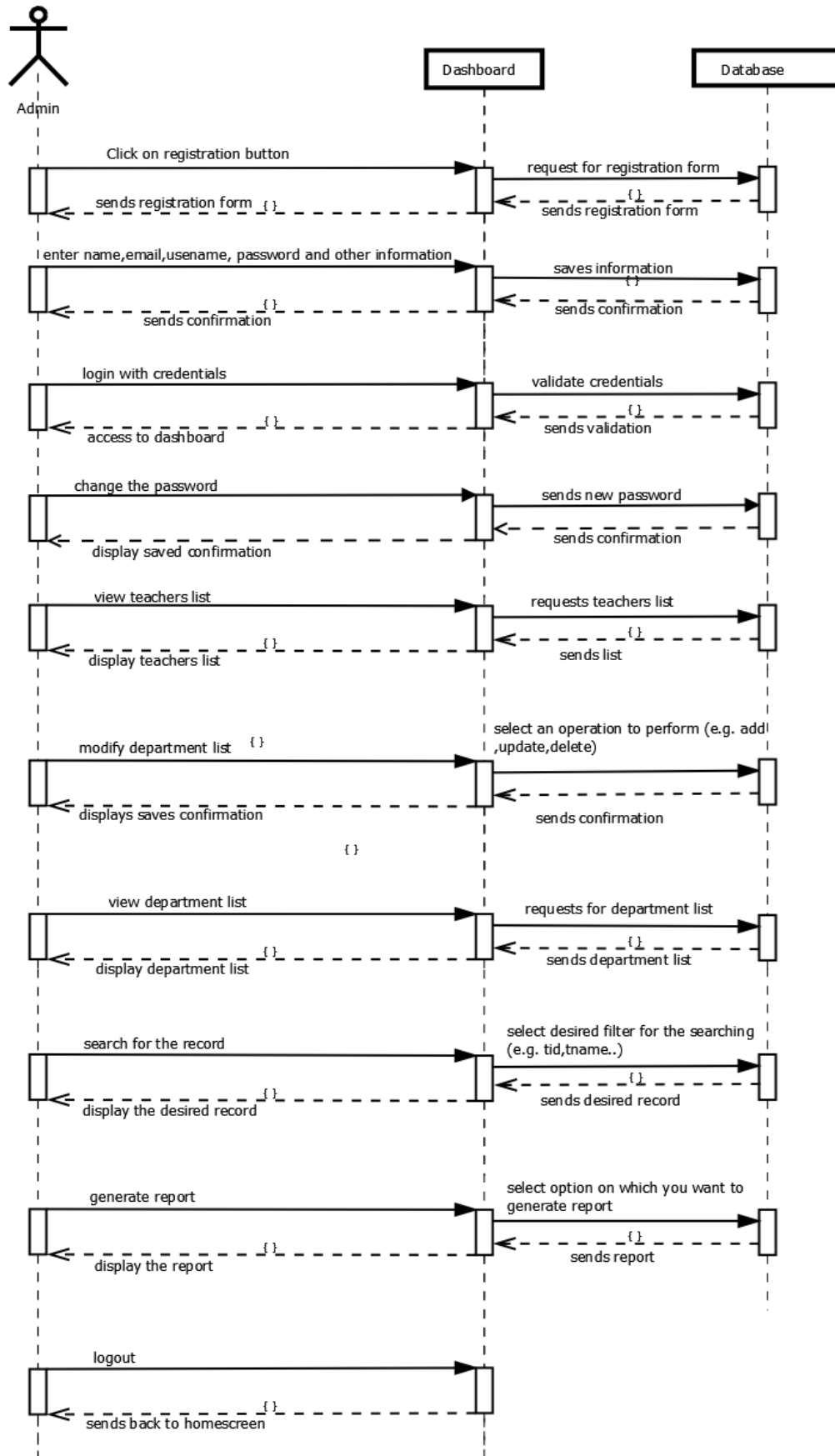
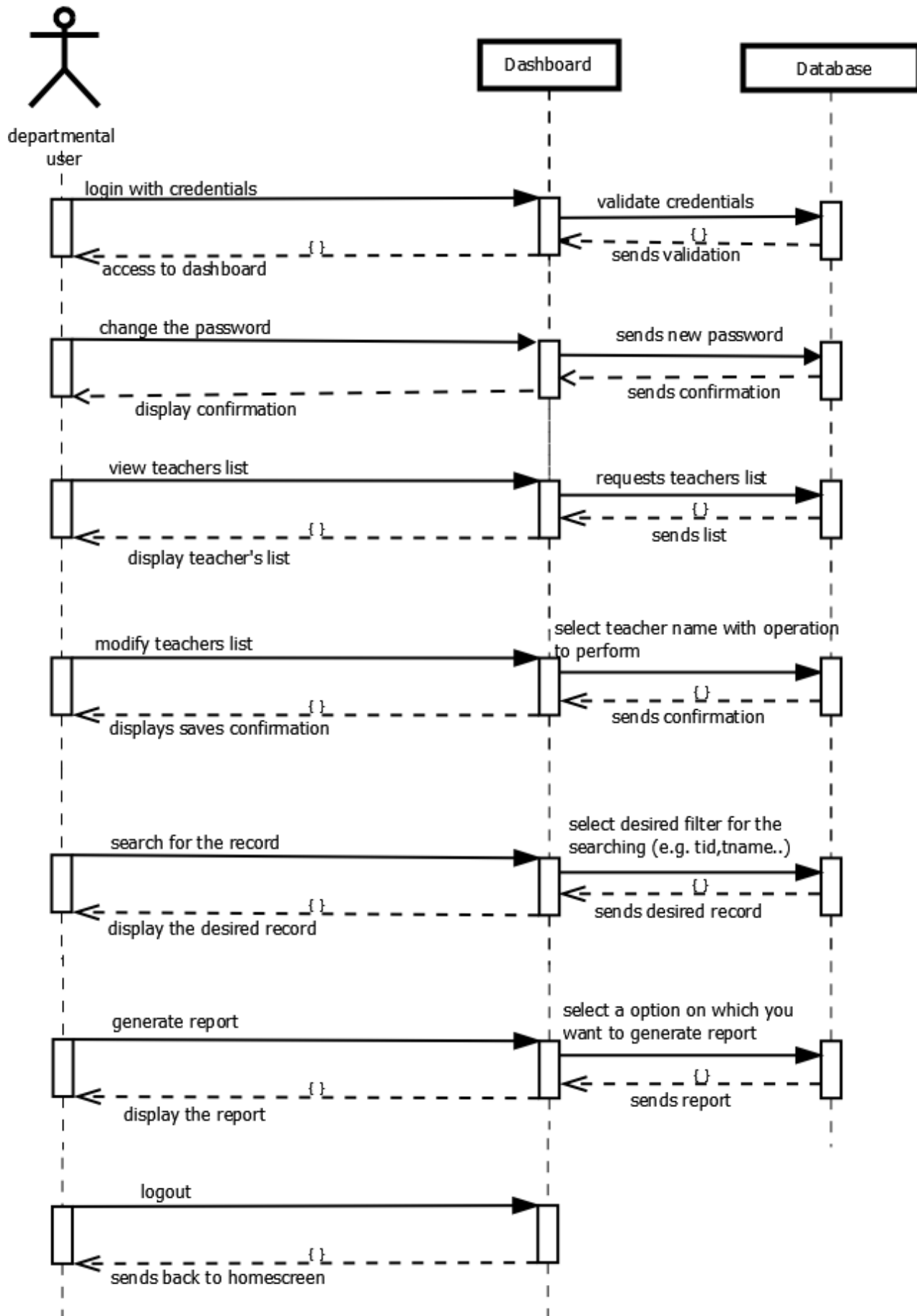
