



EAST WEST UNIVERSITY

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Section: 02 & 03

Project Report Part-1: Software Requirement Specification

Project Topic: Virtual Educational Assistant

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Table of contents

Objective	3
Introduction	3
Motivations	3
Challenges	3
Component Diagram	4
Requirements	5
Functional Requirements	5
Sign up	5
Sign in	5
Password resetting	6
Searching for a teacher	6
Non-Functional Requirements	6
Usability	6
Availability	6
Security	7
Efficiency	7
Technologies	7
UML Use Case Diagram	8
UML Class Diagram	9

Virtual Educational Assistant

Objective

The main target of this specification is those students who are suffering from lack of experienced teacher in his/her desired field. This system will also explore a world of knowledge in front of student where they can collaborate with highly qualified teachers.

Introduction

Virtual educational assistant is a platform where a student can solve any kind of education related problem by contacting with an experienced person on that field who will guide that student virtually. Through this platform a student can find an expert teacher for a specific topic of a field. Besides this a student who is asking for a higher study can also get guideline for his/her next step to his destination.

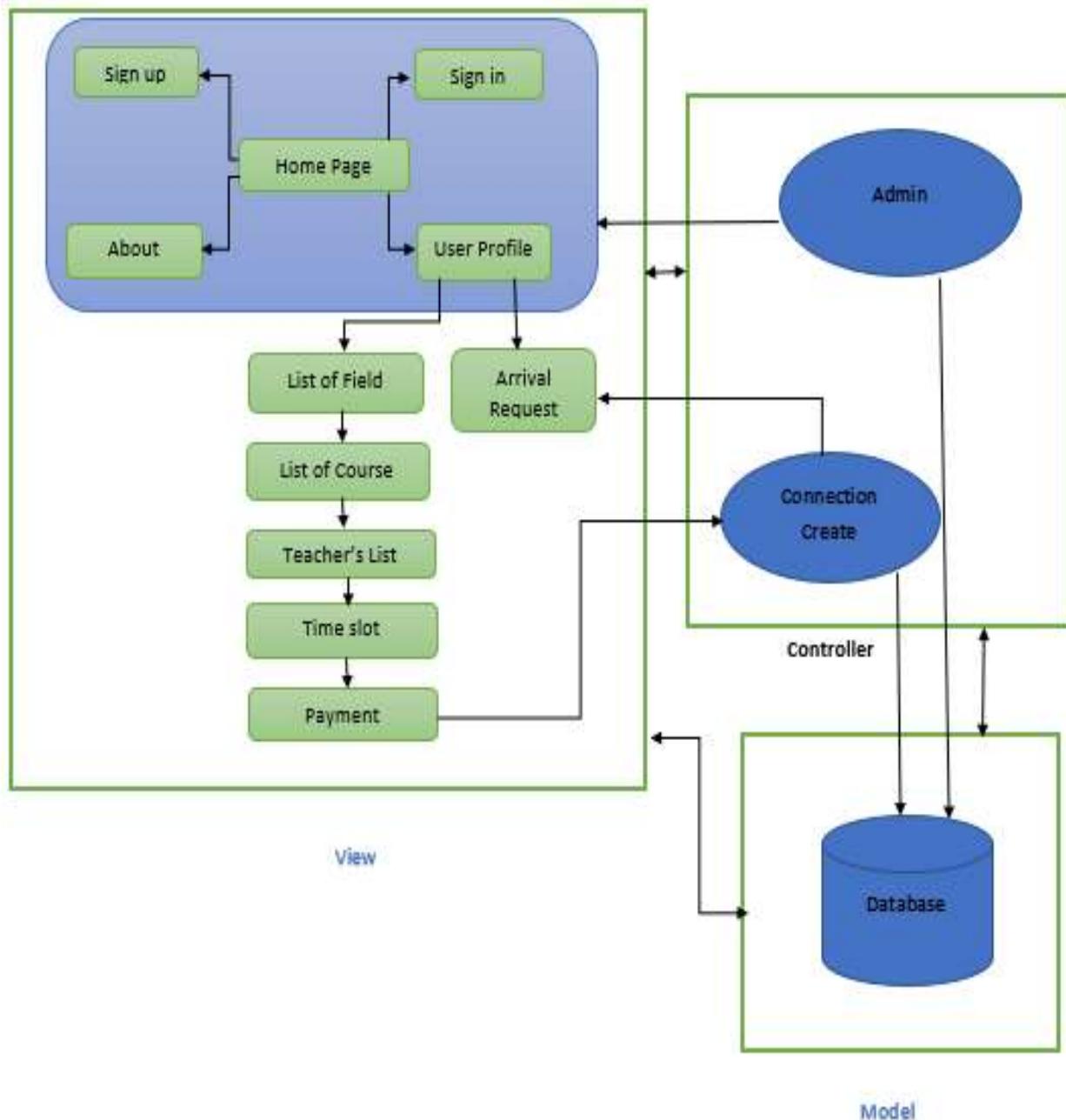
Motivations

- The main focus of this project is helping those students who are confused or facing difficulties regarding any subject or topic of their studies.
- Especially the students who have passed their secondary studies and got admitted into universities in most of the cases tutors are not available for them. In that cases they can get the solutions of their problems through this platform.
- Creating a cost-efficient platform. Since assigning a tutor for a long time is very costly so, a student can use this platform to make understanding a hard topic with a little payment.
- Creating a platform to help students to get prepared for their higher studies. Students who are willing to join the MS or Ph.D. program can also collaborate with an expert through this platform.

Challenges

- Making the searching feature faster to find a teacher available or not.
- Ensuring the secure payment method.
- Securing the authentication process.
- Protection of user information.
- Becoming familiar with the technologies we haven't worked with before like Django, JavaScript etc.

Component Diagram



Requirements

Functional Requirements

Sign up

Without signing up a user cannot get the service of the system. The users can sign up in different categories one of them is teacher and another one is student.

Teacher

Input: Email Id, Password, Name, Educational background.

Output: Creation of teacher's profile.

Student

Input: Email Id, Password, Name.

Output: Creation of student's profile.

- **Scenario-1:** If a person wants to join the system as a teacher to use his/her free time then he/she have to sing up first and the information given above in the input for teacher will be required.
- **Scenario 2:** When a student wants to take the service of the system for solving any problem regarding of his/her study then he/she can make an account through sign up process.

Login

Whenever a user gets back to the website, he/she have to login to the system.

Admin

Input: Username, Password.

Output: For a successful login bring the user to his/her profile, shows administrative functions, logout.

Teacher

Input: Username, Password, Login as value(teacher).

Output: For a successful login bring the user to his/her profile, shows personal information, arrival requests, logout.

Student

Input: Username, Password, Login as value(student).

Output: For a successful login bring the user to his/her profile, shows personal information, Appointment with teachers, logout.

- **Scenario:** The existing account holder (teacher/student) can visit the system for further queries simply by signing up to his/her account using a username and password. For the admin, he/she has control over the whole system after signing in.

Password resetting

If a user forgets his/her password then he/she can click in the forgot password option. A few questions will be asked to the user and if the information is correct then the user will be asked to enter a new password.

Input: New password.

Output: Password resets successfully.

- **Scenario:** When a user tries to log in to the system but failed for forgetting the password, then if he/she wants his/her account back then it is possible by resetting the password.

Searching for a teacher

When a student will start searching for a teacher, he/she has to select a field among Engineering, General and Medical fields.

Input: Engineering/ General/ Medical, Subject, Teacher, Timeslot, Payment, Submit.

Output: Appointment confirm, A report of payment confirmation.

- **Scenario:** When a student searching a teacher for a specific subject then he/she can make the process easy using the searching feature.

Non-Functional Requirements

Usability

- The system should be user friendly.

Availability

- The system should be available 24 hours of 7 days so that the user can access it anytime.
- If database get corrupted then backups of the database should be retrieved from the application data folder and saved by the administrator.

Security

- User's data of the system should be secured.
- Without signing up students cannot get an appointment of any teachers.
- Students can confirm the appointment with teachers after confirming the payment.
- Only students can give rating to the teachers.

Efficiency

- Searching should be faster.

Technologies

Frontend: HTML, CSS, JavaScript, Bootstrap.

Backend: PHP.

