Dharmsinh Desai University, Nadiad



Faculty of Technology Department of Computer Engineering

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Project Report

On

Student Management System

Subject: System Design Practice

B.Tech Semester - VI

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CERTIFICATE

This is to certify that **System Design Practice** Project entitled "**Student Management System**" is the bonafied report of work carried out by

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Of Department of Computer Engineering ,Semester VI , academic year 2019-2020, under our supervision and guidance.

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1. Abstract

Student Management System is mainly designed to satisfy the student related data needs. Student Management System is used to manage any student related information within a particular school, college or a university. This is mainly used by students in-order to view and access the information regarding college which Fees notifications, Result details, exam timetables etc. Any college related information such as events, notifications, updating or deleting of student records could be done easily and securely using this web based online system. Student Management System is a repository of data collection, data processing, data analysis, data reporting. Admin provides secured logins and can view as well update the teacher or student information.

2.Introduction

This Document is of the SRS of the Student Management system for the web application.

1. Purpose

The purpose for the making this system is for helping the students and teacher to manage the data of school as well the student who study there.

Also it helps to maintain information on past & present student in order to help school to make necessary reports as students achievement. Important notice can be also posted related to the student as well the teacher.

2. Aim of the project

The main Aim for this online application is that any notice or important message can be convey very fast also register student or it's parents can check the flow of the study & marks. Marks can be updated by the teachers so it is now easy task for them to put large no of results of students very easily. The time required is less when compared with the paper records. Each and every user should have their own identity and by using this logins teacher is provided by the admin of the system. The admin module allows admin to make changes in teacher and student academic and personal details.

3.Software Requirement Specifications

Types of Users

- Admin
- Teacher
- Student

3.1 Admin

1.1 Access all data

Description: Admin can access all data related to teacher or

Student and watch an if it is need it can change.

Input: user details.

Output: can access the data.

1.2 Manage the users

Description: can add or delete the teachers or students.

Input: enter the user data.

Output: updated user.

1.3 Subject allocation

Description: can allocate the subject to the teacher who has master in that subject.

Input: enter the name of the teacher.

Output: subject allocated to the teacher.

1.4 Registration of student/teacher

Description: can register the user as student or teacher.

Input: enter the name of the student or teacher.

Output: registration successfully done.

1.5 Class allocation

Description: can allocate the class.

Input: enter the class.
Output: class allocated.

3.2 Teacher

2.1 Login In

Description: Teacher once signup/registered after that he can log

into the account.

Input: fill the required details.

Output: login to the system.

2.2 Log Out

Description: Teacher once login after that

Can logout the account.

Input: click the logout button.

Output: logout to the system.

2.3 Add Students record

Description: he can add the students record if new student took an admission.

Input: enter the Student information.

Output: add successfully.

2.4 Students progress record

Description: Teacher can update the information

About the study & it's progress reports.

Input: enter the progress reports.

Output: Details updated.

2.5 Add marks to particular subject

Description: Teacher can add mark for the particular subject.

Input: enter the marks.

Output: updated mark successfully.

3.3 Student

3.1 Login In

Description: student once signup after that he/she

can log into the account.

Input: fill the required details.

Output: login to the system.

3.2 Log Out

Description: Student once login after that he/she can

logout the account.

Input: click the logout button. Output: logout to the system.

3.3 Student record

Description: Student can see the record of him/her self how he is performing and all.

Input: enter student id/login id. Output: result will be shown.

3.4 view result

Description: Student can see his/her result after the examination. all the result of that student will be there so any time he/she can login to his/her account and see the result.

Input: see the result.

Output: result will be shown.

3.5 Subject details

Description: all the subject which is there for that part of the year for study will be instructed there.

Input: open sub details.

Output: details received.