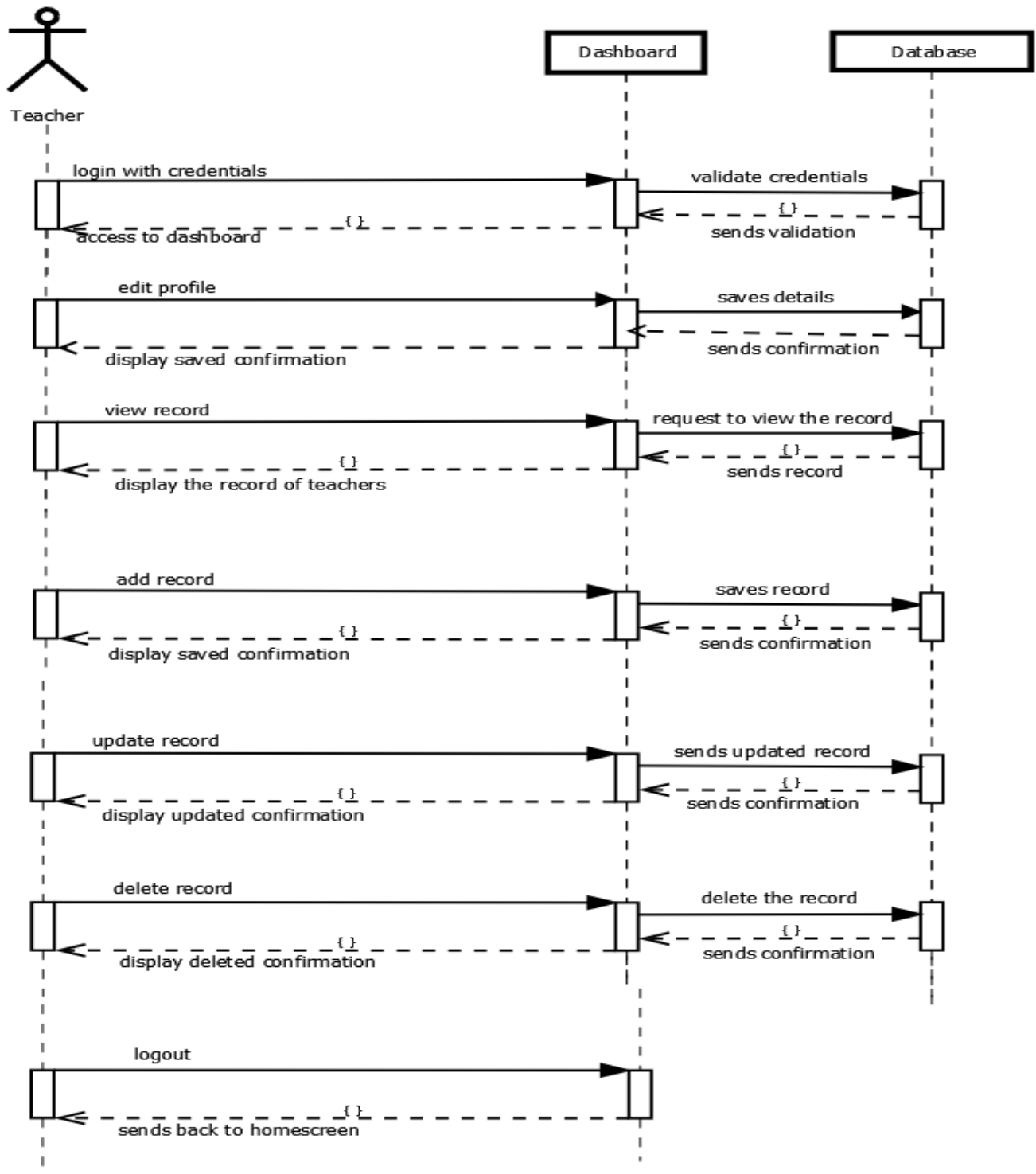