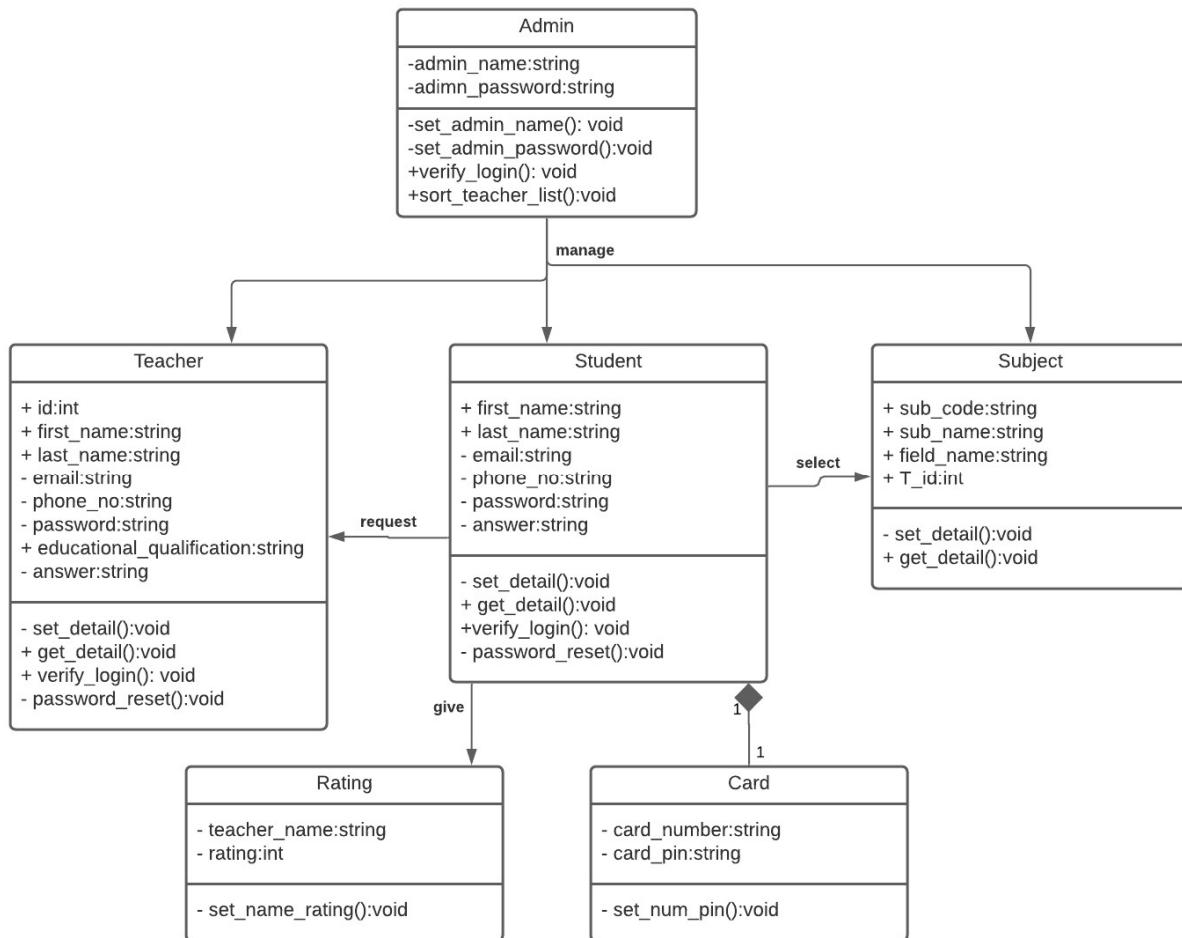
Database: MySQL.

