



# **Annexure- 1**

## **STUDENT MENTORING SYSTEM**

By:  
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**(BSc. (CA&IT) SEMESTER - 6)**

***Exam No: - 31***

Submitted as

***Partial fulfillment of***

**BSc. (CA&IT)**

**2020 – 2021**



**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 09<sup>th</sup> DECEMBER 2020 to 06<sup>th</sup> 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:**

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

### **Software used during the development process:**

<b>Sr. No.</b>	<b>Software Used</b>	<b>Description</b>
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:**

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

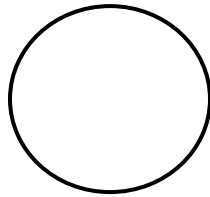
### **Software required to implement of system:**

<b>Sr. No.</b>	<b>Software Used</b>	<b>Description</b>
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

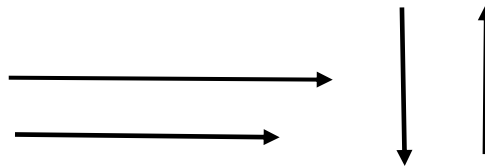
1] Process: - Here flow of data is transformed.



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.

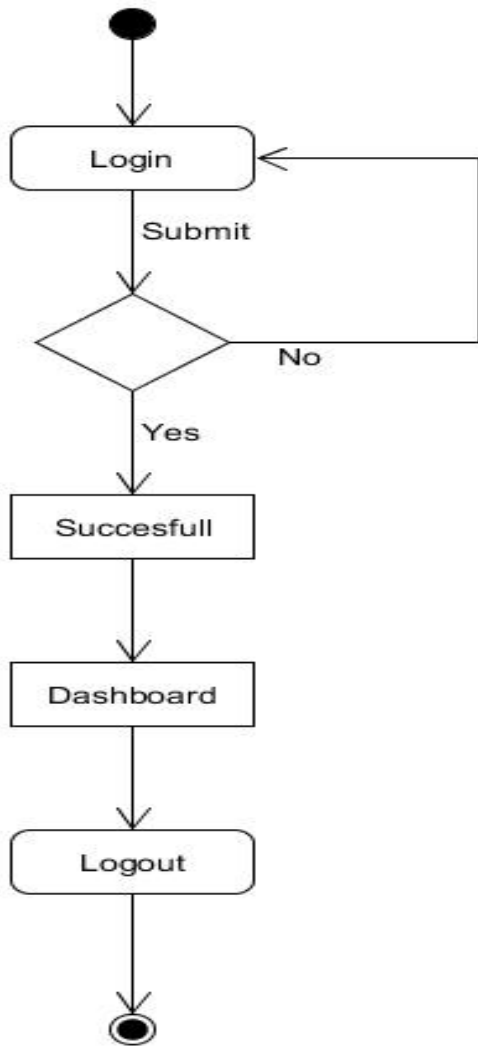


4] Data Store: - It stores name, sources and destinations are written in capital letters.