Figure-3: Data Flow Diagram

Figure-4: Sequence Diagram







Chapter -4

Specific Requirements

4.1 Functional Requirements

Admin is an authorized person to Access the Complete system.

The Entire project is going to develop into three modules:

- One is the **Admin module** where the admin can
 - Register and login.
 - Generate the report of teachers.
 - View teachers and departments list.
 - Modify the departments list.
 - Search the records of the registered teachers.
 - Logout
- The second is the **Department module** where the department can:
 - Login
 - Generate the report of teachers.
 - View and modify the teachers list.
 - Search the records of the registered teachers.
 - Logout
- The third is the **Teacher module** where a teacher can:
 - Login
 - Edit profile.
 - Manage (view, add, update, delete) their record.
 - logout

☐ Admin Login

The system should allow the Admin to log in under a secure system by providing their valid Username and Password.

☐ Home Page Overview

The Home page of this System consists of the Login Function, Registration Function, and Forgot Password.

4.2 Non-functional Requirements (Software System Attributes)

AVAILABILITY

The availability of this website is up to the Internet connection of the client. Since this is a client-server-related website shall be attainable all the time. The user should have an account to enter into the system; if a user does not have an account then the user can only see the information which will be displayed on the homepage of the website.

SECURITY

The authorization mechanism of the system will block the unwanted attempts to the server and also let the system decide on which privileges may the user have. The system has different types of users so there are different levels of authorization.

RELIABILITY

A backup file is maintained so that in case of a system crash, the data will not be affected.

PORTABILITY

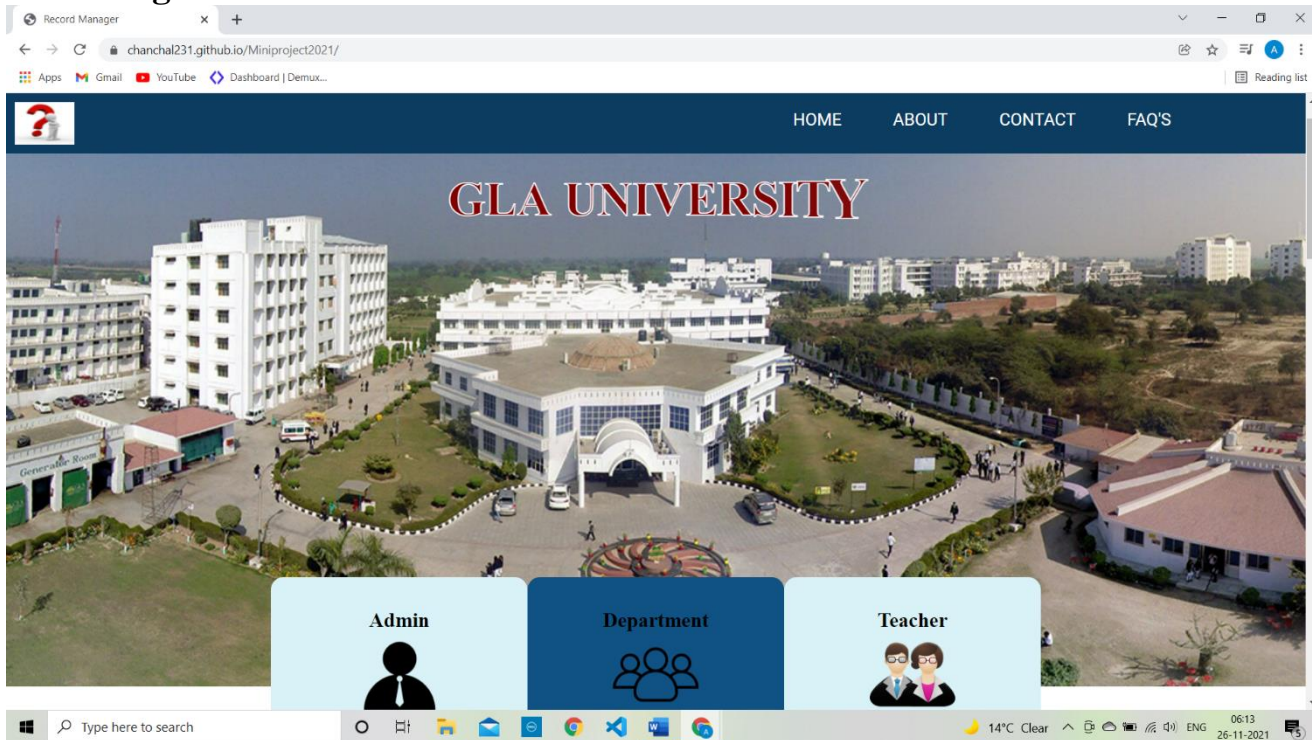
The system is developed using HTML, CSS, JavaScript, react for developing responsive web-based applications that can be accessed by any OS.