Server: Apache

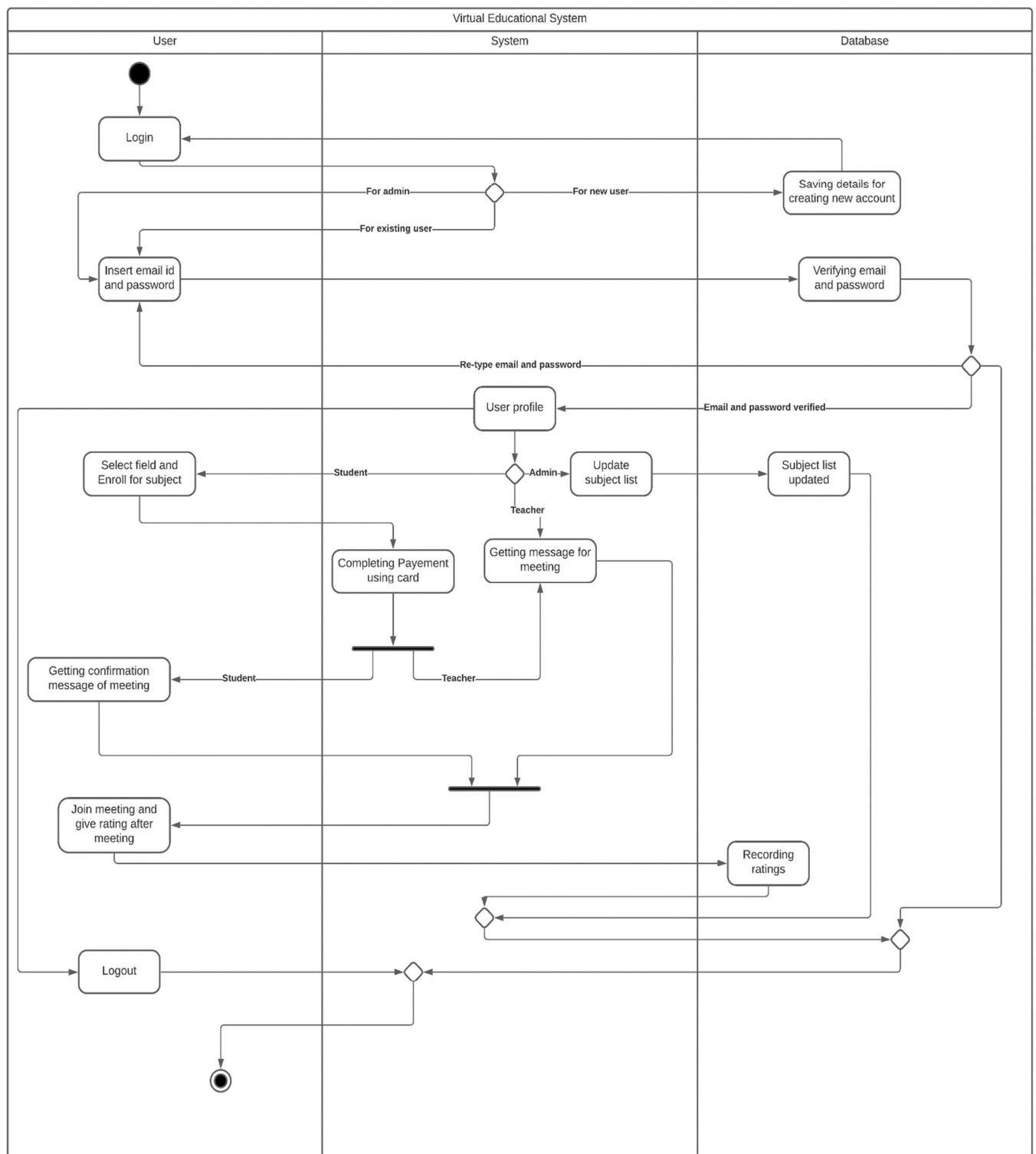
UML Use Case Diagram



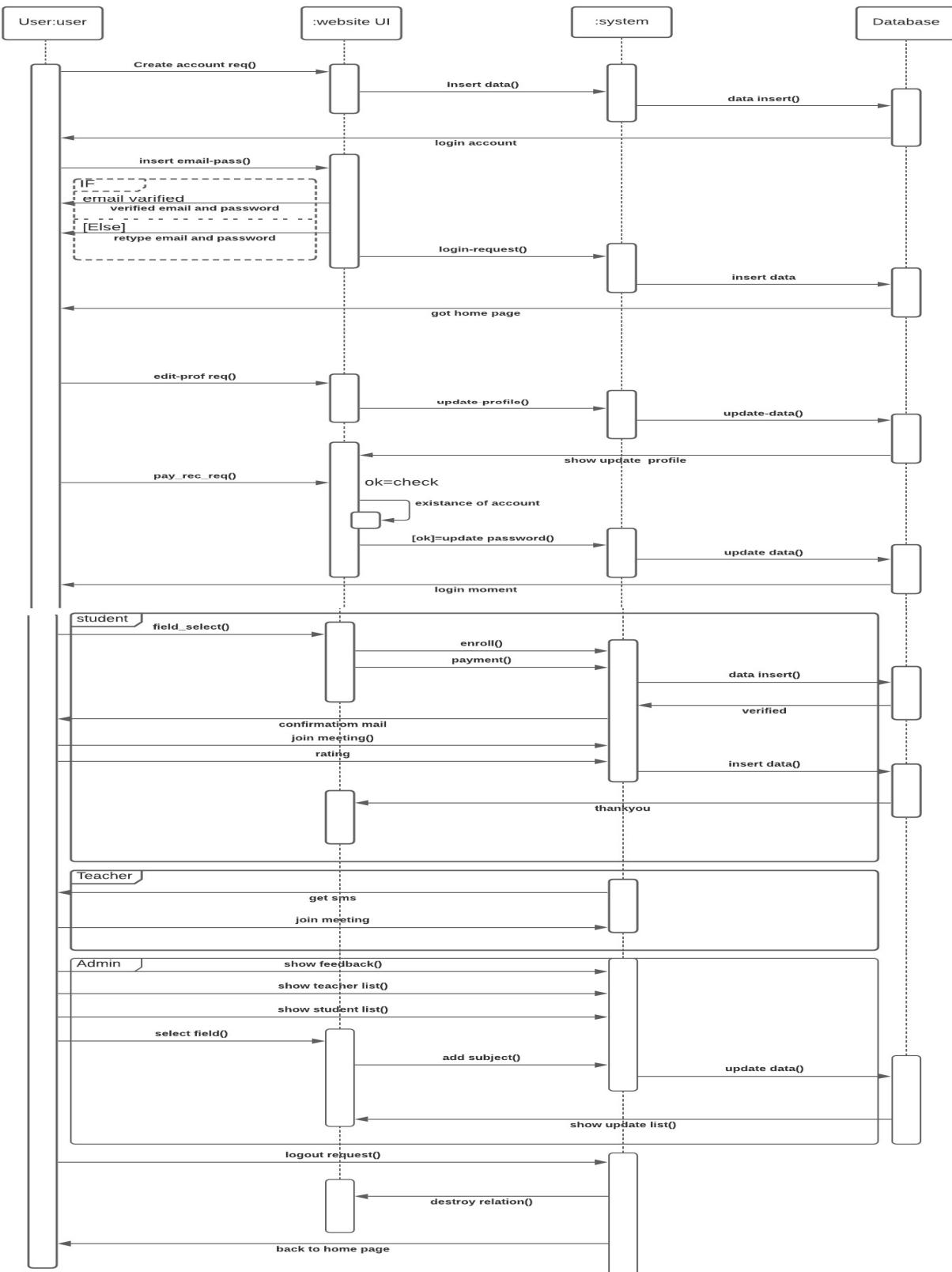
UML Class Diagram



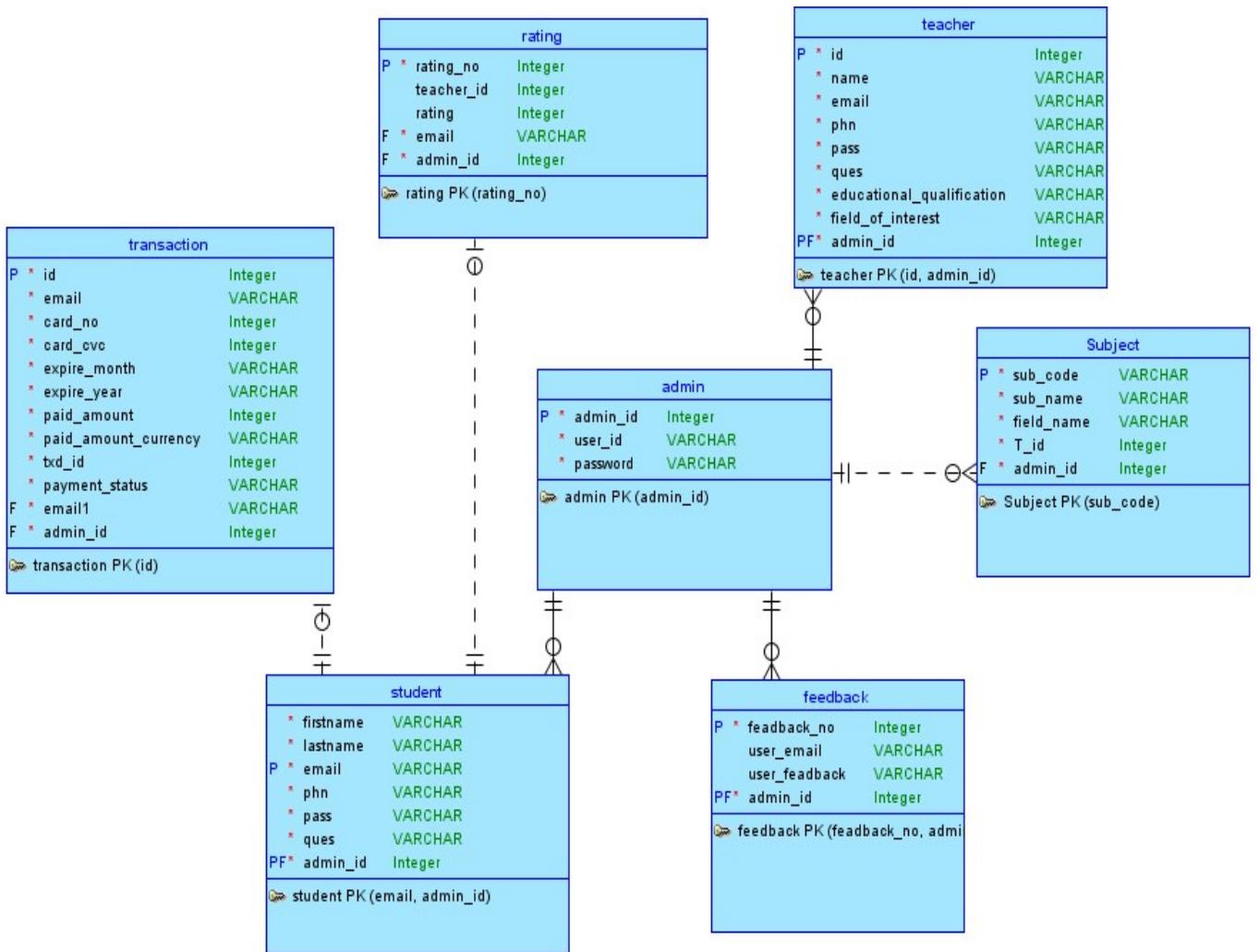
Activity Diagram



Sequence Diagram

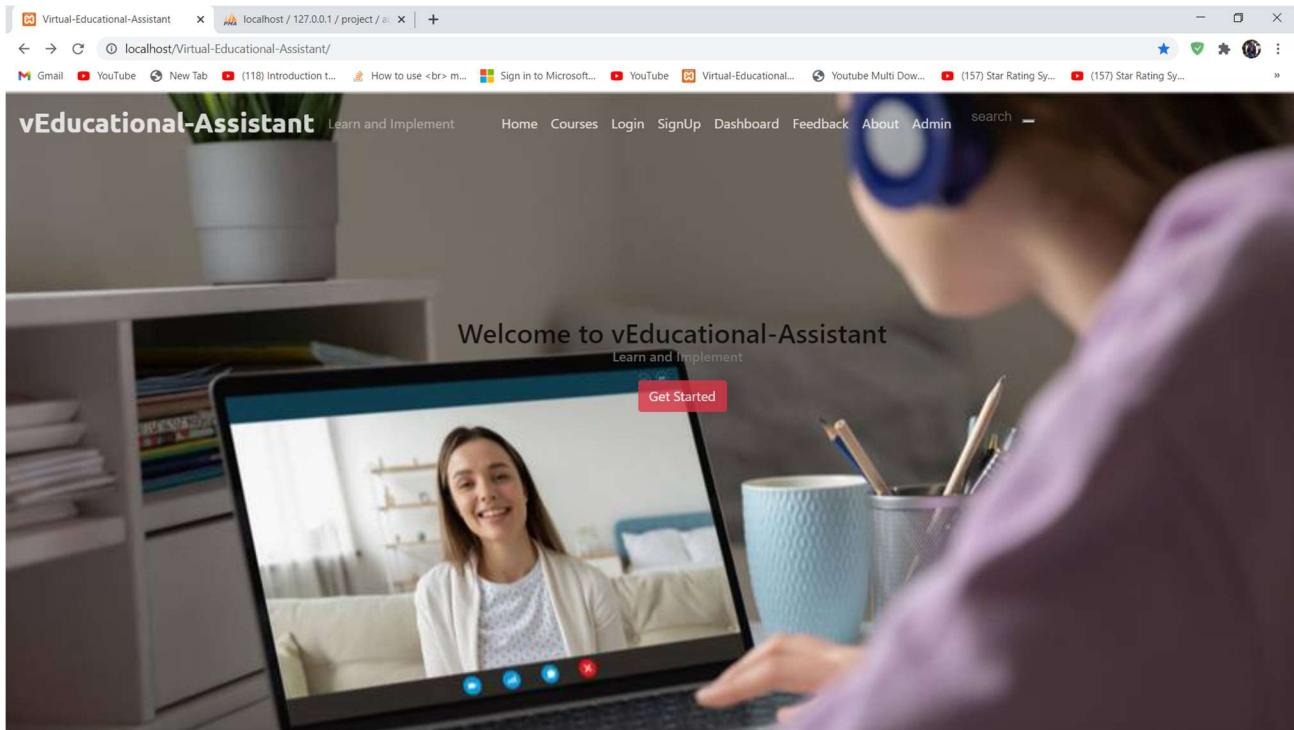


Entity Relationship Diagram

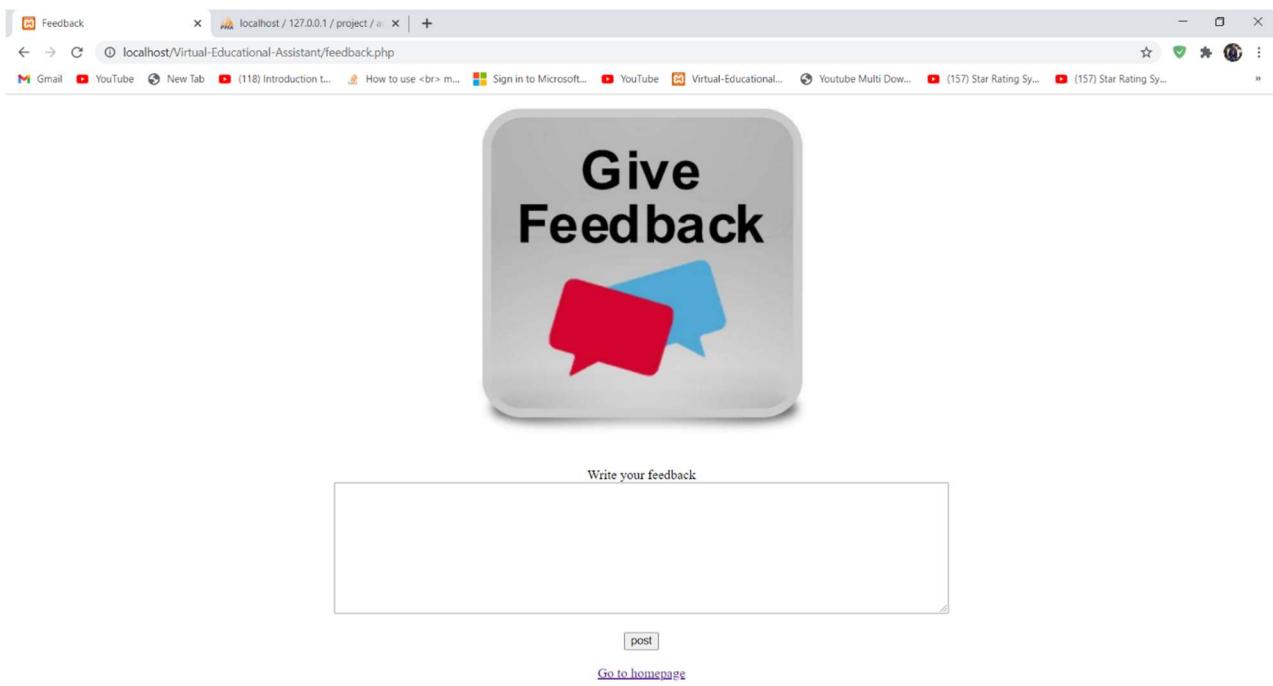


Graphical Interface: Graphical interface of our project is given.

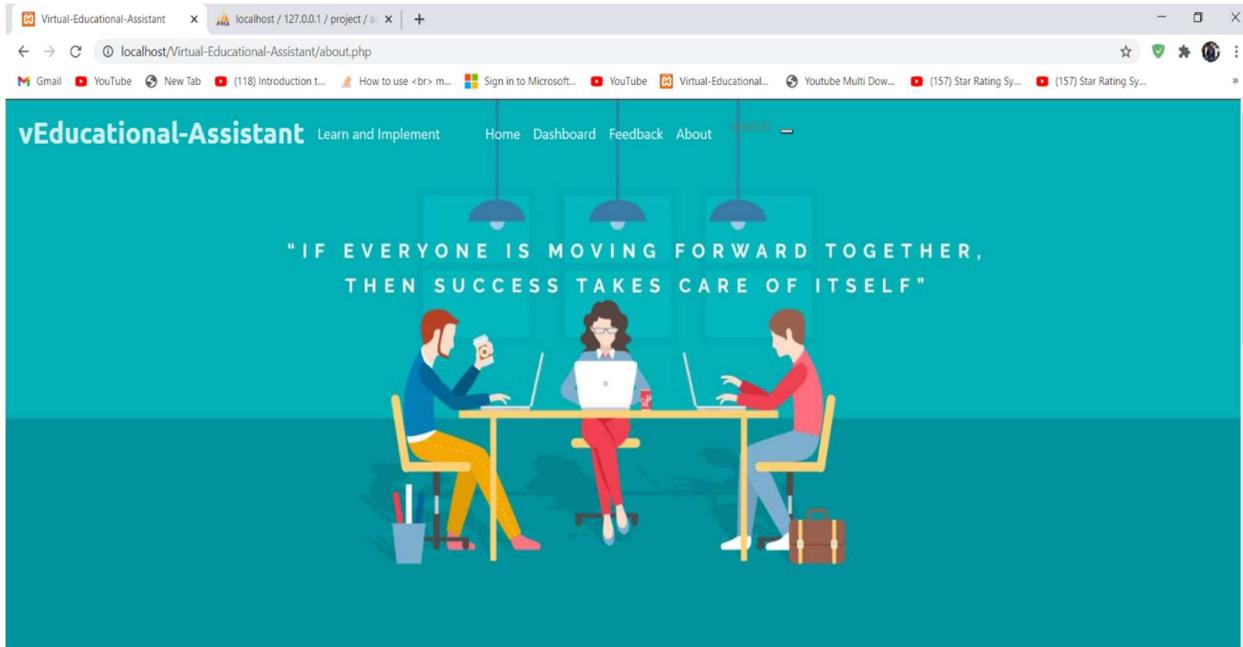
Home page



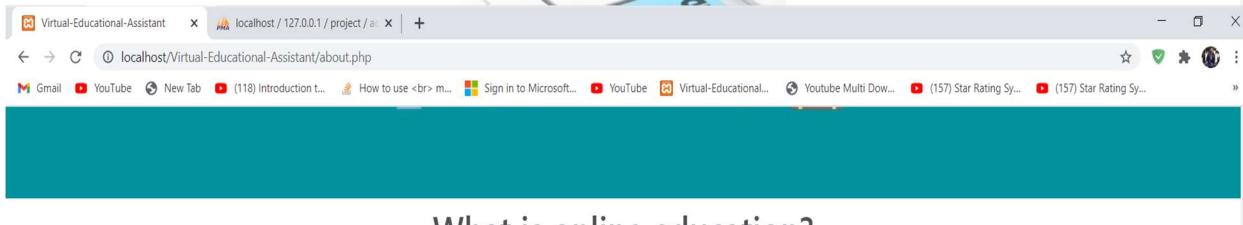
Feedback Page



About Page



What is online education?



What is online education?



In the last 20 years, the Internet has grown from being nearly non-existent into the largest, most accessible database of information ever created. It has changed the way people communicate, shop, socialise, do business and think about knowledge and learning. Much more than just a new twist on distance learning, online schooling is changing the face of traditional classrooms and making education more accessible than ever before. Online education is a form of education where students use their home computers through the internet. For many nontraditional students, among them all those who want to continue working full time or raising families, online graduations and courses have become popular in the past decade. Often online graduation and course programmes, some of which are conducted using digital technologies, are provided via the online learning portal of the host university.

why It's for you?

This platform give's you some benefits. You can sign-up as a student and also as a teacher. If, you sign-up as a student then you can get some benefits. similarly, if you can sign-up as a teacher then you can get some other attractive benfits.

If, you are a expert in any type of course and you want to teach the course then at first you have to sign-up as a teacher. You have give your interested field and educational background at the time of sign-up. After sign-up you can login and you can see your profile. You can serch any course and see the ratings of the tutors. If, any student want to enrolled your course then you can confirm or discard. You can give your hourly rate for your course and **the student can confirm your course after paying you**.

Related Links

[10 benefits of online learning](#)

[11 Free Online Courses that you can take up from Home](#)

[5 Reasons Why Online Learning is More Effective](#)

[E Learning Courses](#)



If, you want to find a tutor for a particular course then at first you have to sign-up as a student. Then, you have to login as a student. After login you will see your profile. You will see the available courses which offered by the tutores. You can find your favourite tutores by search. You can serch your favourite course and it will show you the tutor list and available time which given by the tutores. You can enrolled any course by contact with the tutor. **You have to pay for enrolled course.** you can see rating of tutors.

