

A PROJECT ON
Student Portal
SUBMITTED IN
PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE COURSE OF DIPLOMA IN ADVANCED COMPUTING FROM CDAC



SUNBEAM INSTITUTE OF INFORMATION TECHNOLOGY
Karad

SUBMITTED BY:

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UNDER THE GUIDENCE OF:

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Faculty Member

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CERTIFICATE

This is to certify that the project work under the title 'Student Portal' is done by

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4.Sudarshana Prakash Sonawane

in partial fulfillment of the requirement for award of Diploma in Advanced Computing Course.

Soniya Shinde
Project Guide

Mr. Shubham Borle
Course Co-Coordinator

Date: 24/09/2021

ACKNOWLEDGEMENT

A project usually falls short of its expectation unless aided and guided by the right persons at the right time. We avail this opportunity to express our deep sense of gratitude towards Mr. Nitin Kudale (Center Coordinator, SIIT, Pune) and Mr. Shubham Borle (Course Coordinator, SIIT, Karad).

We are deeply indebted and grateful to them for their guidance, encouragement and deep concern for our project. Without their critical evaluation and suggestions at every stage of the project, this project could never have reached its present form.

Last but not the least we thank the entire faculty and the staff members of Sunbeam Institute of Information Technology, Pune for their support.

Shubham Ashok Paunikar
Shubham Suresh Survase
Soham Sharadchandra Vishwas
Sudarshana Prakash Sonawane
eDAC May 2021 Batch,
SIIT, Karad.

INTRODUCTION TO PROJECT

The School Education Department is the largest department consisting of Primary and Secondary stages, assumes greater significance and aims at imparting minimum and essential general education to all the students.

The “Student Portal” is a web based portal is an attempt to where all information and all services that teacher and students need can be found in one place. It is a portal which thinks students as the main target users and provides so many useful services to students at a single place and through a single interface, where students can provide a username and password to gain access to an education organization’s programs and other learning related materials.

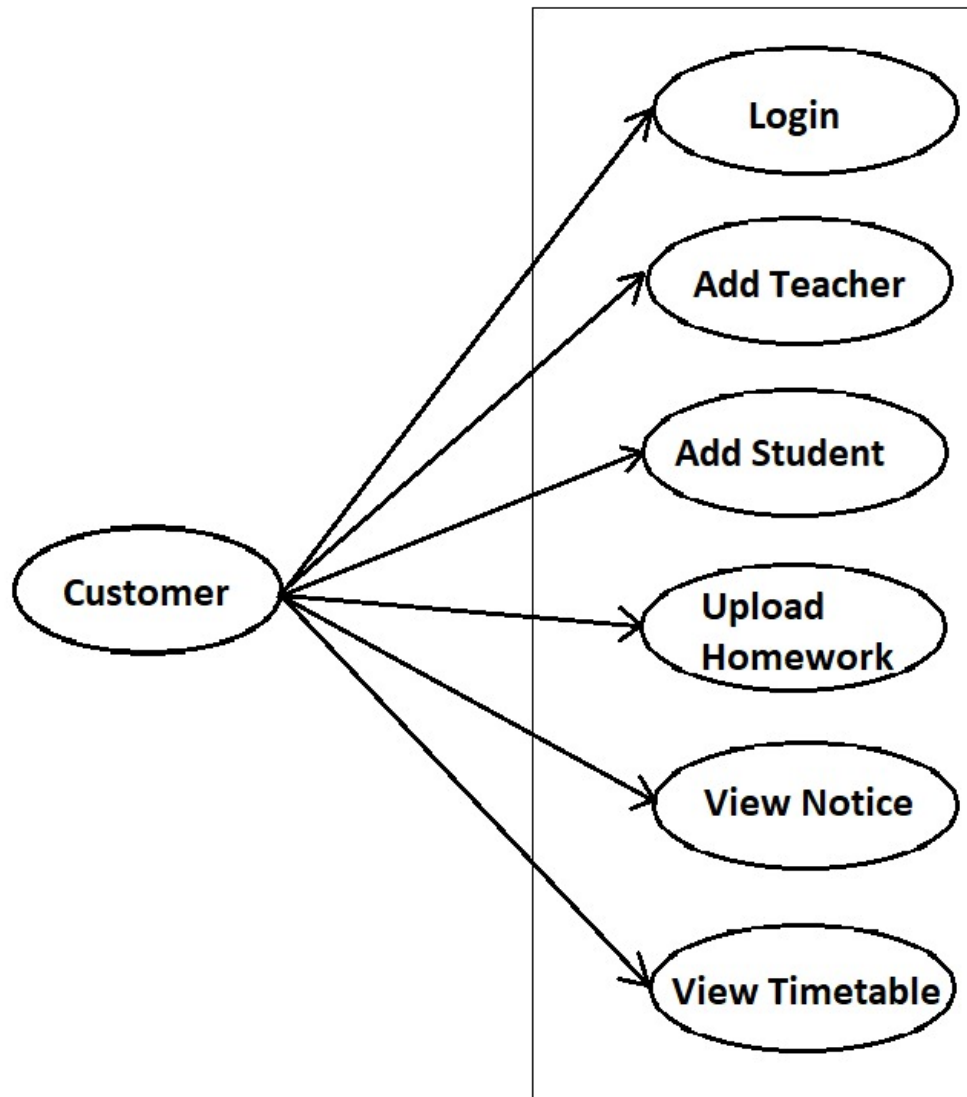
This Portal is used to access online course materials that are hosted on the school’s servers such as lectures, timetable, assigning homework, displaying notice, provide information about the school and contact information. .

The system is globally accessible, central place for all tasks, 24 hour accessible, user-friendly, secure and personalized, faster and better communication. This portal contains Admin, Institute Admin, Teacher, Student.

Here Institute Admin set information about teachers and students, which teacher teaches which subject, assign standard, division to the student. Teacher assign homework, set timetable, and set notice.

