Annexure- 1

STUDENT MENTORING SYSTEM

By:

Hardik M. Kathiriya

(BSc. (CA&IT) SEMESTER - 6)

Exam No: - 31

Submitted as

Partial fulfillment of

BSc. (CA&IT)

2020 – 2021

College Seal

Natubhai V. Patel College of Pure and Applied Sciences

Sardar Patel University

Annexure-2

Natubhai V. Patel College of Pure and Applied Sciences

CERTIFICATE

Date: - .

This is to certify that **Hardik Kathiriya** of **BSc. (CA&IT) Sem – 6 (Seat no:31)** has worked on project entitled **Student Mentoring System** from 09thDECEMBER 2020 to 06th FEBRUARY 2021.This **(PS06CIIT26)** is in-house project course of three credits.

He was regular in his/her work and developed around **30 hours** for the project including analysis and design. He has completed the project satisfactorily.

Head / Coordinator (Mr. Mayur Patel)

Project Guide (Mr. Mayur Patel)

PREFACE

It gives me great pleasure in placing this in the hands of my esteemed faculties. The objective of the report is to provide a conceptual understanding of the Application as well as working guide.

Surely no other as Information Technology has proven as the driving force of the nation. I.T. not decides the present but also the future. The need for Application today is a competence in a global world.

A **B. Sc. (CA & IT)** is a three year full time course. It covers various topics associated with the area of computer science. The third year students have to develop a project, for which I choose to develop **Student Management System**

An effort has been made to exhaustively deal with every part of the system developed and at appropriate position, so that Admin can easily maintain the working of a application, through the respected computerized process.

Hardik Kathiriya

ACKNOWLEDGEMENT

This project work has been the most practical and exciting part of my learning experience, which would be an asset for me for my future career.

No system is created entirely by an individual. Many people have helped me to create this system and each of their contribution has been valuable.

Proper organization of concept and analysis of the system is due to keen interest and helping hand of my teachers and colleagues.

I am deeply thankful to our principal sir **Dr. Basudeb Bakshi** for holding my thoughts and vision towards all the subjects, I was studying till date.

I am deeply thankful to **Mr. Mayur Patel**. The Head of Computer Science Department, who was a constant source of inspiration not only during this project, but also through the year.

Most sincere thanks to project guide **Mr. Mayur Patel** for his kind co-operation and who has always been guiding, encouraging, and motivating me throughout the project.

I am also greatly thankful to the entire Computer Laboratory Staff and my dear friends who have helped me in the completion of this project directly or indirectly.

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INTRODUCTION TO PROJECT

What is a mentor?

Faculty mentors play a crucial role in mentoring graduates. Students and their mentors share responsibility for ensuring productive and rewarding mentoring relationships. Both parties have a role to play in the success of mentoring. For graduate students, a mentor is someone who serves as a guide throughout their institutional training. They provide both professional and personal advice in transitioning into, and out of, graduate school. They give constructive feedback on writing, teaching and other elements of career design. They can serve to help students balance professional goals with their personal lives or give emotional encouragement during challenging times.

Objectives of SMS (Student Mentoring System)

The objectives of the SMS include:

- To help undergraduate fresh students understand the challenges and opportunities present in the Institute and develop a smooth transition to campus life.
- To counsel academically weak undergraduate first year students and to play an important role in helping troubled students cope with academic, extra-academic and personal problems.
- To provide positive role models to first year undergraduate students in the institute.
- To proactively try to identify problems of the general student populace and to bring them to the notice of the concerned authorities.
- Ensuring regularity and punctuality of students through counseling sessions.

Module: Student Mentoring System

- Student Mentors are respected, well-balanced students usually belonging to the 1st to 3rd in **BSC(CA&IT),BCA and Master in Msc(IT),MCA** courses.

SCOPE OF WORK

- The objective is to develop an Online Mentoring System to promote and encourage students to actively participate in the academic activities.

- Our project replaces the conventional and inconvenient method of clearing doubts in classes which involves the mentor and student to be physically present at the same time.

- In this context arises the importance of our project. This project bridges the existing gap between mentor and students due to the time constraints.

SYSTEM FEATURES

The New proposed system is totally based on online application system. It supports following facilities:

- The system will reduce the complexity.
- It can be easily handled by the people who have elementary knowledge of computer because it provides a user-friendly environment.
- This system also provides the easy debugging of the errors when created.
- It’s hardware and software configuration are not very costly that means, the hardware and software requirement for this software/project are not very costly.

HARDWARE AND SOFTWARE

Hardware used during the development process:

Sr. No.	Components	Description
1	Processor	intel Core i5 Processor
2	RAM	8 GB RAM
3	Hard disk	1 TB

Software used during the development process:

Sr. No.	Software Used	Description
1	Windows 10	Operating System
2	Oracle Application Express	Front End Tool
3	Oracle Database release 11.2.0.4	Back End Tool

Hardware Requirement to implement of System:

Sr. No.	Components	Description
1	Processor	Intel Core i3,i5,i7
2	RAM	4 GB RAM Or Higher
3	Hard disk	512 GB or Higher

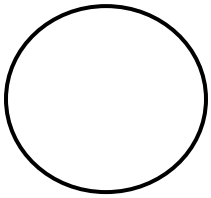
Software required to implement of system:

Sr. No.	Software Used	Description
1	Windows 7,8 or higher	Operating System
2	Oracle Application Express	Front End Tool
3	Oracle Database release 11.2.0.4	Back End Tool

DATAFLOW DIAGRAMS:

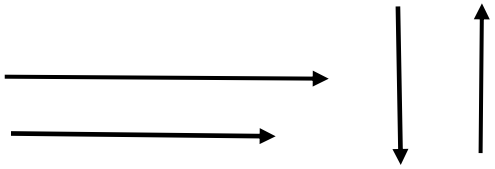
THE SYMBOLS USED IN DFD'S

1] Process: - Here flow of data is transformed.



2] External Entity: - A Source or destination of data which is external to the system.

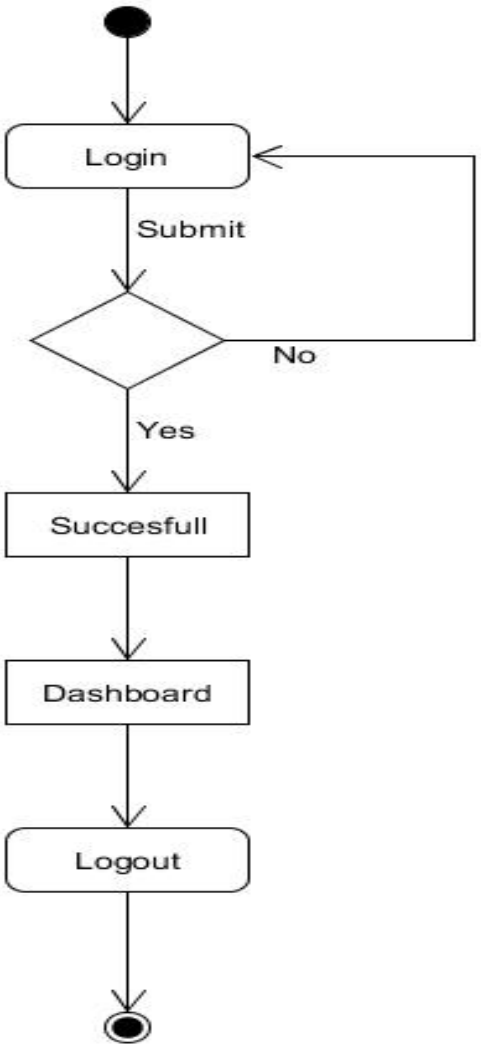
3] Data Flow: - It is a packet of data, it may be in the form of document, letter, telephone call etc.



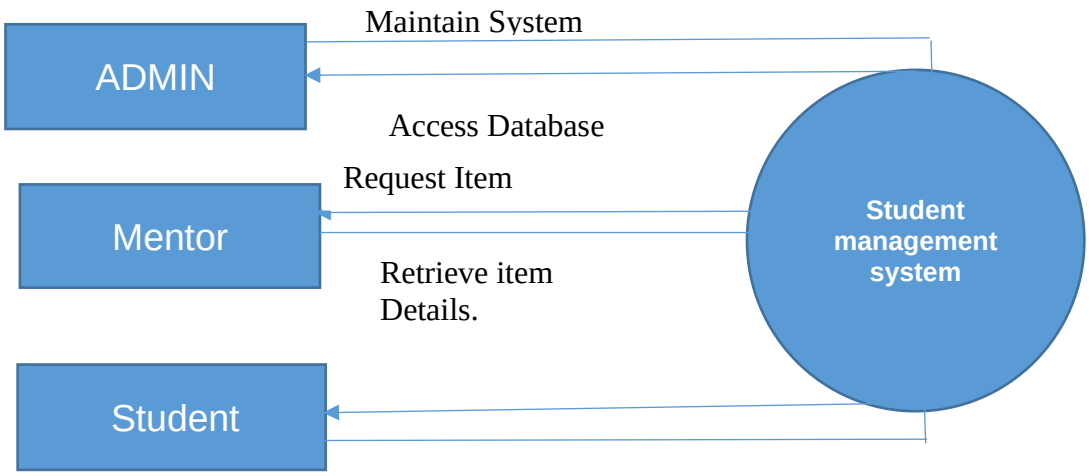
4] Data Store: - It stores name, sources and destinations are written in capital letters.

