

Daffodil International University

Department of Software Engineering, FSIT

SWE-431 Project / Thesis

Project Documentation

School Management System

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APPROVAL

This **Project** titled “**School Management System**”, submitted by **Tonoy Saha, ID: 161-35-1424** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Software Engineering and approved as to its style and contents.

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Acknowledgement

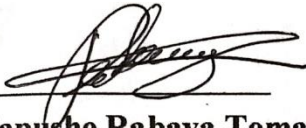
At first, I am blessed as have successfully moved towards the last semester. I am pleased to my almighty. First of beginning of university life, I have learned a lot about software engineering as well as computer science related knowledge from my university knowledgeable teachers and helpful big brothers. Teachers teach us ethics, morality and politeness as well as software knowledge and related knowledge. I must be thankful to my parents and my family for giving me the opportunity and always be with me. My family always supports me. My family prioritizes my inspired and opinion as well.

I am grateful to my supervisor **Tapushe Rabaya Toma** for allowing me for doing to development the project. Madam supports to make this project successful.

Declaration

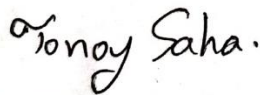
I hereby declare that, this project has been done by me under the supervision of **Tapushe Rabaya Toma, Lecturer, Department of SWE, Daffodil International University**. I also declare that neither this project nor any part of this project has been submitted anywhere for my degree.

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Chapter 1: Introduction

1. Project overview

Now a day's education plays a great role in development of any country. Many of education organizations try to increase education quality. One of the aspects of this improvement is managing of school resources.

Education Management System carried on by any individual or institution engaged in providing a services to students, teachers, guardians and other persons are intermediary that performs one or more of the following functionalities – Student Admission, Employee Registration, Student List, Employee List, Student Attendance, Employee Attendance, Student Routine, Result Management, Payroll & Accounts.

Education Management System (EMS) is such a service which provides all services for an educational institute to make your life easier and faster by assuring its performance. Easy User Management System, Easy Admission Process, Easy Attendance System.

In a nutshell, Education Management Software managed your education institution by simplifying and automating processes and addressing the needs of all stakeholders helping them to be more efficient in their respective roles.

1.1.1 Background

The system is completed under the guidance of the theory and methods of management information systems, database technology support. This paper first discusses the structure of

the background, purpose and significance of the graduate design topics. Then describes the development platform and database technology and the advantages of each, followed by more devoted a system requirements analysis, design, implementation, and the implementation of the tasks, techniques and tools. End system to complete the information input, output, data modification, query and statistics, as well as print statements, make operation simple and quick.

In this project, we try to build up sound software which can operate any challenging situation in the modern time. Administrator and users information are making effective decisions. The decisions are more accurate, relevant and timely the information stored or process is more effective.

1.1.2 Benefits & Beneficiaries

The common features of the projects are:

- This is very easy to use for each user.
- Increase Efficiencies and Reduce Costs
- Transform IT for Higher Education
- Easy Solution
- Easy Admission Process
- Secure All Data
- Easy Account Maintenance
- Transaction History
- Easy Attendance Process
- The user of the database can see all information and also can edit if necessary.

- Easy implemented routine for student and teacher's.

1.1.3 Goals

The main goal of this project is easy the process of education management in a school. Main functions of a school like students registration, give result, take attendance, teacher position change etc. work can be done very easily and efficiently.

1.2 Project Schedule

Every process has a scheduling plane to complete the project on time properly. It also helps the developer and all related employee for maintain time schedule.

1.3.1 Gantt Chart

Production control tools are the main feature of gantt chart. Gantt chart maintains to complete our assigned job in time of period. In developing software, gantt chart is most important for a software company as like as software team. I will show a Gantt chart for our project.

Activities		W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W1 0	W1 1	W1 2	W1 3	W1 4	W1 5
Planning	Ideas	█														
	Problem definition	█	█													
	Proposal planning	█	█													
Requirement	Requirement specification		█	█												
	Requirement analysis		█													
QA-1	Quality assurance			█												
System design	Sketching				█											
	Design specification				█	█										
	Database design					█										
Implemental	Searching vehicles					█	█	█	█	█						
QA-2	Test cases			█				█	█	█	█					
Implementatio n	Impose case & demerits.										█	█	█	█		
Testing	Unit testing					█		█				█	█	█	█	
	Black box testing												█	█	█	█
Delivery	Software release															█

Figure 1.2: Gantt Chart

1.3.2 Release Plan or Milestone

The release plan or milestones are given below:

Activities	Duration in week	Total Week
Brainstorming	Week 1	1
Problem identification	Week 1, Week 2	2
Requirement specification	Week 2	1
Requirement analysis	Week 2	1
Sketching	Week 4	1
Design specification	Week 4	1
Database design	Week 5	1
Vehicle search	Week 5, Week 6, Week 7, Week 8	4
Quality assurance	Week 3,	1
Test case	Week 3, Week 7, Week 8, Week 9	4
Impose case & demerits	Week 10, Week 11, Week 12, Week 13	4
Unit testing	Week 11, Week 12	2
Black-box testing	Week 13, Week 14, Week 15	3
Software release	Week 16	1

Chapter 2: Software Requirement Specification

2.1 Functional Requirement

2.1.1 User can Login in System

SRS 01	User can Login to the system.
Description	After enter URL in any internet browser, in system login page user must have log in first before enter the main system. All user mandatory for login. Only authorized user can login the system.
Stakeholders	All authenticated user.

2.1.2. Add Teacher and student

SRS 02	Add Teacher and student
Description	After login user can add student and teacher by adding their details.
Stakeholders	Super Admin, admin, Worker

2.1.3 Edit teacher position

SRS 03	Edit teacher position
Description	Super admin and admin can edit any teacher position. They can make any teacher co-ordinator or principal or subject teacher.
Stakeholders	Super admin and admin.

2.1.4 View Teacher

SRS 04	View Teacher
Description	Any user can view teacher details. But user should be authenticated.
Stakeholders	All authenticated user

2.1.5 Add class subject

SRS 05	Add class subject
Description	Admin and Super admin can add class subject. Subject can be added one time in one year. Else they can be edited.
Stakeholders	Admin and super admin

2.1.6 Add class section

SRS 06	Add class section
Description	Admin and Super admin can add class section. Section should be added at the first end of the year.
Stakeholders	Admin and super admin

2.1.7 Assign teacher to a class or edit

SRS 07	Assign teacher to a class or edit
Description	Specific user can assign or reassign class subject teacher.
Stakeholders	Super admin, admin, principal, co-ordinator.

2.1.8 Can approve result, notice or class routine

SRS 08	Can approve result, notice or class routine
Description	Specific user can approve result, notice or class routine. Final result will not be shown without approval.
Stakeholders	Super admin, admin, principal

2.1.9. Give marks and attendance to the student

SRS 09	Give marks and attendance to the student
Description	Subject teacher only can give his student subject marks.
Stakeholders	Subject teacher.

2.1.10. Can see student details, attendance, marks and results.

SRS 10	Can see student attendance, marks and results.
Description	Admin and super admin can see all students' details and all marks. Subject and guide teacher can see only his student mark and details. Parents can only see his child subject marks and details. Student can only see his marks and details.
Stakeholders	All authenticated users.

2.1.11. View student details

SRS 11	View student details
Description	Admin, Super admin, principal and co-ordinator can see any student details. Teacher can see details of his own student. Parents can only see his child details. Student can only see his details.
Stakeholders	All users.

2.2 Data Requirements

Defining data requirements for need to build a model. Our system maximum data would be loaded form internal user. For this cause we need to focus some kind of major points.

Such as:

- Types of entity of the system
- Route data locations
- Capacity and resources of the data requirements
- Data source sequence
- Data availability schedules
- Quantity of data

- Availability of data

2.3 Performance Requirements

To maintain performance of a software system it is very important. To ensure performance, as a developer we need to manage and maintain some steps. Now, I try to discuss about perspective by going to enhance the performance of this system project.

2.3.1 Speed & Latency Requirements.

For software development process it is very important for speed and latency must be ensured while retrieving data from the cloud server.

SLR-1	Data generate result must be faster.
Description	When Admin and Accounts officer access the software, it's generating report based on cloud database very quickly.
Stakeholders	All users.

2.3.2 Precision & Accuracy Requirements

Result of a software system to be to the end user is must be needed to be accurate. Wrong information might be ruined the whole business process.

PAR-1	Accounts result must be accurate.
Description	Though it's an accounting system, so accuracy and precision must be given in accounts and admin report. Also client's information might be accurate.
Stakeholders	Accounts officer and admin officer.

2.3.3 Capacity Requirements

We must developed a system which be capable to handle user, provide accurate information, Handling database, manage http request etc.

CR-1	The system will handle thousands of data.
Description	The system need to handle data thousands of data every month.
Stakeholders	Admin and Accounts officer.

2.4 Dependability Requirements

The term dependability is measured based on four dimensions. Such as:

- Availability
- Reliability
- Safety
- Security

When we want to say our system is dependable and safe then we must say that we can fulfill the four above dimension. We also want to say that there is no way to make any kind of mistakes of our system. Besides that, it is also very important to limit the damage which might be caused by system failure.

2.4.1 Reliability & Availability Requirements

Now, I will mention requirements which are related to reliability and availability.

RAR-1	The system must be available on 24 X 7
Description	Our system must be available all day long, every day in a week. The system must be web base and can access anywhere any place. System must be malware free.
Stakeholders	Officer Admin & Accounts section officer.

2.4.2 Robustness or Fault-Tolerance Requirements

To ensure robustness and fault-tolerance facilities to the end users, it is urgent to ensure 0% crash. Moreover, it must show accurate results.

RFT-1	The system handles all user access without system errors.
Description	Two king of user might hit our application system at a time. All their requests must be handled without any fault.
Stakeholders	System authorized user.

2.4.3 Safety-Critical Requirements

There are clients information and accounts information are safety critical requirements in our software.

SCR-1	All information must be safety with full secure authorization access.
Description	An organization/company internal data is more secure information. Though the system is web base system so, data cloud safety is more essential for our system.
Stakeholder	System user.

2.5 Maintainability & Supportability Requirements

It is very important to provide after service or support to the end users.

2.5.1 Maintainability Requirements

MR-1	System helps to update user profile.
Description	It is very important to update security system by sudden time period.
Stakeholders	System user.

2.5.2 Supportability Requirements.

Supportability requirements may have related to some extends. Like:

- Testability
- Extensibility
- Adaptability
- Maintainability
- Compatibility
- Configurability
- Serviceability
- Install ability

Our application meets all of the above requirements related to supportability.

2.5.3 Adaptability Requirements

There are no adaptability requirements in our system software.

2.6 Security Requirements

Software security is very much important for making software. Requirements of software security are very important. As an accounts and clients information maintenance system all kind of data is sensitive and authentic. Enforces of security of an application system of the software security. We write some security related requirements is given below:

- Signing multiple users in one platform.
- Get accesses according to logged in user.
- Set points to the drivers without having any issue.
- Signing out as a admin & accounts officer.
- Handling encrypted passwords.

2.6.1 Access Requirements

Our software application system accessing, there remains some authentication and authorization techniques. Every module of this application system will provide the techniques. Now, I will provide an explanation below.

AR-1	Application provides security mechanism.
Description	Every module is designed in such a way that it only give access to the authorized and authenticated users.
Stakeholders	Admin & Accounts Officer.

2.7 Usability and Human-Interaction Requirements

When anyone or any company can developing any system, they can try to make the system user friendly and easy to usable for the end users.

2.7.1 Ease of Use Requirements

Our application is easy to use and also easily understandable.

EUR-1	Application must be usable for the end users.
Description	This system is enough usable to the admin and accounts officer by which they can operate this system easily.
Stakeholders	Admin & Accounts officer.

2.7.2 Personalization and Internationalization Requirements

We are assigned personalization and internationalization requirements to our application system. Only authorized person like admin officer and accounts officer can access this system using proper maintain access level.

2.7.3 User Documentation Requirements

Every documentation has two types. One is internal documentation which document is generally written by the application engineers. This document prepared to make development life cycle easier for the system engineers or system analysts.

UDR-1	The system engineer documentation.
Description	To develop our application named ISP clients & accounts management system, Bandwidth manager, Internet Officer manager firstly we have make a system analysis team as well as documentation team.
Stakeholders	System analysts or software developers.

2.7.4 Training Requirements

After service application is involved by training requirements. The training requirements are very necessary to properly train up end users to the system so that they would be capable to operate easily. After launching the full package to the market, firstly we provide training to the different end users like ISP office Admin & Accounts Officer.

2.8 Look and Feel Requirements

Look and feel requirements mainly refers how the system will look like and how the user interface or graphical user interface of our system will display to the user.

2.8.1 Appearance Requirements

Admin & Accounts user must know which input fields are required and which are not.

For that reason, we will use labels for all input fields. Input fields might be text type, radio, checkbox, spinner etc.

AR-1	Labels of mandatory fields must be bold.
Description	The mandatory field's label must be bold and all input fields must have placeholder to make it easier for the users.
Stakeholders.	Admin & Accounts officer.

2.9 Operational and Environmental Requirements

Performance, capabilities, measurements, process are referred by Operational and environmental requirement.

2.9.1 Expected Physical Requirements

There are no expected physical requirements in our system.

2.9.2 Requirements for Interfacing with Adjacent Systems

There are no requirements for interfacing with adjacent system for our project.

2.9.3 Release Requirements

Though it's a web base application, so must be an internet connection and web browser for accessing the system is needed.

2.10 Legal Requirements

Legal requirements mainly mention the terms and conditions for privacy and policy of any organizations. The terms and condition of our application is that, no third party software without cloud is allowed to engage to use our data for their business purpose.

2.10.1 Compliance Requirements

There are no specific compliance requirements for our system.

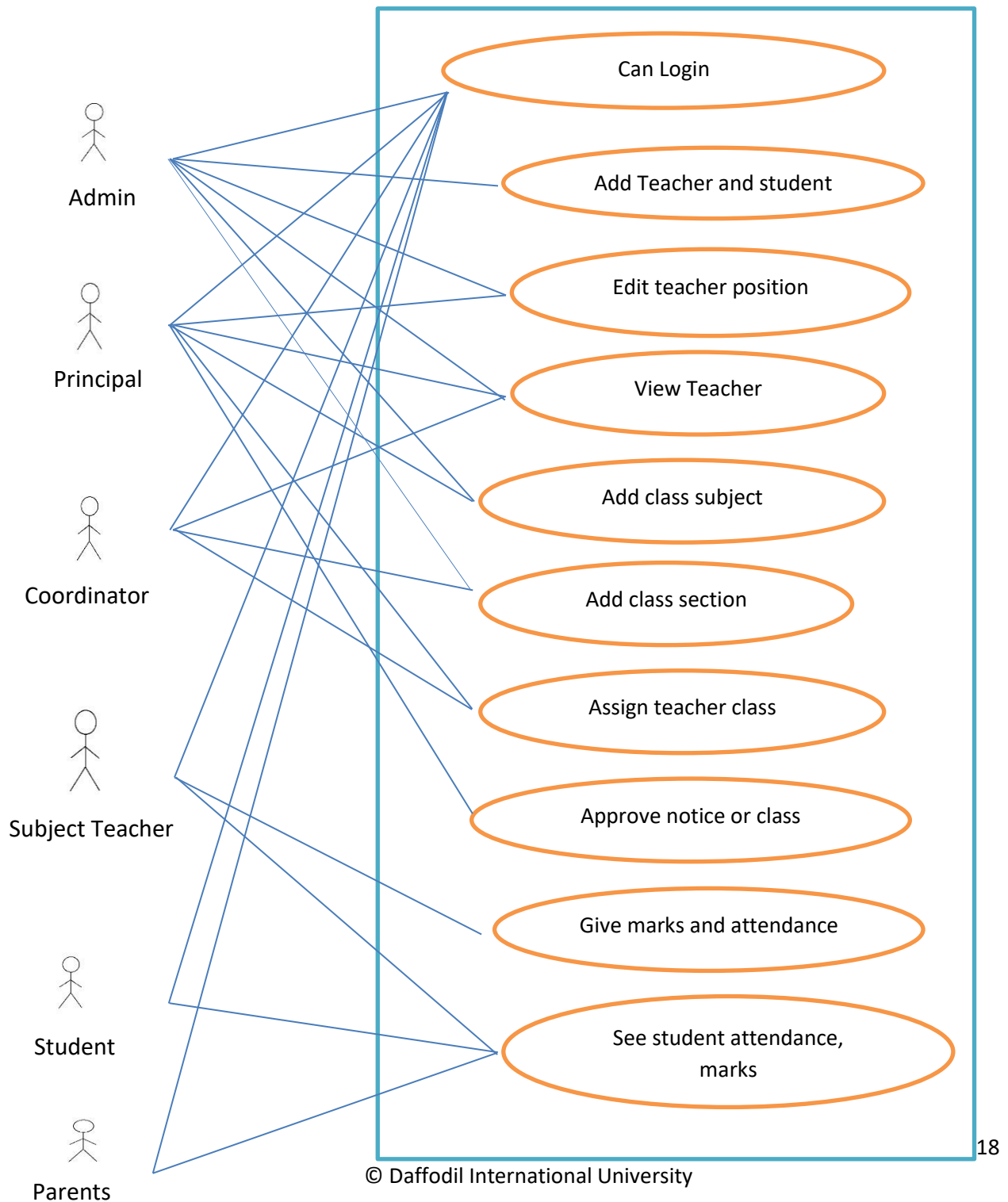
2.10.2 Standards Requirements

There are no specific standards requirements for our system.