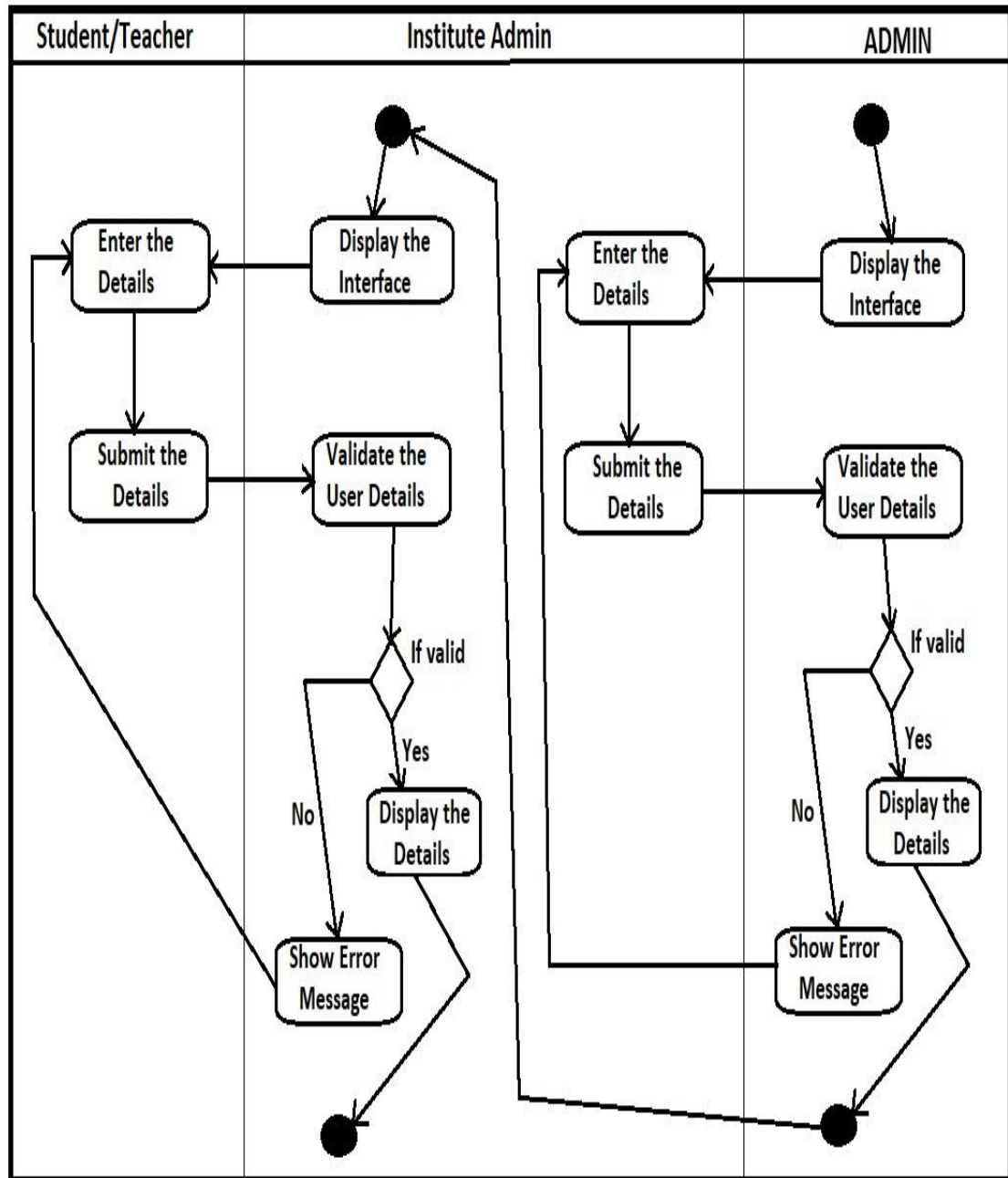
2.REQUIREMENTS

2.1 FUNCTIONAL REQUIREMENTS



In this web application, main customer is Institute which will take our service and provide it to teachers and students of this institute.

2.2 Registration and Creation of User page



Here main admin will login in this application and he will give access to institutes which will be our customer. For giving access to institutes, admin will create one institute admin for each institute.

Once institute admin created, admin will display login interface for institute admin. Institute admin will enter details and submit it back to admin. Admin will verify details which are submitted by institute admin, if the details are correct then it will redirect to next page and if the details are wrong then it will show error message to user.

After login, institute admin can create fields which are necessary for institute like teachers, students, standards, divisions and subjects.

Institute admin will display login interface to teachers and students. Teacher/student will enter details and submit it to institute admin. If the details are right then they will redirect to next page. If details are not correct then it will show error message to teacher/student.

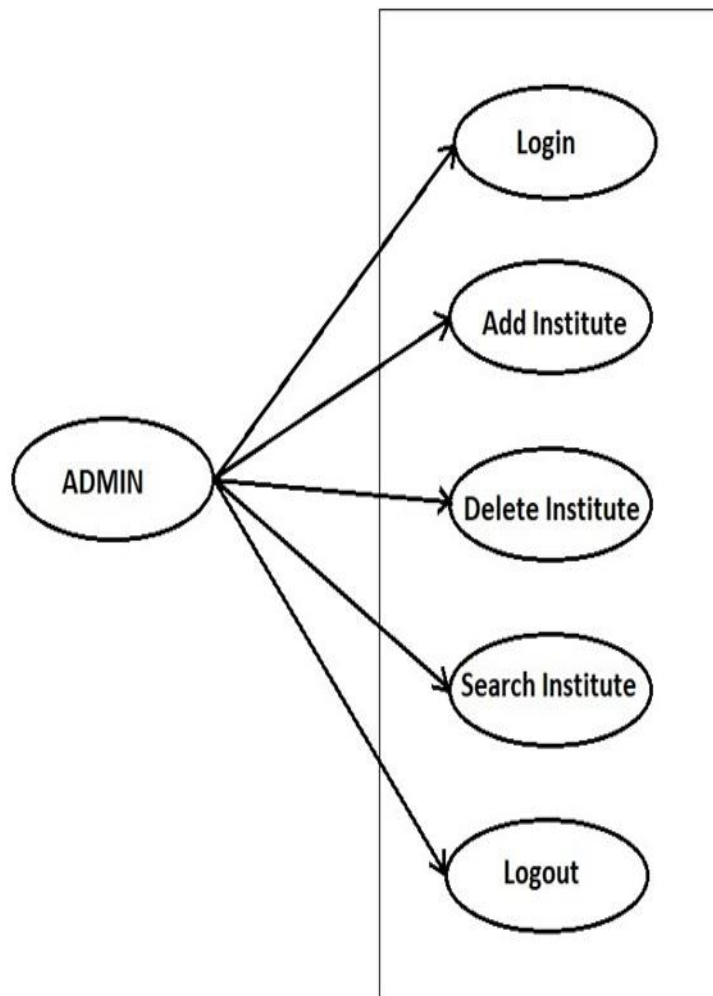
After successful login, teacher can select his standard and division. Teacher can assign homework to any particular standard or division with respect to his subjects. Teacher can also display notice to his standards and set timetable for the standards.