DATA FLOW DIAGRAM

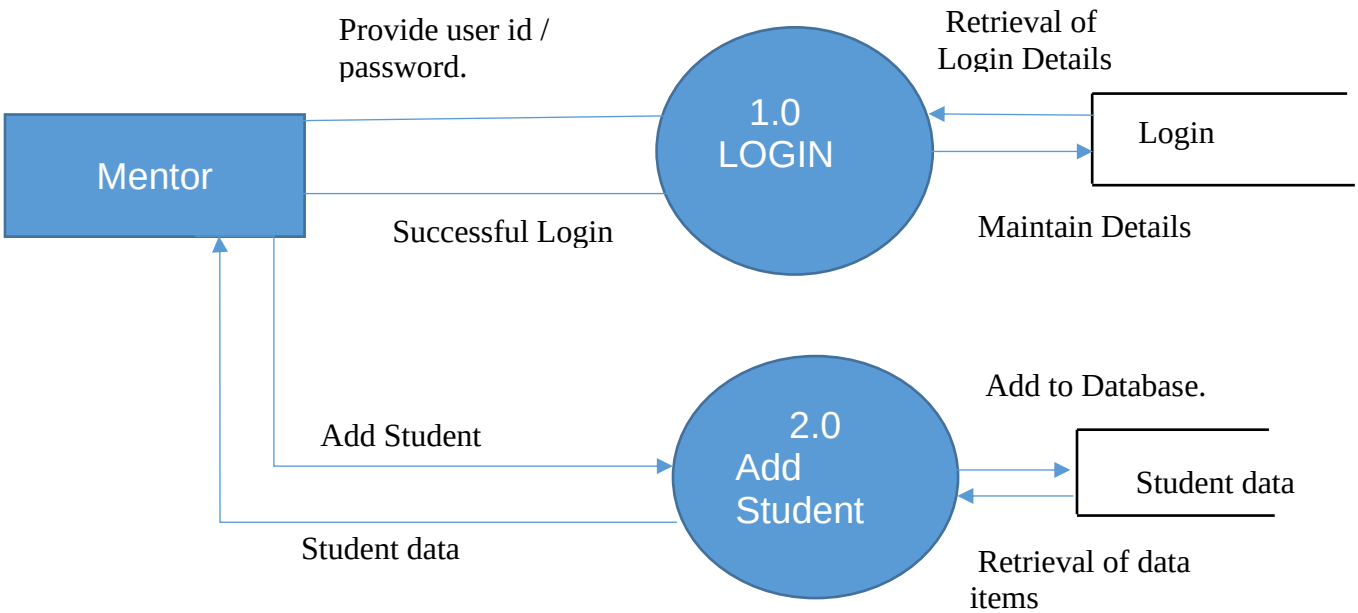
Activity Diagram for Login:



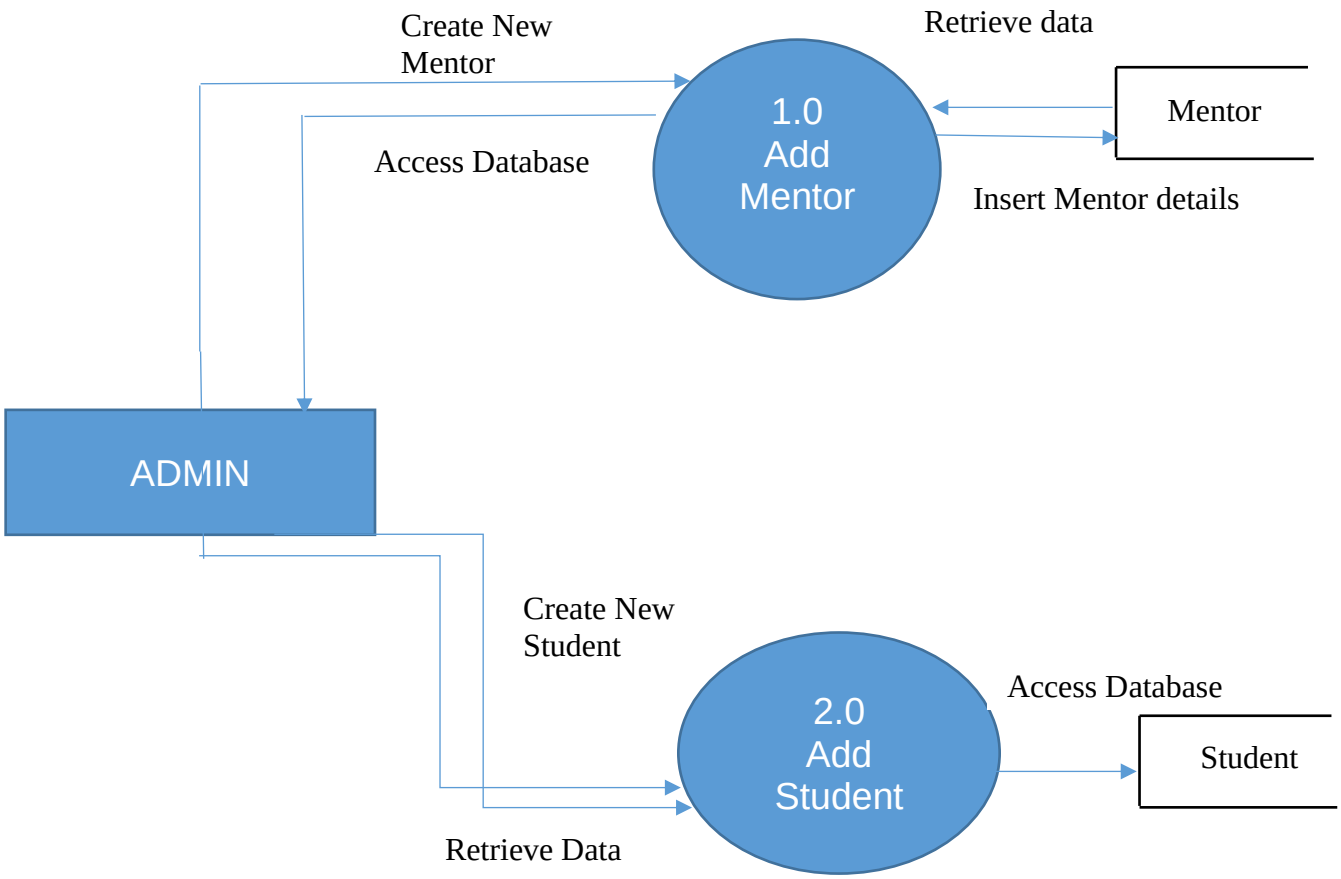
(Context Level Diagram)



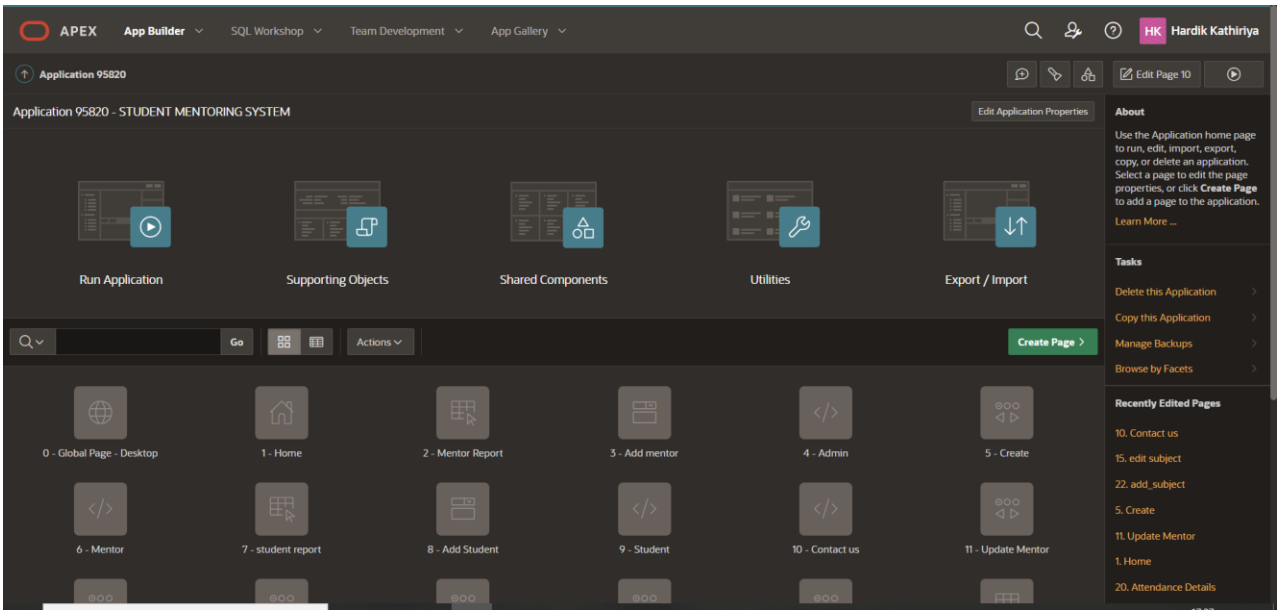
ZERO LEVEL DIAGRAM FOR MENTOR



ZERO LEVEL DIAGRAM FOR ADMIN



VIEW OF ORCALE APPLICATION EXPRESS



- This is First Look of Orcale Application Express.

ORCALE DATABASE LAYOUTS

SCHEME NAME: STUDENT MANAGEMENT SYSTEM

TABLE NAME : LOGIN

Column Name	Data Type	Size
USERNAME	VARCHAR2	20
PASSWORD	VARCHAR2	20

TABLE NAME : ADD_MENTOR

Column Name	Data Type	Size
ID	NUMBER	5
NAME	VARCHAR2	20
EMAIL	VARCHAR2	20
SEMESTER	VARCHAR2	10
DEPARTMENT	VARCHAR2	20
YEAR	VARCHAR2	10
MOBILE	NUMBER	10

TABLE NAME : ADD_STUDENT

Column Name	Data Type	Size
SID	NUMBER	5
FNAME	VARCHAR2	10
LNAME	VARCHAR2	10
RNO	VARCHAR2	30
EMAIL	VARCHAR2	20
YEAR	VARCHAR2	20
BRANCH	VARCHAR2	10
SEMESTER	VARCHAR2	10
DOB	VARCHAR2	20
MOBILE	NUMBER	10
DEGREE	VARCHAR2	10
AMENTOR	VARCHAR2	30

TABLE NAME : SUBJECT

Column Name	Data Type	Size
S_ID	NUMBER	5
YEAR	VARCHAR2	20
BRANCH	VARCHAR2	20
SEMESTER	VARCHAR2	15
SUB1	VARCHAR2	15
SUB2	VARCHAR2	15
SUB3	VARCHAR2	15
SUB4	VARCHAR2	15

TABLE NAME : MARKS

Column Name	Data Type	Size
STUDENT_ID	NUMBER	10
SUB1	VARCHAR2	15
SUB2	VARCHAR2	15
SUB3	VARCHAR2	15
SUB4	VARCHAR2	15
M1	VARCHAR2	5
M2	VARCHAR2	5
M3	VARCHAR2	5
M4	VARCHAR2	5

TABLE NAME : ATTENDANCE

Column Name	Data Type	Size
A_ID	NUMBER	10
A_FNAME	VARCHAR2	20
A_LNAME	VARCHAR2	20
A_YEAR	VARCHAR2	15
A_BRANCH	VARCHAR2	15
A_SEMESTER	VARCHAR2	15
A_ADATE	DATE	-