Chapter 3: Requirement Analysis

3.1 Use Case Diagram

Use case diagram is mainly mention the user and system access level clearly. There are two actors in our system. Each actor plays different role. And those are already indicated to this use case diagram. This diagram will clarify our system in brief.



3.1.1 Can Login

Name	Can login.
Goal	Authorize the user in the system.
Pre-Condition	User must be a registered user.
Primary Actor	System user.
Secondary Actor	System Administrator.
Trigger	When user go to the system login page.
Success scenario	<ol style="list-style-type: none">1. User request for login page and page loads.2. User Enter the user ID and password.3. User login to the system.
Failure scenario	<ol style="list-style-type: none">1. User Id or password entered wrong.2. User try to login without registration.
Quality Requirements	Login error message should appear clearly. To many login attempts will suspend the user for 10 minutes.

3.1.2. Add Teacher and student

Name	Add Teacher and student
Goal	To register teacher and student in the system.
Pre-Condition	User must be authorized. User should be an admin.
Primary Actor Secondary Actor	Admin. Student and teacher.
Trigger	When user use the option “Add teacher” in teacher section or “Add student” in the student section.
Success scenario	1. User log into the system as admin. 2. Go the “Add teacher” or “Add admin” page 3. Fill the form and submit.
Failure scenario	1. User is not logged in. 2. User not an admin 3. Form not correctly filled. 4. Adding existing user.
Quality Requirements	1. Form should be validated properly. 2. Error information should be clear to understand.

3.1.3. Edit teacher position

Name	Edit teacher position
Goal	To edit a teacher position to a coordinator or a principal or a normal teacher.
Pre-Condition	User must be authorized. User should be an admin.
Primary Actor	Admin.
Secondary Actor	Teacher.
Trigger	When user use the “Edit teacher” option in teacher list table.
Success scenario	<ol style="list-style-type: none"> 1. User log into the system as admin. 2. Go the “All teachers” page. 3. Select a teacher from the teacher list. 4. Click “Edit teacher” option from the action column. 5. Select a position from the dropdown and click save.
Failure scenario	<ol style="list-style-type: none"> 1. User is not logged in. 2. User not an admin.
Quality Requirements	Error information should be clear to understand.

3.1.4. View Teacher

Name	View Teacher
Goal	View teacher information.
Pre-Condition	User must be authorized.
Primary Actor	Teacher
Secondary Actor	All other type of user.
Trigger	When user use the option “View teacher” in teacher section.
Success scenario	<ol style="list-style-type: none">1. User Go to the all teacher page.2. Select a teacher.3. View selected teacher details.
Failure scenario	<ol style="list-style-type: none">1. User is not logged in.
Quality Requirements	Error information should be clear to understand.

3.1.5. Add class subject

Name	Add class subject
Goal	Add subjects to a class.
Pre-Condition	User must be authorized. User should be an admin.
Primary Actor	Admin
Secondary Actor	Teacher, Student.
Trigger	When user use the option “Add subjects” in “Class” section.
Success scenario	1. User Go to the add subject page. 2. Select a class. 3. Enter the subjects name and click save.
Failure scenario	1. User is not logged in. 2. User not an admin. 3. User not selected a class. 4. User not entered any subject’s name.
Quality Requirements	Error information should be clear to understand. Form should be validated properly.

3.1.6. Add class section

Name	Add class section
Goal	Add section to a class subject.
Pre-Condition	User must be authorized. User should be an admin.
Primary Actor	Admin
Secondary Actor	Teacher, student.
Trigger	When user use the option “Add Section” in “Class” section.
Success scenario	1. User Go to the add section page. 2. Select a class from the drop down menu. 3. Enter amount of section to be added. 3. Click save button.
Failure scenario	1. User is not logged in. 2. User not an admin. 3. User not selected a class.
Quality Requirements	Error information should be clear to understand.

3.1.7. Assign teacher class

Name	Assign teacher class
Goal	Assign teacher to a subject in a class.
Pre-Condition	User must be authorized. User should be an admin.
Primary Actor	Admin
Secondary Actor	Teacher, student.
Trigger	When user use the option “Assign teacher” in “Class” section.
Success scenario	<ol style="list-style-type: none">1. User Go to the add assign teacher page.2. Select a class from the drop down menu.3. All subjects will appear in table. Click “Assign Teacher”.4. Then select a teacher and click “save”.
Failure scenario	<ol style="list-style-type: none">1. User is not logged in.2. User not an admin.3. User not selected a class.
Quality Requirements	Error information should be clear to understand.

3.1.8. Approve notice or class routine

Name	Approve notice or class routine
Goal	To approve class notice, or class routine before publishing.
Pre-Condition	User must be authorized. User should be an admin, principal
Primary Actor	Admin, principal
Secondary Actor	Teacher, student, Parents.
Trigger	When user use the option “Notice” or “Routine” in “Publish” section.
Success scenario	1. User Go to the publish page. 2. Select an option (Notice and Routine) from the ul menu. 3. From the table click publish from the action column of the row.
Failure scenario	1. User is not logged in. 2. User not an admin or principal.
Quality Requirements	

3.1.9. Give marks and attendance

Name	Give marks and attendance
Goal	Subject teacher will give his student attendance and subject marks. And system will record it.
Pre-Condition	User must be authorized. User should be a subject teacher.
Primary Actor	Subject teacher.
Secondary Actor	Student, Parents.
Trigger	When user use the option “Give Marks” in “Marks” section.
Success scenario	<ol style="list-style-type: none"> 1. User Go to Give Marks page. 2. Select a subject from his subject list table. 3. From the table he has to click Quiz or Mid and Final button from the action column of the row. 4. Suppose he selects Mid And Final then all class subject student list will appear with their marks input boxes. 5. He input the marks and click save.
Failure scenario	<ol style="list-style-type: none"> 1. User is not logged in. 2. If user not a subject teacher. 3. If user is a subject teacher but have no classes assigned. 4. User not authorized to see that student.
Quality Requirements	Error information should be clear to understand.

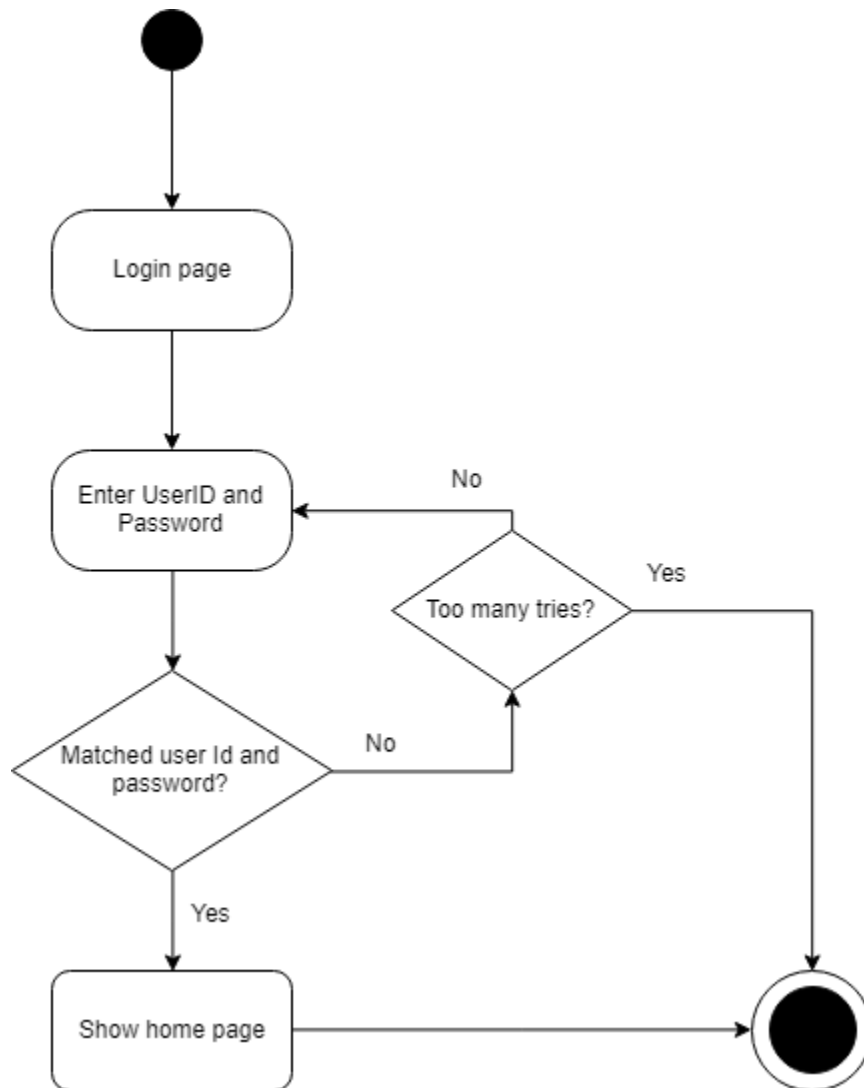
3.1.10. See student details, attendance, marks and results

Name	View student attendance, marks and results
Goal	To see a student details, his attendance and mid final marks.
Pre-Condition	<ol style="list-style-type: none"> 1. User must be authorized. 2. Admin, principal, coordinator can see any student attendance and other marks. 3. Subject teacher can see only assigned student results. 4. Students and parents can see only his result or his child result.
Primary Actor	Student
Secondary Actor	All other type of user.
Trigger	<p>When user use the option “View result” in Student section.</p> <p>When user is a student or parents then there will be an option “View Result”.</p>
Success scenario	<ol style="list-style-type: none"> 1. User login to the page. 2.1.1 If user is an admin or principal or coordinator. 2.1.2 User goes to menu Student> All Student and student list will load in a table. 2.1.3 User clicks “view result” in action column. 2.2.1 If user is subject teacher. 2.2.2 User goes to menu “Marks” and subject list load in a table. 2.2.3 User clicks “Quiz” or “Mid and final” in action column.
Failure scenario	<ol style="list-style-type: none"> 1. User is not logged in. 2. User not authorized to see that student.
Quality Requirements	Error information should be clear to understand.

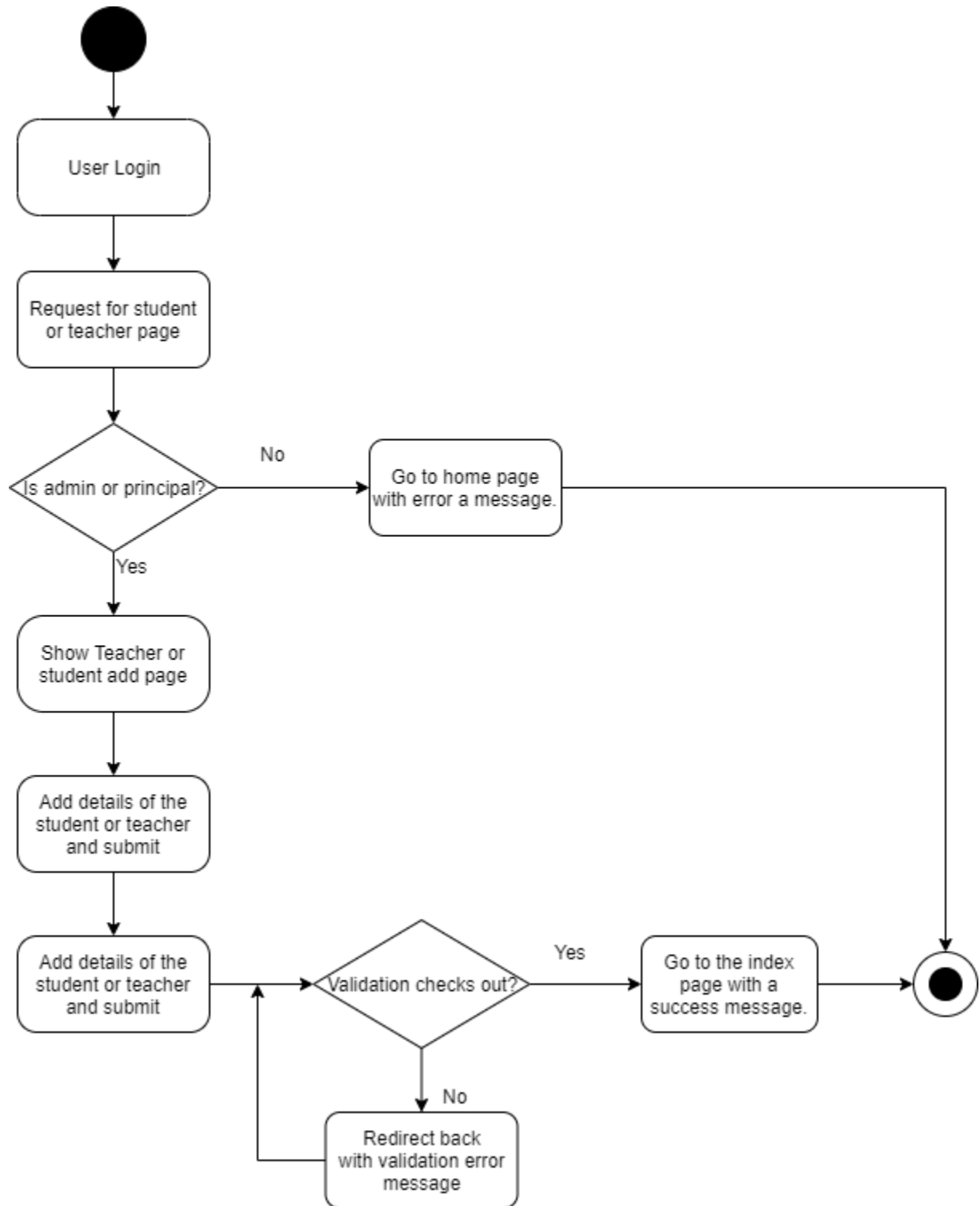
3.2 Activity Diagram

We have prepared some activity diagram according to our use case. These activity diagrams are properly referring the flow of the individual conditions of our project.