After login, student will get his respect standard and division. Student can download homework which is assigned by his teacher and after completing he can also upload homework for grading. Also student can see notice, timetable which is set by teacher.

2.3 User Account

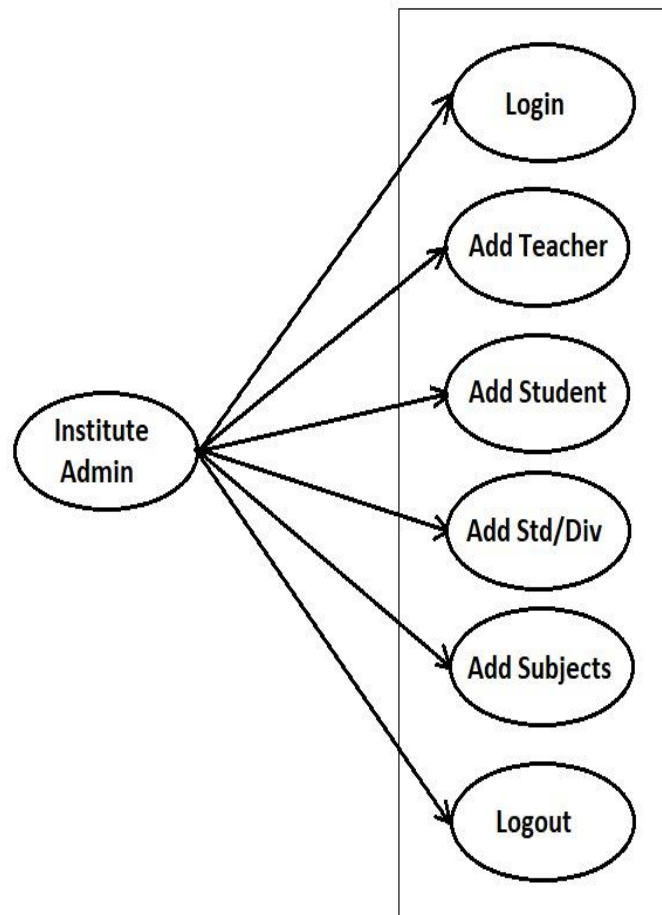
- **ADMIN**

The main control in this portal is given to Admin .He/She can add institute , delete institute, search institute. Admin passes control of particular institute to institute admin of that institute .



- **INSTITUTE ADMIN**

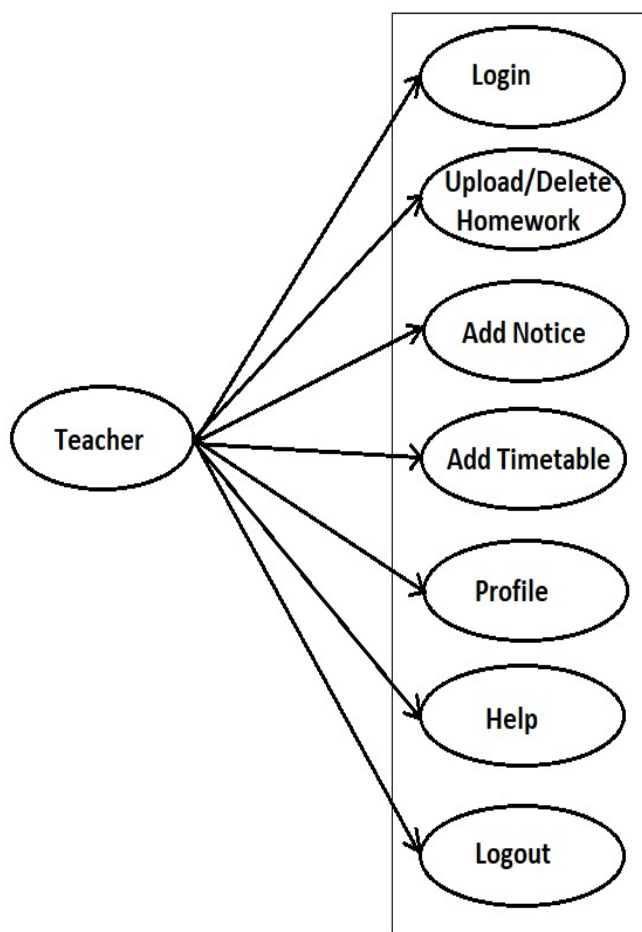
The Institute admin is main customer and sub customers are teachers and students. Institute admin is a head of that institute, he/she add teacher, students, standard, division, assign subject to that particular teacher.



- **TEACHER**

After successful login as a teacher , teacher do the following functions.

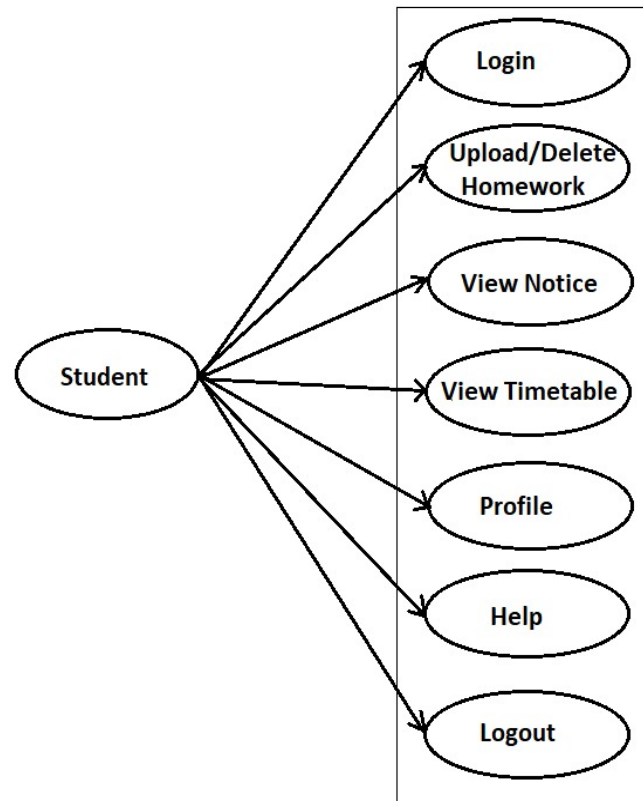
Uploading homework of particular subject, delete homework, add notice if whenever require, add timetable of lectures, exams and any events.