INPUT/OUTPUT SCREEN DESIGN

LOGIN PAGE:

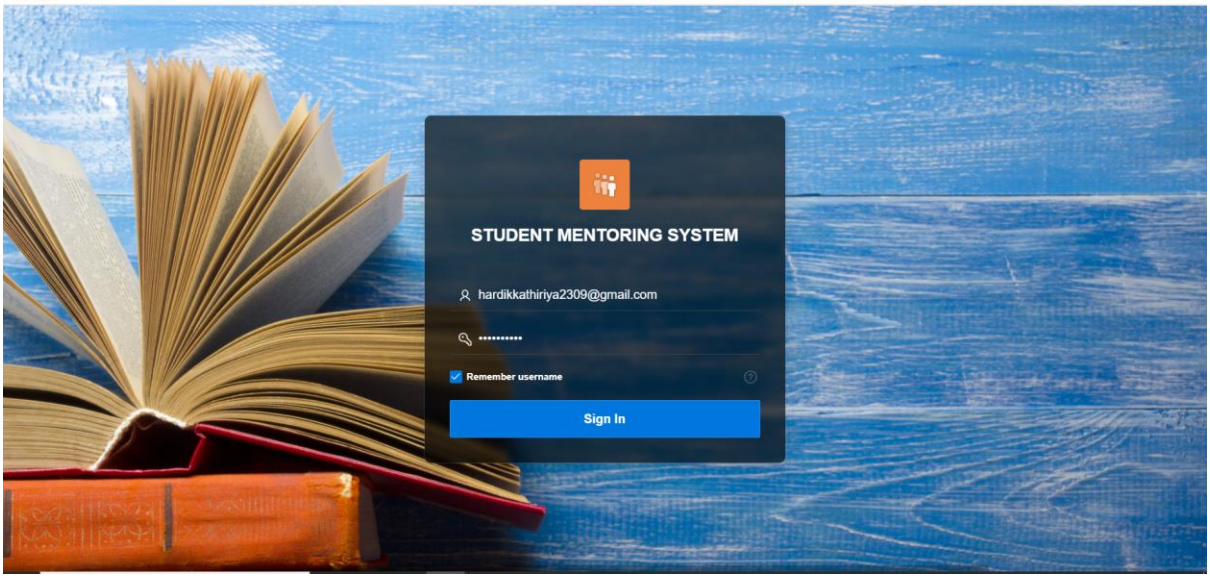


Figure 1.1

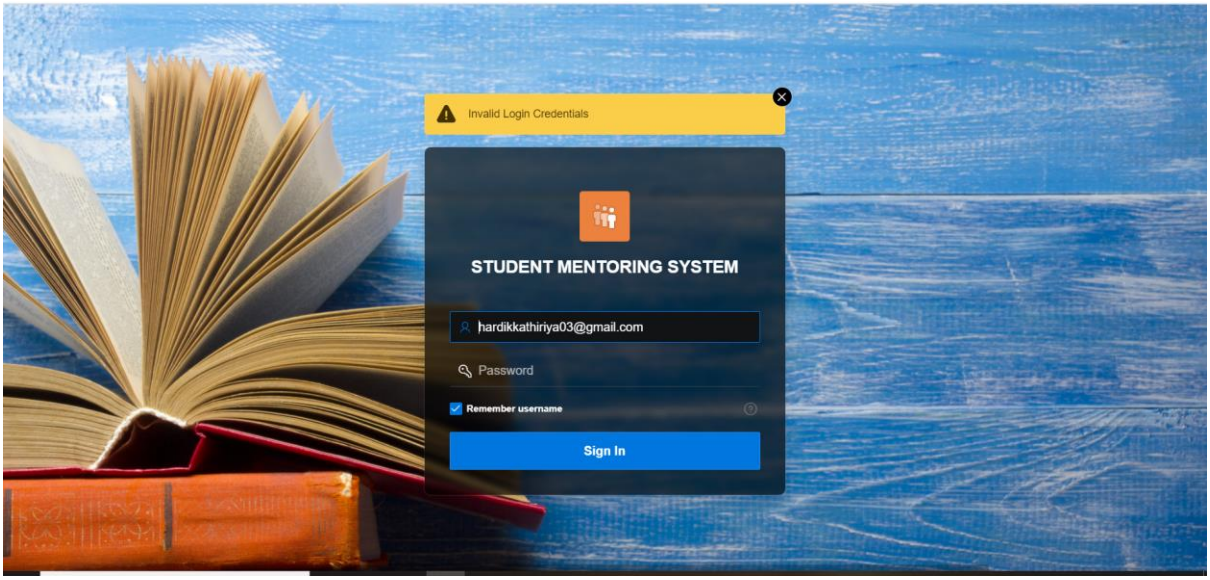


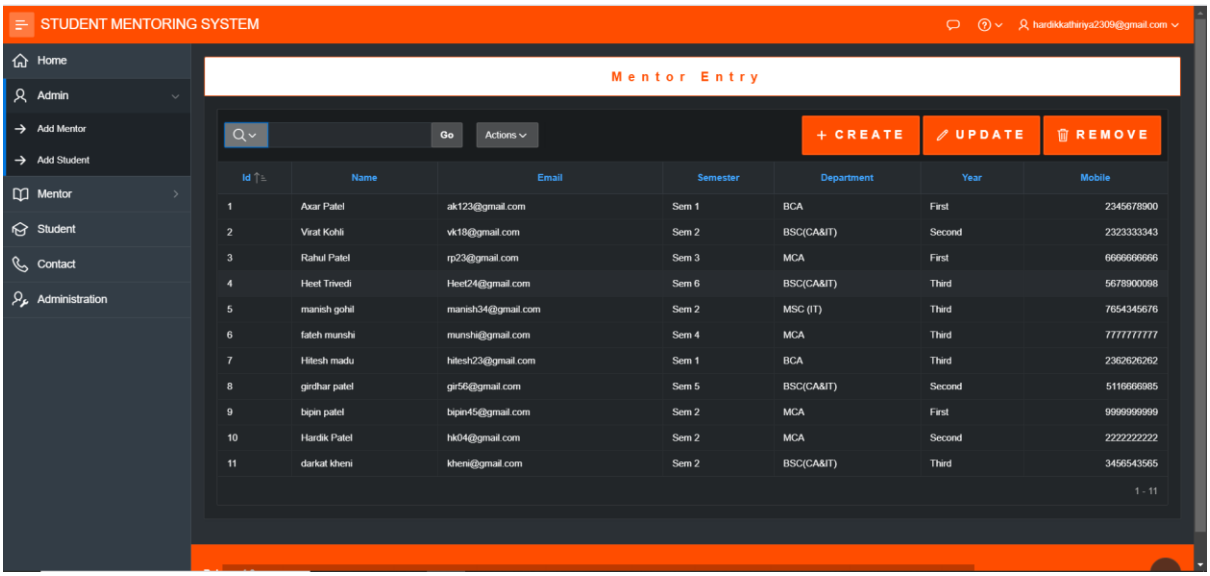
Figure 2.0

Admin can login with registered login username and password. No other than admin can login to the system. Figure 1.2 shows the invalid credentials validation. By login page will be redirected to the home screen(fig 2.0).

HOME PAGE

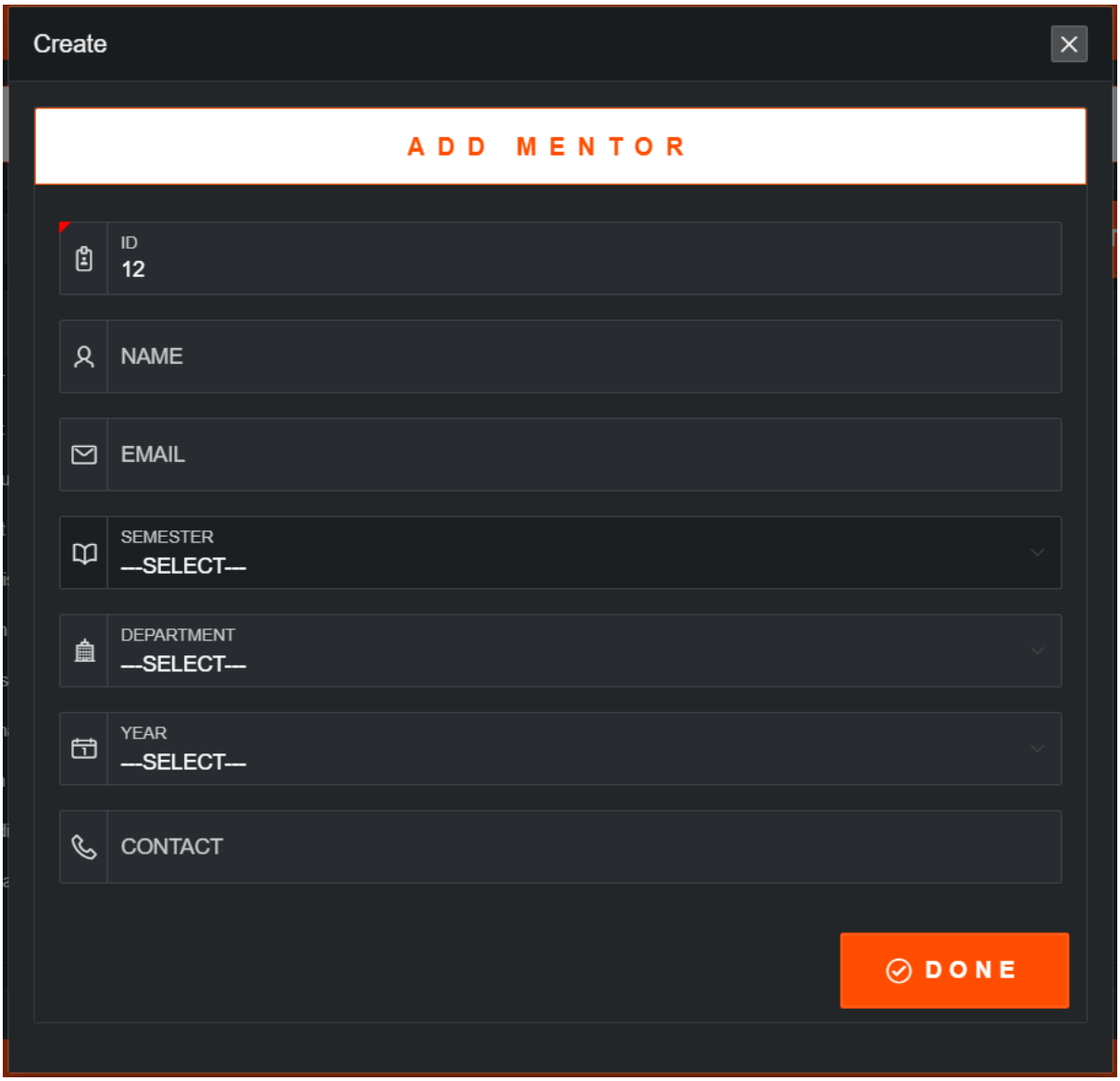
- This is the home page of the system. On the right top corner, the current user is displayed. It consists of a navigation bar to navigate to different pages.
- The navigation bar to display list of system moduale admin,mentor and Student and contact.