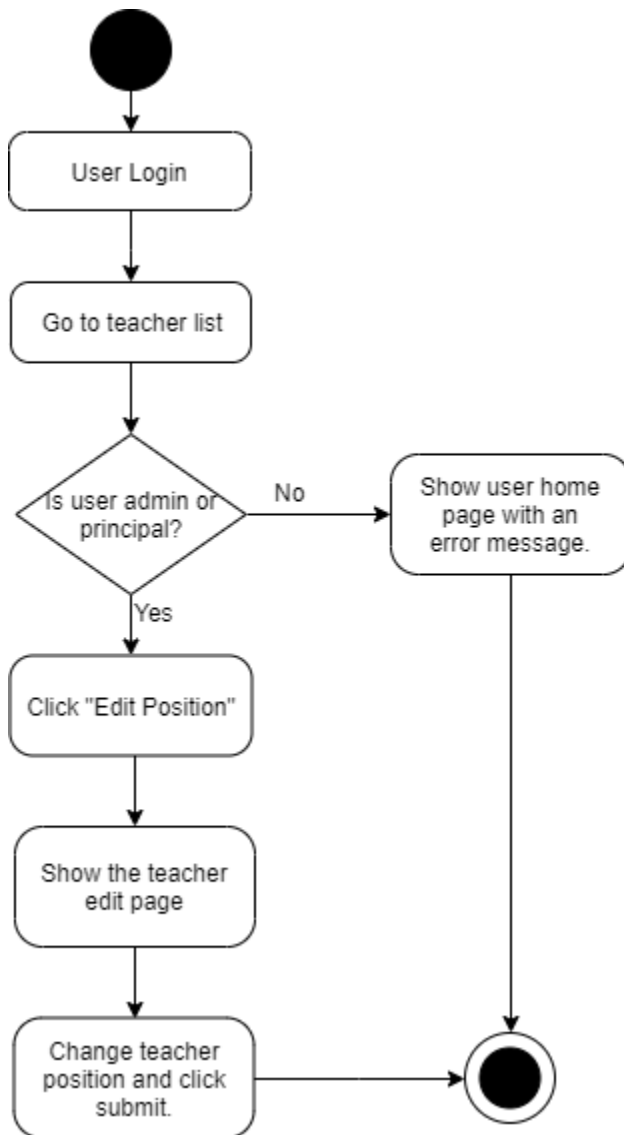
3.2.1. User Login



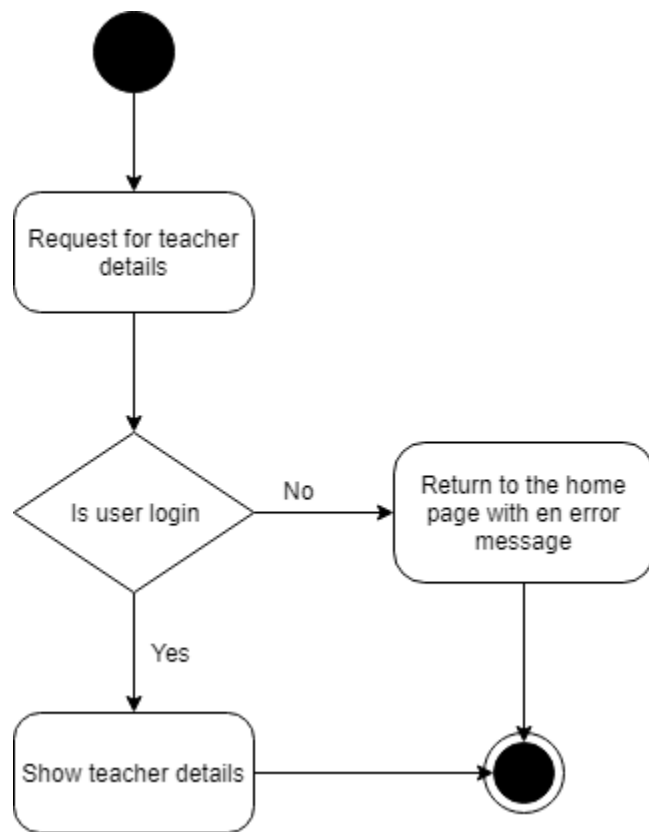
3.2.2. Add Teacher and student



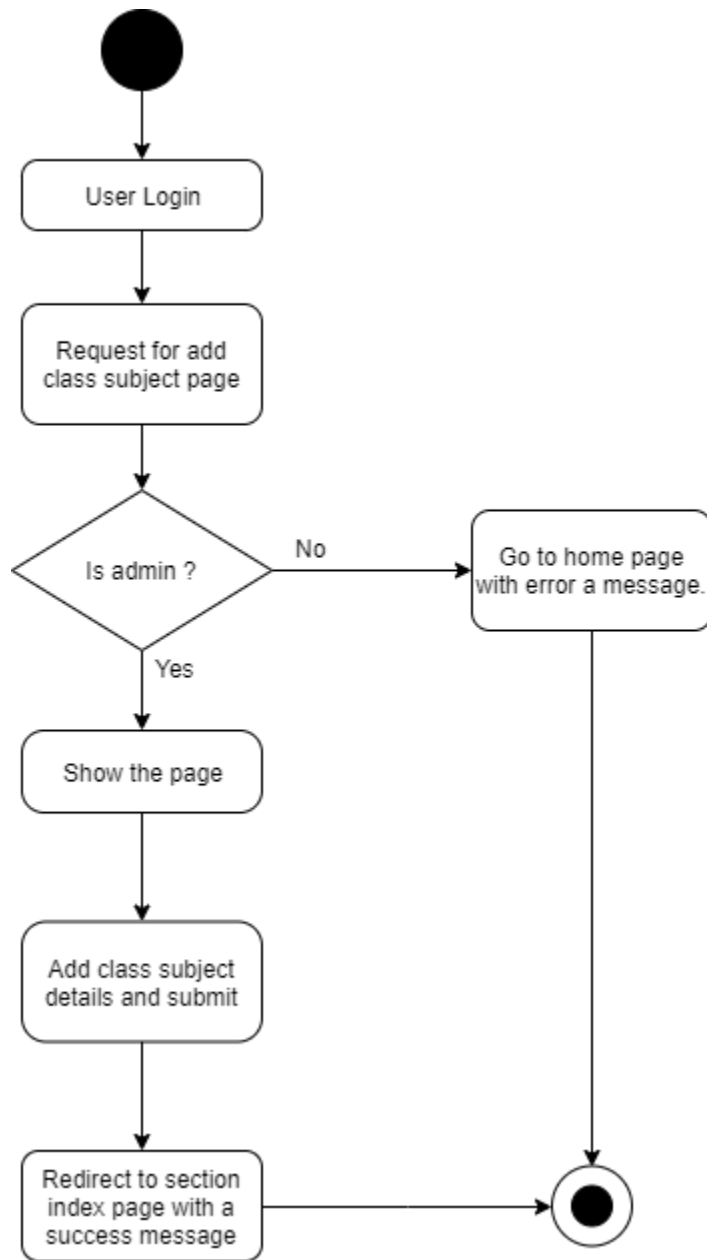
3.2.3. Edit teacher position



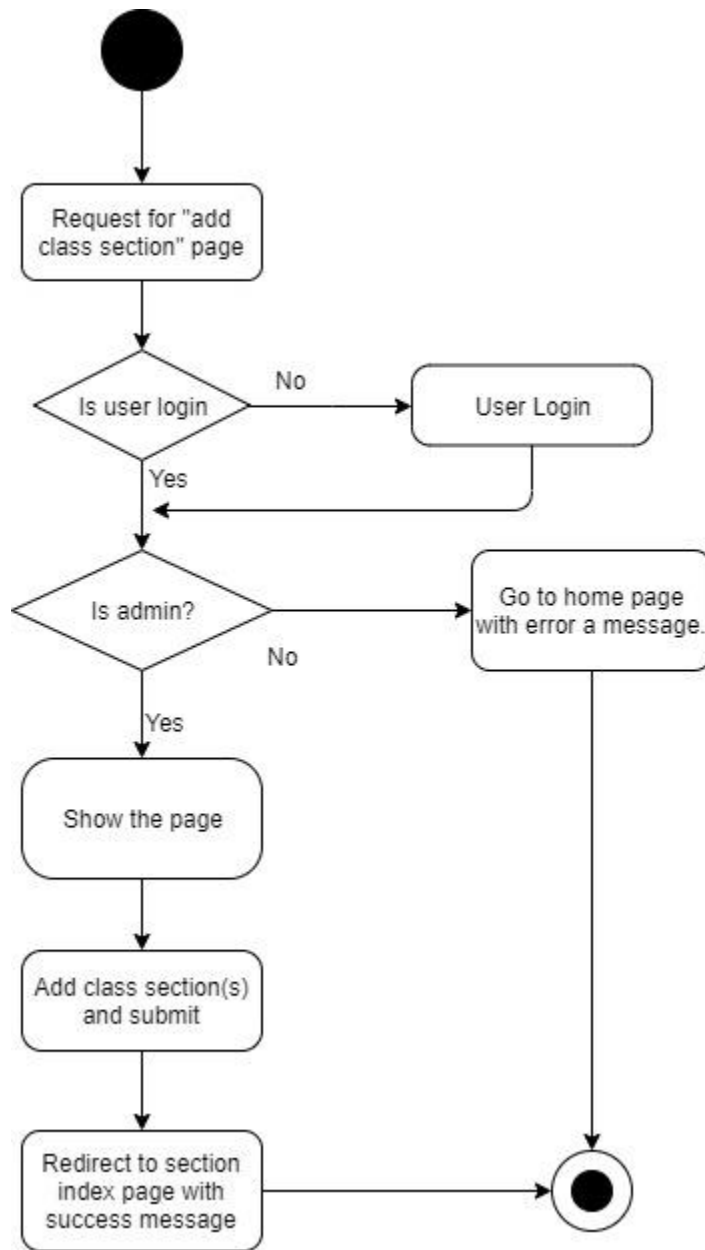
3.2.4. View teacher.