3.6 edit profile of student

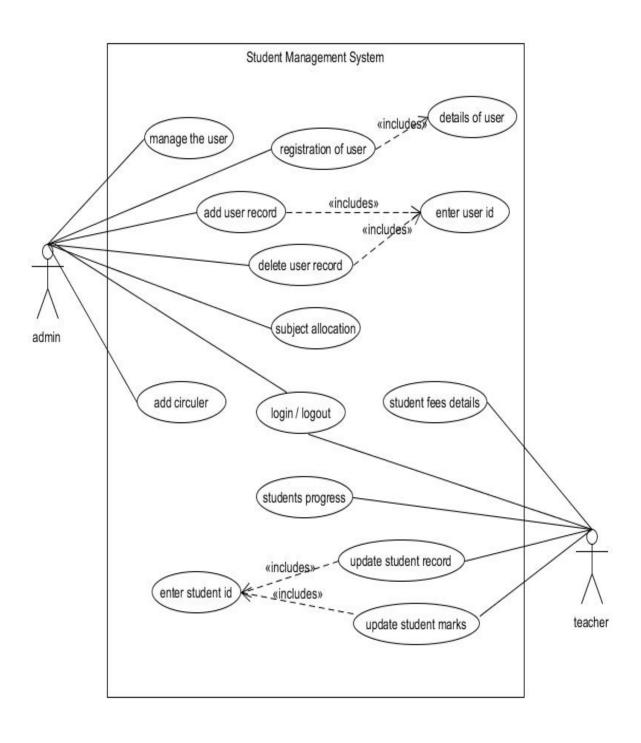
Description: one can edit its personal detail like name and address like wise if there is a miss-match in making the account.

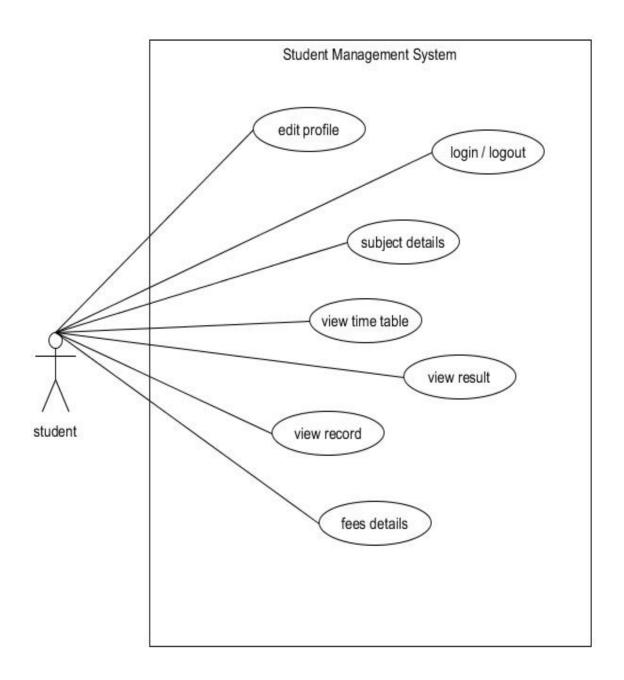
Input: make edit.

Output: successfully edited.