MENTOR ENTRY



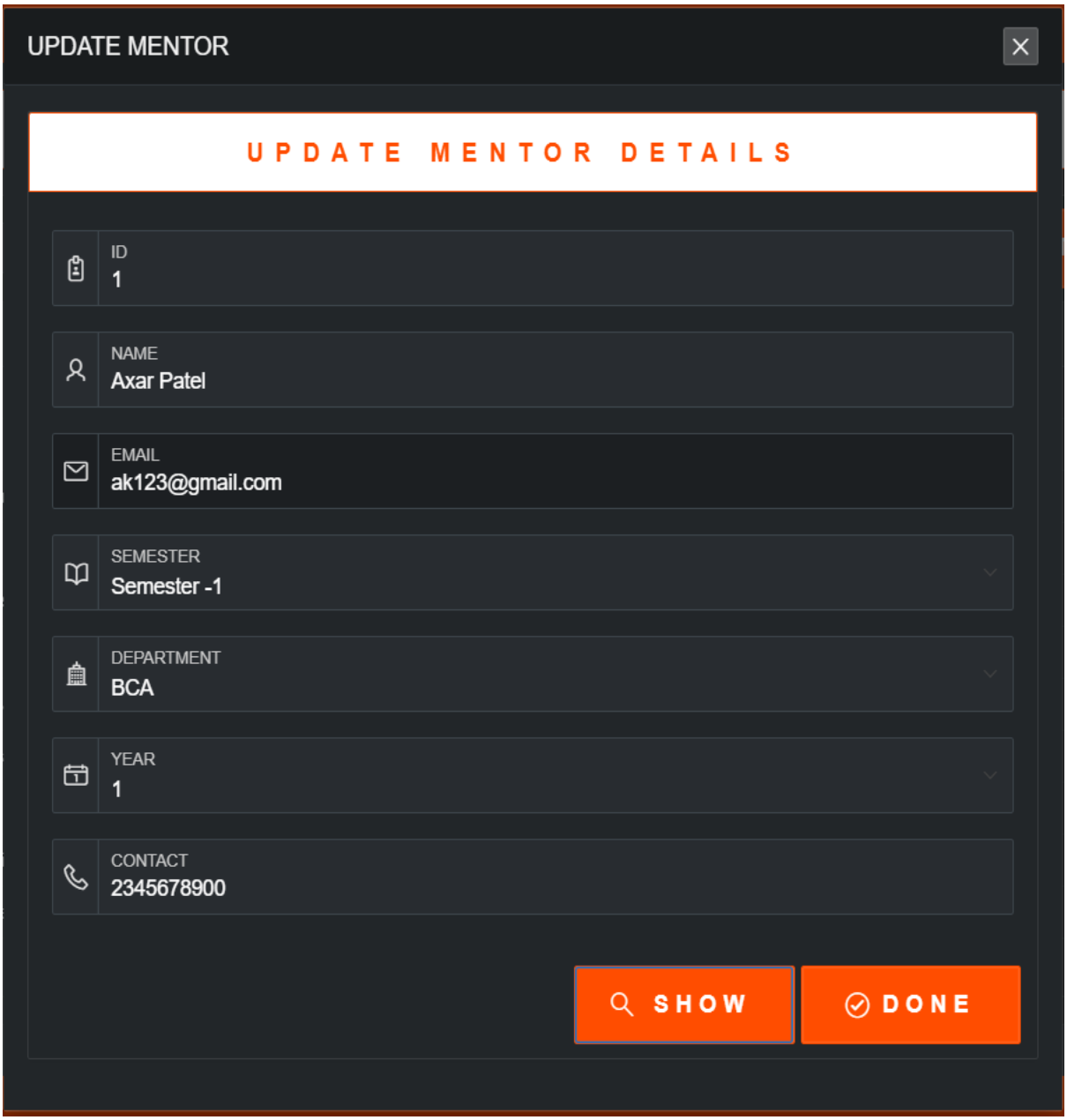
- This is the Mentor entry report.you can create , update,and remove mentor datails in this page.

ADD MENTOR FORM



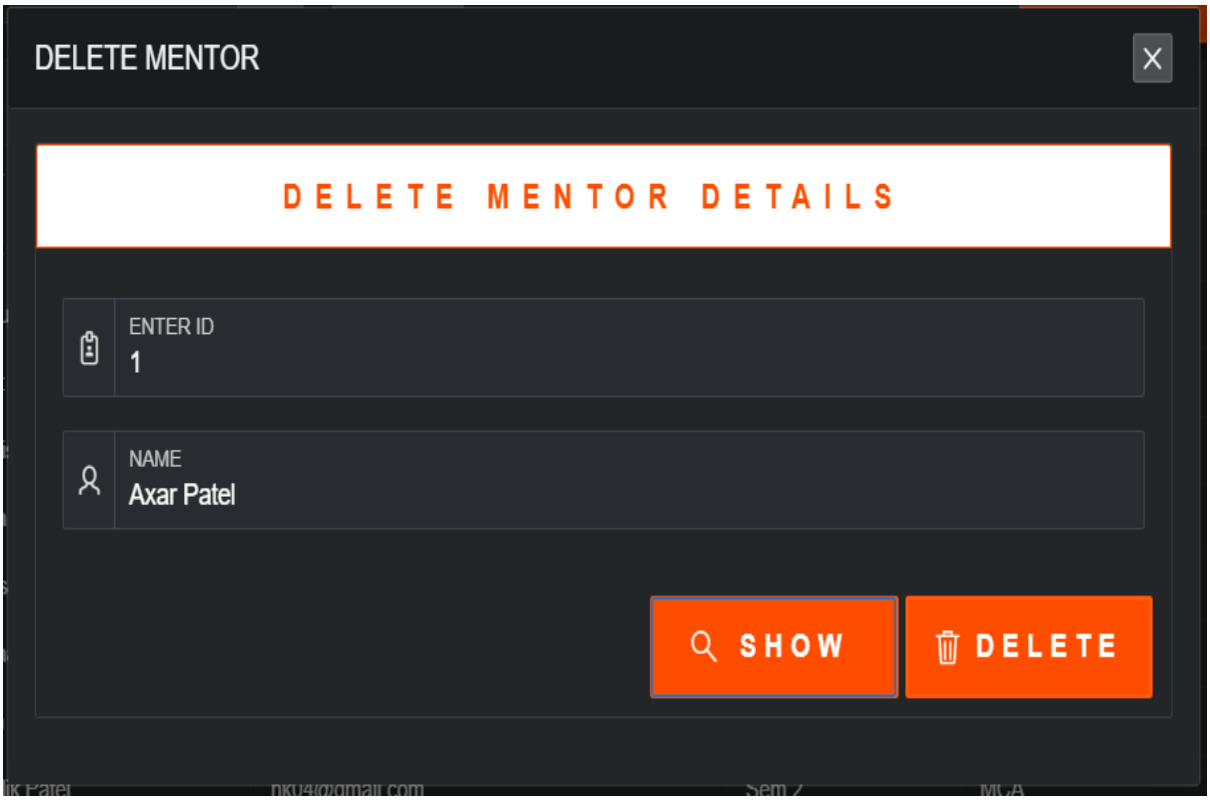
- This is add mentor form.fill the all item and click the done button and all data can submit add_metor table in database.
- Id filed is auto increment.

UPDATE MENTOR FORM



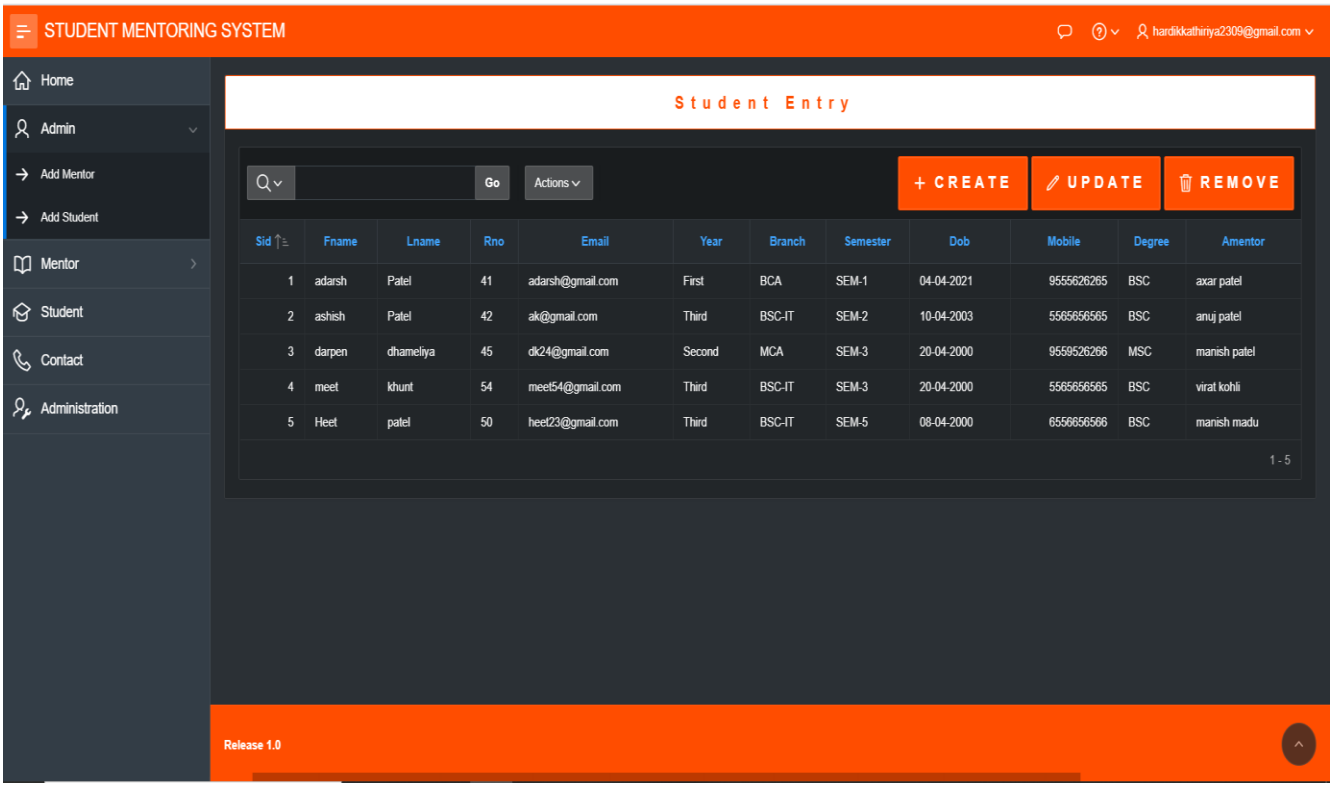
- This is update mentor form.fill the id item and click the show button and all data can show in particular text-filed and you can change data and click the done button and submit all data in add_metor table in database.