MAINTAINABILITY

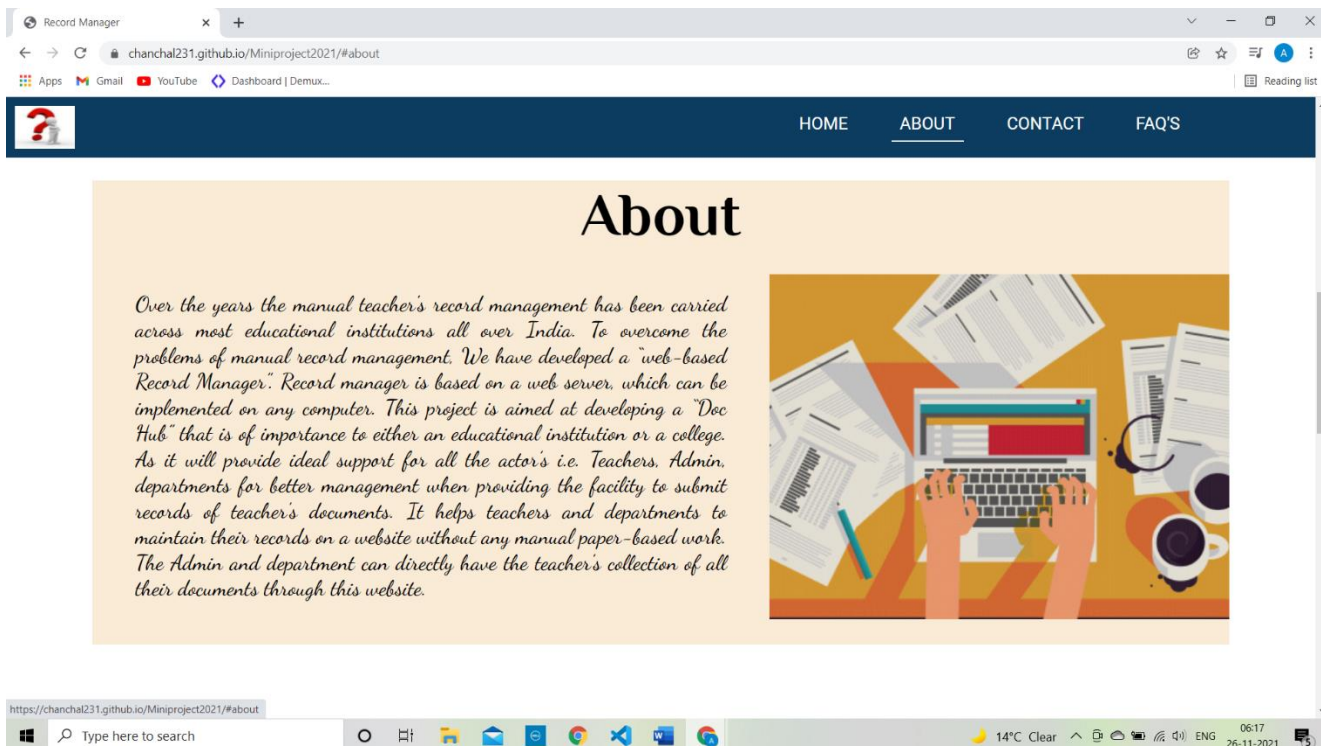
This website will follow the modular structure so it will be easy to maintain.