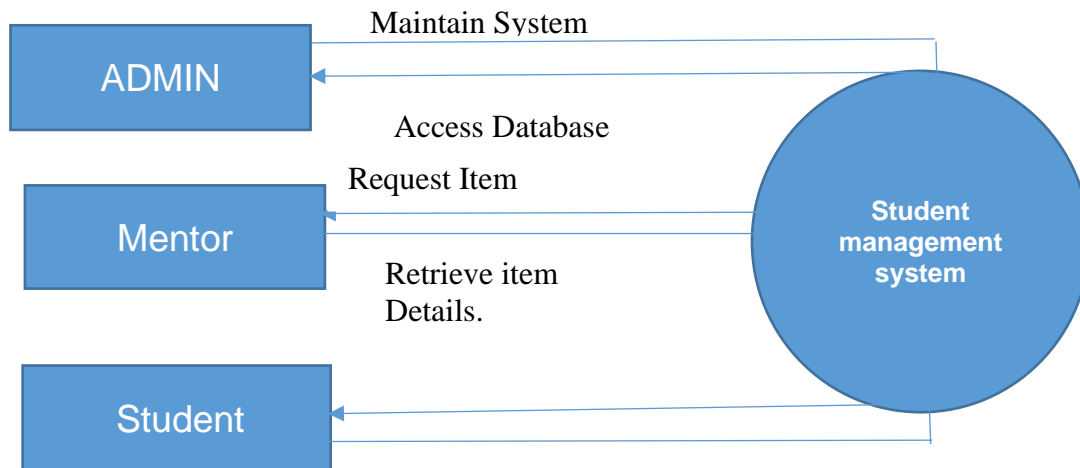


## DATA FLOW DIAGRAM

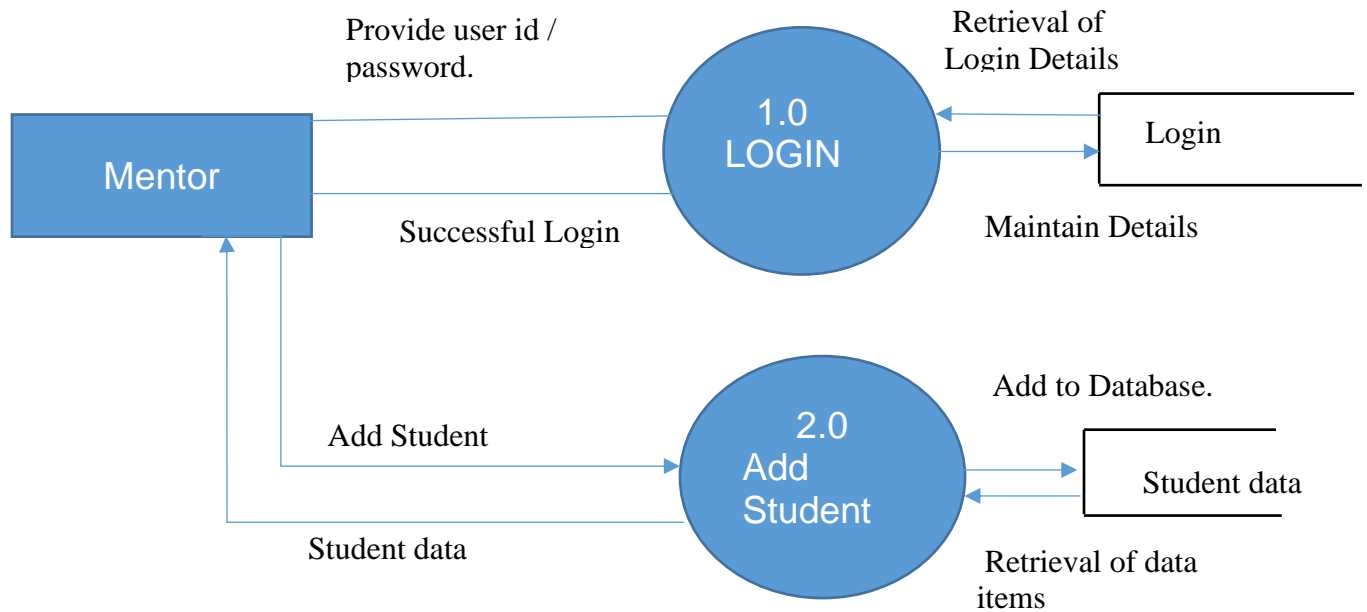
### Activity Diagram for Login:



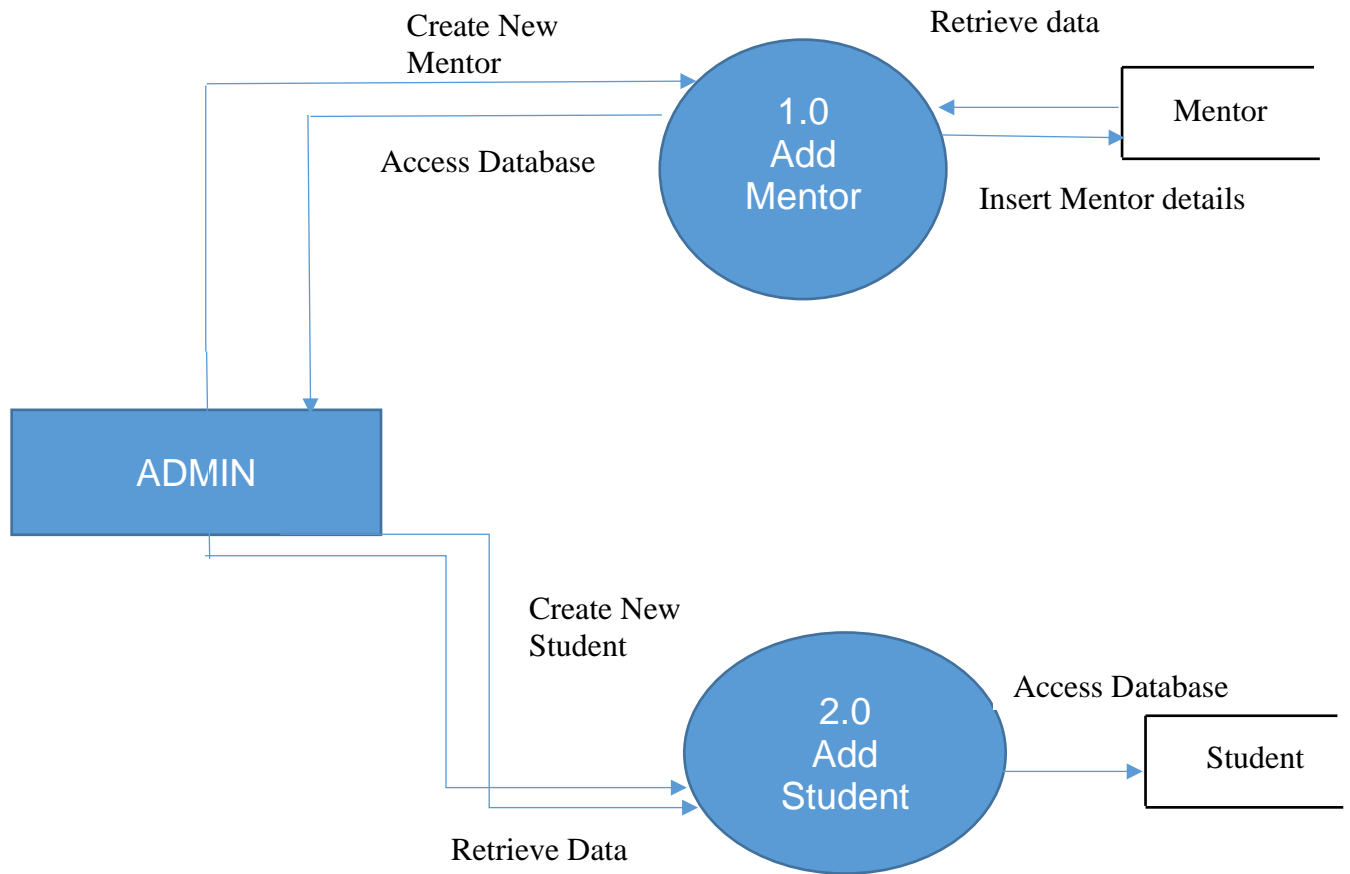
## (Context Level Diagram)