REMOVE MENTOR FORM



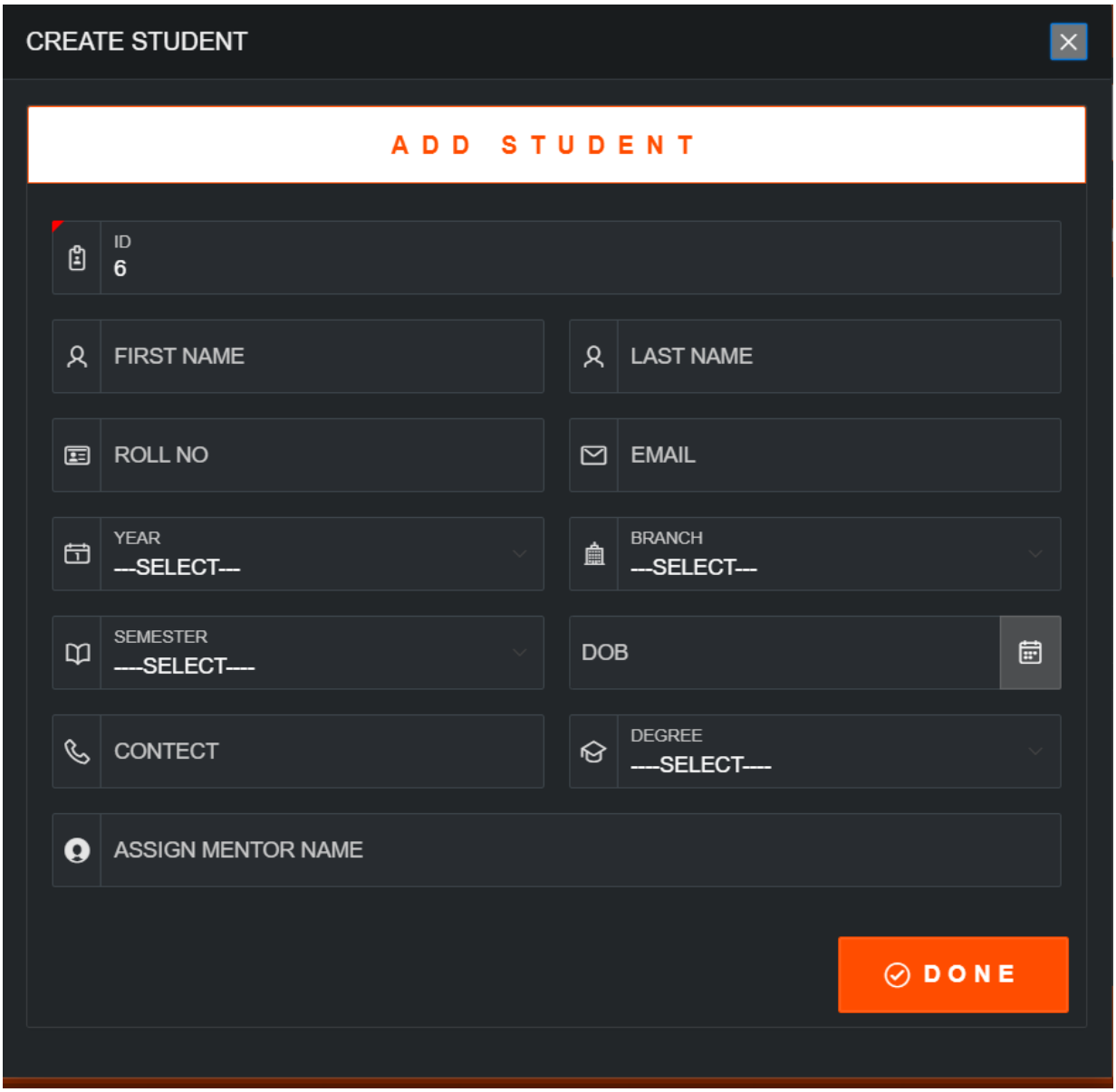
- This page is delete mentor form.enter id and click the show button and record name is currect you can check and if currect so click the delete button and delete the record.

STUDENT ENTRY REPORT



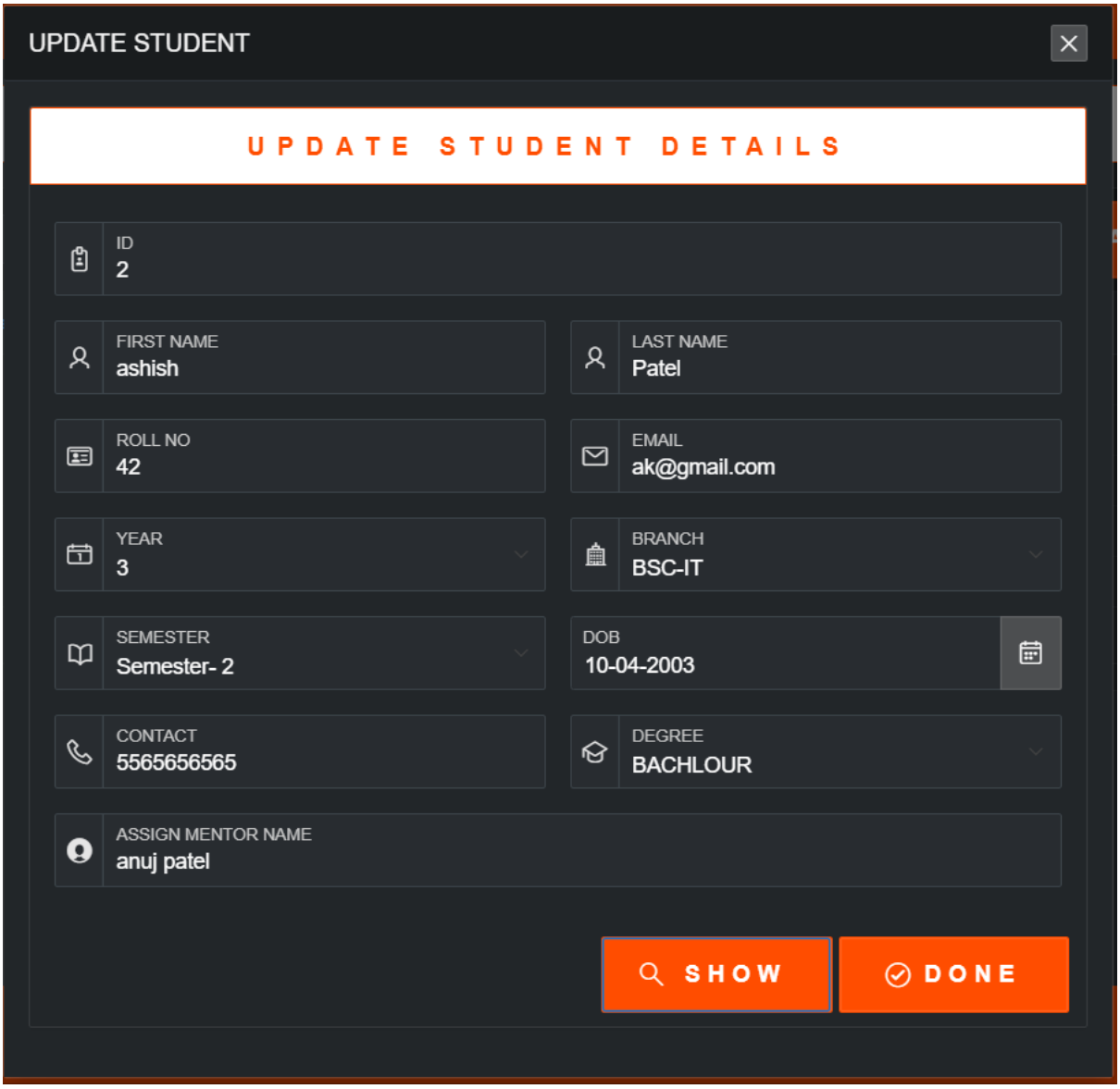
- This is the Student entry report.you can create , update,and remove student datails in this page.