Are you teacher?

If, you are a expert in any type of course and you want to teach the course then at first you have to sign-up as a teacher. You have give your interested field and educational background at the time of sign-up. After sign-up you can login and you can see your profile. You can serch any course and see the ratings of the tutors. If, any student want to enrolled your course then you can confirm or discard. You can give your hourly rate for your course and **the student can confirm your course after paying you**.

Related Links

[10 benefits of online learning](#)

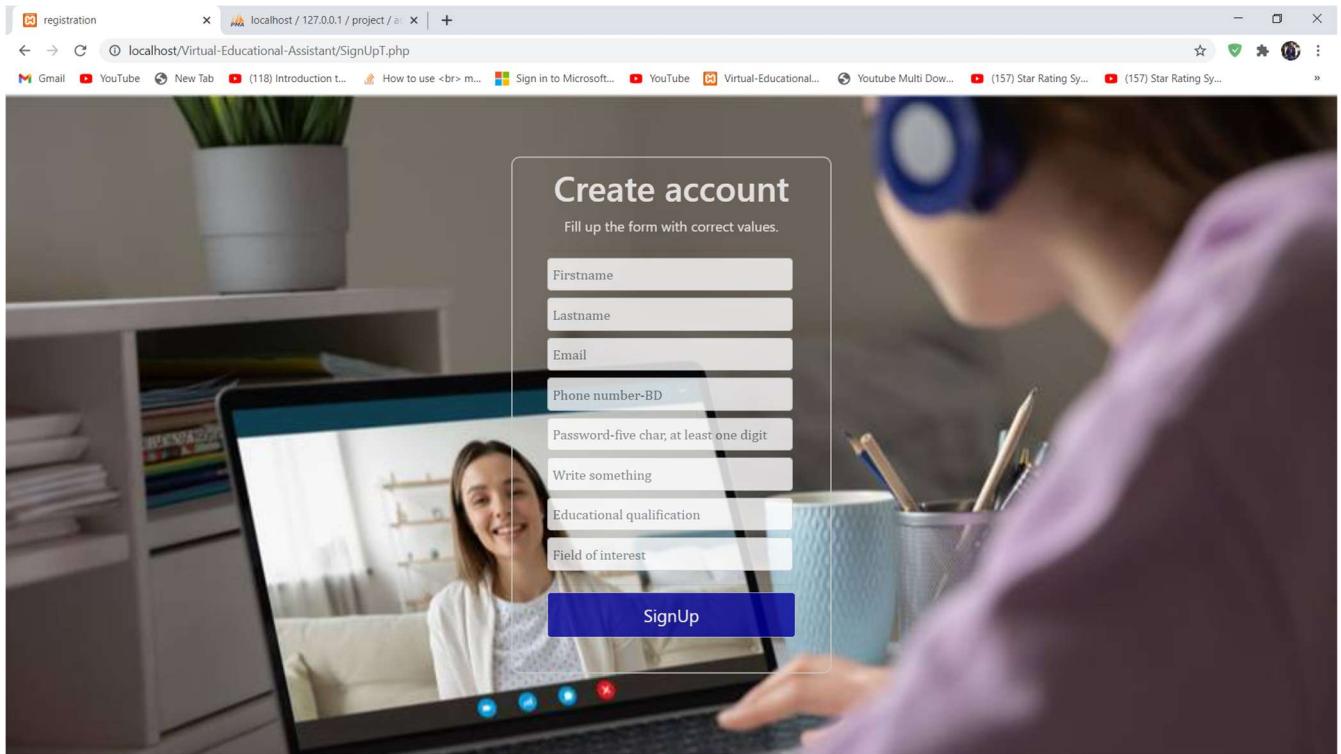
[11 Free Online Courses that you can take up from Home](#)

[5 Reasons Why Online Learning is More Effective](#)

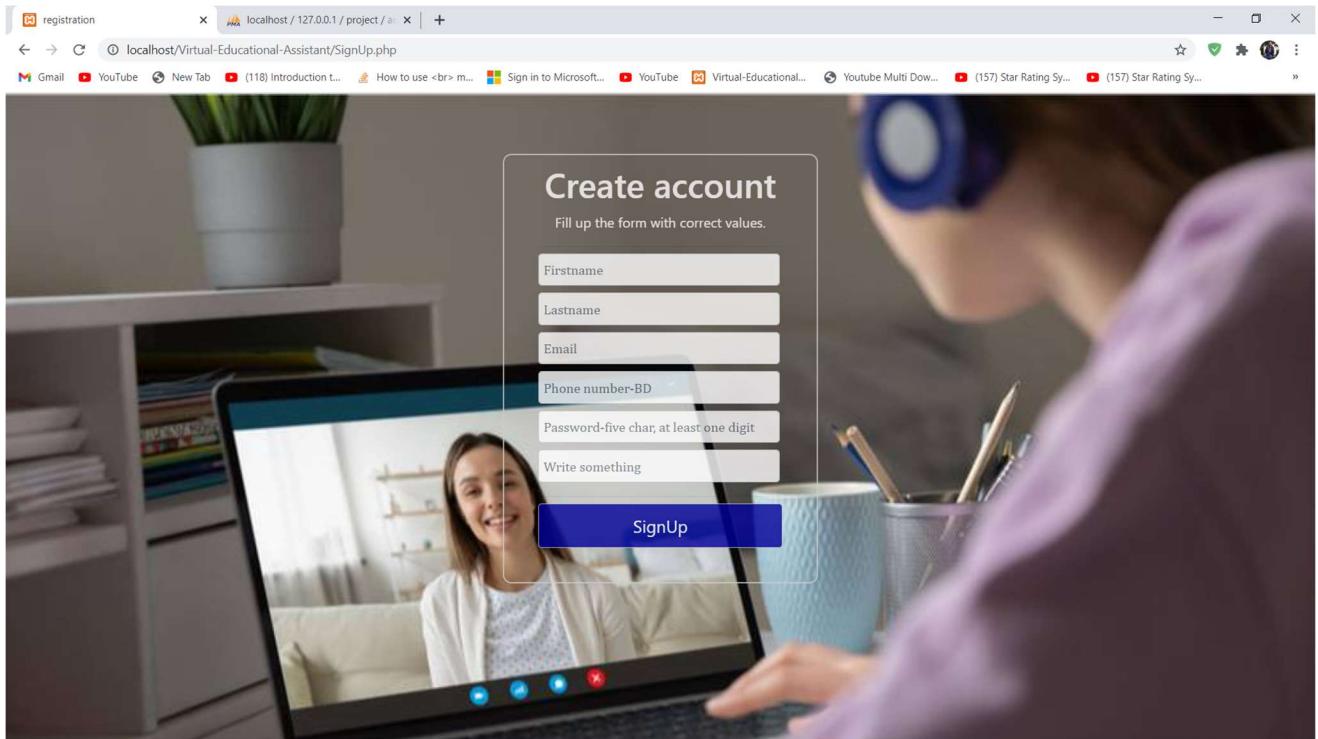
[E Learning Courses](#)