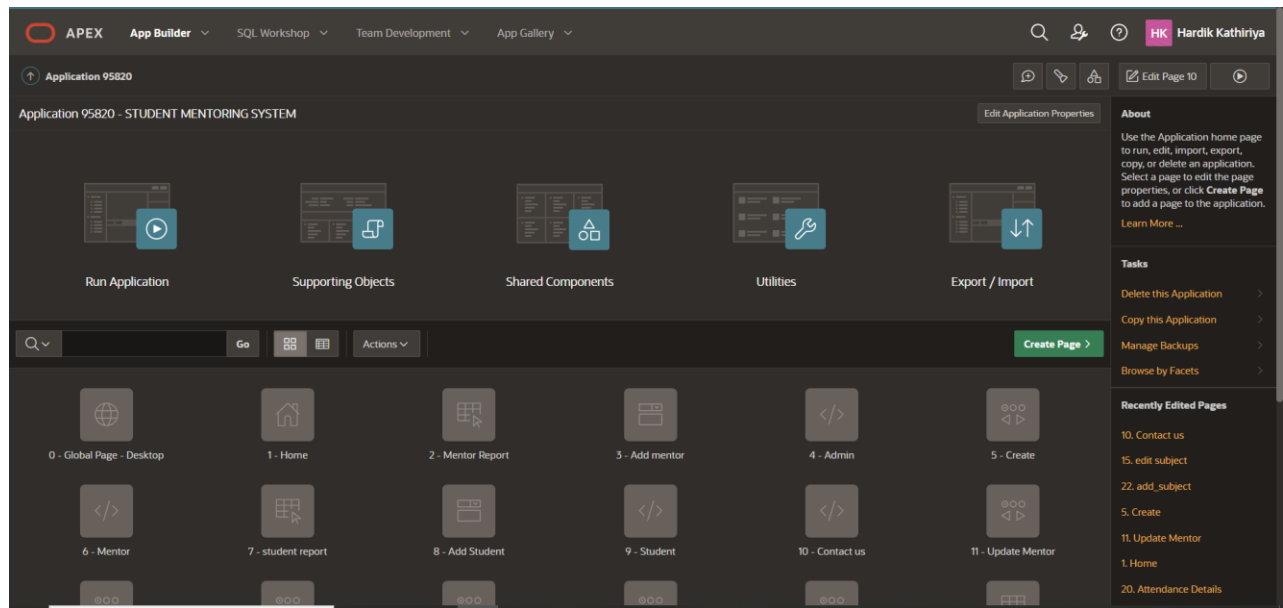
## ZERO LEVEL DIAGRAM FOR MENTOR



## ZERO LEVEL DIAGRAM FOR ADMIN



## VIEW OF ORCALE APPLICATION EXPRESS



- This is First Look of Oracle 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:

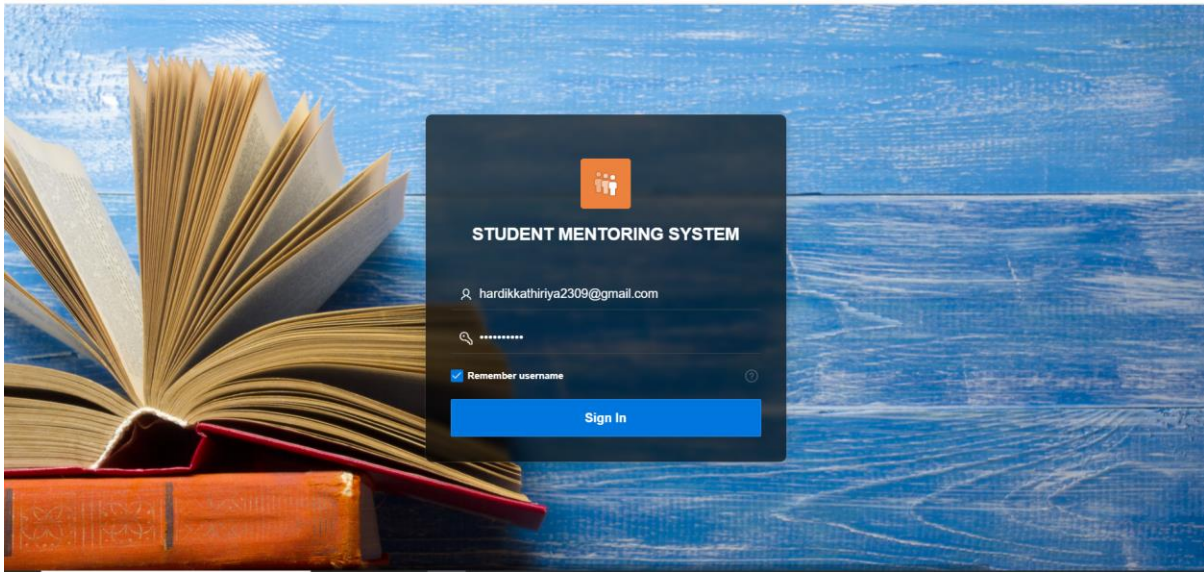


Figure 1.1

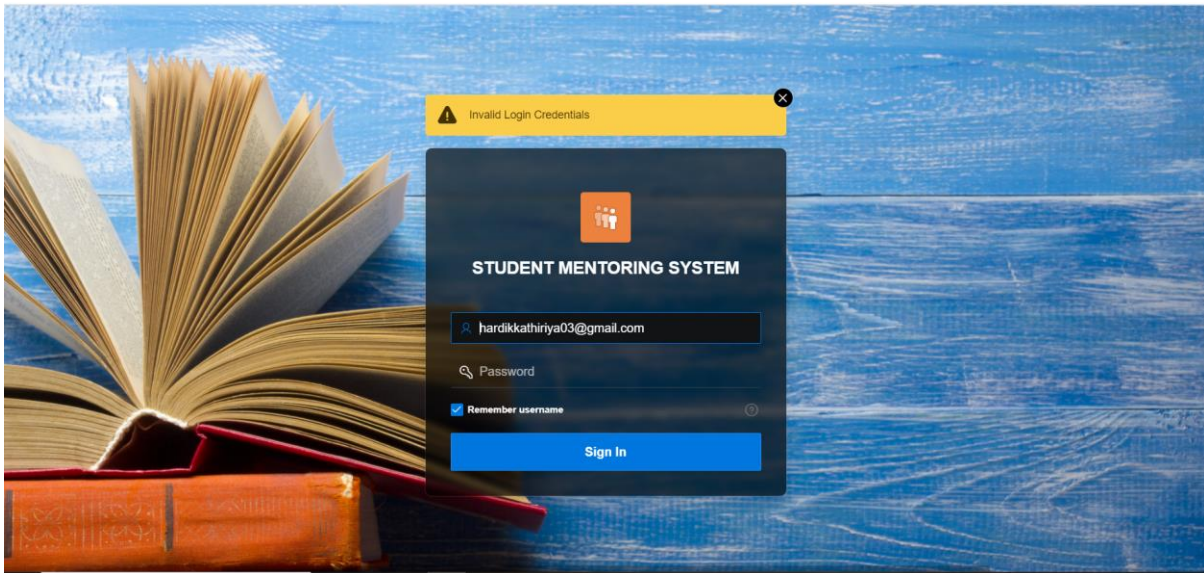


Figure 2.0

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

Id	Name	Email	Semester	Department	Year	Mobile
1	Acar Patel	ak123@gmail.com	Sem 1	BCA	First	2345678900
2	Virat Kohli	vk18@gmail.com	Sem 2	BSC(CA&IT)	Second	2323333343
3	Rahul Patel	rp23@gmail.com	Sem 3	MCA	First	6666666666
4	Heet Trivedi	Heet24@gmail.com	Sem 6	BSC(CA&IT)	Thrid	5678900098
5	manish gohal	manish34@gmail.com	Sem 2	MSC (IT)	Thrid	7654345676
6	fateh munshi	munshi@gmail.com	Sem 4	MCA	Thrid	7777777777
7	Hitesh madu	hitesh23@gmail.com	Sem 1	BCA	Thrid	2362626262
8	girdhar patel	gr56@gmail.com	Sem 5	BSC(CA&IT)	Second	5119999985
9	bipin patel	bipin45@gmail.com	Sem 2	MCA	First	9999999999
10	Hardik Patel	hk04@gmail.com	Sem 2	MCA	Second	2222222222
11	darkat khens	khens@gmail.com	Sem 2	BSC(CA&IT)	Thrid	3456543565

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

## ADD MENTOR FORM

Create

×

ADD MENTOR

📋

ID

12

👤

NAME

✉

EMAIL

📖

SEMESTER

—SELECT—

🏢

DEPARTMENT

—SELECT—

📅

YEAR

—SELECT—

📞

CONTACT

✓

DONE

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

## UPDATE MENTOR FORM

UPDATE MENTOR

×

UPDATE MENTOR DETAILS

ID	1
NAME	Axar Patel
EMAIL	ak123@gmail.com
SEMESTER	Semester -1
DEPARTMENT	BCA
YEAR	1
CONTACT	2345678900

SHOW

DONE

- 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\_meteor table in database.