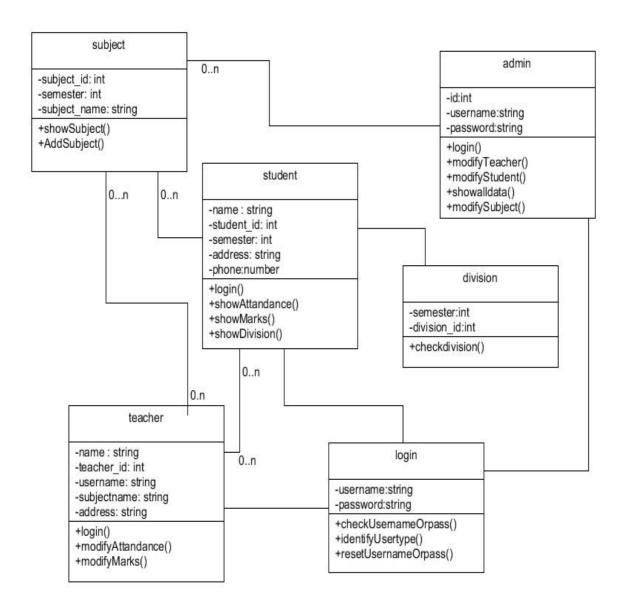
4.Design

4.1 USE-CASE Diagram

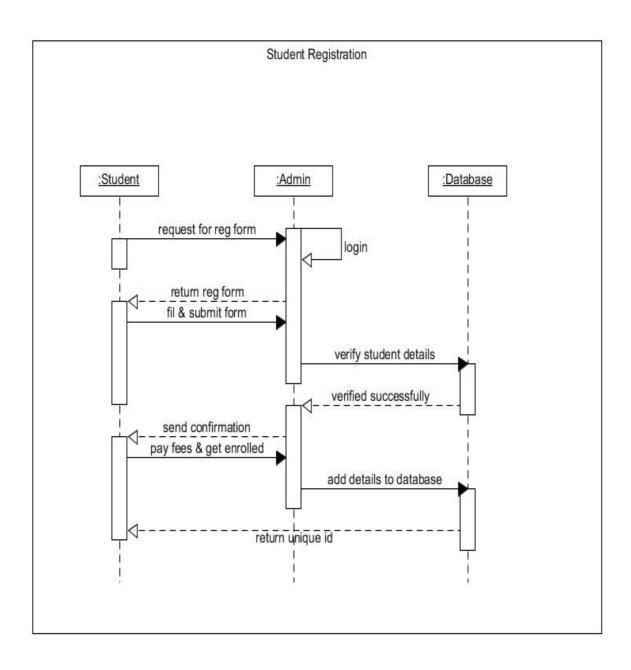


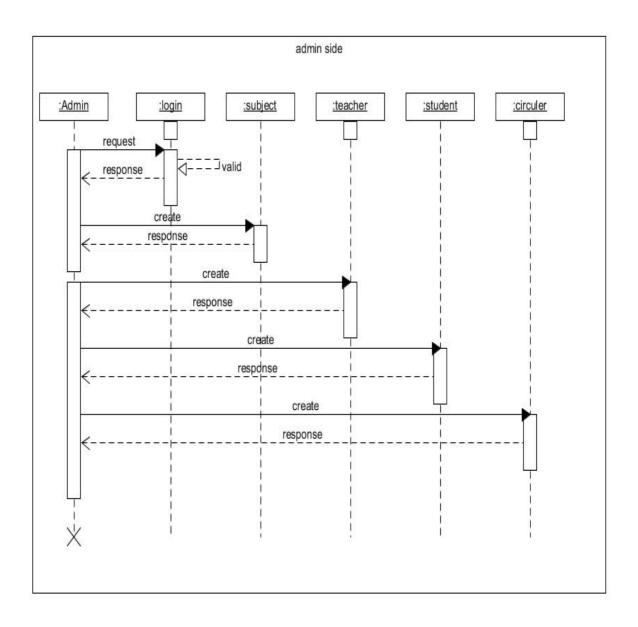


4.2 Class Diagram

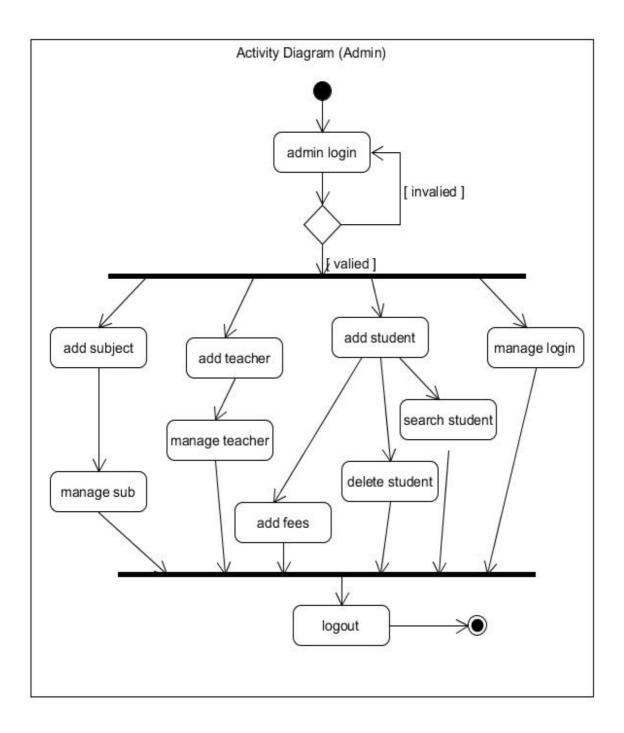


4.3 Sequence Diagram

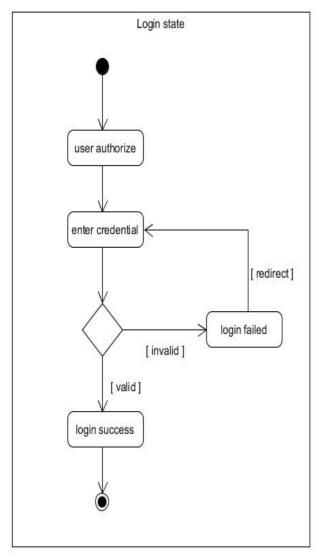


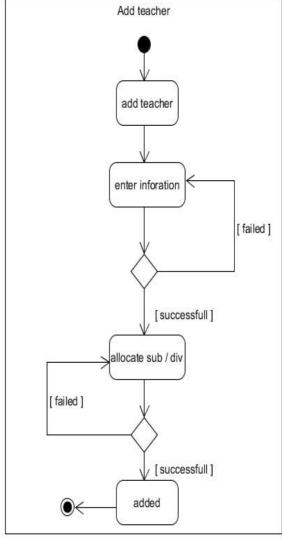


4.4 Activity Diagram

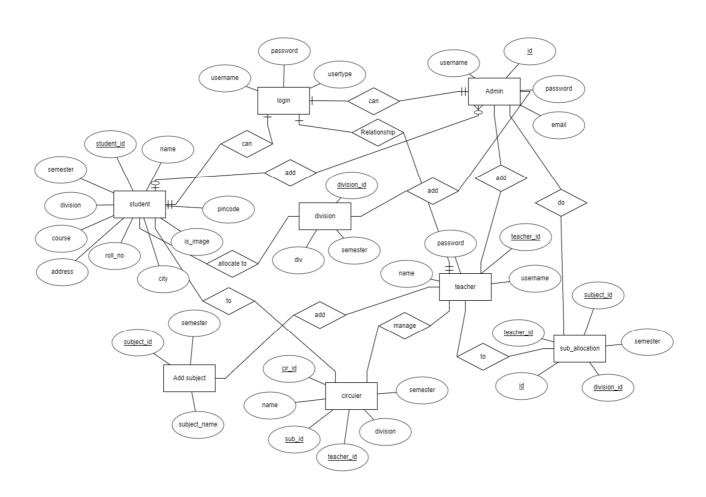


4.5 State Diagram





4.6 E-R Diagram



4.7 Data Dictionary

1. Login:

Sr.No	Field Name	Data	Width	Required	Unique
		Type			
1	Username	Varchar22	10	Yes	Yes
2	Password	Varchar22	10	Yes	No
3	User type	Int	1	Yes	No

2. Admin:

Sr.No	Field Name	Data Type	Width	
1	Id	Int	1	
2	Username	Varchar2	10	
3	Password	Varchar2	10	

3. Add Subject:

Sr.No	Field Name	Data Type	Width
1	subject_id	Int	1
2	Semester	Int	1
3	Subject_name	Varchar22	10

4. Teacher:

Sr.No	Field Name	Data Type	Width	
1	teacher_id	Int	1	
2	Name	Varchar2	10	
3	Username	Varchar2	10	
4	Password	Password Varcahr2		

5. Subject Allocation:

Sr.No	Field Name	Data Type	Width
1	Id	Int	1
2	Semester	Semester Int	
3	division_id	Int	10
4	subject_id	Int	10
5	teacher_id	teacher_id Int	

6. Division:

Sr.No	Field Name	Field Name Data Type	
1	division_id	Int	1
2	Semester	Int	10
3	Division	Varchar2	10