CHAPTER -5 USER INTERFACE

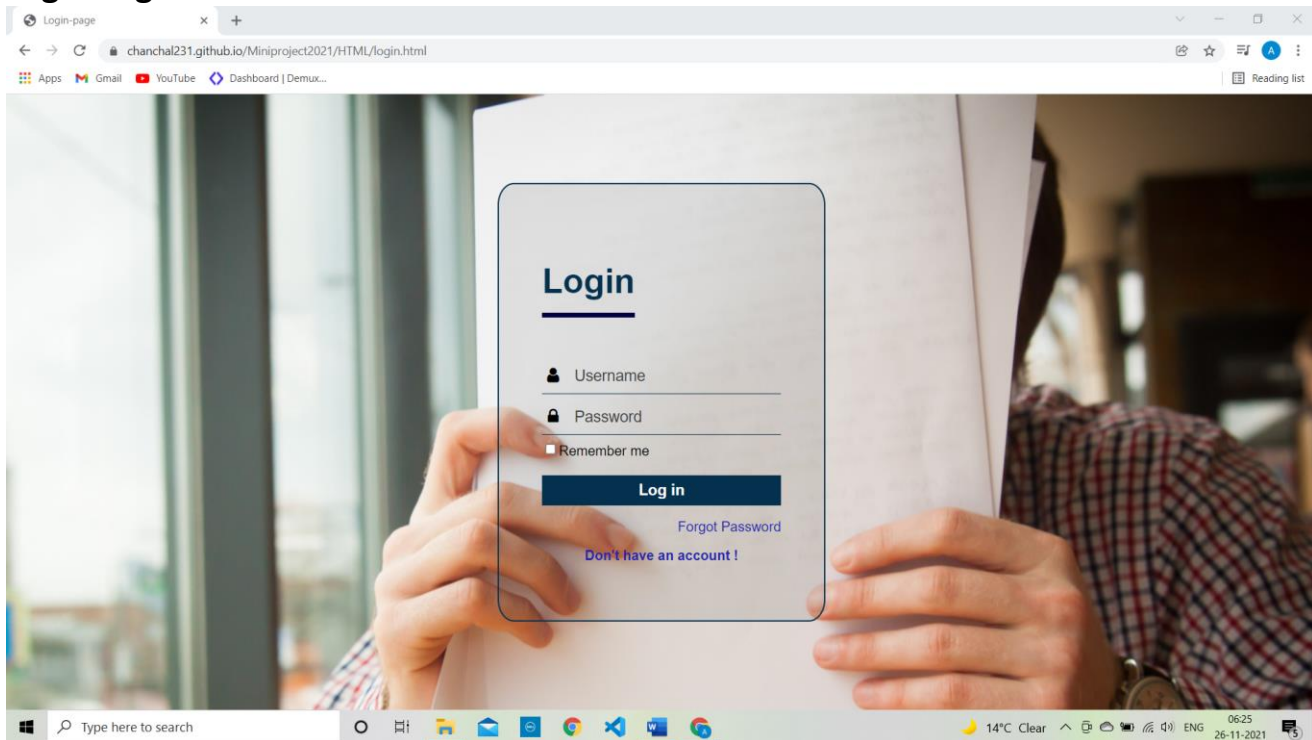
Home Page



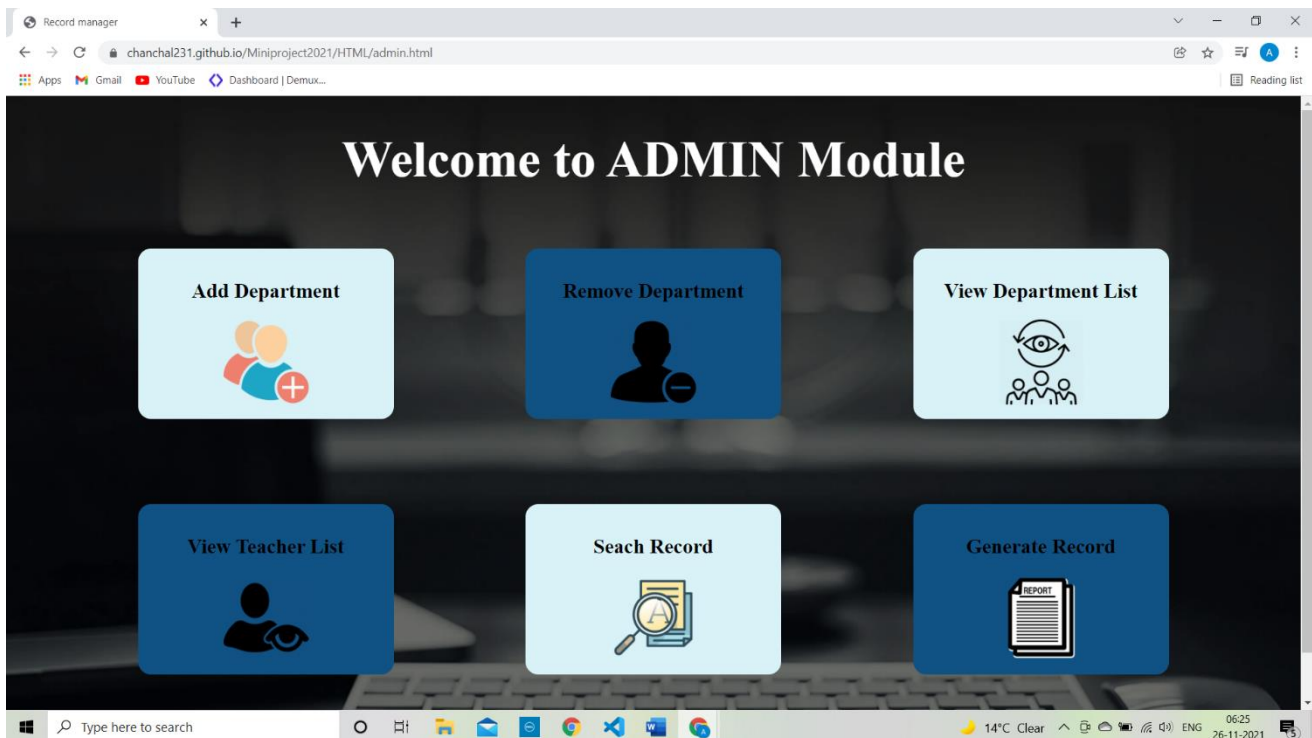
About



Login Page



Admin Module



Add Department

The screenshot shows a web browser window with the title 'add dep'. The address bar displays 'chanchal231.github.io/Miniproject2021/HTML/adminadd.html'. The browser's tab bar shows 'Apps', 'Gmail', 'YouTube', and 'Dashboard | Demux...'. The page features a light blue background with a white geometric pattern. The form contains four labels and input fields: 'Enter Department Id:' with a 'Department Id' input field, 'Enter Department Name:' with a 'Department Name' input field, 'Enter Department Password:' with a 'Password' input field, and 'Confirm Password:' with a 'Confirm Password' input field. A blue 'Add' button is positioned below the input fields. The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 14°C, clear weather, and the date 26-11-2021 at 06:26.

add dep

chanchal231.github.io/Miniproject2021/HTML/adminadd.html

Apps Gmail YouTube Dashboard | Demux...

Reading list

Enter Department Id: Department Id

Enter Department Name: Department Name

Enter Department Password: Password

Confirm Password: Confirm Password

Add

Type here to search

14°C Clear 06:26 26-11-2021

Remove Department

The screenshot shows a web browser window with the title 'Remove'. The address bar displays 'chanchal231.github.io/Miniproject2021/HTML/adminremove.html'. The browser's tab bar shows 'Apps', 'Gmail', 'YouTube', and 'Dashboard | Demux...'. The page features a light blue background with a white geometric pattern. The form contains two labels and input fields: 'Enter Department Id:' with a 'Department Id' input field and 'Enter Department Name:' with a 'Department Name' input field. A blue 'Remove' button is positioned below the input fields. The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 14°C, clear weather, and the date 26-11-2021 at 06:26.

Remove

chanchal231.github.io/Miniproject2021/HTML/adminremove.html

Apps Gmail YouTube Dashboard | Demux...