- **STUDENT**

After successful login as a student, student eligible to do following functions:

Student upload and delete homework ,view notice, view timetable of lectures or any events ,update their profile.



- **SOFTWARE REQUIREMENT**

- A. .React
- B. J2EE
- C. MySQL database

3. DESIGN

3.1 Database Design

The following table structures depict the database design.

Table1: User Info

Field	Type	Null	Key
Id	Int	No	PRI
Firstname	Varchar(100)	YES	
Lastname	Varchar(100)	YES	
Username	Varchar(100)	YES	
Password	Varchar(300)	YES	
Email	Varchar(150)	YES	
Mobile	Varchar(30)	YES	
Role	Varchar(15)	YES	
Institute_id	int	YES	
profilepicture	Varchar(100)	YES	

Table2: Institute Info

Field	Type	Null	Key
Id	Int	NO	PRI
Name	Varchar(50)	YES	
Email_id	Varchar(50)	YES	
Contact_no	Varchar(30)	YES	
Address	Varchar(200)	YES	

Table3: Student Info

Field	Type	Null	Key
Id	int	NO	PRI
Std_id	Int	YES	
Div_id	Int	YES	
User_id	Int	YES	
Assignment_id	Int	YES	
Assignment_data	Varchar(200)	YES	

Table4: Standard Info

Field	Type	Null	Key
Id	int	NO	PRI
Std_name	Varchar(5)	YES	
Institute_id	Int	YES	

Table5: Div Info

Field	Type	Null	Key
Id	int	NO	PRI
Div_name	Varchar(1)	YES	

Table6: Subject Info

Field	Type	Null	Key
Id	int	NO	PRI
sub_name	Varchar(50)	YES	

Table7: Teacherstddiv Info

Field	Type	Null	Key
Id	int	NO	PRI
User_id	Int	YES	
Div_id	Int	YES	
Std_id	Int	YES	
Sub_id	Int	YES	

Table8: Subjectteacherstd Info

Field	Type	Null	Key
Id	int	NO	PRI
User_id	Int	YES	
Std_id	Int	YES	
Sub_id	Int	YES	

Table9: Stdsubinst Info

Field	Type	Null	Key
Std_id	Int	YES	
Sub_id	Int	YES	

Table10: Stddivinst Info

Field	Type	Null	Key
Std_id	Int	YES	
Div_id	Int	YES	

Table11: Stddivinst Info

Field	Type	Null	Key
Id	Int	NO	PRI
User_id	Int	YES	
Sub_id	Int	YES	
Div_id	Int	YES	
Deadline	Varchar(50)	YES	
Assignment	Varchar(100)	YES	
Std_id	Int	YES	
Assignment_title	Varchar(100)	YES	

Table12: Notice Info

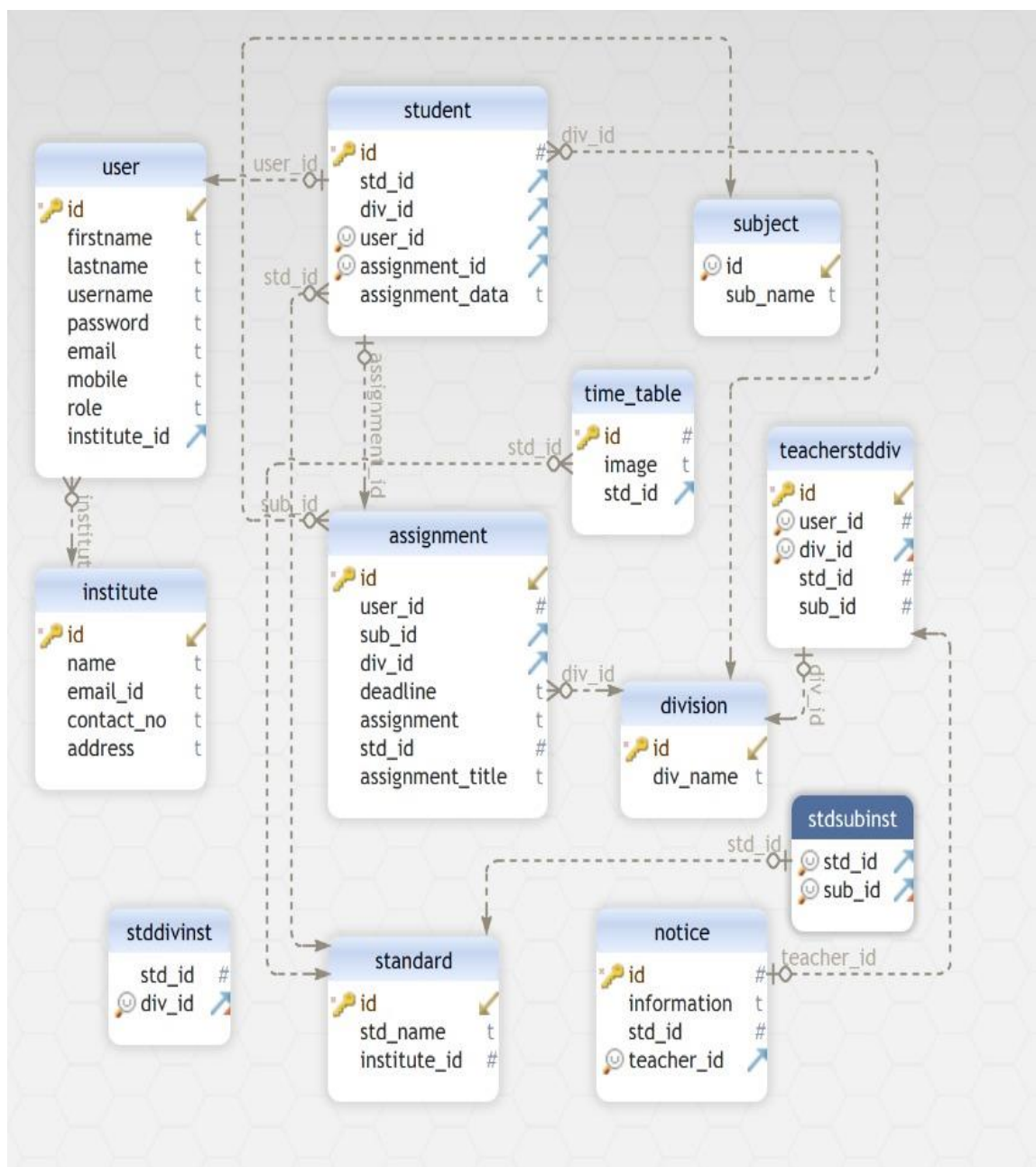
Field	Type	Null	Key
Id	Int	NO	PRI
Information	Varchar(200)	YES	
Std_id	Int	YES	
User_id	Int	YES	