## REMOVE MENTOR FORM

DELETE MENTOR

X

DELETE MENTOR DETAILS

ENTER ID

1

NAME

Axar Patel

SHOW

DELETE

Axar Patel

dku4107@gmail.com

SEPT /

MLA

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

# STUDENT ENTRY REPORT

STUDENT MENTORING SYSTEM

Home

Admin

Add Mentor

Add Student

Mentor

Student

Contact

Administration

Student Entry

Q

Go

Actions

+ CREATE

UPDATE

REMOVE

Sid	Fname	Lname	Rno	Email	Year	Branch	Semester	Dob	Mobile	Degree	Amentor
1	adarsh	Patel	41	adarsh@gmail.com	First	BCA	SEM-1	04-04-2021	9555626265	BSC	axar patel
2	ashish	Patel	42	ak@gmail.com	Third	BSC-IT	SEM-2	10-04-2003	5565656565	BSC	anuj patel
3	darpen	dhameliya	45	dk24@gmail.com	Second	MCA	SEM-3	20-04-2000	9559526266	MSC	manish patel
4	meet	khunt	54	meet54@gmail.com	Third	BSC-IT	SEM-3	20-04-2000	5565656565	BSC	virat kohli
5	Heet	patel	50	heet23@gmail.com	Third	BSC-IT	SEM-5	08-04-2000	6556656566	BSC	manish madu

1 - 5

Release 1.0

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



## ADD STUDENT FORM

CREATE STUDENT

ADD STUDENT

ID

6

FIRST NAME

LAST NAME

ROLL NO

EMAIL

YEAR

---SELECT---

BRANCH

---SELECT---

SEMESTER

---SELECT---

DOB

CONTECT

DEGREE

---SELECT---

ASSIGN MENTOR NAME

DONE

- 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.
- Conctect no is max 10 number can store.

## UPDATE STUDENT FORM

UPDATE STUDENT

×

UPDATE STUDENT DETAILS

ID	2				
FIRST NAME	ashish		LAST NAME	Patel	
ROLL NO	42		EMAIL	ak@gmail.com	
YEAR	3		BRANCH	BSC-IT	
SEMESTER	Semester- 2		DOB	10-04-2003	
CONTACT	5565656565		DEGREE	BACHLOUR	
ASSIGN MENTOR NAME	anuj patel				

SHOW

DONE

- 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

DELETE STUDENT

REMOVE STUDENT DETAILS

ENTER ID  
2

FIRST NAME  
ashish

LAST NAME  
Patel

SHOW

REMOVE

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

# SUBJECT ENTRY REPORT

STUDENT MENTORING SYSTEM

hardikkathirya2309@gmail.com

Home

Admin

Mentor

Add Subject

Add Marks

Attendance Details

Student

Contact

Administration

Subject Entry

Q

Go

Actions

+ ADD

EDIT

S Id	Year	Branch	Semester	Sub1	Sub2	Sub3	Sub4
1	Second	BCA	SEM-1	scsc	sdf	df	sdf
2	Third	BCA	SEM-3	asd	SZDXF	SZDX	szD
3	First	MCA	SEM-2	vc	zxcx	v	zcxv
4	Third	BSC-IT	SEM-3	dsfd	sd	adsl	sdas
5	Third	BSC-IT	SEM-5	dv	dsfd	dsfd	d
6	Third	BSC-IT	SEM-5	dlfd	sd	fgmj	nb
7	Third	MCA	SEM-2	bnjm	hn	hgf	bn
8	Second	BSC-IT	SEM-5	hgfd	ghgnhm	fd	fgh
9	Second	BSC-IT	SEM-3	df	brv	dfgg	vc
10	Second	MSC-IT	SEM-4	hgjhd	php	fg	ghg

1 - 10

Release 1.0

https://apex.oracle.com/pls/apex/hardik/r/student-mentoring-system1/home?session=8298...