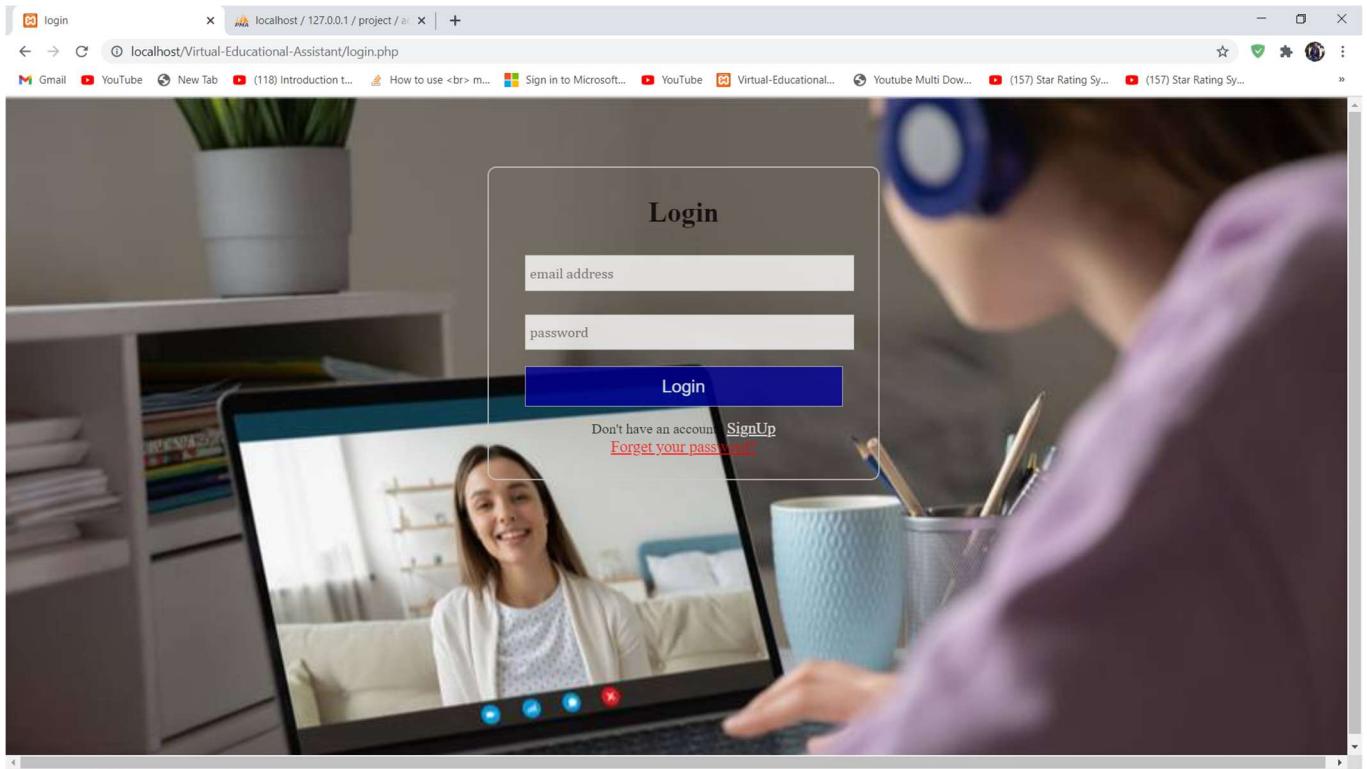
Teacher's Sign Up Page



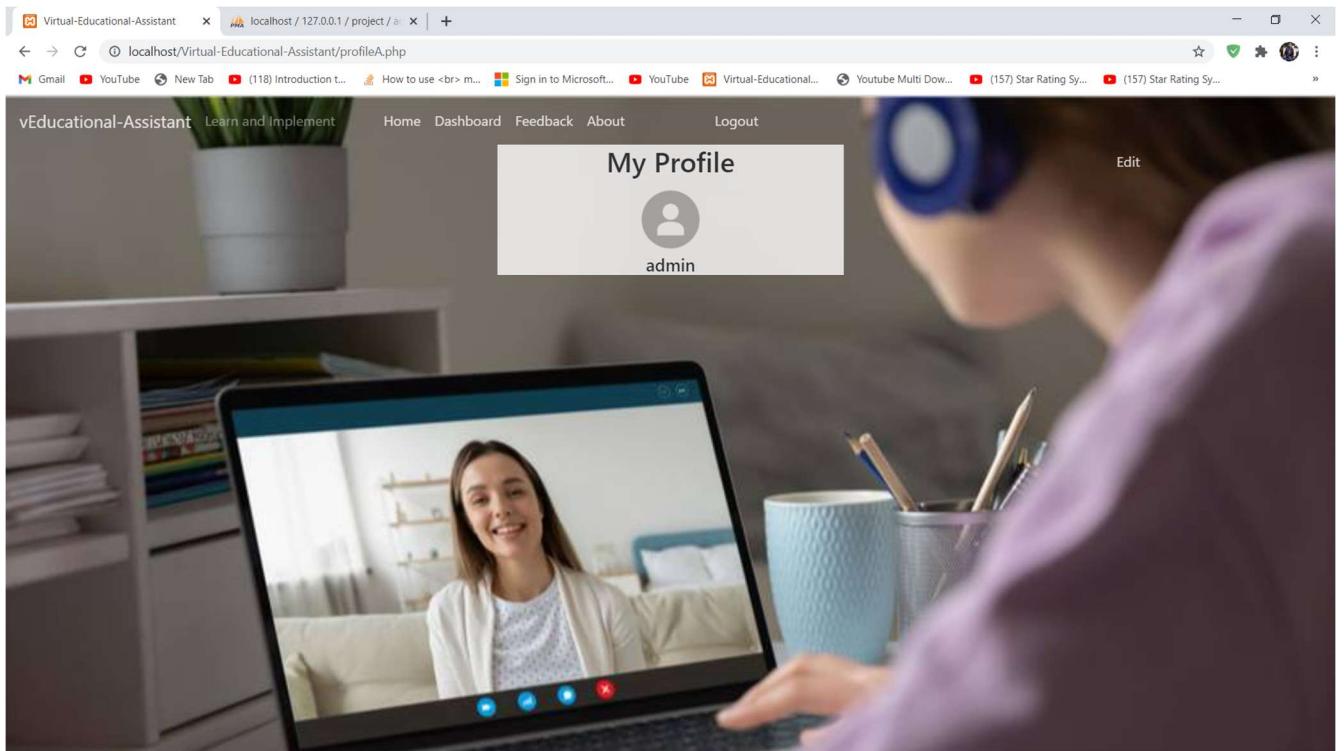
Student's Sign Up Page



Login Page



Admin's Profile page



User Feedback Page: This page only can see admin

A screenshot of a web browser window titled "localhost / 127.0.0.1 / project /". The main content is a "User Feedback" form. It has two input fields: "User S email address" containing "imujannatulnaim@gmail.com" and "Feedback" containing "The service is good.". The background of the page shows a person using a laptop for a video call.

Subject List Page from Admin: Here only can add subject

A screenshot of a web browser window titled "localhost / 127.0.0.1 / project /". The main content is a "List of Subjects" table. The table has columns: Subject Code, Subject Name, Teacher Name, Email Address, Tutor Fees, and Status. The data is as follows:

Subject Code	Subject Name	Teacher Name	Email Address	Tutor Fees	Status
CSE107	C++	Md. Pardhan	pardhan@gmail.com	500	available
CSE245	Algorithm	Md. Fokhrul Islam	fokhrulislamdu@gmail.com	500	available
CSE301	Database	md islam	islam@gmail.com	600	not available

Below the table is a form with four input fields: "Subject code", "Subject name", "teacher id", and "tutor fees", followed by a "Add" button. The background of the page shows a person using a laptop for a video call.

Teacher's Profile Page

A screenshot of a web browser displaying a teacher's profile page. The title bar shows "localhost / 127.0.0.1 / project / profileT.php". The page header includes "vEducational-Assistant" and "Learn and Implement" on the left, and "Home", "Dashboard", "Feedback", "About", and "Logout" on the right. A large image of a person wearing headphones and working on a laptop is in the background. In the center, a modal window titled "My Profile" displays the following information:

My Profile	
	Imu Islam
First Name:	Imu
Last Name:	Islam
Contact No:	01876829345
Email Address:	imu@gmail.com
Educational Qualification:	BSc in Math
Field of Interest:	Math
Status:	available
Meet Link:	https://meet.google.com/gvk-bzim-ost?authuser=0&hs=179

The "Edit" button is located in the top right corner of the modal.

Teacher's Profile Edit Page

A screenshot of a web browser displaying the Teacher's Profile Edit Page. The title bar shows "localhost / 127.0.0.1 / project / editT.php". The page structure is similar to the previous screenshot, with "vEducational-Assistant" and "Learn and Implement" on the left, and "Home", "Dashboard", "Feedback", "About", and "Logout" on the right. The background image of a person working on a laptop is present. A modal window titled "Edit your profile" is open in the center, containing input fields for updating the profile:

Choose File	No file chosen
Imu	
Islam	
01876829345	
BSc in Math	
Math	
available	
https://meet.google.com/gvk-bzim-ost	

A blue "Save" button is at the bottom of the modal.