Reading list

Enter Department Id: Department Id

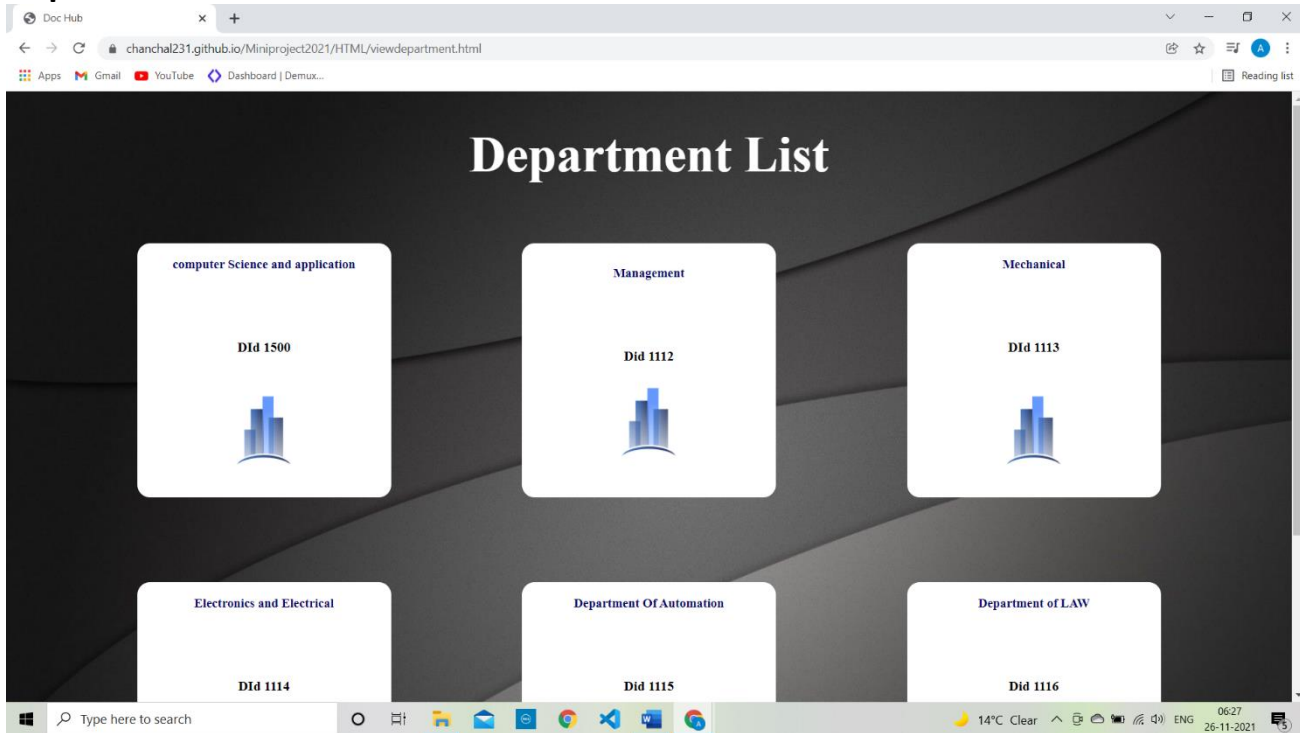
Enter Department Name: Department Name

Remove

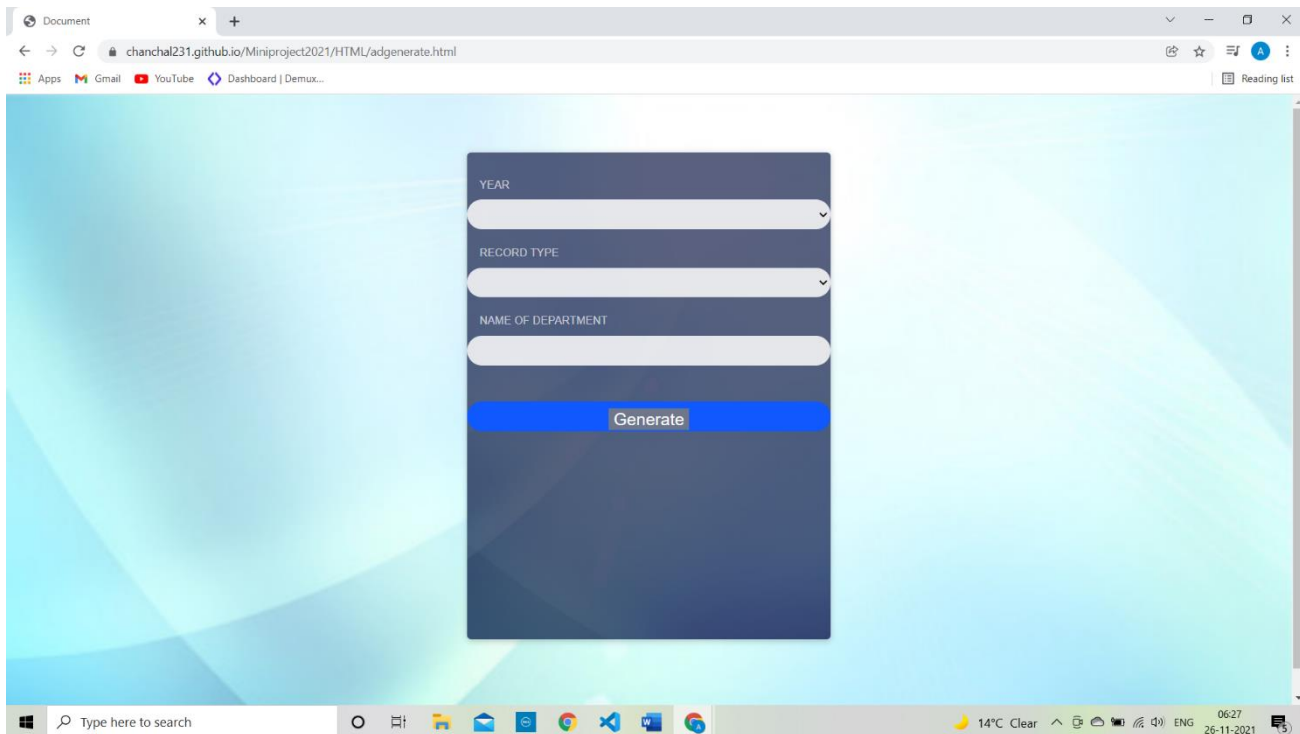
Type here to search

14°C Clear 06:26 26-11-2021

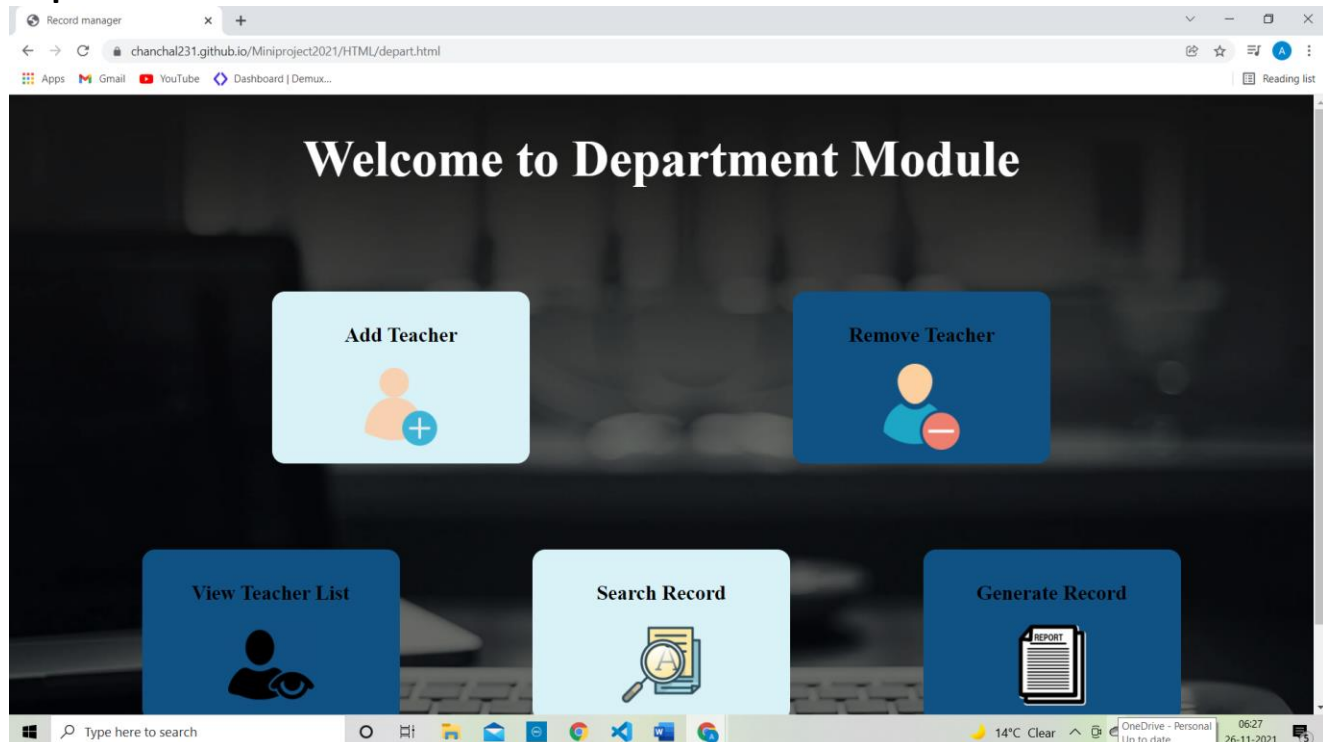
Department list



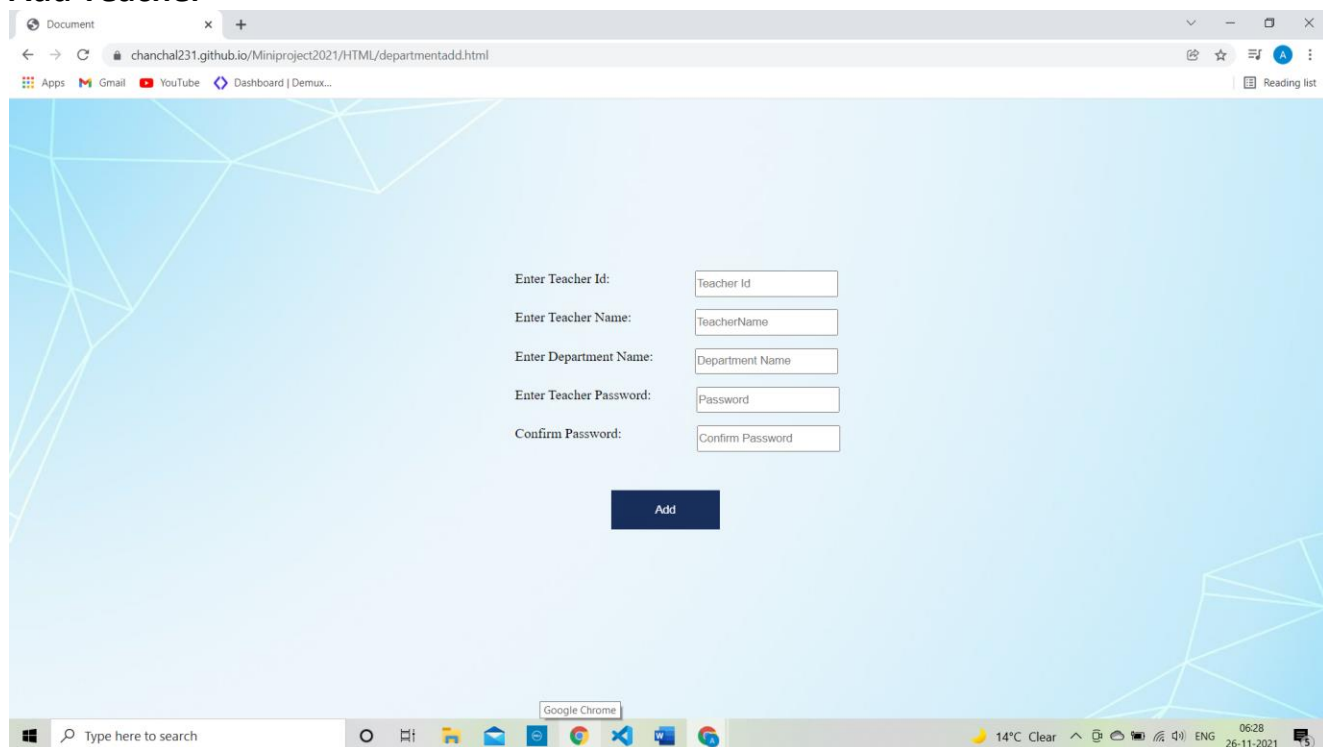
Generate Record



Department Module



Add Teacher



Remove Teacher

Remove

chanchal231.github.io/Miniproject2021/HTML/departmentremove.html

Apps Gmail YouTube Dashboard | Demux...

Reading list

Enter Teacher Id:

Enter Teacher Name:

Remove

Type here to search

14°C Clear 06:28 26-11-2021

Teacher Module

Doc Hub


chanchal231.github.io/Miniproject2021/HTML/teacher.html

Apps Gmail YouTube Dashboard | Demux...


Reading list

Welcome to Teacher's Module


View Record




Add Record



Update Record



Delete Record



Type here to search

14°C Clear 06:28 26-11-2021

View Record

The screenshot shows a web browser window with the URL `https://chanchal231.github.io/MiniProject2021/HTML/viewrecord.html`. The page displays a 'Record List' with eight categories, each represented by a card with a dark header and a light body. Each card has 'Delete' and 'Edit' buttons at the bottom.

| Category | Details |
|------------------|--|
| BOOK | Text Book Data base Management system Navathe s&k group 23 april 2000 |
| publication | A Type Ai & ML Dainik Jagran 23 april 2000 |
| Seminar | Organized Ai & ML 23 april 2000 Lorem ipsum dolor sit amet. |
| Conference | Participated Ai & ML 23 april 2000 Lorem ipsum dolor sit amet. |
| Symposia | Participated Ai & ML 23 april 2000 Lorem ipsum dolor sit amet. |
| Workshop | Participated Ai & ML GLA 23 april 2000 |
| Research Project | AI & ML DRDO 50k |
| Award | Best Teacher 23 may 2020 I was awarded best teacher among all the teachers of Banasthali |

Add Record:-

1. Research Project