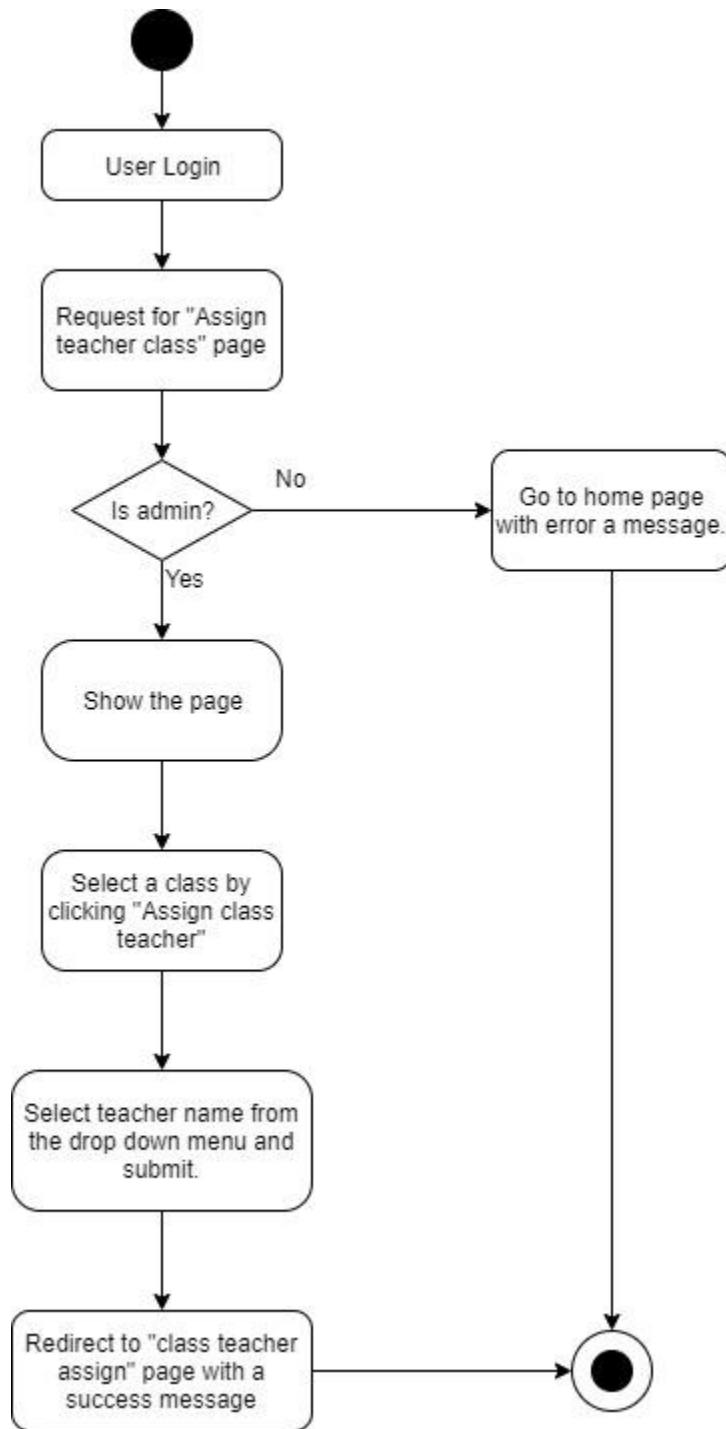
3.2.5. Add class subject



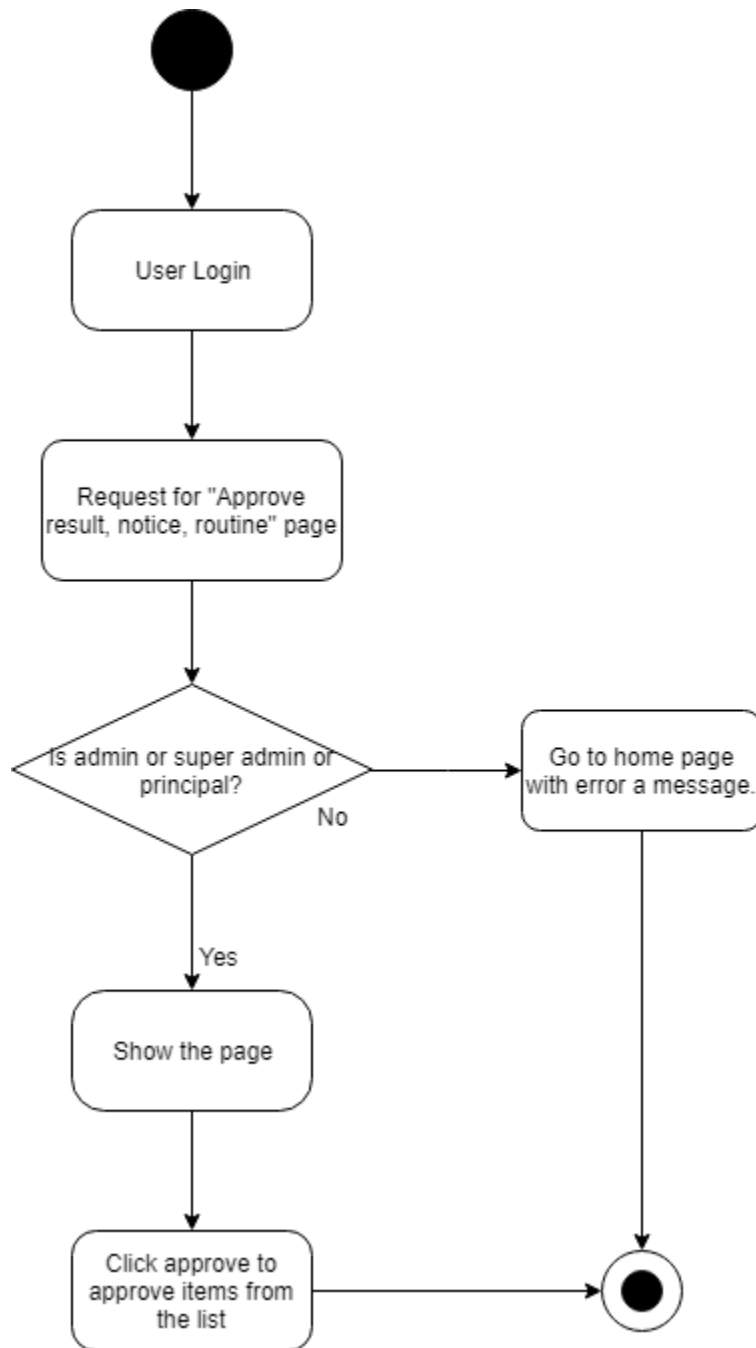
3.2.6. Add class section



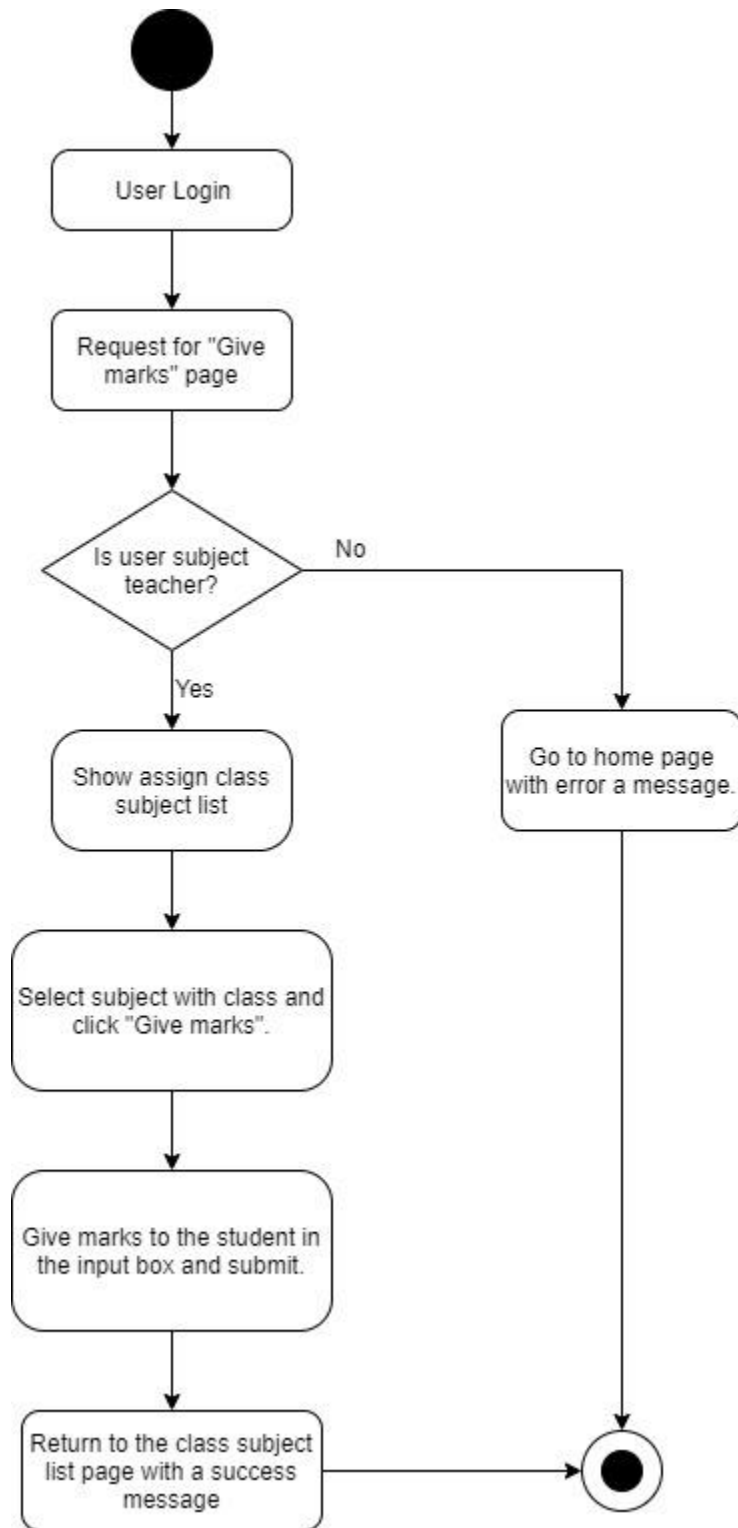
3.2.7. Assign class teacher



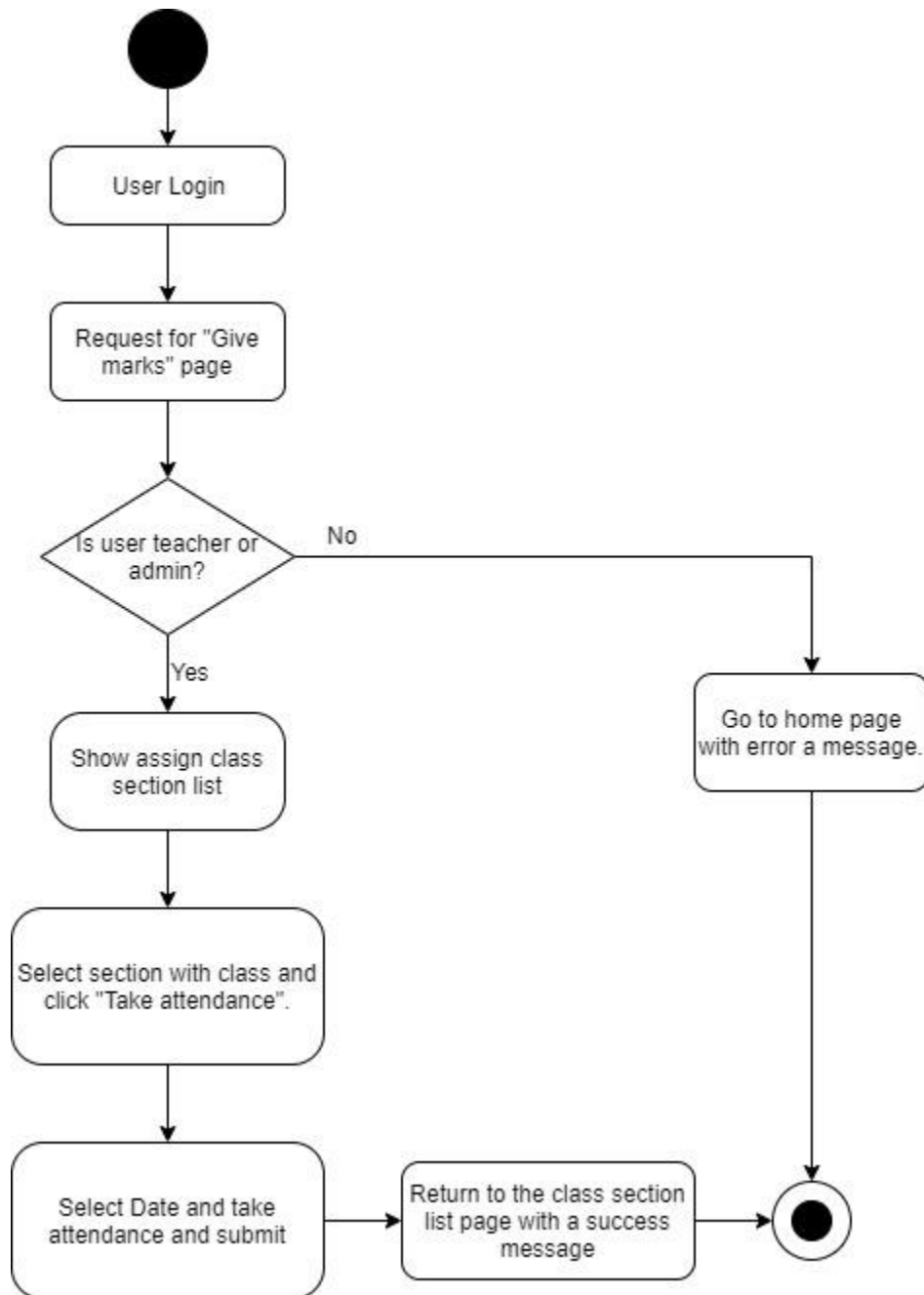
3.2.8. Approve notice or class routine



3.2.9. Give marks



3.2.10. Take attendance



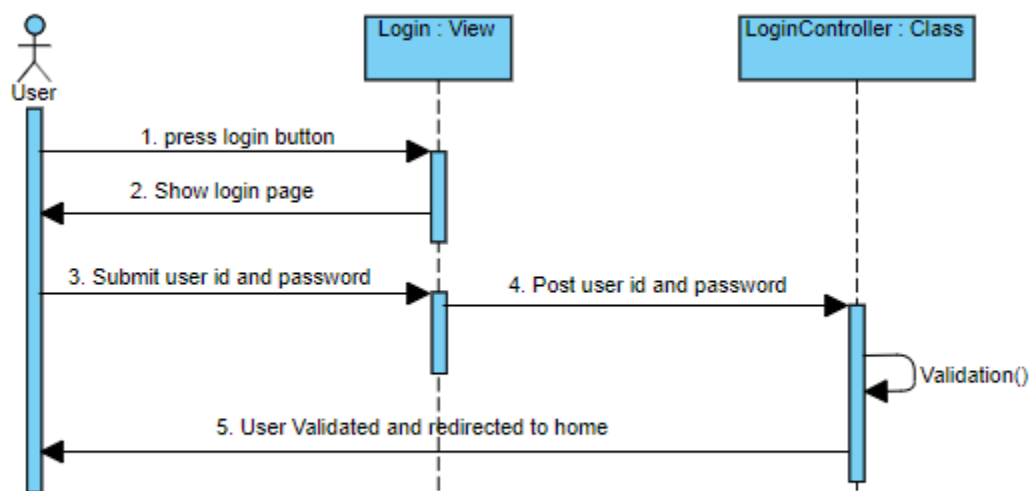
3.2.11. See student details, attendance, results

3.3 Sequence Diagrams

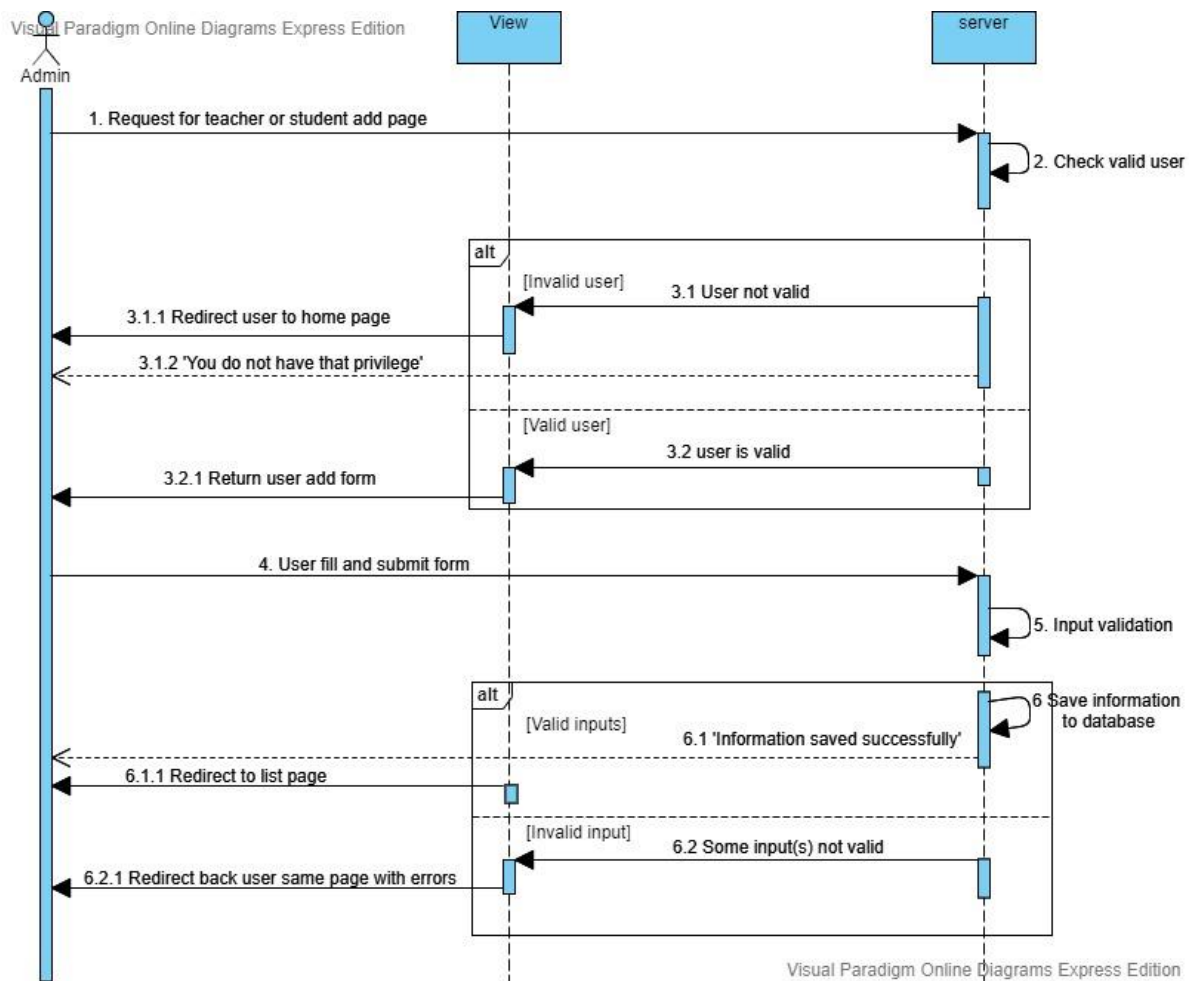
Mainly sequence diagrams understand us how the data will be followed in any application.

Now we are going to show some sequence diagrams.