7. Student_Info:

Sr.No	Field Name	Data Type	Width	Required	Unique	PK/FK	Referenced Table
1	Student_id	Int	10	Yes	Yes	PK	Login
2	course	Varchar2	10	Yes	Yes		
3	Semester	Varchar2	10	Yes	Yes		
4	division	Varchar2	10	Yes	Yes		
5	Roll_no	Int	1	Yes	Yes		
6	Name	Varchar2	20	Yes	No		
7	Email	Varchar2	30	Yes	Yes		
8	Address	Varchar2	50	Yes	No		
9	Pincode	Int	6	Yes	No		
10	City	Varchar2	10	Yes	No		
11	Is Image	Boolean	1	Yes	No		

5.Implemantation Details

5.1 Modules created and brief description of each modules.

We Create Many Module such as

Admin module:

The admin manages all the information related to the students and the teacher. Some of the operations performed by the admin in the Student Management System are updating the details about the students such as his name, roll number, phone number, aggregate marks till present class. Admin also updates teacher related information such as name, mail id, phone number, designation etc. Admin creates separate logins to every user by providing the passwords randomly.

Student module:

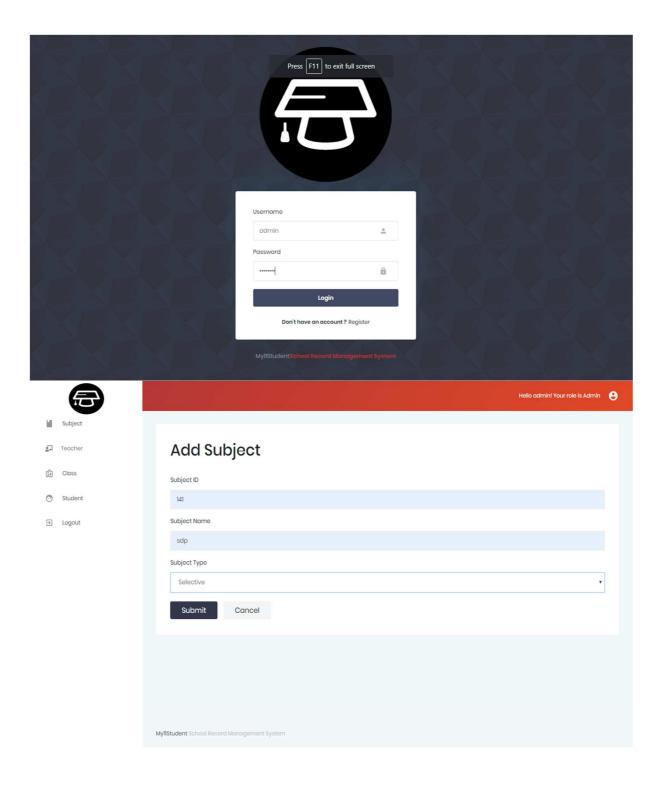
Student plays a vital role in this System. This app lets the students to view the entire information that is updated by the teacher. For example, a student can view about his marks & his details. The class events is updated by any teacher of that particular class.

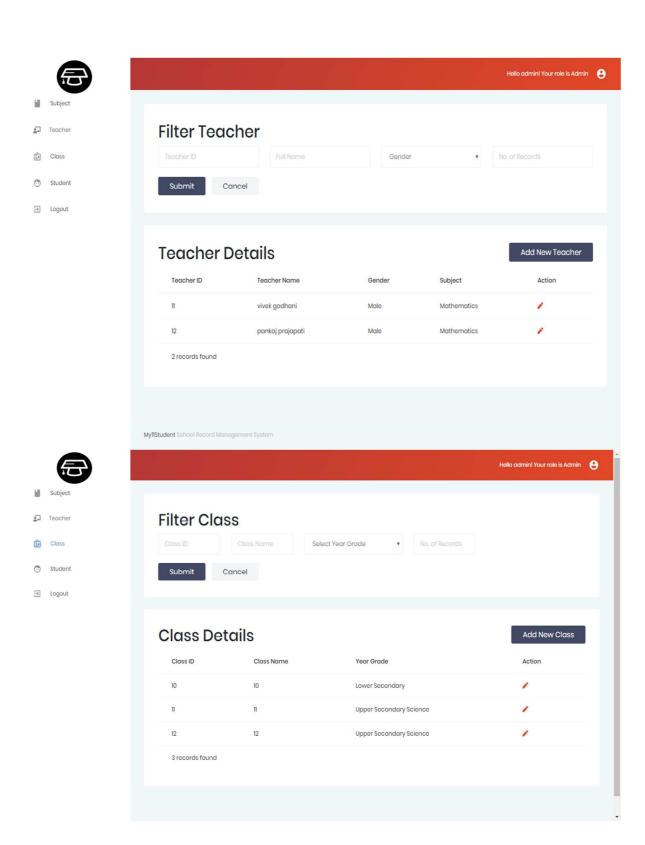
Teacher module:

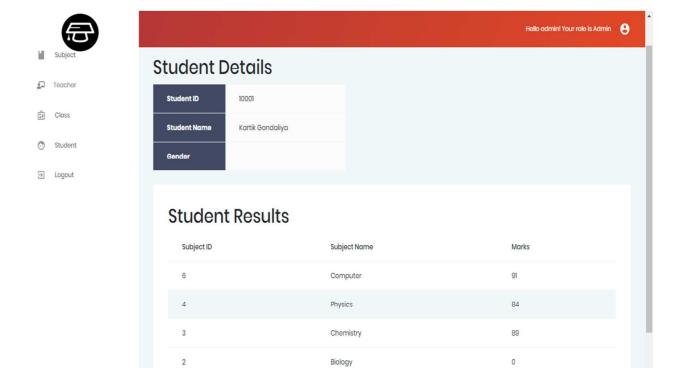
The teacher can view all the updates of the admin. i.e. the students notifications which are updated by the admin. The teacher can update any student by signing in to his account with his email id as user-name and with the randomly created password by the admin.

6.ScreenShots

1.Admin side login





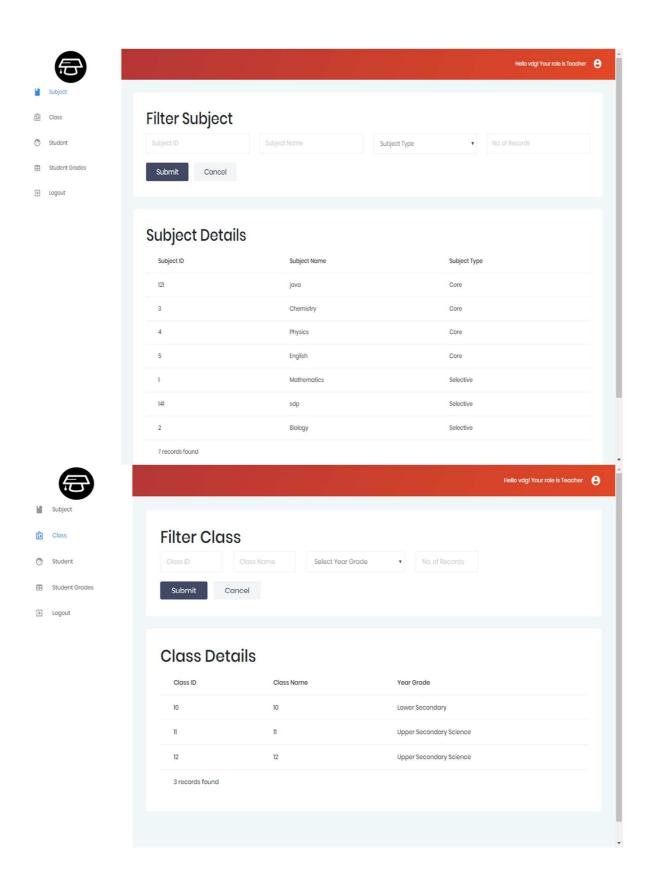


English

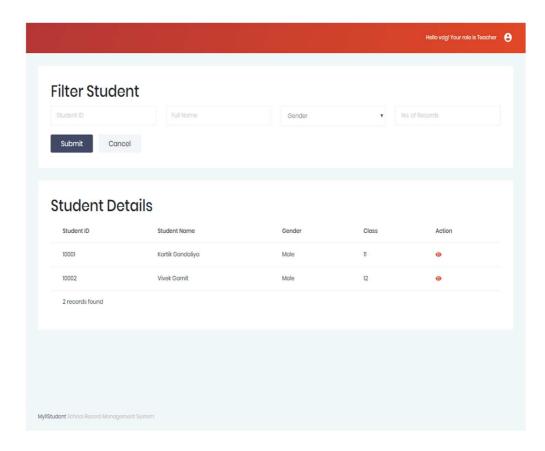
Mathematics

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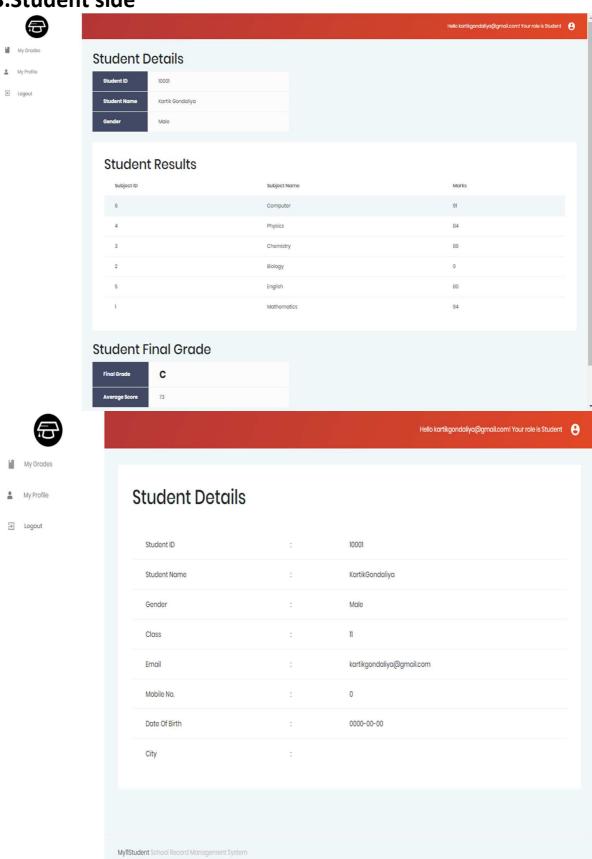
2.Teacher side







3.Student side



7. Limitation and Future Extension

7.1 Limitation

Absence of proper internet-network makes it difficult for a user to access information, which is a significant disadvantage. The risk of data mishandling might be bothersome; but all these drawbacks can be evaded by choosing proper, cost-efficient and best software that best benefits an organization.

7.2 Functionality (Not Implemented) or Future Extension

7.2.1 Add important notice / circular

Description: can add the information for the all including Teacher & also the students so that they get notify as early as possible.

Input: enter the notice.

Output: information updated as a notice.

7.2.2 Student fees details

Description: Teacher can see the details of the fees of the student whether he has submitted the fees for the particular standard.

Input: student id/name.

Output: details will be showed.

7.2.3 Can create id-card

Description: Sub-admin can create id card for the student.

Input: enter the required details.

Output: make id-card.

7.2.4 Fees Details

Description: Student can see the details of the fees that will be submitted by him as well he /she can generate the fee receipt.

Input: enter into the account. Output: result will be shown.

7.2.5 time table

Description: the time table for the academic year will be given on the account so one can see from that.

Input: open time-table.

Output: successfully opened.

8. Conclusions

The Application was designed for a very basic purpose for maintaining student data and teacher data in a dynamic manner. The app was programmed using simple and livid codes. The use of highly user-friendly software like SQL developer for accessing the database. The app is embedded with a local server through the software Apache tomcat 8.0 with server port 80,443 and connector port 8020; this enables the portal to work on intranet. The app used the following for enhancing its look and functionality Hypertext Mark-up language (HTML) was used for building web pages, JavaScript's were used for programming web pages and Cascading style sheets (CSS) were used for styling the web page. The app is provided with an admin login for updating the student and teacher information time to time. The app eliminates the paper work which could lead to loss of data and data redundancy. Due to the many users reading and modifying student data in the system, it is an ideal use for such a system.