ADD STUDENT FORM



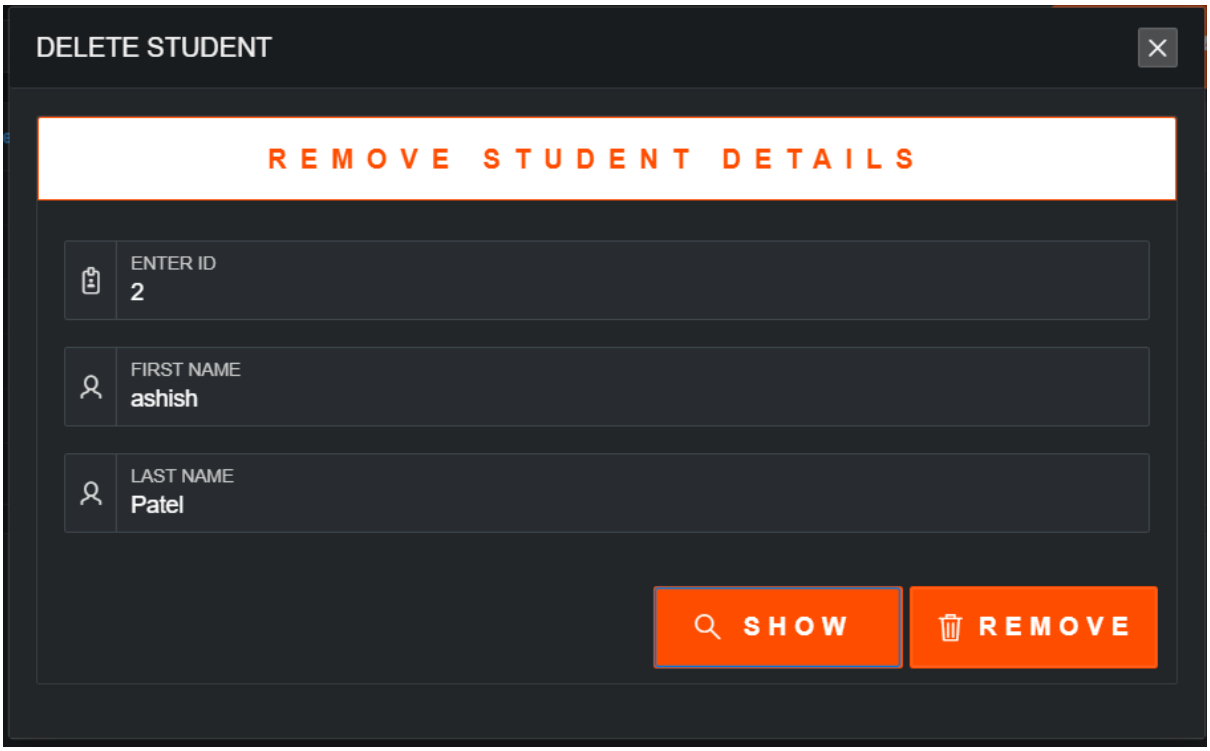
- This is add Student form.fill the all item and click the done button and all data can submit add_student table in database.
- Id filed is auto increment.
- The selection view of year,branch,and semester and degree.
- Contect no is max 10 number can store.

UPDATE STUDENT FORM



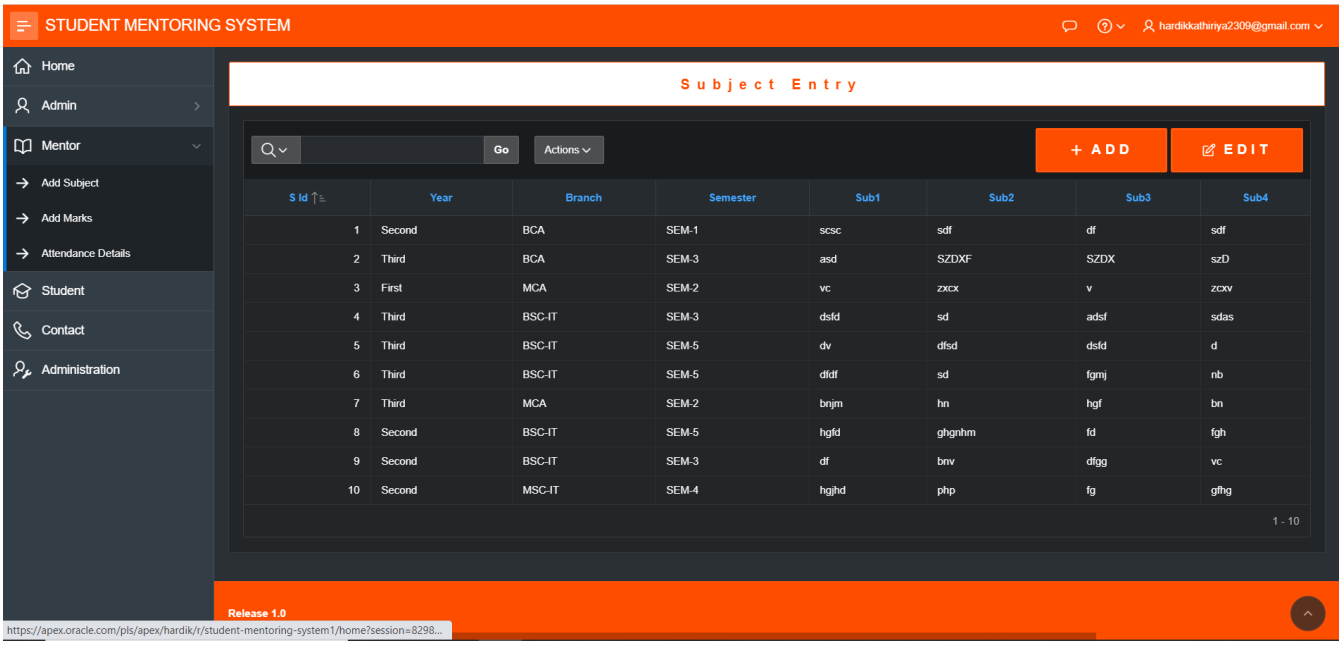
- This is update Student form.fill the id item and click the show button and all data can show in particular text-filed and you can change data and click the done button and submit all data in add_student table in database.

REMOVE STUDENT FORM



- This page is delete Student form.enter id and click the show button and record name is currect you can check and if currect so click the delete button and delete the record.

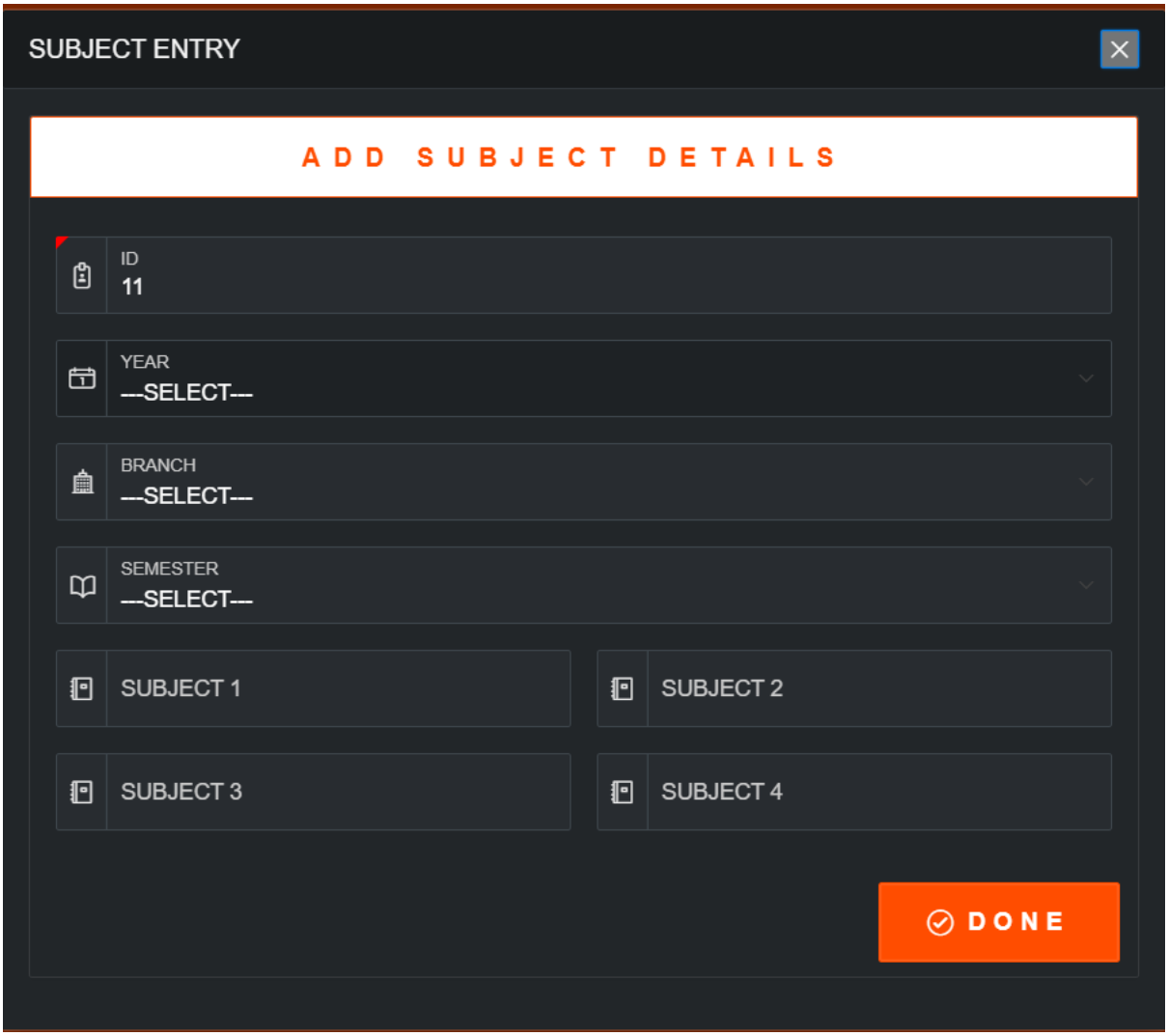
SUBJECT ENTRY REPORT



- This page is Subject entry page report all data can show this report in table subject.