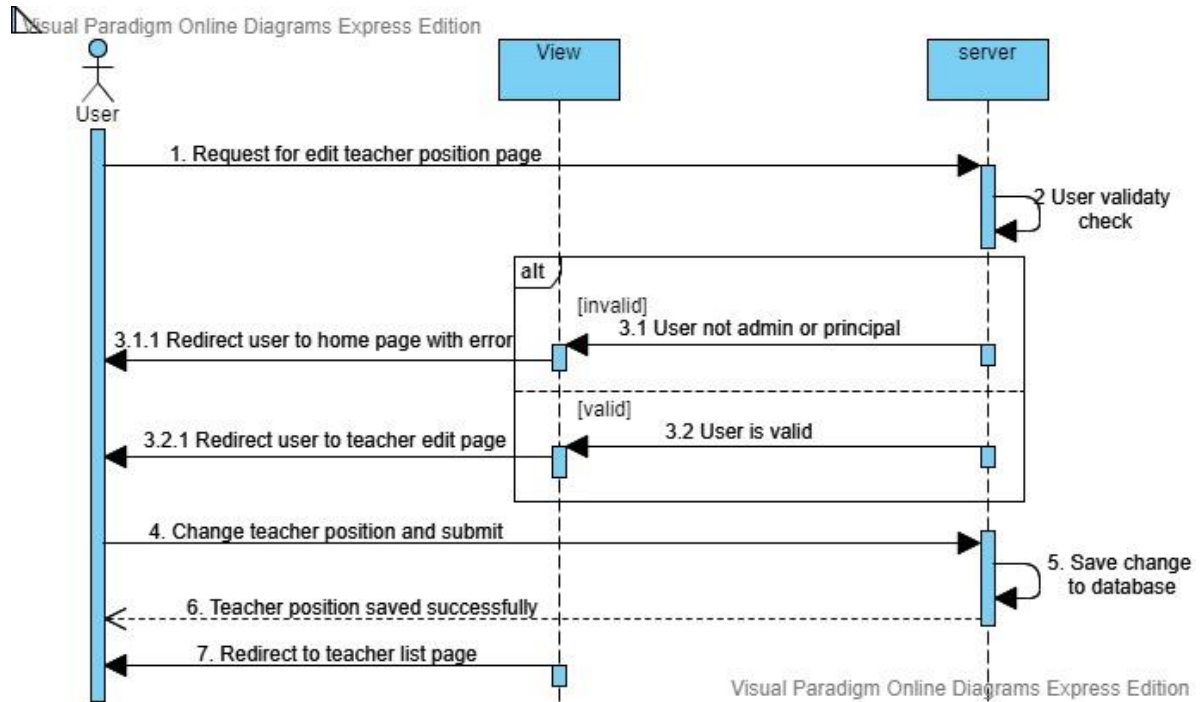
3.3.1. User Login



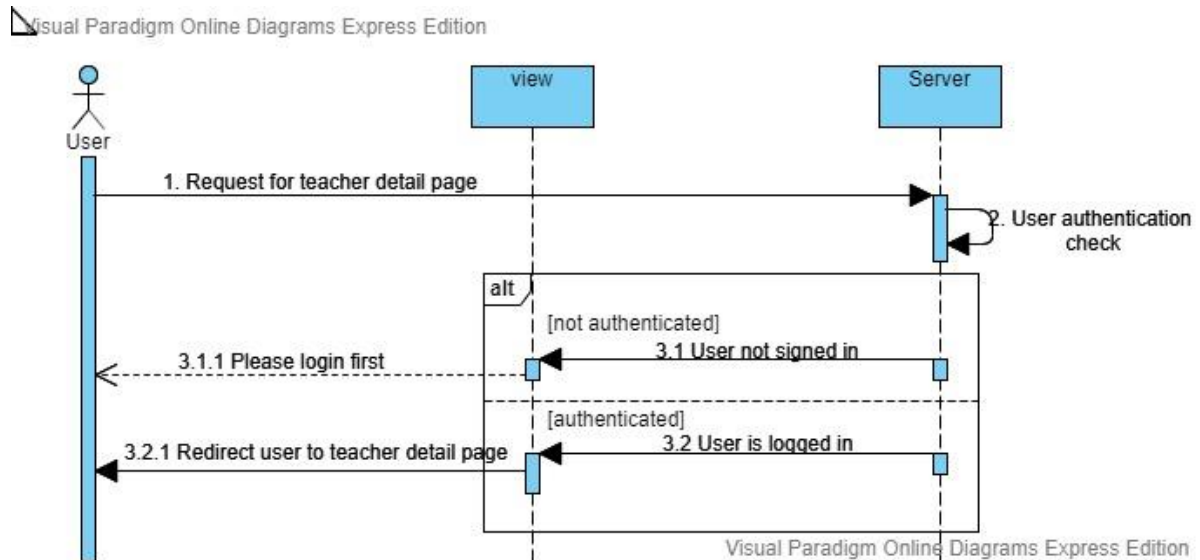
3.3.2. Add Teacher and student



3.3.3. Edit teacher position

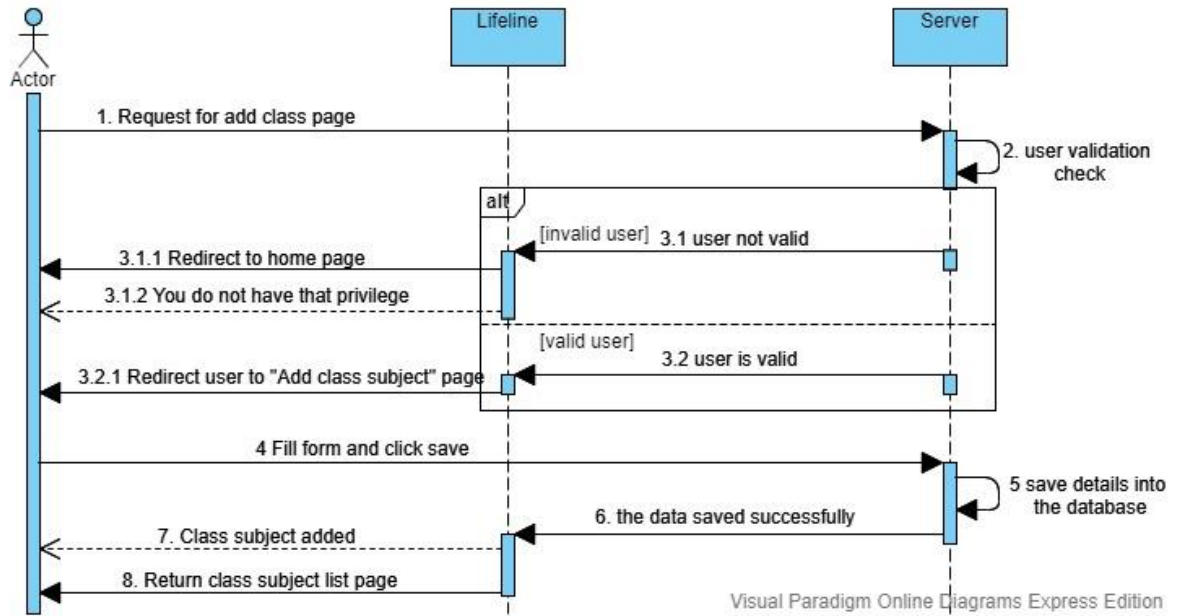


3.3.4. View teacher.



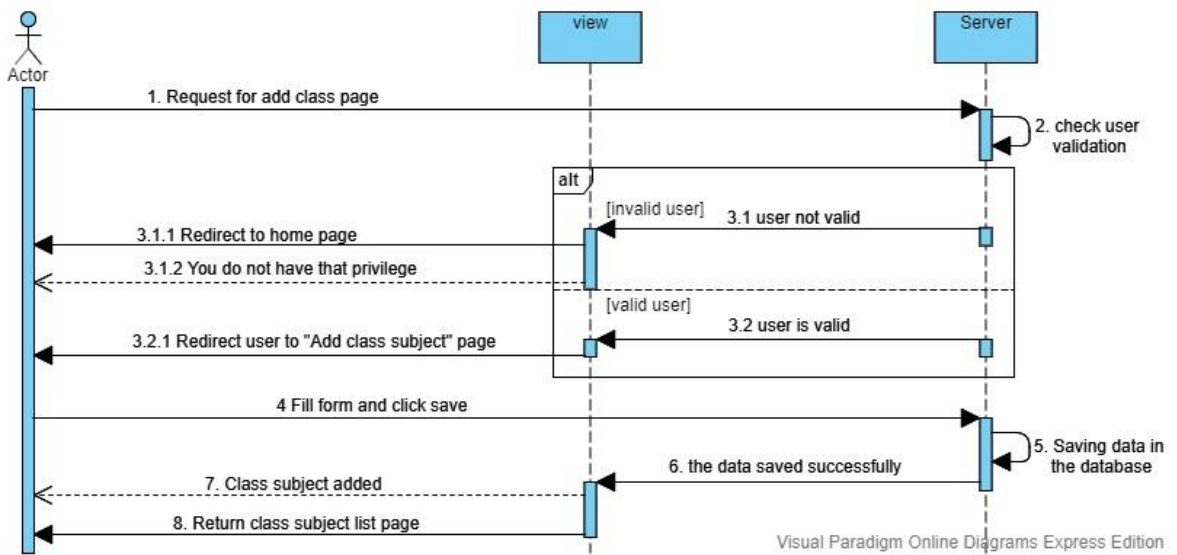
3.3.5. Add class subject

Visual Paradigm Online Diagrams Express Edition



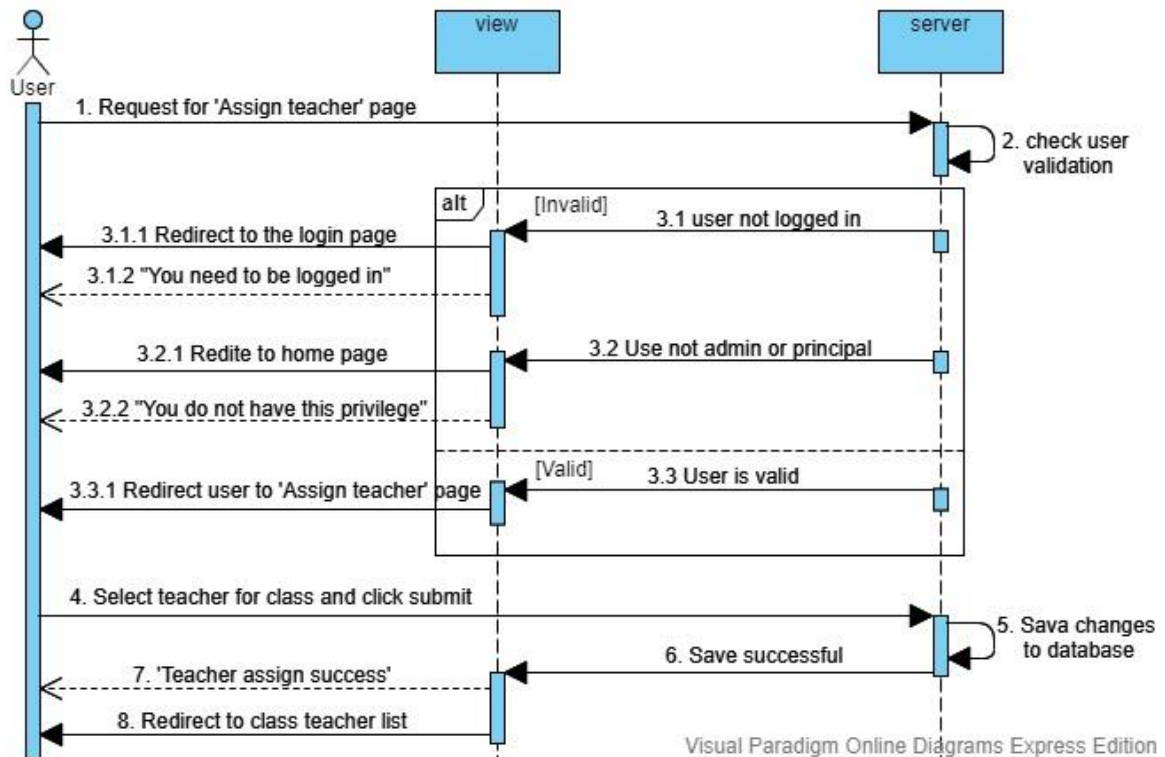
3.3.6. Add class section

Visual Paradigm Online Diagrams Express Edition



3.3.7. Assign class teacher

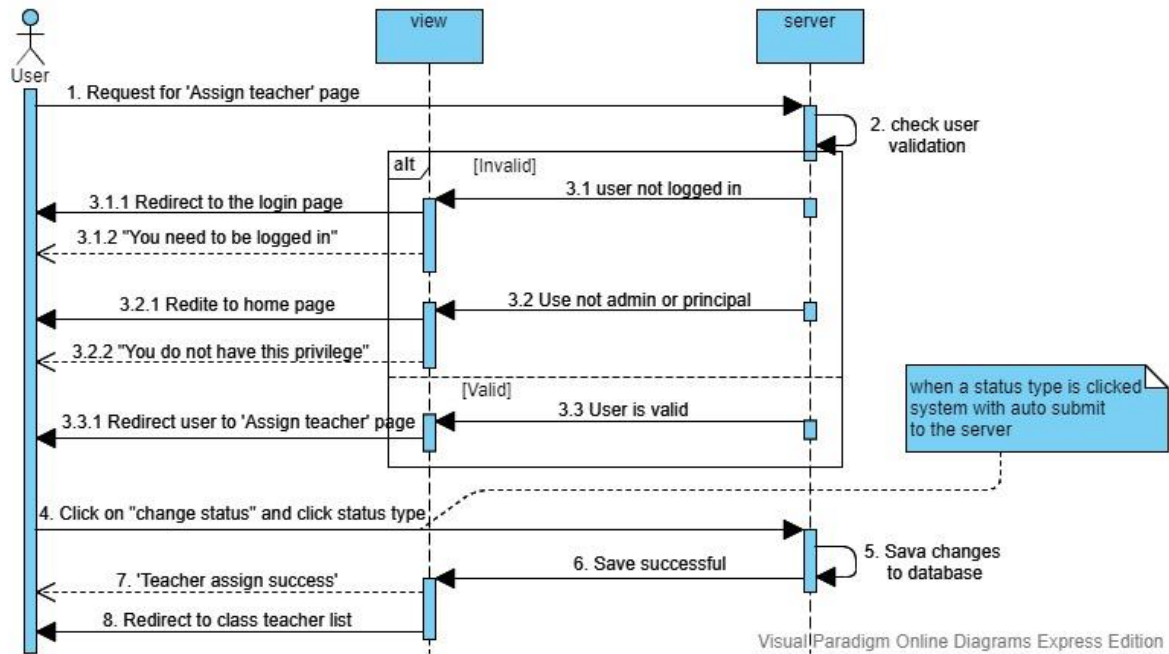
Visual Paradigm Online Diagrams Express Edition