Table13: Time table Info

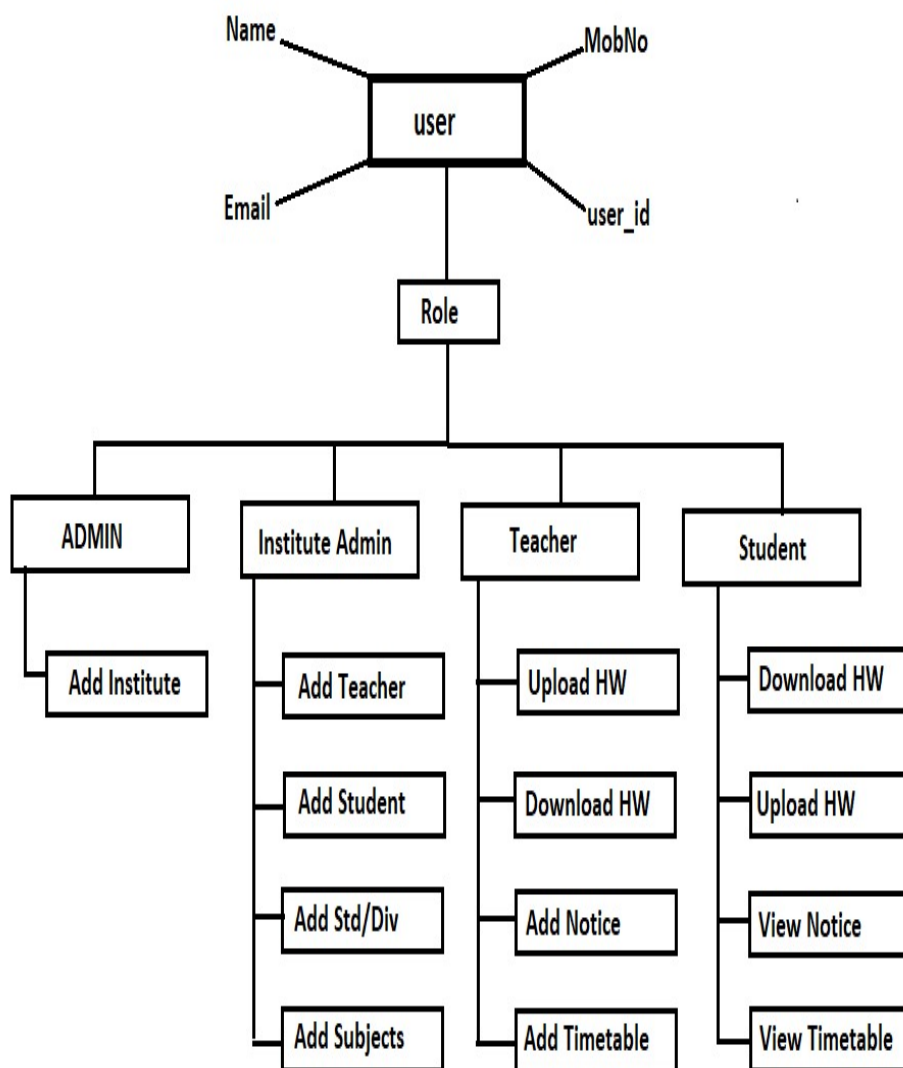
Field	Type	Null	Key
Id	Int	NO	PRI
Image	Varchar(60)	YES	
Std_id	Int	YES	
User_id	int	YES	

E-R Diagram and Dataflow diagram

• E-R Diagram



- **Dataflow diagram**



4. CODING STANDARDS IMPLEMENTED

Naming and Capitalization

Below summarizes the naming recommendations for identifiers in Pascal casing is used mainly (i.e. capitalize first letter of each word) with camel casing (capitalize each word except for the first one) being used in certain circumstances.

Identifier	Case	Examples	Additional Notes
Class	Pascal	Institute, Student, Standard, Division	Class names should be based on "objects" or "real things" and should generally be nouns .
Method	Camel	getTeacher, getStudent	Methods should use verbs or verb phrases.
Parameter	Camel	Username, email, Mobile,role	Use descriptive parameter names. Parameter names should be descriptive enough that the name of the parameter and its type can be used to determine its meaning in most scenarios.
Interface	Pascal	AdminService, divisionService, studentService	Do not use the ‘_’ sign
Property	Pascal	Role	Use a noun or noun phrase to name properties.
Associated private member variable	Camel_case	Div_id, Sub_id, Sub_name, Assignment_id	Use underscore camel casing for the private member variables

Comments

- Comment each type, each non-public type member, and each region declaration.
- Use end-line comments only on variable declaration lines. End-line comments are comments that follow code on a single line.
- Separate comments from comment delimiters (apostrophe) or `//` with one space.
- Begin the comment text with an uppercase letter.
- End the comment with a period.
- Explain the code; do not repeat it.

5. TEST REPORT

The report of the testing is given hereunder.