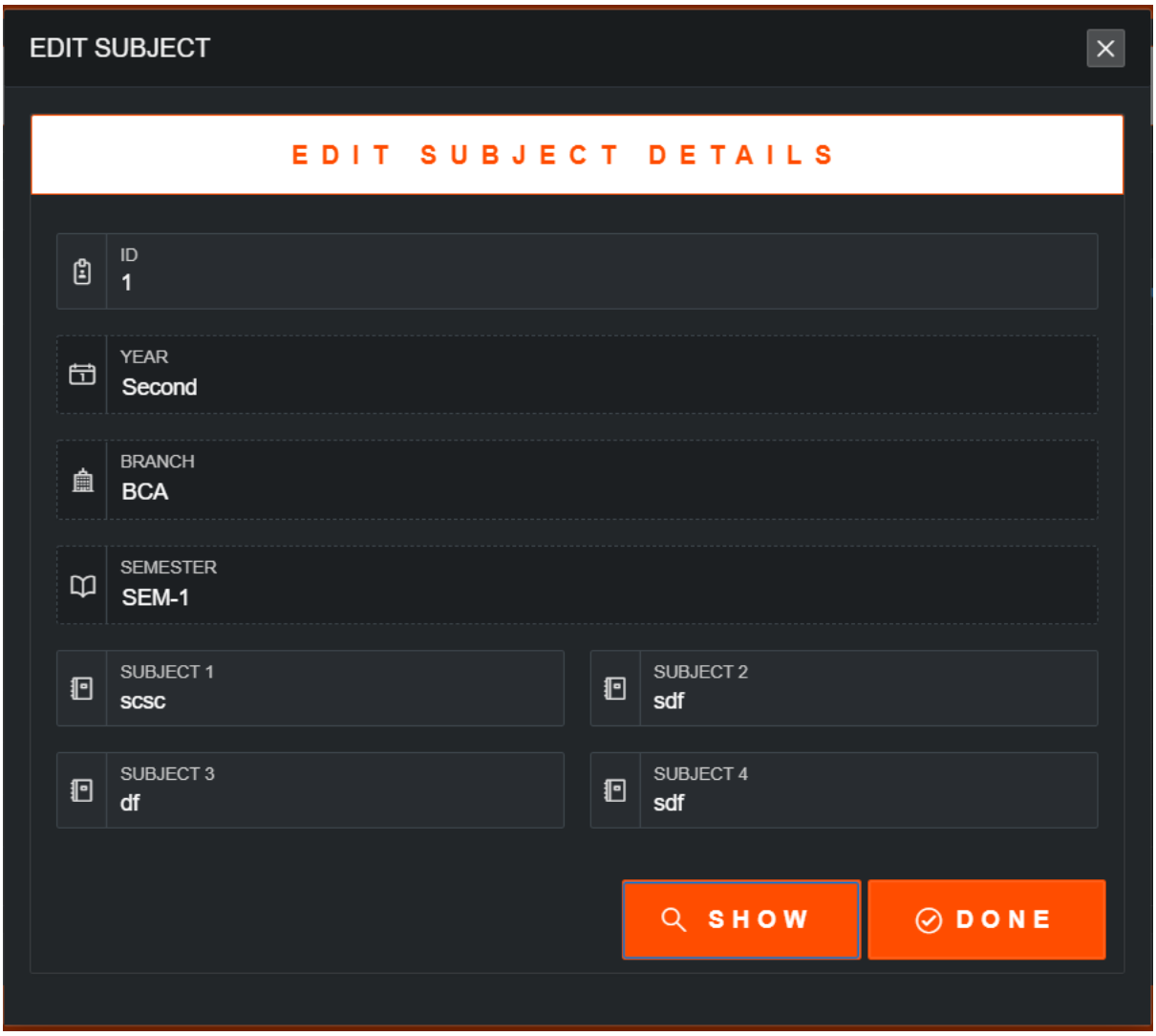
- Mentor can add subject the add button click and add subject datails and also can edit this all data in report.

ADD SUBJECT FORM



- This is add Subject form.fill the all item and click the done button and all data can submit add_student table in database.
- Id filed is auto increment.
- The selection view of year,branch,and semester.

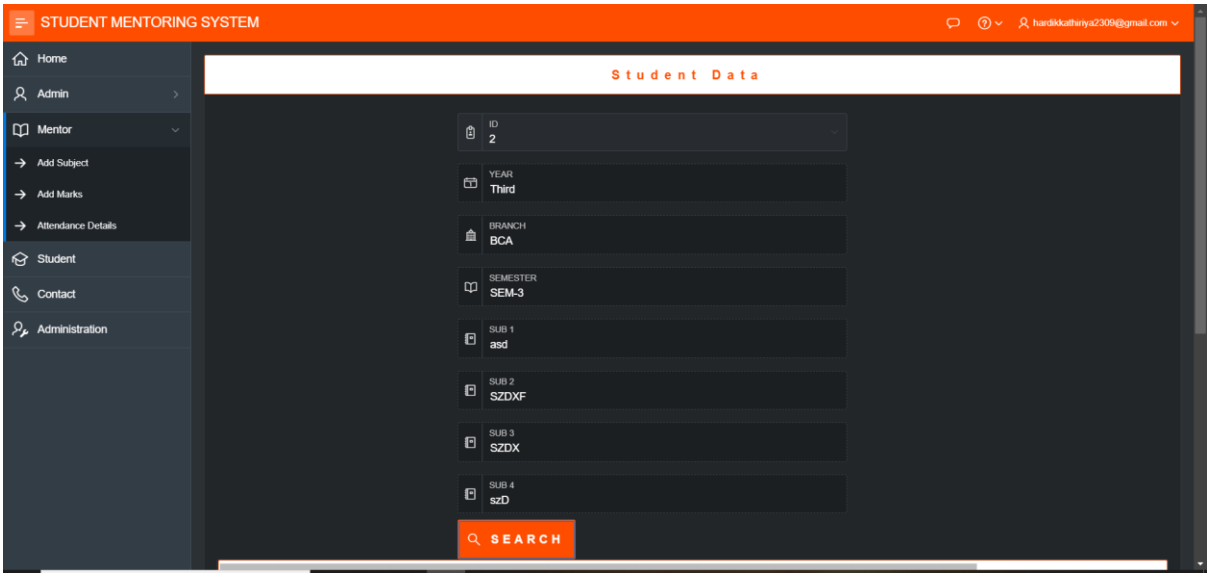
EDIT SUBJECT FORM

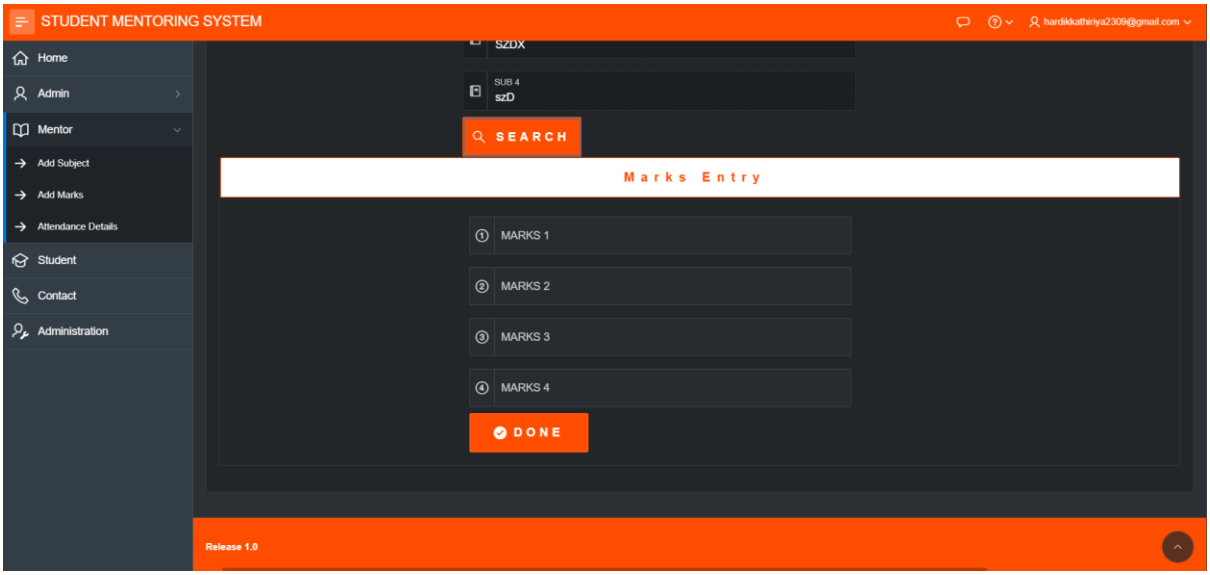


- This is Edit Subject form.fill the id item and click the show button and all data can show in particular text-filed and you can change data and click the done button and submit all data in Subject table in database.

MARKS ENTRY

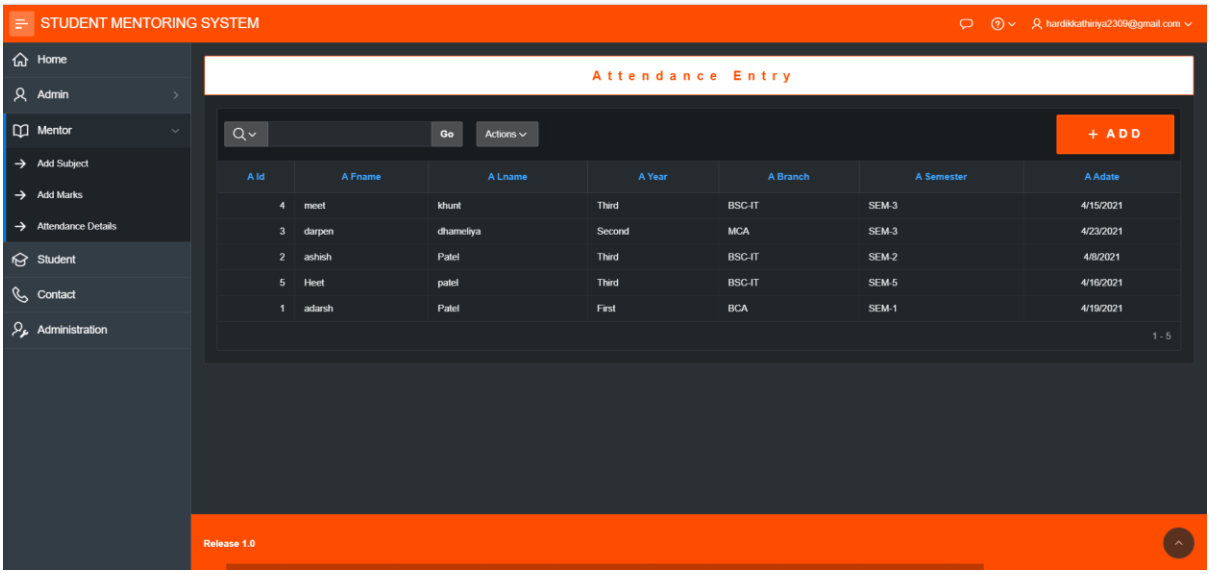
STUDENT DATA FORM

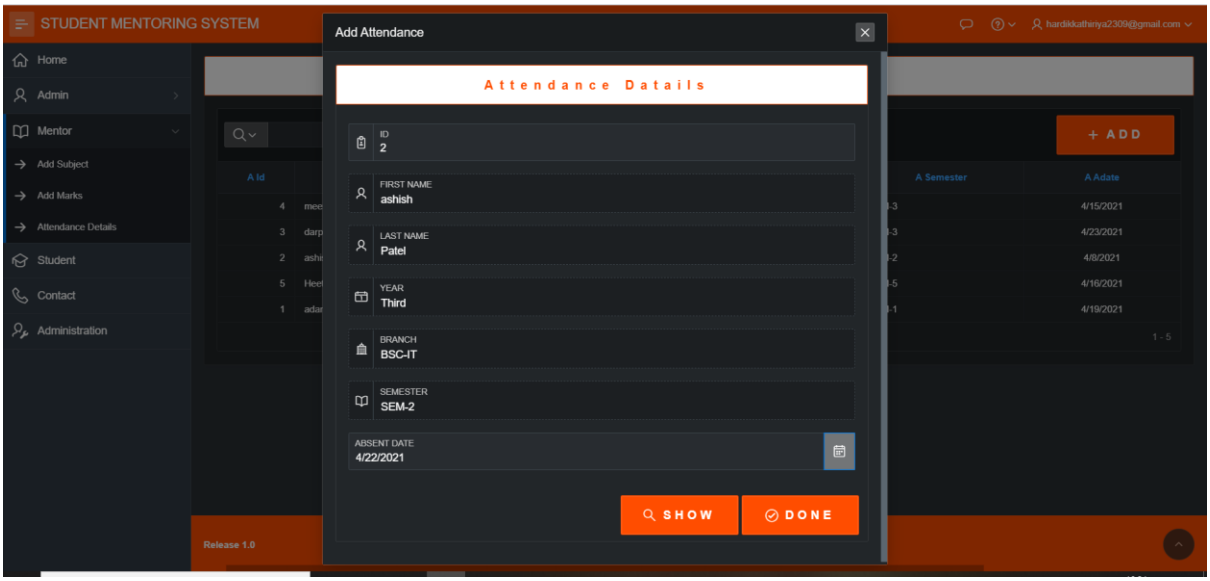




- This page is student marks entry page retirve the all student data call by id and four subject marks can store each student vice call by student id and all data can store marks table in database.