The screenshot shows a web browser window with the URL `https://chanchal231.github.io/MiniProject2021/HTML/trecords.html#`. The page has a dark sidebar on the left with navigation links: Research Project, Conference, Symposia, Seminar, Workshop, Publications, Books, and Academic Awards. The main content area has a teal background and contains a form for adding a new research project record.

Form Fields:

- Title of Research project
- Name of Funding Agency
- Amount released (in rupees)

Buttons:

- Add

2.Conference

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux... Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Nature of Conference

Title of Conference

Place of Conference

dd-mm-yyyy

Details of Conference

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

3.Symposia

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux... Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Nature of Symposia

Title of Symposia

Place of Symposia

dd-mm-yyyy

Details of Symposia

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

4.Seminar

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux... Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Nature of Seminar

Title of Seminar

Place of Seminar

dd-mm-yyyy

Details of Seminar

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

5.Workshop

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux... Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Nature of Workshop

Title of Workshop

Place of Workshop

dd-mm-yyyy

Details of Workshop

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

6.Publications

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux...

Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Nature of Journal

Title of Journal

Name of Journal

dd-mm-yyyy

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

7.Books

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux...

Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Book Type

Book title

Book author name

Book publisher name

dd-mm-yyyy

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

8.Academic Rewards

Document x +

chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Apps Gmail YouTube Dashboard | Demux... Reading list

Research Project

Conference

Symposia


Seminar

Workshop

Publications

Books

Academic Awards



Title of Academic Award

dd-mm-yyyy

Details of Award

Add

https://chanchal231.github.io/Miniproject2021/HTML/trecords.html#

Type here to search

14°C Clear 06:29 26-11-2021

FAQs

Record Manager x +

chanchal231.github.io/Miniproject2021/#contact

Apps Gmail YouTube Dashboard | Demux... Reading list


HOME ABOUT CONTACT FAQ'S

FAQ's

Why I can't register as an admin?

What is departmental id while logging in?

Do we need to have always an unique id?



Type here to search

14°C Clear 06:24 26-11-2021

CONCLUSION

The purpose of this project is to overcome the problems of manual record management, We have developed a “web-based RECORD MANAGER”. which is based on a web server, which can be implemented on any computer. This project is aimed at developing a “Record Manager” that is of importance to either an educational institution or a college. As it will provide ideal support for all the actor’s i.e. Teachers, Admin, departments for better management when providing the facility to submit records of teacher's documents. In this application, FIREBASE is used as back-end design, and HTML, CSS, and JavaScript are used as front-end tools. It helps teachers and departments to maintain their records on a website without any manual paper-based work. The Admin and department can directly have the teacher's collection of all their documents through this website.

REFERENCES:-

1. <https://www.w3schools.com/whatis/>
2. <https://www.beta-labs.in/2020/06/web-development.html>
3. HTML & CSS: Design and Build Web Sites
Book by Jon Duckett