Visual Paradigm Online Diagrams Express Edition

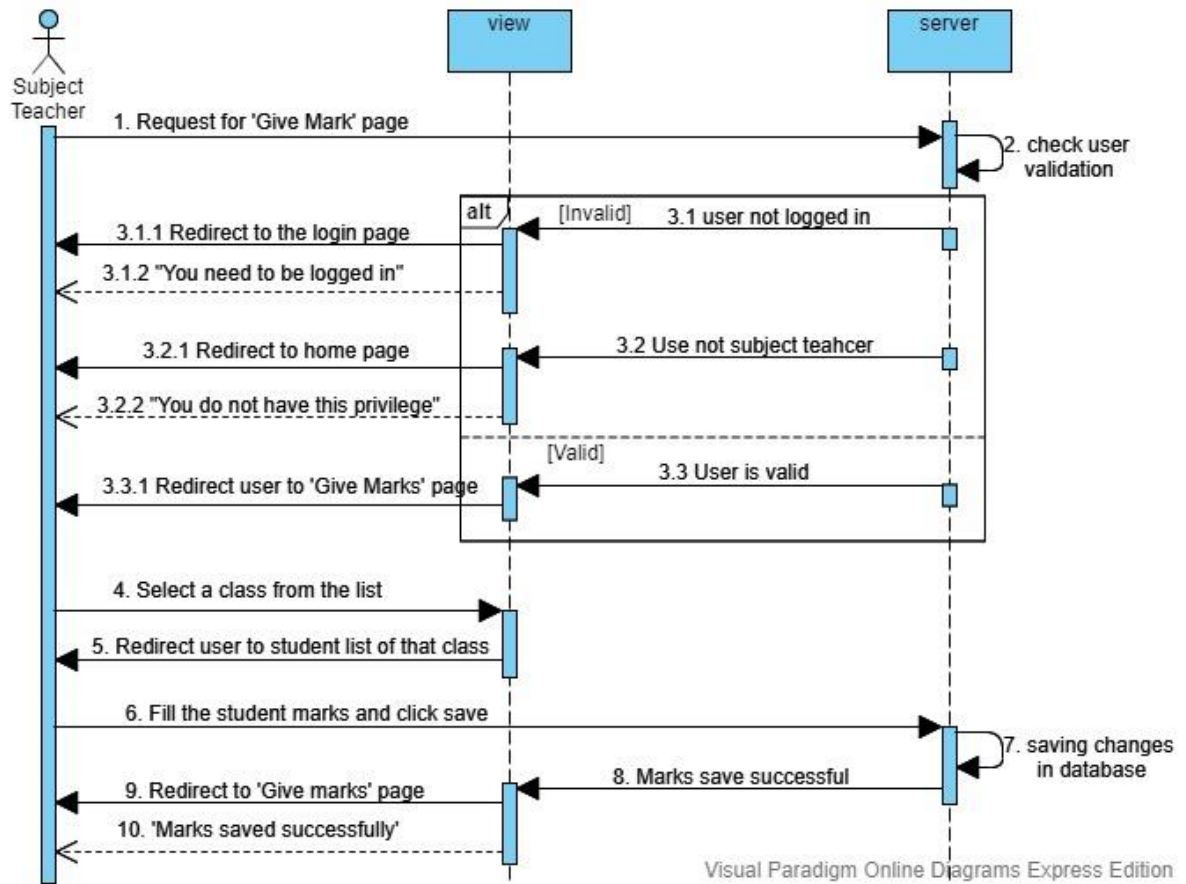
3.3.8. Approve notice or class routine

Visual Paradigm Online Diagrams Express Edition



3.3.9. Give marks

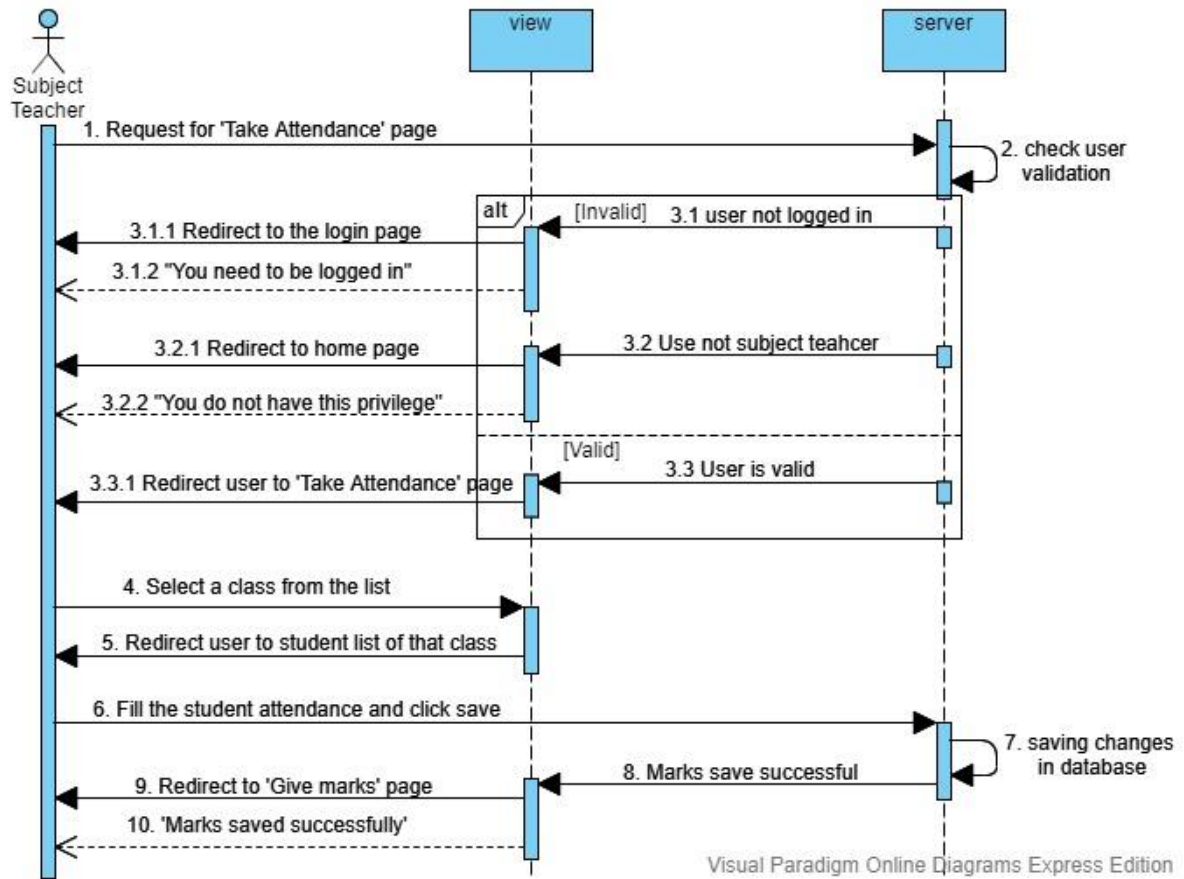
Visual Paradigm Online Diagrams Express Edition



Visual Paradigm Online Diagrams Express Edition

3.3.10. Take attendance

Visual Paradigm Online Diagrams Express Edition



Visual Paradigm Online Diagrams Express Edition

Chapter 4: System Design Specification

4.1 Development tools and technology

For developing software tools are must be needed. There are many different kinds of tools for developing software in different language. For my project development in PHP Laravel framework I use visual studio Code IDE.

4.1.1 User Interface Technology

I use jQuery for validation using JavaScript, Bootstrap for frontend development. I use CanvashJS for data graphical view.

4.1.2 JQuery UI

JQuery is for JavaScript library which uses for JavaScript core programming language for design web frontend development. It also helps the client site helper which makes sure the over hit form database. The other main task for JavaScript is validation without fulfillment system term and condition. AJAX stands for Asynchronous JavaScript and XML. It is also a subset of JavaScript. By using AJAX no page reloading is required. It is also compatible with any browser like Google Chrome, Mozilla

4.1.3 Programming Language

Developing software most important part is programming language for the software development. The security, performance and some of other features are related of programming language. I use jQuery for validation using JavaScript, Bootstrap for frontend development. The server side programming language name is PHP(Laravel) MVC framework. Both of them are open source general purpose scripting language.

4.1.4 Integrated Development Environment

IDE stands for Integrated Development Environment. Programmers write code on IDE. After that IDE provide the feature to execute the source code. For developing my web application, I have used one IDE. To develop my web version, I have used visual studio code which is powered by Microsoft Company.

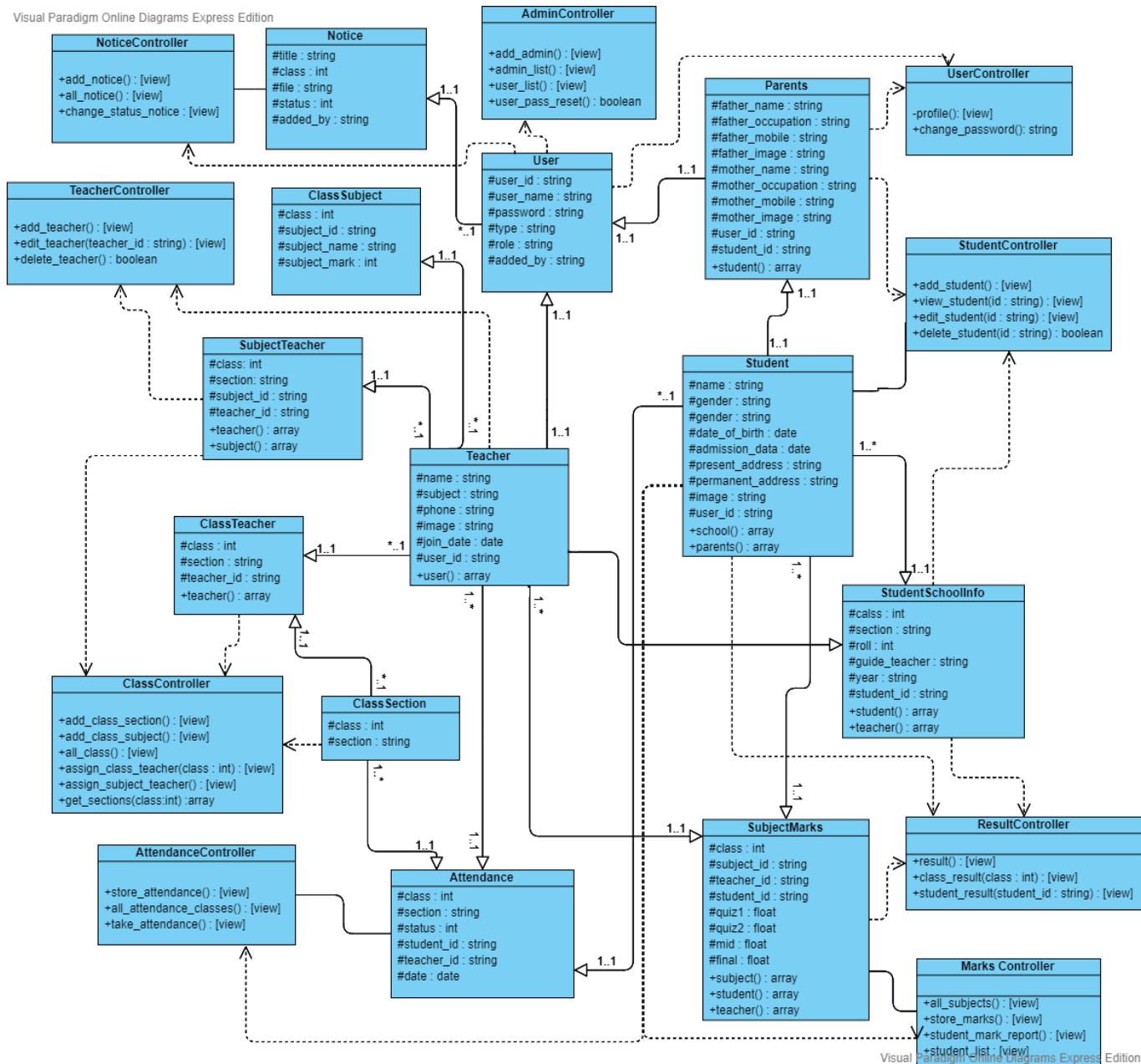
4.1.5 Database Server

- Server: 127.0.0.1 via TCP/IP
- Server type: MariaDB
- Server connection: SSL is not being used
- Server version: 10.1.37-MariaDB - mariadb.org binary distribution
- Protocol version: 10
- User: root@localhost
- Server charset: UTF-8 Unicode (utf8)

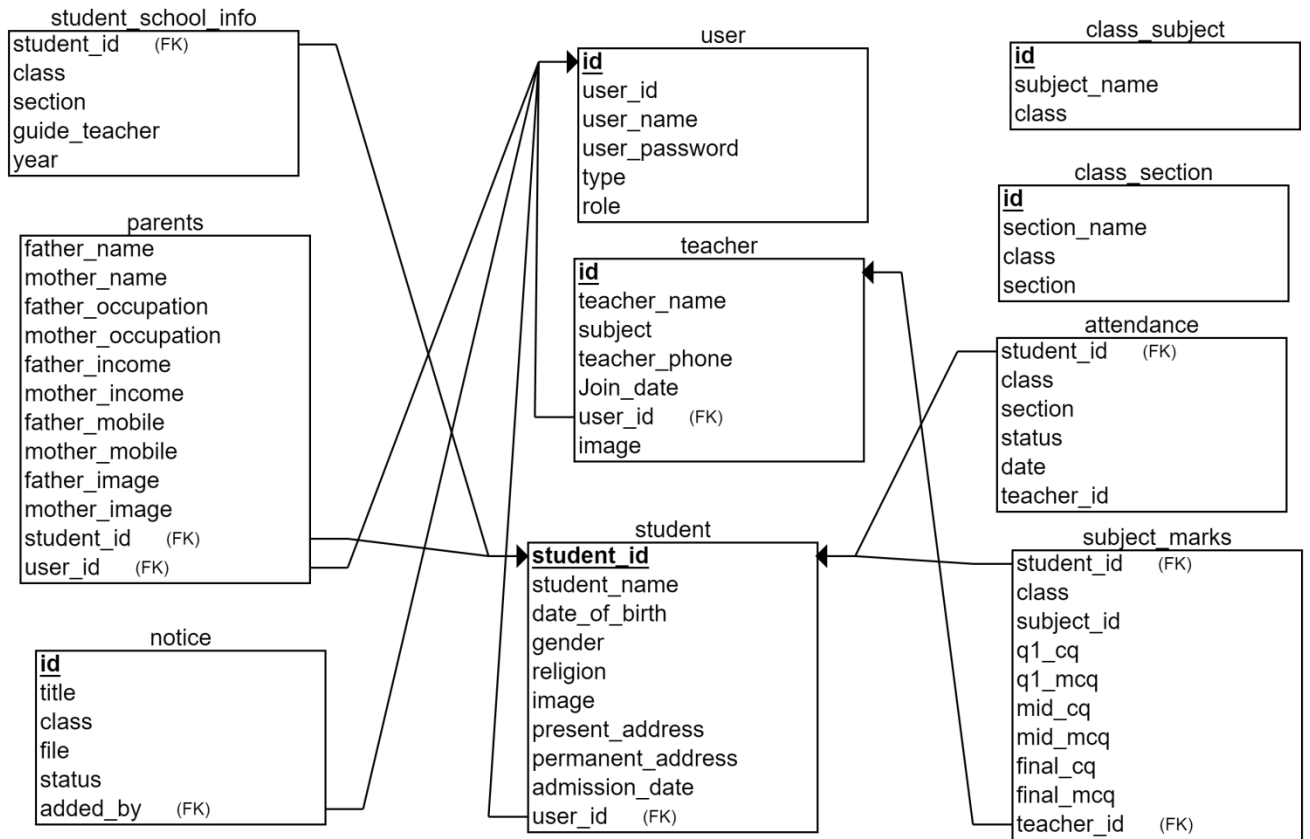
It is also very easy to use. It can also ensure the security, scalability, high performance and many things.

4.2 Class Diagram:

Visual Paradigm Online Diagrams Express Edition



4.3 Database Diagram:



Chapter 5: System Test

5.1. User Login

Name: User Login		
Description: Try login into the system.		
Precondition: User must have User ID and password		
Test scenario	Test Data	Test Result
1. User try to login to the system	User Id : admin Password : 123456	Success

5.2. Add Teacher

Name: Add Teacher		
Description: Try to add teacher in the system		
Precondition: <ul style="list-style-type: none">• User must have User ID and password.• User should login as admin.		
Test scenario	Test Data	Test Result
1. User logged in as a admin. 2. User go to the “Add teacher” page. 3. Fill the form of teacher details 4. Click ‘save detail’ button.	Teacher name : William J. Mattingly User Id : 1231 Subject : Bangla Phone : 01360657507 Join Date : 2019-10-30	Success

5.3. Edit teacher position

Name: Edit teacher position		
Description: Try to edit teacher role.		
Precondition: <ul style="list-style-type: none">• User must have User ID and password.• User should login as admin or principal.		
Test scenario	Test Data	Test Result
1. User logged in to the system. 2. User go to teacher list page 3. User selects a teacher to edit role. 4. User edit role. 5. User click save.	Teacher role: Subject Teacher	Success

5.4. View teacher

Name: View teacher		
Description: Try to view a teacher details		
Precondition: <ul style="list-style-type: none">• User must have User ID and password• User must be logged in.		
Test scenario	Test Data	Test Result
1. User Login to the system 2. Click on “Teacher list”. 3. Teacher list with details appear	User Id : 1900001 Password : 123456	Success

5.5. Add class subject

Name: Add class subject		
Description: Try to add subject to a class.		
Precondition: <ul style="list-style-type: none">• User must have User ID and password.• User should login as admin.		
Test scenario	Test Data	Test Result
1. User logged in to the system. 2. User go to add subject page. 3. Fill the subject details 4. User click save.	Subject Id ; ban-01 Subject name : Bangla Class : 1 Subject Marks : 100	Success

5.6. Add class section

Name: Add class section		
Description: Try to add section to a class.		
Precondition: <ul style="list-style-type: none">• User must have User ID and password.• User should login as admin.		
Test scenario	Test Data	Test Result
1. User logged in to the system. 2. User go to add section page. 3. Fill the section name details. 4. Click saves.	Section name : a Class : 1	Success