GENERAL TESTING:

SR.NO.	TEST CASE	EXPECTED RESULT	ACTUAL RESULT	ERROR MESSAGE
1	Login Page/ Home page	Home Page will come	OK	Please enter username and password again
2	Forgot password	Reset password page will come	OK	Nothing
3	Add institute	Institute will be added	OK	Nothing
4	Delete institute	Institute will be deleted	OK	Nothing
5	Search institute	Particular institute will be shown	OK	Institute not found. Please check institute again.
6	Add teacher	Teacher will be added to institute	OK	Nothing
7	Delete teacher	Teacher will be deleted with respected id	OK	Nothing
8	Search teacher	Teacher will be shown with respected id	OK	Teacher not found. Please check teacher again.
9	Add Standard	Standard will be added to institute	OK	Nothing
10	Add division	Division will be added to standard in institute	OK	Nothing
11	Add subjects	Subjects will be added to standard in institute	OK	Please enter valid subject.
12	Add student	Student will be added to institute	OK	Nothing
13	Delete student	Student will be deleted with respected id	OK	Nothing
14	Search student	Student will be shown with respected id	OK	Student not found. Please check student

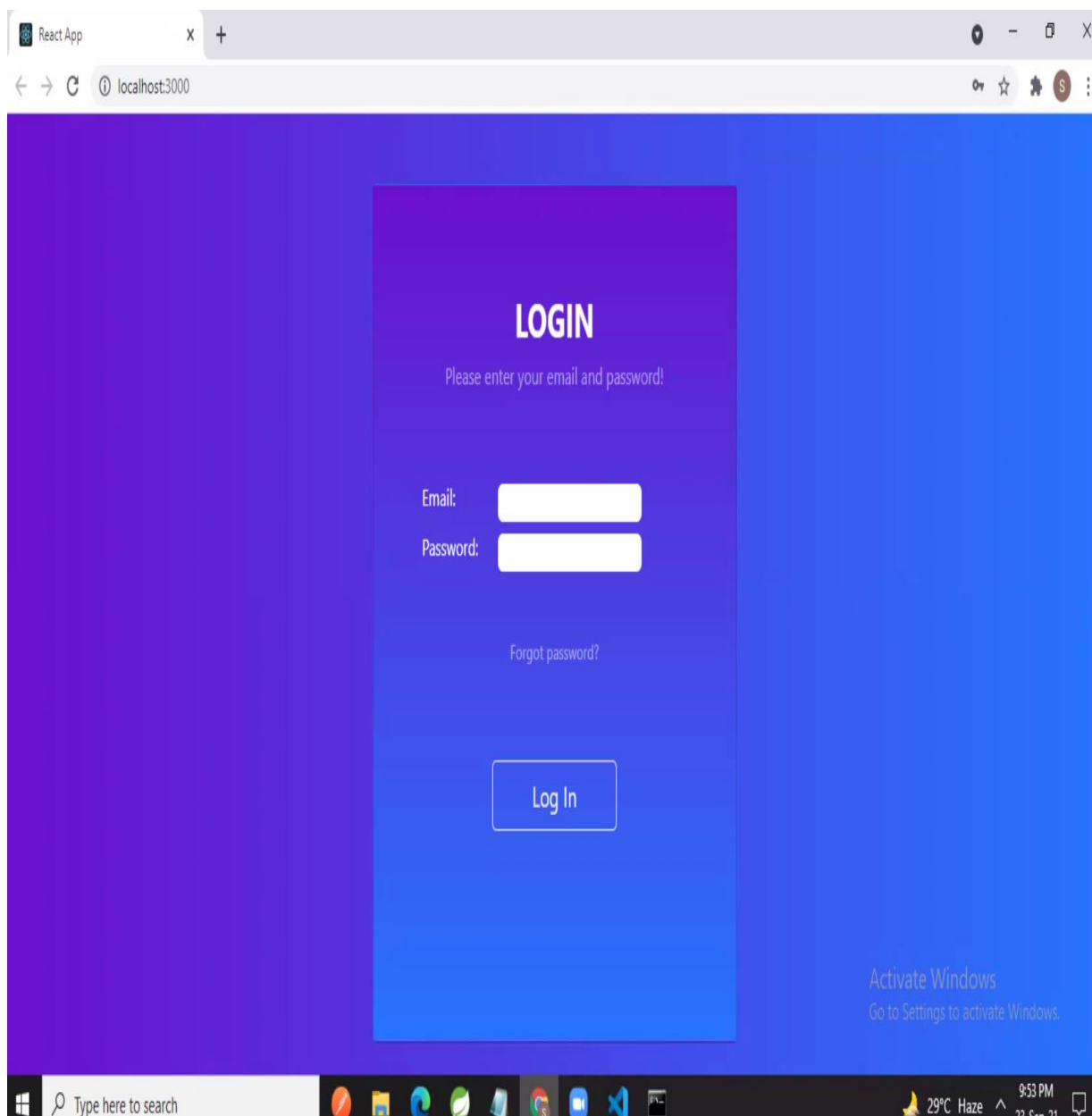
				again.
15	Upload homework	Homework will be uploaded	OK	Nothing
16	Download homework	Homework will be downloaded	OK	Nothing
17	Add notice	Notice will be added and displayed at student side	OK	Nothing
18	Add timetable	Time-table will be added and displayed at student side	OK	Nothing
19	Add deadline	Deadline for homework will be added	OK	Nothing
20	View notice	Notice will be displayed to students	OK	Nothing
21	View timetable	Time-table will be displayed to students	OK	Nothing
22	View profile	User profile will be shown	OK	Nothing
23	Help and Contact	Institute contact information will be shown	OK	Nothing
24	Logout	Page will redirect to login page/ home page	OK	Nothing

6. PROJECT MANAGEMENT RELATED STATISTICS

DATE	WORK PERFORMED	SLC Phase	Additional Notes
AUG 28, 2021	Project Allotment and User Requirements Gathering	Feasibility Study	Our team met the client New High School to know their requirements.
AUG 31, 2021	Initial SRS Document Validation And Team Structure Decided	Requirement Analysis (Elicitation)	The initial SRS was presented to the client to understand his requirements better
SEPT 02, 2021	Designing the use-cases, Class Diagram, Collaboration Diagram, E-R Diagram and User Interfaces	Requirement Analysis & Design Phase	Database Design completed
SEPT 04, 2021	Business Logic Component design Started	Design Phase	-----
SEPT 07, 2021	Coding Phase Started	Coding Phase	50% of Class Library implemented.
SEPT 08, 2021	Implementation of Web Application and Window Application Started	Coding Phase	Class Library Development going on.
SEPT 09, 2021	Implementation of Web Application and Window Application Started	Coding Phase	Class Library shown to Project guide.
SEPT 10, 2021	Implementation of Web Application and Window Application Continued	Coding Phase and Unit Testing	Class Library Modified as per the need.
SEPT 17, 2021	Implementation of Web Application and Window Application Continued	Coding Phase and Unit Testing	--