Subject List Page from Teacher: Here teacher cannot Enroll

A screenshot of a web browser showing a list of subjects. The page title is "List of Subjects". The table has columns: Subject Code, Subject Name, Teacher Name, Email Address, Tutor Fees, and Status. The data is as follows:

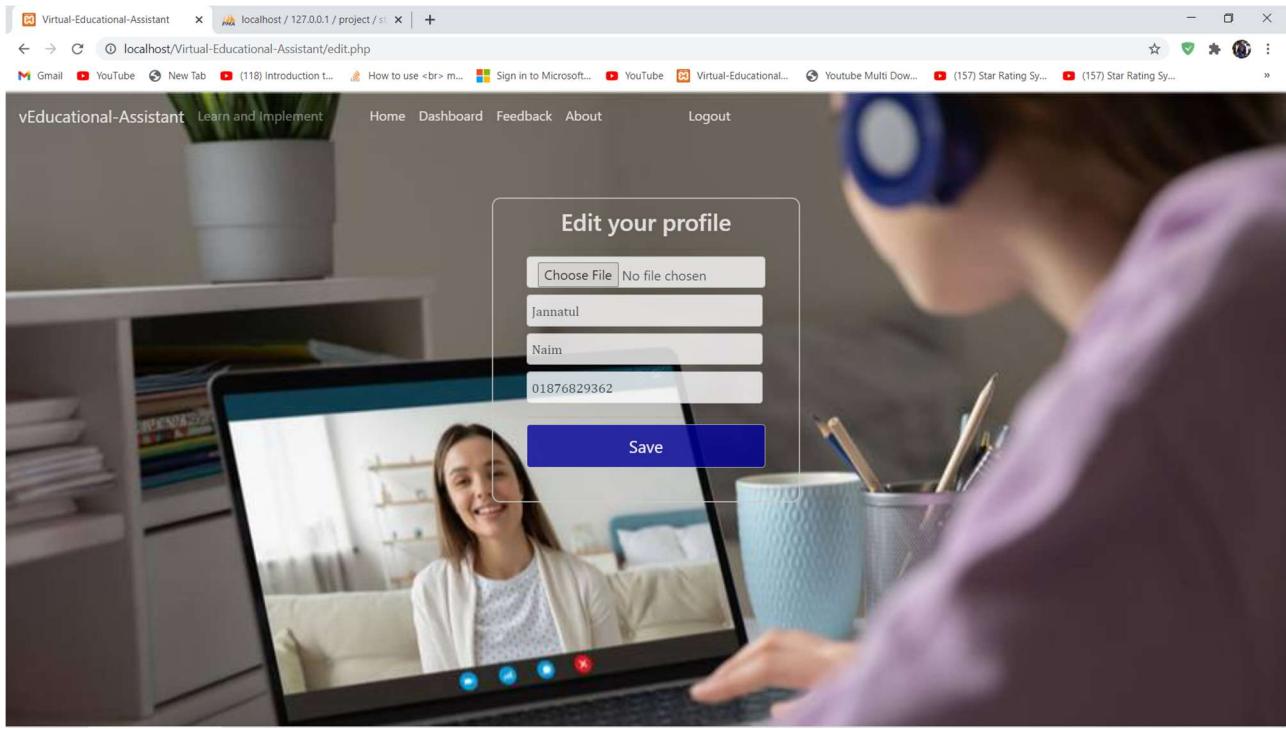
Subject Code	Subject Name	Teacher Name	Email Address	Tutor Fees	Status
CSE107	C++	Md. Pardhan	pardhan@gmail.com	500	available
CSE245	Algorithm	Md. Fokhrul Islam	fokhrulislamdu@gmail.com	500	available
CSE301	Database	md islam	islam@gmail.com	600	not available

Student's Profile Page

A screenshot of a web browser showing a student's profile. The page title is "My Profile". The profile information is as follows:

First Name: Jannatul
Last Name: Naim
Contact No: 01876829362
Email Address: imujannatulnaim@gmail.com

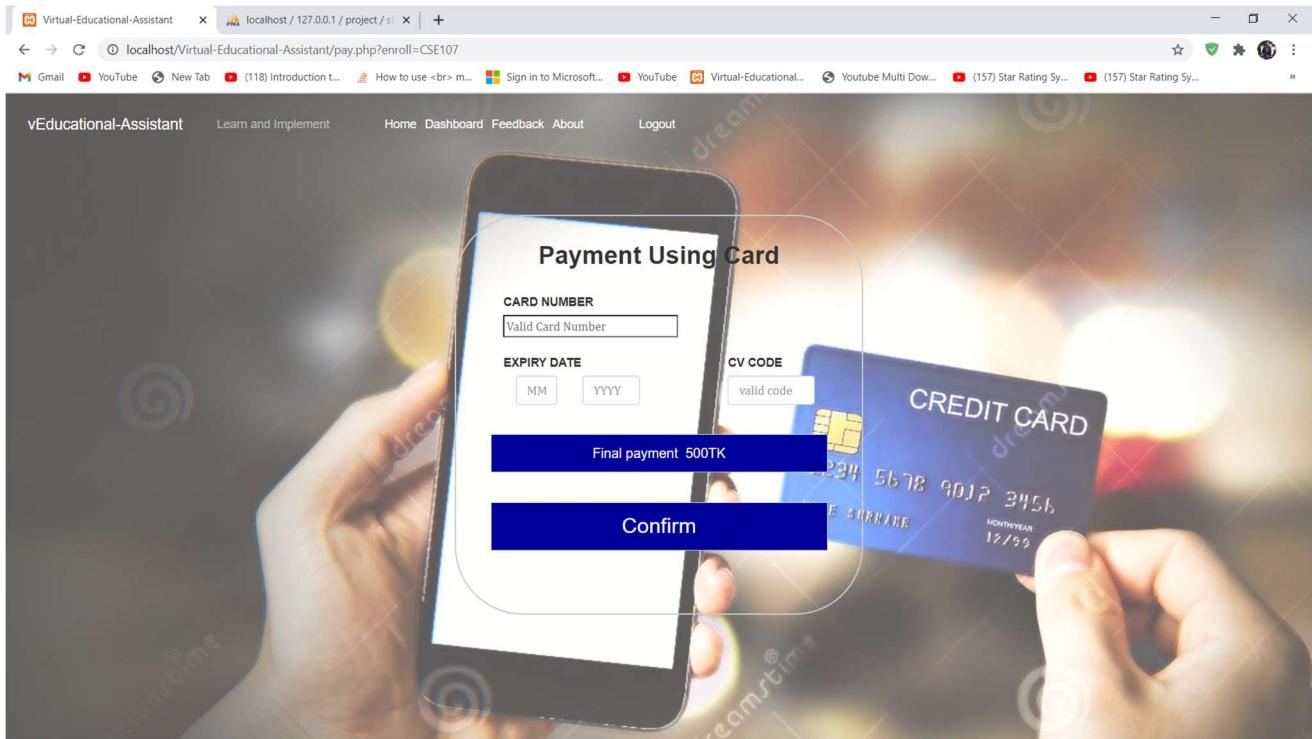
Student's Profile Edit Page



Subject List Page from Student: Here student can Enroll any course

Subject Code	Subject Name	Teacher Name	Email Address	Tutor Fees	Status	Enrollment
CSE107	C++	Md. Pardhan	pardhan@gmail.com	500	available	Enroll
CSE245	Algorithm	Md. Fokhrul Islam	fokhrulislamdu@gmail.com	500	available	Enroll
CSE301	Database	md islam	islam@gmail.com	600	not available	Enroll

Payment Page



Mail Page: After payment paid student will get mail

Meet - gvk-bzim-ost | Gmail | Payment confirmation - imjanna | + | mail.google.com/mail/u/1/#inbox/

Gmail Search mail

Inbox 756

Compose

Payment confirmation Inbox

virtualeducationalassistant@gmail.com
to me 10:14 PM (0 minutes ago)

Payment successfully done.
Your transaction Id is 16096901676851445

Reply Forward

Starred Snoozed Sent Drafts 19

Meet New meeting Join a meeting

Hangouts

Activate Windows
Go to Settings to activate Windows.