- 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 details and also can edit this all data in report.

## ADD SUBJECT FORM

SUBJECT ENTRY

×

ADD SUBJECT DETAILS

ID

11

YEAR

—SELECT—

BRANCH

—SELECT—

SEMESTER

—SELECT—

SUBJECT 1

SUBJECT 2

SUBJECT 3

SUBJECT 4

✓ DONE

- 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

EDIT SUBJECT

×

EDIT SUBJECT DETAILS

ID	1		
YEAR	Second		
BRANCH	BCA		
SEMESTER	SEM-1		
SUBJECT 1	SCSC		
SUBJECT 2	sdf		
SUBJECT 3	df		
SUBJECT 4	sdf		

SHOW

DONE

- 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

The screenshot shows the 'Student Data' form in the 'STUDENT MENTORING SYSTEM'. The form is titled 'Student Data' and contains several input fields for student information. The fields are: ID (2), YEAR (Third), BRANCH (BCA), SEMESTER (SEM-3), SUB 1 (asd), SUB 2 (SZDXF), SUB 3 (SZDX), and SUB 4 (szD). A 'SEARCH' button is located at the bottom of the form. The left sidebar contains navigation links: Home, Admin, Mentor, Add Subject, Add Marks, Attendance Details, Student, Contact, and Administration. The top bar shows the system name and a user profile.

Field	Value
ID	2
YEAR	Third
BRANCH	BCA
SEMESTER	SEM-3
SUB 1	asd
SUB 2	SZDXF
SUB 3	SZDX
SUB 4	szD

The screenshot shows the 'Marks Entry' form in the 'STUDENT MENTORING SYSTEM'. The form is titled 'Marks Entry' and contains four input fields for marks. The fields are: MARKS 1, MARKS 2, MARKS 3, and MARKS 4. A 'DONE' button is located at the bottom of the form. The left sidebar contains navigation links: Home, Admin, Mentor, Add Subject, Add Marks, Attendance Details, Student, Contact, and Administration. The top bar shows the system name and a user profile.

Field	Value
MARKS 1	
MARKS 2	
MARKS 3	
MARKS 4	

- This page is student marks entry page retrieve 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

STUDENT MENTORING SYSTEM

Attendance Entry

Q Go Actions + ADD

A Id	A Fname	A Lname	A Year	A Branch	A Semester	A Date
4	meet	khunt	Third	BSC-IT	SEM-3	4/15/2021
3	darpen	dhameiya	Second	MCA	SEM-3	4/23/2021
2	ashish	Patel	Third	BSC-IT	SEM-2	4/8/2021
5	Heet	patel	Third	BSC-IT	SEM-5	4/16/2021
1	adarsh	Patel	First	BCA	SEM-1	4/19/2021