SEPT 18, 2021	After Ensuring Proper Functioning the Required Validations were Implemented	Coding Phase and Unit Testing	Module Integration was done by the Project Manager
SEPT 19,2021	The Project was Tested by the project team	Testing Phase (Module Testing)	--
SEPT 20,2021	The Project was Submitted to Project guide	Testing Phase (Acceptance Testing)	The Project of Other Team was Taken up by the Team for Testing
SEPT 22, 2021	The Errors Found were Removed	Debugging	The Project was complete for submission
SEPT 24,2021	Final Submission of Project		

Homepage:



Admin Dashboard:

The screenshot shows a web browser window with the URL `localhost:3000/addinstitute`. The page has a dark blue background with a light blue central panel. The panel is titled "ALL INSTITUTE" and contains a table with the following data:

#	name	action
1	New high school	<button>delete</button>
2	Holy Cross High School	<button>delete</button>
3	Balak Mandir High School	<button>delete</button>
4	Saint Lawrence High School	<button>delete</button>
5	Katrap Vidyalay	<button>delete</button>

Below the table, there are two buttons: add institute and Logout.

Institute Admin Dashboard:

The screenshot shows a web browser window with the URL `localhost:3000/options/109`. The page has a dark blue background with a light blue central panel. The panel is titled "OPTIONS" with the subtitle "(add,edit or delete)". Below the title, there are three buttons: Teacher, Standard Division Subject, and Student.

Add Teacher:

React App

localhost:3000/addteacherstddivsub/4/109

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TEACHER DETAILS

Name: Sudarshana Sonawane

standard	division	subject
1	A	English
1	C	English

Standard

1

Division

A

subject

Mathematics

Submit

Windows Taskbar: Search, File Explorer, Edge, VS Code, Docker, Chrome, Task Manager, System Tray (Network, Volume, ENG, 9:54 AM)

Add Student:

React App

localhost:3000/addstudent/109

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STUDENT DETAILS

fill details of student

Email:

Password:

Role:

student

username:

firstname:

lastname:

mobile:

Submit

Windows Taskbar: Search, File Explorer, Edge, VS Code, Docker, Chrome, Task Manager, System Tray (Network, Volume, ENG, 9:56 AM)

Add Standard Division Subject:

ALL STANDARD

#	Standard	action
1	1	delete add subject
2	2	delete add subject
3	3	delete add subject
4	4	delete add subject

add standard

Teacher Dashboard:

Division A Standard 1 Sudarshana Sonawane

English

#	title	deadline	action
1	OS	21 Sept	students assignment delete
2	Tree	21 september 2021	students assignment delete

enter title of homework enter deadline

add homework pdf

Choose File No file chosen

Add

Add Assignment:

localhost:3000 says
Successfully inserted assignment

Division: A, Standard: 1, User: Sudarshana Sonawane

#	title	deadline	action
1	OS	21 Sept	students assignment delete
2	Tree	21 september 2021	students assignment delete

enter title of homework: Verb, enter deadline: 30 September 2021

add homework pdf: Choose File: datastructure.png, Add

Add Notice:

Standard: 1, User: Sudarshana Sonawane

Notice

This is to inform you that according to the Government of Maharashtra circular, that we have just received, the Diwali holidays will now commence from tomorrow 7th November, 2020 and conclude on 20th November, 2020. As a result, the online class assessment scheduled for the 7th and 9th of November, 2020 will be postponed to the 21st and 23rd November, 2020 respectively. We know you have worked very hard but it will hold you in good stead in the future. Remember to continue studying during the holidays and reviewing the portion completed. Use this vacation to spread peace and harmony.

enter notice: [Text Area]

Add, delete

Activate Windows
Go to Settings to activate Windows.

View Assignment:

#	title	deadline
1	OS	21 Sept
2	Tree	21 september 2021

Add Timetable:

School timetable Name: Kim

	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 - 10.30	English	maths	history	English	science
Break					
11.00 - 12.30	maths	IT	science	maths	English
Lunch time					
1.30 - 3.00	geography	music	PE	drama	art
After school	football		piano		swimming

add homework pdf

Choose File No file chosen

Add delete

Activate Windows
Go to Settings to activate Windows.

View Timetable:

React App

localhost:3000/studenttimetable/3/109

Standard: 1 Shubham Survase

New high school

Dashboard

Timetable

Notice

Profile

Help

Logout

School timetable Name: Kim

	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 - 10.30	English	maths	history	English	science
11.00 - 12.30	maths	IT	science	maths	English
1.30 - 3.00	geography	music	PE	drama	art
After school	football		piano		swimming

Student Work:

React App

localhost:3000/viewassignmentstudent/3/109

all assignments Standard: 1 Shubham Survase

New high school

Dashboard

Timetable

Notice

Profile

Help

Logout

assignment

```

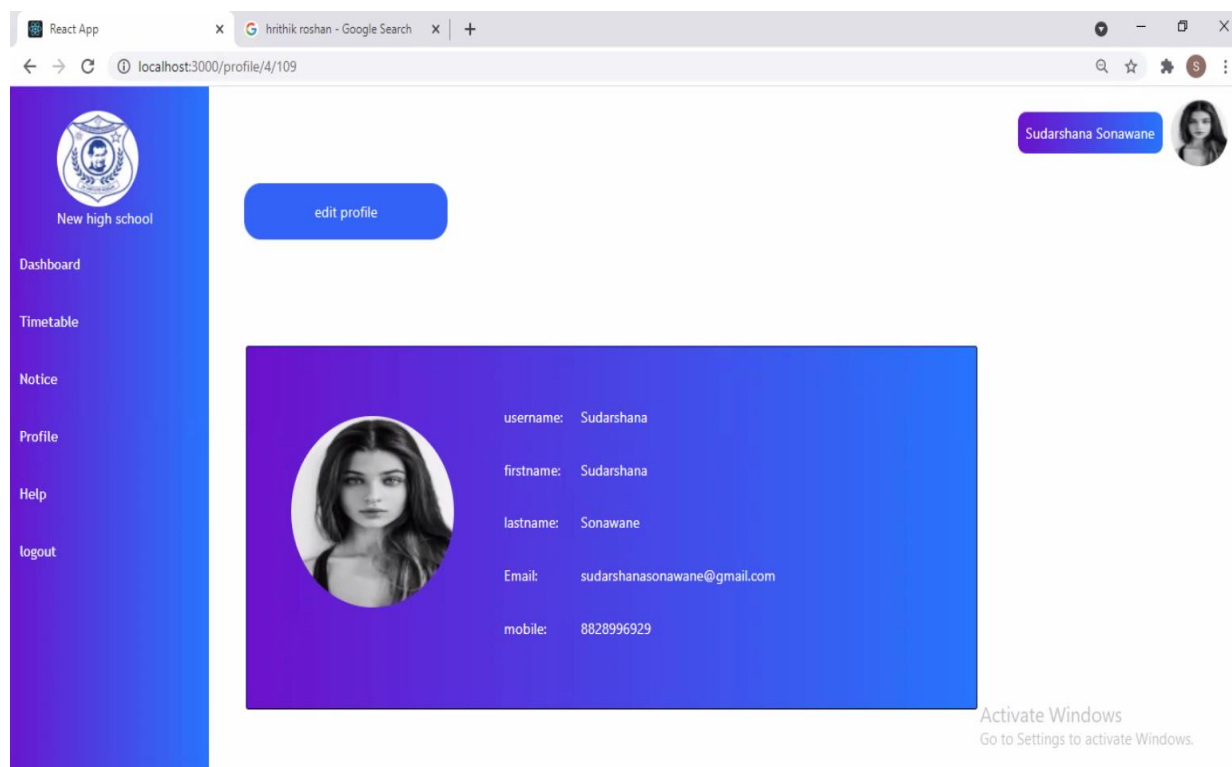
graph TD
    1((1)) --- 2((2))
    1 --- 3((3))
    2 --- 4((4))
    2 --- 5((5))
    3 --- 6((6))
    3 --- 7((7))
    4 --- 8((8))
    4 --- 9((9))
    5 --- 10((10))
    5 --- 11((11))
    6 --- 13((13))
    7 --- 14((14))
  
```

add homework photo

Choose File No file chosen

Add

Profile Details:

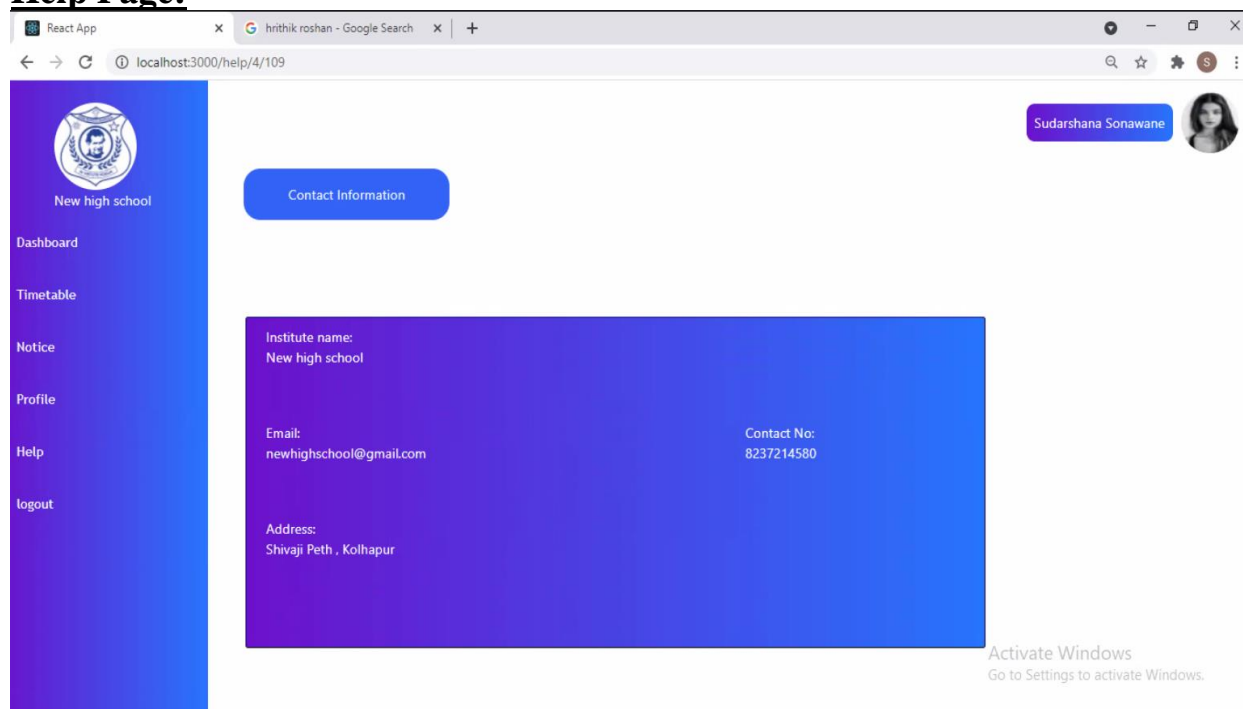


The screenshot shows a web browser window with the URL `localhost:3000/profile/4/109`. The page features a blue sidebar on the left with a school logo and the text "New high school". The sidebar menu includes: Dashboard, Timetable, Notice, Profile, Help, and logout. The main content area has a blue header with a user profile card for "Sudarshana Sonawane" and an "edit profile" button. Below this is a large blue box containing a circular profile picture and the following details:

username:	Sudarshana
firstname:	Sudarshana
lastname:	Sonawane
Email:	sudarshanasonawane@gmail.com
mobile:	8828996929

An "Activate Windows" watermark is visible in the bottom right corner.

Help Page:



The screenshot shows a web browser window with the URL `localhost:3000/help/4/109`. The page layout is similar to the Profile page, with a blue sidebar on the left containing the same menu items. The main content area has a blue header with a user profile card for "Sudarshana Sonawane" and a "Contact Information" button. Below this is a large blue box containing the following details:

Institute name:	New high school	
Email:	newhighschool@gmail.com	Contact No: 8237214580
Address:	Shivaji Peth , Kolhapur	

An "Activate Windows" watermark is visible in the bottom right corner.

Logout Page:

localhost:3000 says
You are Logged out, see you

OK

select division

Division A Standard 1

Sudarshana Sonawane

Dashboard

Timetable

Notice

Profile

Help

#	title	deadline	action
---	-------	----------	--------

enter title of homework

enter deadline

add homework pdf

Choose File No file chosen

Add

Activate Windows
Go to Settings to activate Windows.

7.REFERENCES:

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