Waiting for cache... 10:13 PM 1/3/2021

Message Page: If student paid payment teacher will get message

22:32

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+8801870724422
Bangladesh

22:32

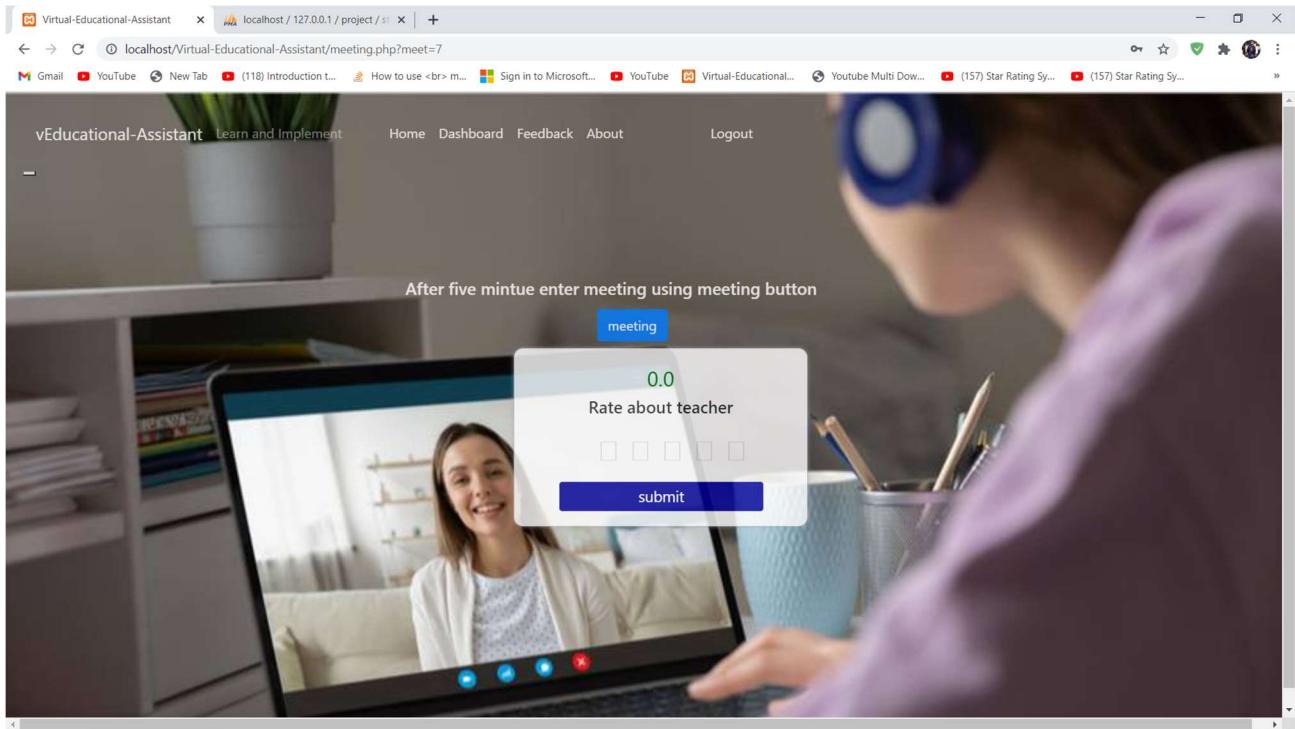
Join meeting after five minute



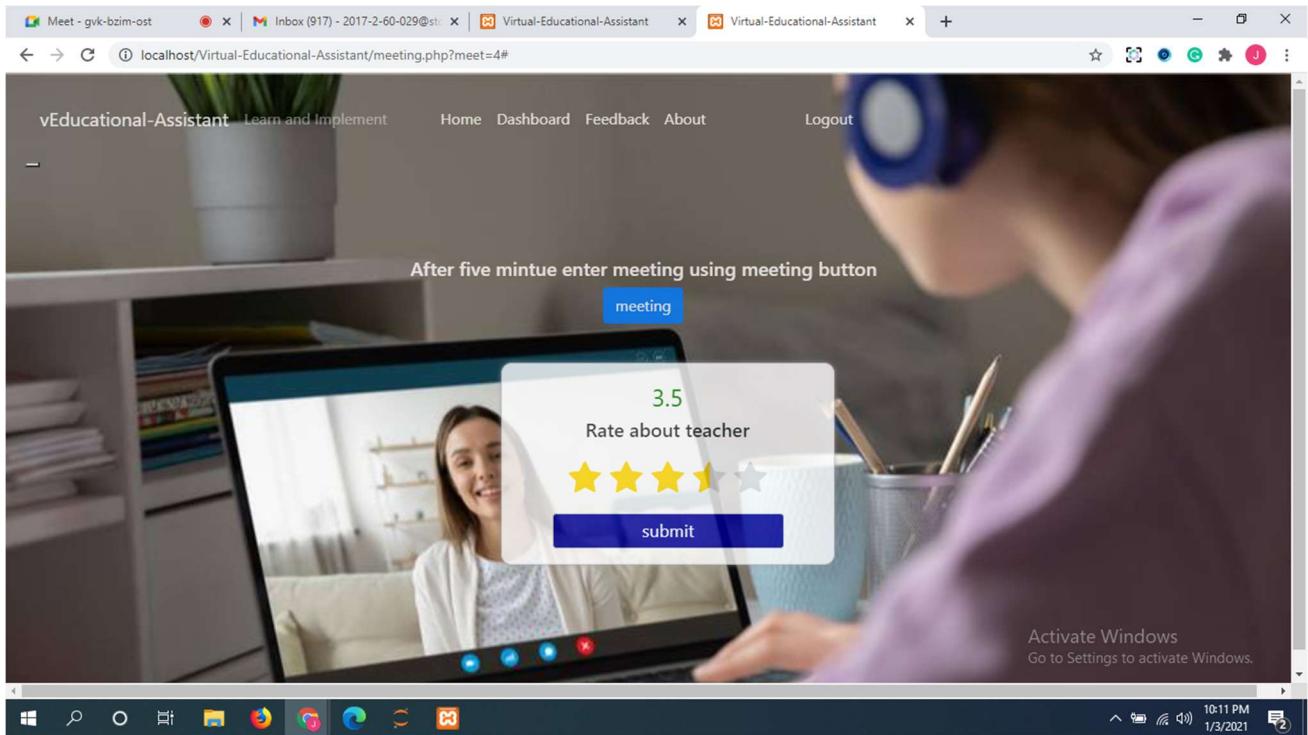
Text message



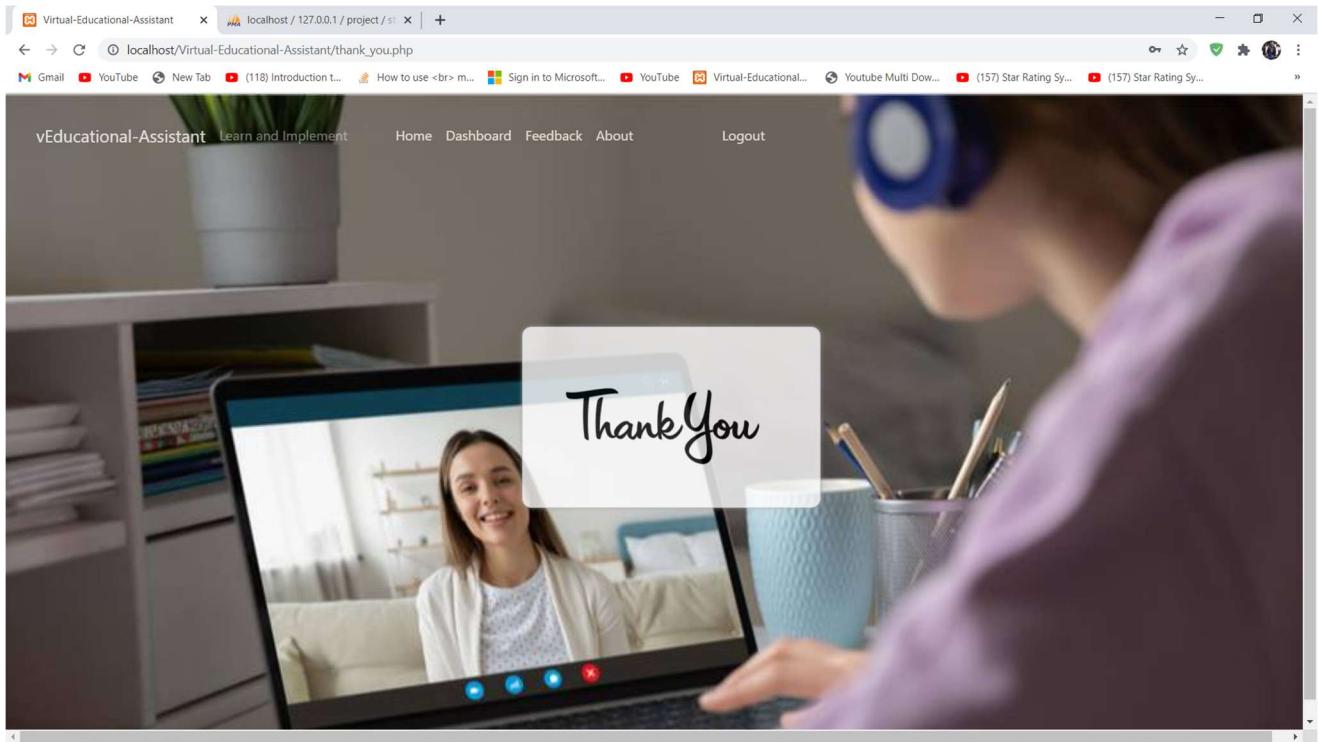
Meet Link Page: After paid payment student can see this page



Rating Page: After meeting with teacher student can give rating



Thank You Page: After giving rating student can see this page



Conclusion: Many students all over the world want to learn in online. Especially during lockdown. We know at the time of **COVID-19** many countries in the world go to lockdown. So all education institutions are closed during the lockdown. So students want to learn in online but they cannot find their favorite tutor and course. Because they(student) cannot communicate with them(Teacher). If any common platform is available then students and teachers can communicate between them. So this **virtual education assistance** software is the common platform where students can find their favorite tutor and course. Students can learn any available course in sitting home and teachers can teach any course in sitting home by this software.