5.7. Assign class teacher

Name: Assign class teacher		
Description: Try to assign class teacher so that teacher can take attendance.		
Precondition: <ul style="list-style-type: none"> • User must have User ID and password. • User should login as admin. 		
Test scenario	Test Data	Test Result
<ol style="list-style-type: none"> 1. User logged in to the system. 2. Goes to the “Teacher Assign” page. 3. Select a class from the list and click on “Assign class teacher” button 4. Sections with teacher list will be loaded. 5. Select teacher in a section from teacher list. 6. Click “Assign Teacher” 	Teacher id: T-1231, Teacher id: null, Teacher id : T-111	Success

5.8. Approve notice or class routine

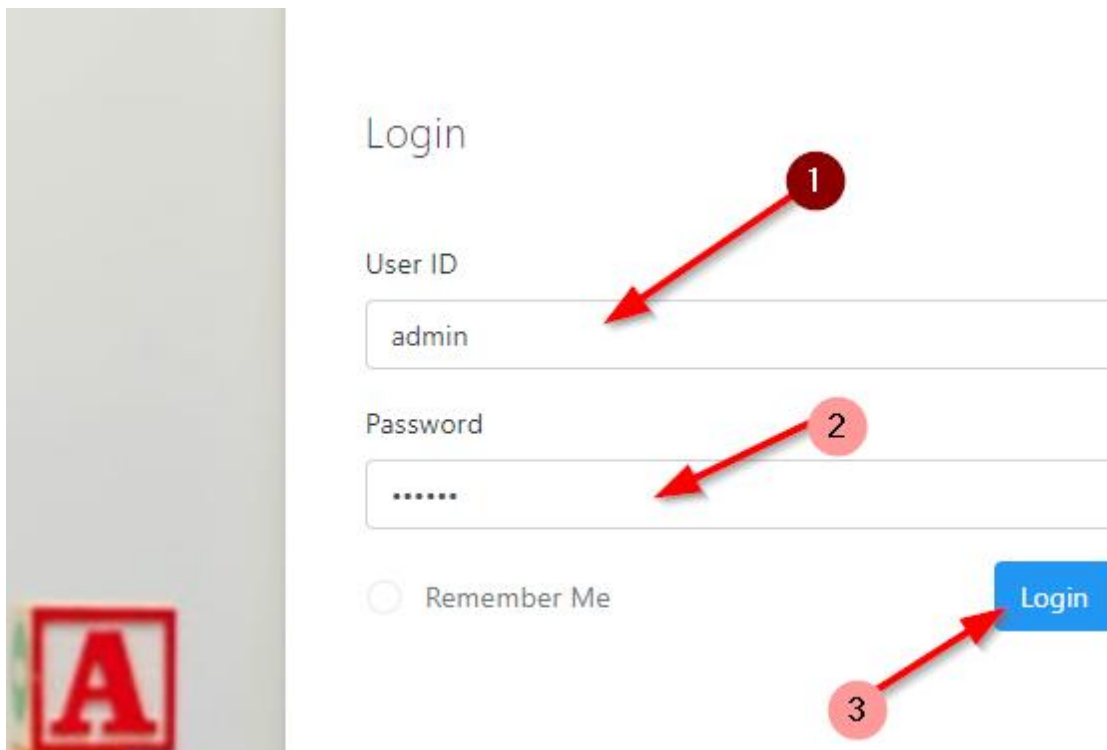
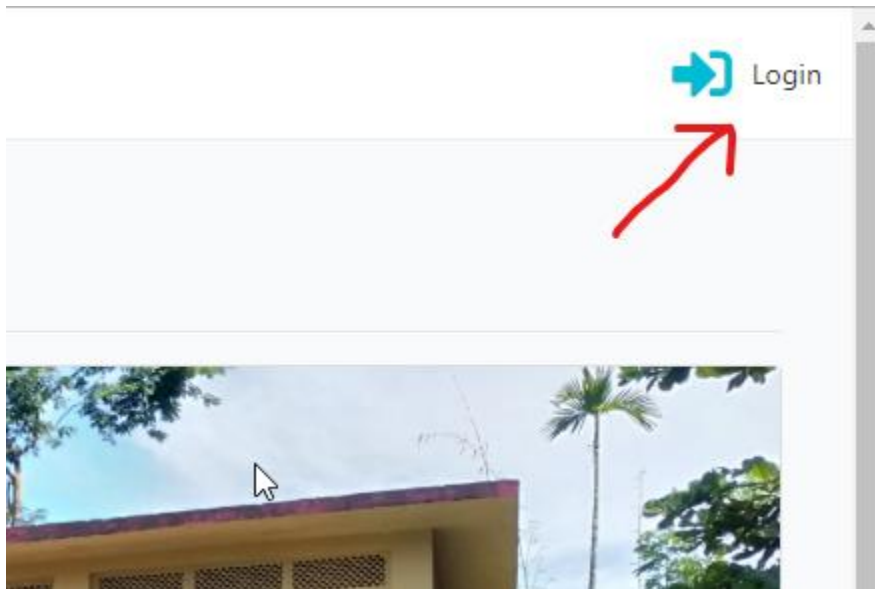
Name: Approve notice or class routine		
Description: Notice will be uploaded to the system. Only approved notice will show.		
Precondition: <ul style="list-style-type: none"> • User must have User ID and password. • User should login as admin or • User should be a principal 		
Test scenario	Test Data	Test Result
<ol style="list-style-type: none"> 1. User logged in to the system. 2. Goes to the “Notice list” page. 3. Select a class from the list and click on “change status” button 4. Three options will pop-up. 5. Click on a option. Then status will change. 	Status ['1'=> '0']	Success

5.9. Give marks

Name: Give marks		
Description: Teacher will try to give student marks.		
Precondition: <ul style="list-style-type: none">• User must have User ID and password.• User should login as teacher.		
Test scenario	Test Data	Test Result
<ol style="list-style-type: none">1. User logged in to the system.2. User goes to 'Give marks' page.3. Select a class with section from the list and click on "give marks" button4. Student list will appear with Quiz1, mid, quiz2, final input boxes .5. Click on a option. Then status will change.	Quiz1:10, Mid:20, Quiz2: 30, Final: 30	Success

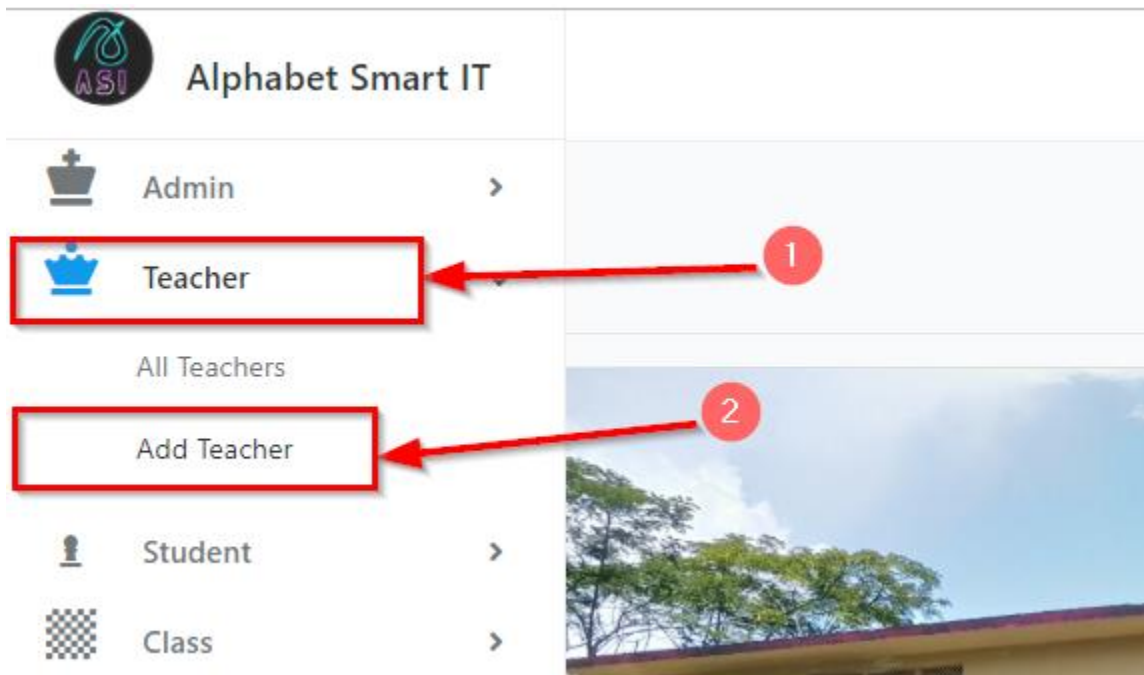
Chapter 6: User Manual

6.1. Login



6.2. Add Teacher

Step 1:

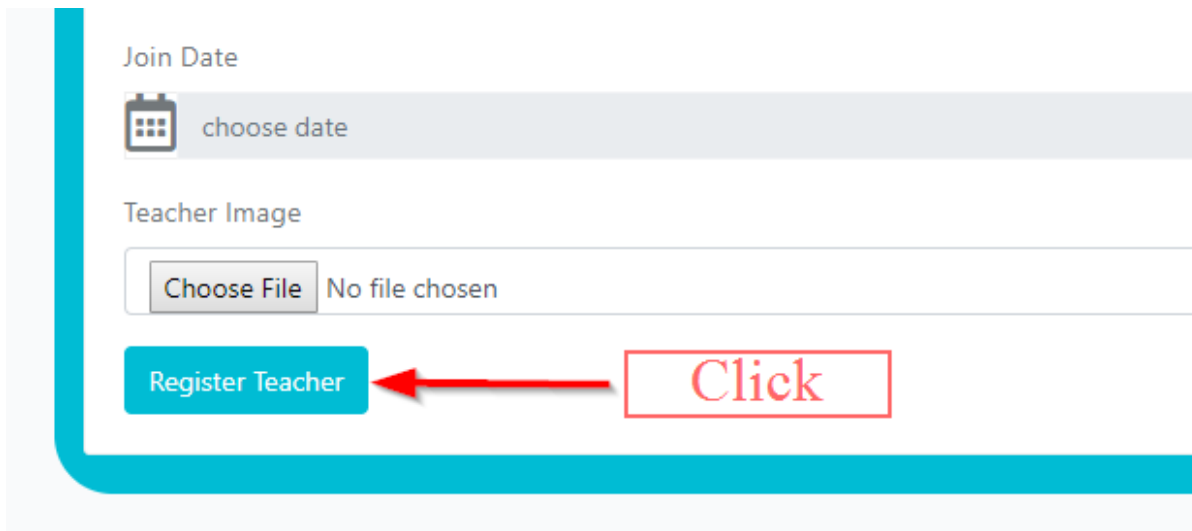


Step 2:

The screenshot shows the "Add Teacher" form. The title "Add Teacher" is displayed on the left. On the right, a red box contains the text "Fill the form". The form consists of the following fields:

- Teacher name: Full name
- User Id
- Role: Select Teacher Role (dropdown menu)
- Subject name
- Phone: Insert only 11 digit phone number

Step 3:



Join Date
choose date

Teacher Image
Choose File No file chosen

Register Teacher

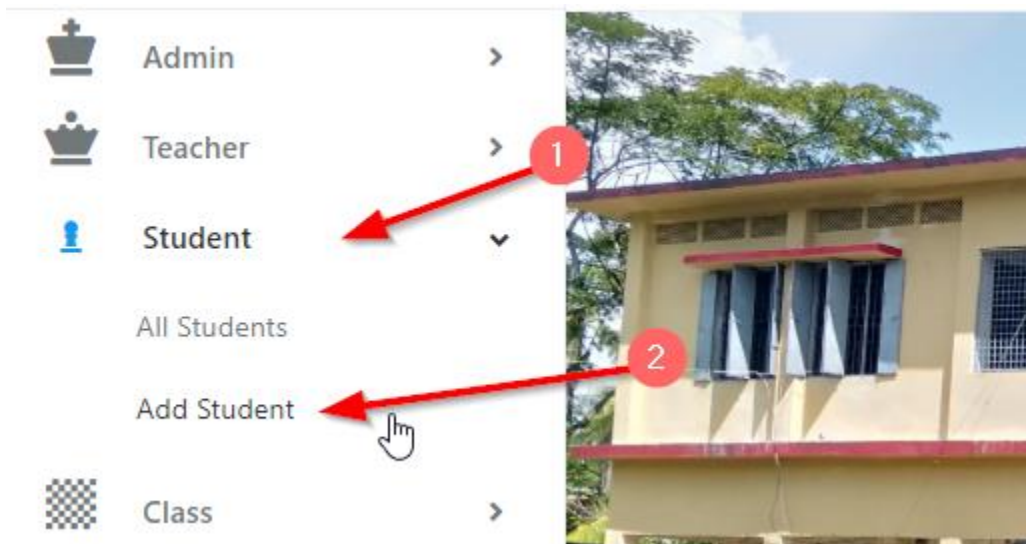
Click

The image shows a registration form with a 'Join Date' field containing a calendar icon and the text 'choose date'. Below it is a 'Teacher Image' field with a 'Choose File' button and the text 'No file chosen'. At the bottom, there is a blue 'Register Teacher' button. A red arrow points from a red-bordered box containing the word 'Click' to the 'Register Teacher' button.

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6.3. Add Student

Step 1:



Step 2:

Add Student

Fill The form

Student School Info

Student Class Section

Roll Guide Teacher

Student Basic Info


Student name

Step 3:

H Wife

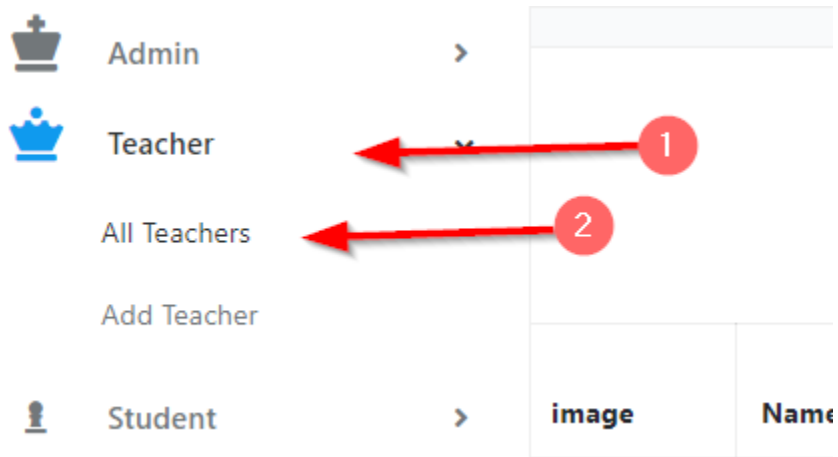
Mother Mobile

Mother Image



6.4. Change teacher position

Step 1:



Step 2:

Teacher List

Show 10 entries Search:

No	User ID	image	Name	Subject	Phone	Join Date	Role	Added By	Action
1	T-1231		William J. Mattingly	Bangla	734-273-6061	2019-10-30	Subject Teacher	Admin	Edit Role Delete
2	T-112		Shaun D. Hess	English	0123456	2019-10-20	Subject Teacher	Admin	Edit Role Delete
3	T-111		Ludwig Blick	English	0123456123123	2019-10-29	Subject Teacher	Admin	Edit Role Delete

A red box highlights the 'Subject Teacher' role in the first row, and a red arrow with a '1' points to the 'Edit Role' button in the same row.

Step 3:

Edit Teacher

Teacher name
William J. Mattingly

User Id
T-1231

Role
Subject Teacher
Subject Teacher

Subject Teacher
Principal
Co-Ordinaton

Phone

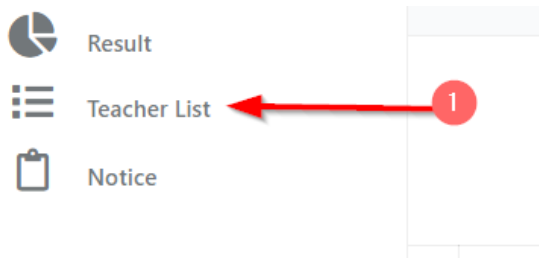
Two red arrows with circular markers '1' and '2' point to the 'Subject Teacher' option in the dropdown menu and the 'Co-Ordinaton' option respectively.