1 - 5

Release 1.0

STUDENT MENTORING SYSTEM

Add Attendance

Attendance Details

ID 2

FIRST NAME ashish

LAST NAME Patel

YEAR Third

BRANCH BSC-IT

SEMESTER SEM-2

ABSENT DATE 4/22/2021

SHOW DONE

Release 1.0

- 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

### MY PROFILE

#### Profile Card



HARDIK KATHIRIYA

IT STUDENT

SP UNIVERSITY

f   in

+919016366736

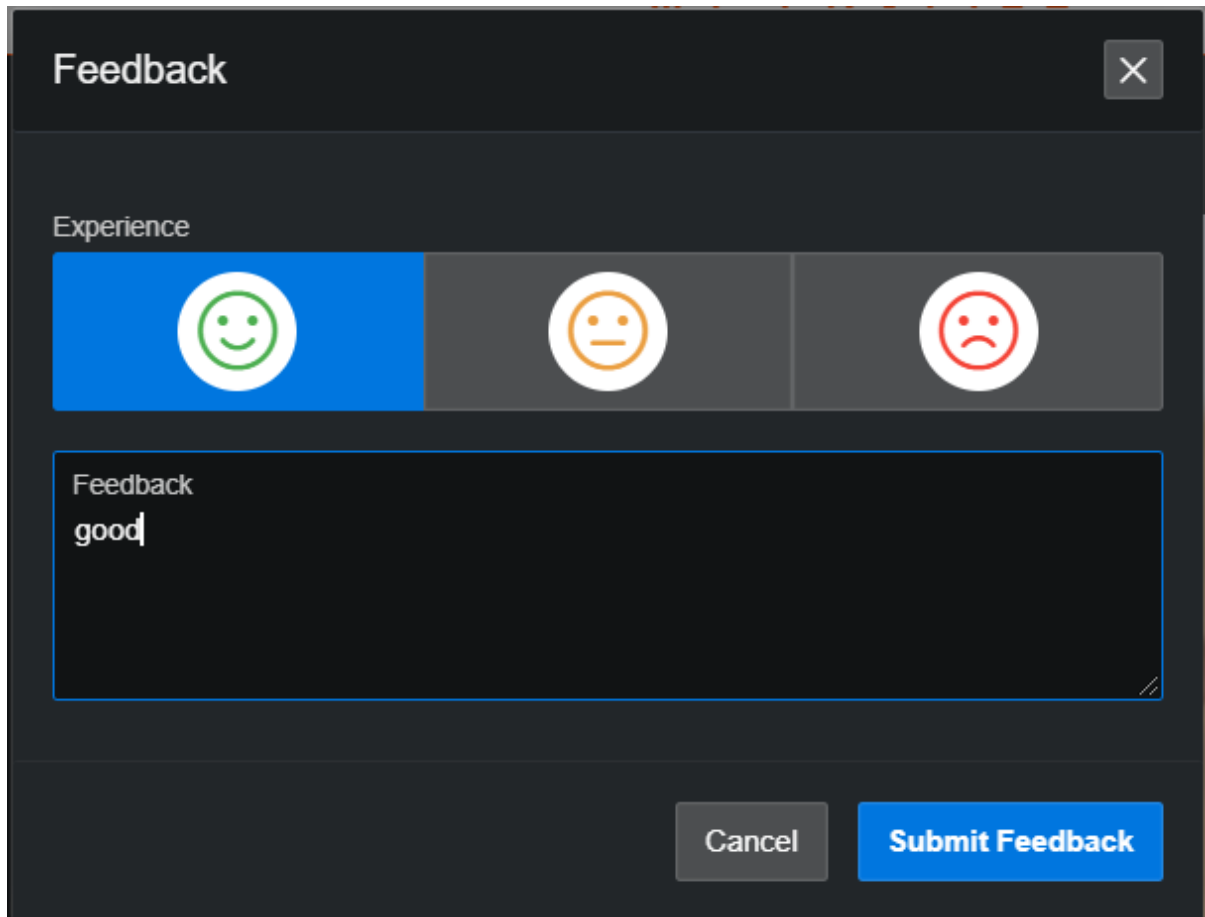
#### About Page

=> A mentor is an individual with expertise who can help develop the career of a mentee. The mentor guides, trains, advises, and promotes the career development of the mentee.  
=> A mentor is an experienced guide, trustworthy advisor, a personal champion, a constructive critic, a motivator, a listener. A mentor wants the protégé to succeed!

Create By : Hardik Kathiriya  
Mo : 9016366736  
Email : hkathiriya04@gmail.com

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

## FEEDBACK PAGE



The image shows a feedback form titled "Feedback" with a close button (X) in the top right corner. Below the title, there is a section labeled "Experience" with three radio button options: a green smiley face (selected), an orange neutral face, and a red frowny face. Below these options is a text input field with the placeholder text "Feedback" and the word "good" entered. At the bottom right, there are two buttons: "Cancel" and "Submit Feedback".

Feedback

Experience

Feedback  
good

Cancel Submit Feedback

- 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>