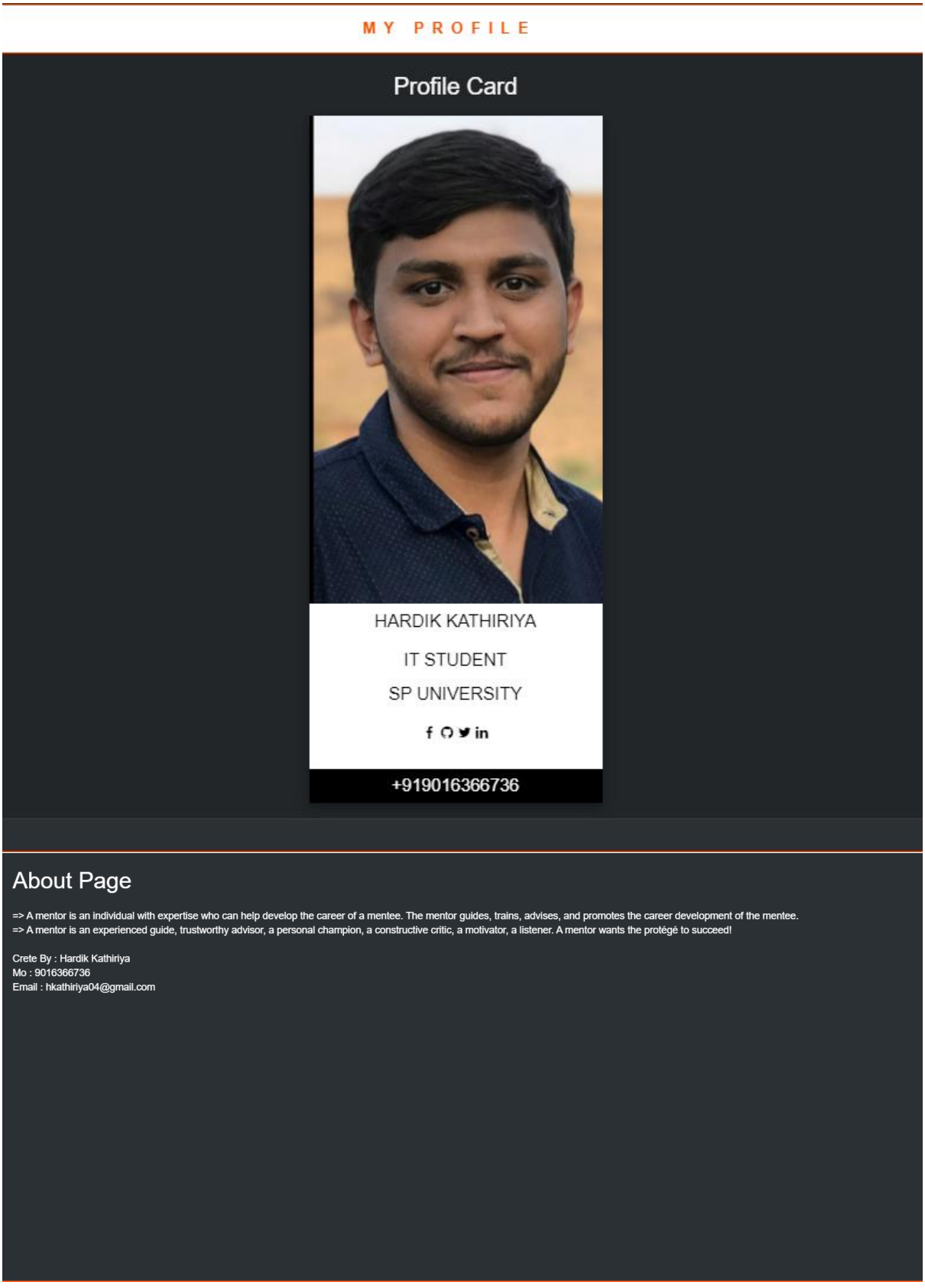
ATTENDANCE ENTRY





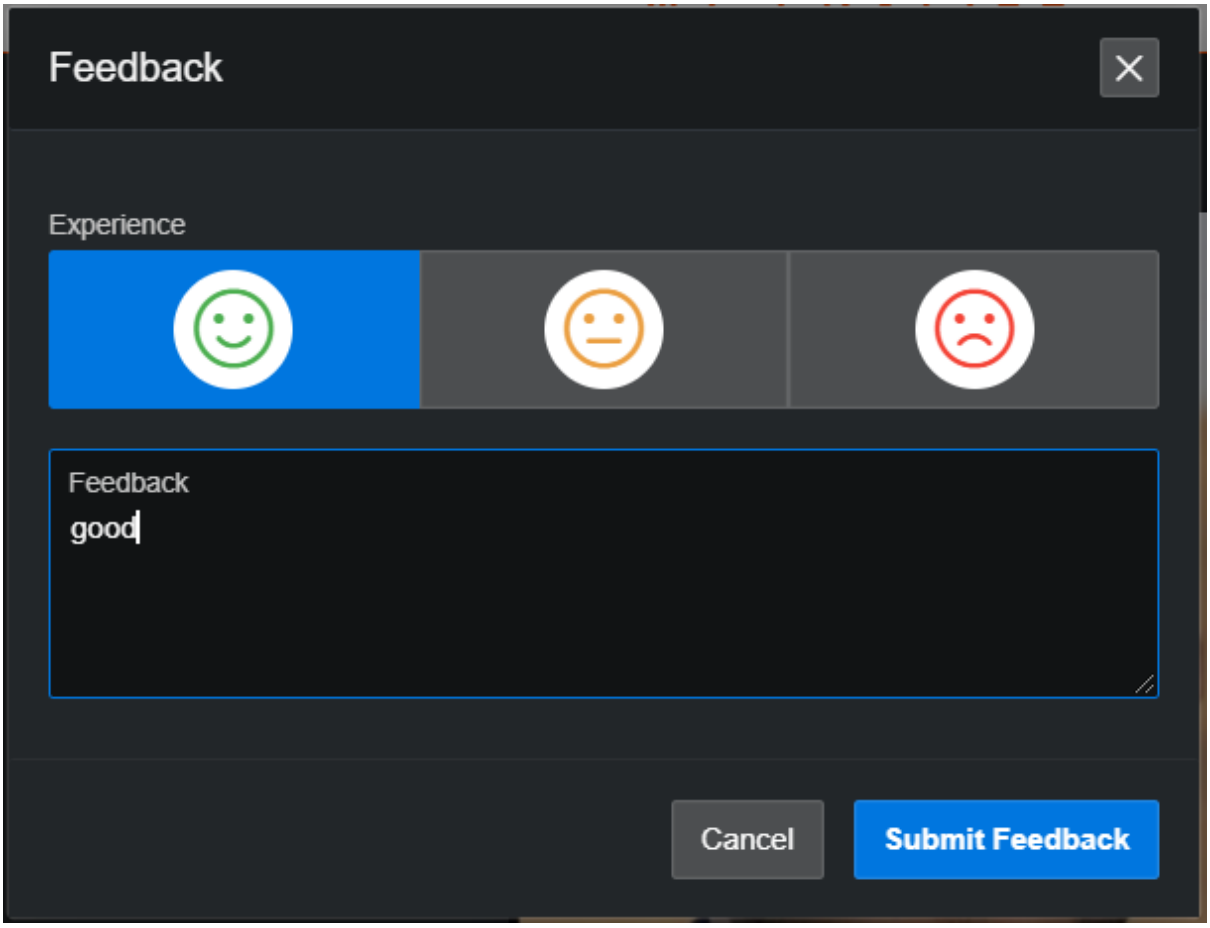
- This page is attendance report and add attendance of student. Click the add button and fill the all data call by id all filed can display only and absent date chose the date in date picker and click the done button all data can store attendance table in database.

CONTACT US PAGE



- This page is contact us and all data can show and social media icon also visited link.

FEEDBACK PAGE



- This is feedback form review your Experience and you can Submit the Feedback.

ADVANTAGES AND LIMITATIONS

➢ Advantages

The system is very simple to use. The system requires very low system resources and will work in almost all configurations.

It has got following advantages:

- User Friendly application
- Can Use in Mobile phones
- Open Source application
- Secure Database
- Simple and low Coding techniques
- Easy maintenance
- Fast processing and handy
- Data can be updated easily
- Database records can be maintained from anywhere
- Easy Data Retrieval
- System reduces manual workload
- Less error prone and accuracy is maintained
- Provides reports of data

➢ Limitations

• System is not a multi-user system.

CONCLUSION

- The database of the system can also easily be ported in any other standard database with nominal changes.

- This is an open source application so that others can edit and transform this system application according to their needs.

- This will be an additional advantage and management of man power based on their free time from his normal duty.

- Finally, we can say that these systems will not only auto-mate the process but save the valuable time of the Admin, which can be well utilized by this institute.

REFERENCES

- http://www.google.com
- https://apex.oracle.com/en/learn/documentation/
- https://www.youtube.com