Step 4:






6.5. View Teacher

To view teacher user have to login as student or parents or admin



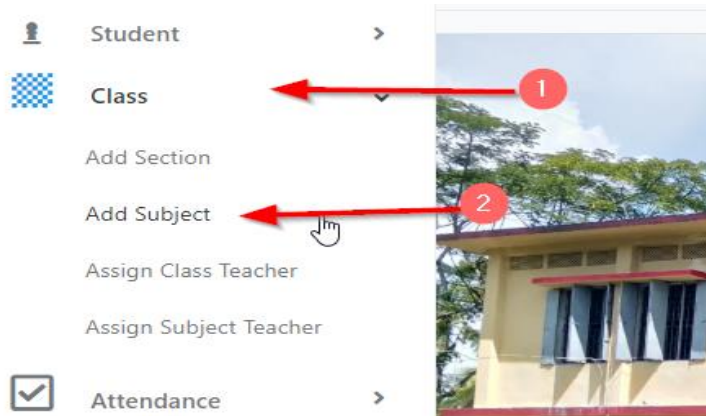
Teacher List

Show entries

No	User ID	image	Name	Subject	Phone
1	T-1231		William J. Mattingly	Bangla	734-273-6061
2	T-112		Shaun D. Hess	English	0123456
3	T-111		Ludwig Blick	English	0123456123123

6.6. Add class subject

Step1:



Step2:

Add A Subject In Class

Class: (1)

Subject Code: (2)

Subject Name: (3)

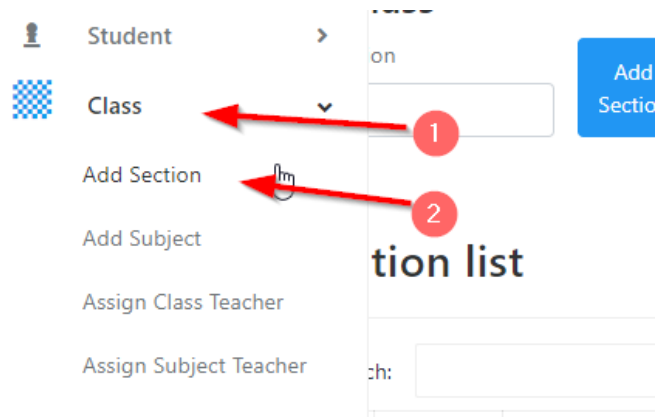
Subject Total Mark: (4)

Fill Details and submit

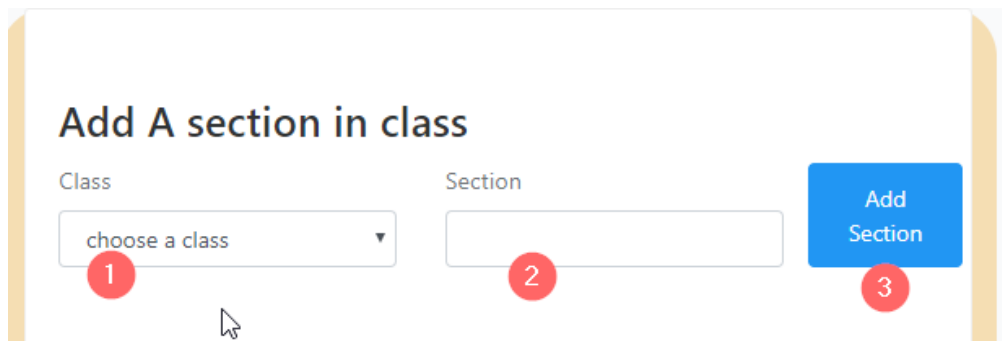
(5)

6.7. Add class section

Step1:

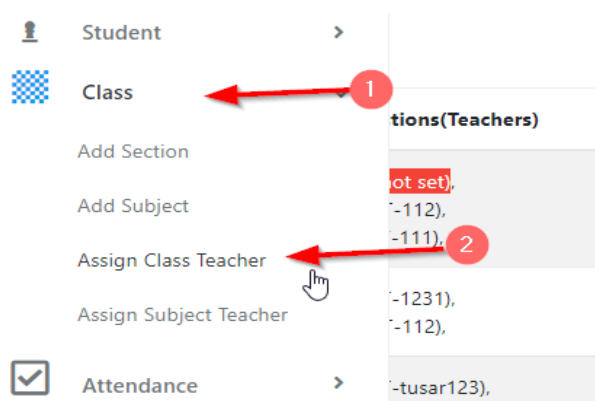


Step2:



6.8 Assign class teacher

Step1:



Step2:

Show 10 entries Search:

Class	Sections(Teachers)	Total Sections	Action
1	a (not set), b (T-112), c (T-111),	3	Assign Class Teacher 1
2	a (T-1231), b (T-112),	2	Assign Class Teacher
5	- (T-111-123)	1	Assign Class Teacher

Step3:

Assign teacher in class 1

Select a teacher

Section: a	Teacher	Select Teacher
Section: b	Teacher	William J. Mattingly
Section: c	Teacher	Fahim

Step4:

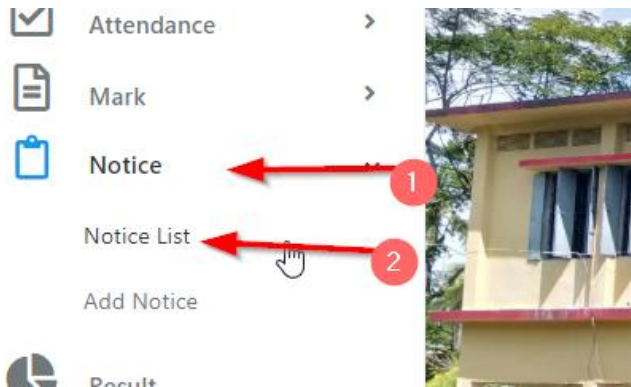
Assign teacher in class 1

Section: a	Teacher	Shaun D. Hess 2
Section: b	Teacher	Shaun D. Hess
Section: c	Teacher	Ludwig Blick

Save 3

6.9 Approve notice or class routine

Step1:



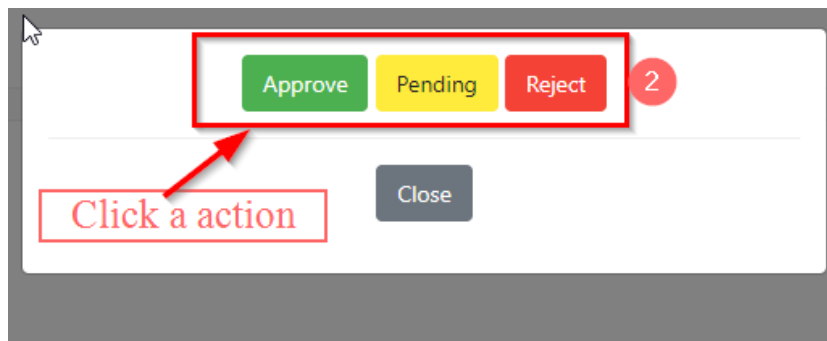
Step2:

Notice List

Search:

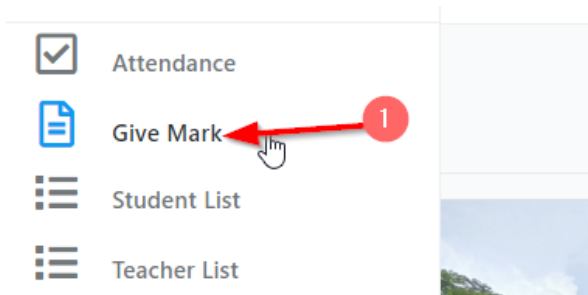
For Class	Added By	status	Posted
1	Tushar Saha(admin)	Approved Change	2019-10
everyone	Tushar Saha(admin)	Rejected Change	2019-10

Step3:



6.10 Give marks

Step1:



Step2:

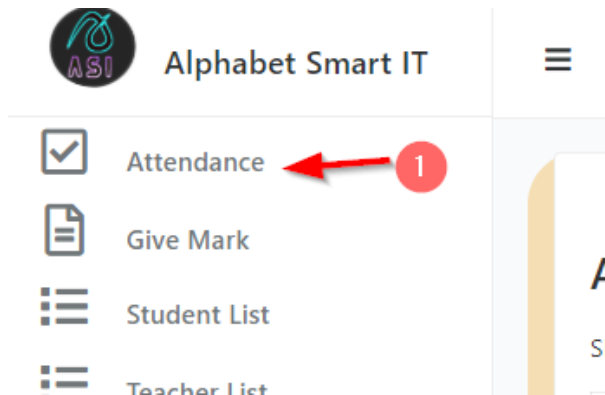


Step3:



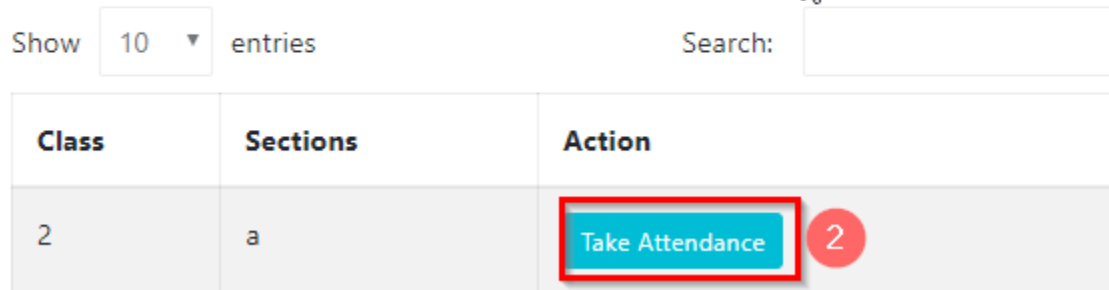
6.11 Take Attendance

Step1:

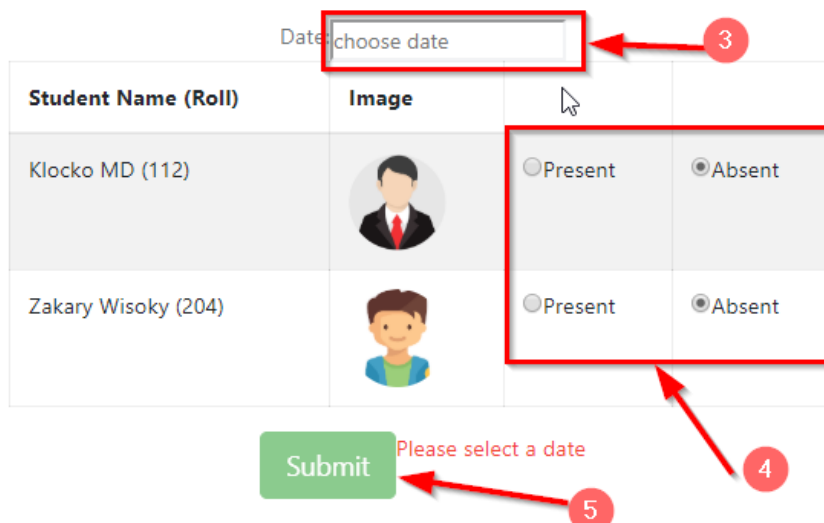


Step2:

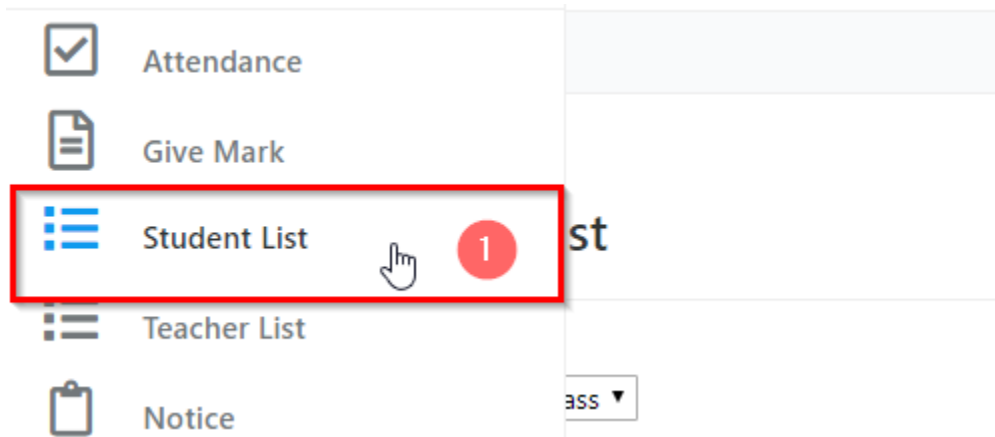
All Classes



Step3:



6.12 View Students



A navigation menu with five items: 'Attendance' (checkmark icon), 'Give Mark' (document icon), 'Student List' (list icon, highlighted with a red box and a red circle with the number '1'), 'Teacher List' (list icon), and 'Notice' (clipboard icon). A dropdown menu labeled 'Class' is partially visible on the right.

All Student List

Select Class:

Show entries

ID	Student Name	Class	Section
1900001	Maggie Klocko	1	a
1900002	Klocko MD	2	b
1900003	Maggie Klocko	1	a
1900004	O'Reilly Cdwa	1	a

Chapter 7: Conclusion

7.1 Project Summary

I have started to develop this project from January-2019. From the very starting of development of

this project, it demands hard working, patients, persistency to meet the requirements of stakeholders. After that I have proposed the design.

Database plays a vital role for any application software. And so this is why, I have designed the database diagram having tables with proper relationship. After that, I have prepared the user interface and take their approval to continue to the next part. It is to be said that, the interface of my application is very simple and easy to understand. After completing that, I have started to write the core functionality of the project.

Developing project is not end of all tasks actually. There are some other important tasks to perform. And that is testing. It is also known as quality assurance also. Almost at every software company there are quality assurance teams. Their main responsibility is to find the loop holes or vulnerability of software. If there any bug remains before handover to the stakeholders, there is a change to ruin the whole project. So testing plan is very important. And after developing the project, I have assured the quality of this project.

7.2 Limitations

For developing this project, I have faced some limitations. Now I will describe those in brief.

Payment Method: In our application, there is not having any payment method directly by which one can make their transaction through our application. End user need to pay and after that they will enter those data to our application. At last recipient will confirm the transaction.

No Android Version: We haven't mobile version for manage the system at Android platform. But there are also web bootstraps so that for web base mobile operating systems for mobile like Windows or iOS. But we have not developed our mobile applications for those versions.

7.3 Obstacles and Achievements

I believe that if there are not any obstacles to develop a project, then there doesn't have any challenges. Because we know, challenge gives us the opportunity to prove ourselves. Obstacles, challenges and achievements are like a path to the success.

Before starting this project, I didn't know the actual flow of software development life cycle.

By developing this project, I have learnt to know how to have a row requirement from clients.

After that I have learnt system analysis, database design and many things. My supervisor helps me a lot from the very beginning of the development of this project.

7.4 Future Scope

I have learnt a lot throughout the whole development stage of this project. For making this project developed, I have also met some young entrepreneurs and enthusiasts also. I am very much thankful to all of them as their idea and discussion gave me some opportunities to make my product complete. It will help me to work with similar type project in future also.

7.5 References

I have gained some knowledge from some platforms. Obviously I will mention those references. For making my project successful those resources help me a lot. Not I will mention the names below.

www.google.com

www.youtube.com

www.php.net/

www.getbootstrap.com

www.w3schools.com

www.jquery.com

<https://laravel.com/docs/>

www.stakeoverflow.com