Sardar Vallabhbhai National Institute of Technology

Project Report on

"Online Examination System"

Subject: Software Tools- III

Academic Year: 2019-20

Submitted By: Pritesh Kumar Tripathi (U17CO111)

B.Tech (CO) - III

5th Semester

Jury Signature **Student's Signature**

Introduction

Online quizzes and test are very common now-a-days. Most of the educational institutes follow the curriculum of continuous evaluations. MCQ based quiz is a very common way of testing. This web-application on **Online Examination System** aims at building a system which can conduct MCQ based tests and also to ensure proper measures to avoid any sorts of suspicious activities attempted during an online test on a browser.

The website mainly focus on three different categories of users. First is the administrator who has the powers to add a new user to the system. The user might be a student or a professor.

Next group of people are professors. A professor can make a test on any of courses he/she is undertaking. This test, shall then be visible to all the students who are enrolled in that specific course. The professor can also view the current attempts of the test, and also clear the response of any student if needed. Finally, the system mainly focuses upon students, who can attempt the test of their registered courses. Also they can check the results of their previously attempted test's and check their responses.

Technologies Used:

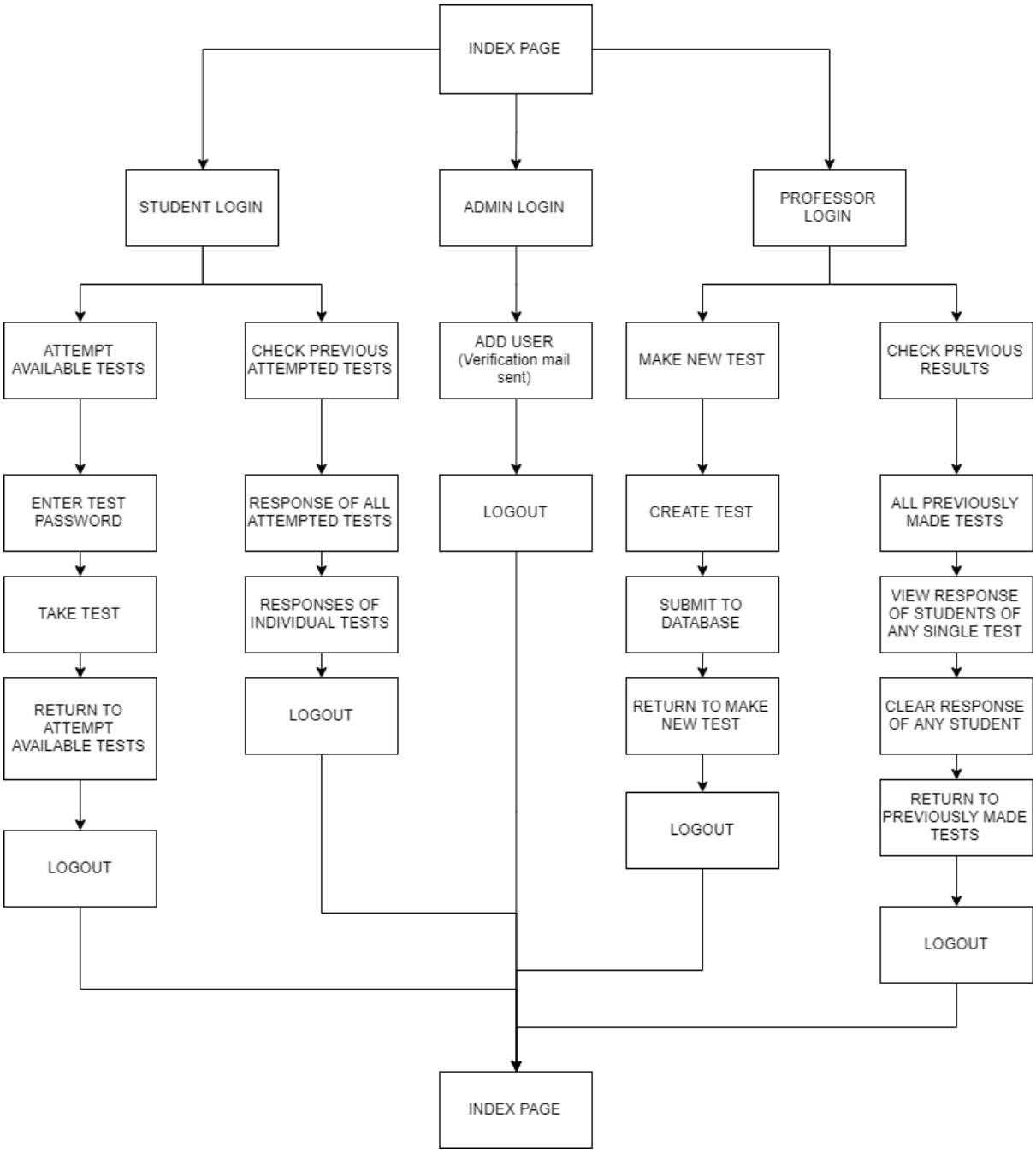
1. HTML
2. CSS
3. JavaScript
4. PHP
5. jQuery

Features:

1. Student, Administrator and Professor Login.
2. Email upon registration of new user using **PHPMailer**.
3. Email to students at the finish of a attempted test informing their performances.
4. Test conducted in full screen mode.
5. Tab switching and minimisation of the browser prohibited.
6. Timer for each test which on expiration automatically submits the test.
7. Students can view previous responses to their tests.
8. Professors can make new tests and check the all attempts to any particular tests.
9. Logout for all professors, students and administrator.

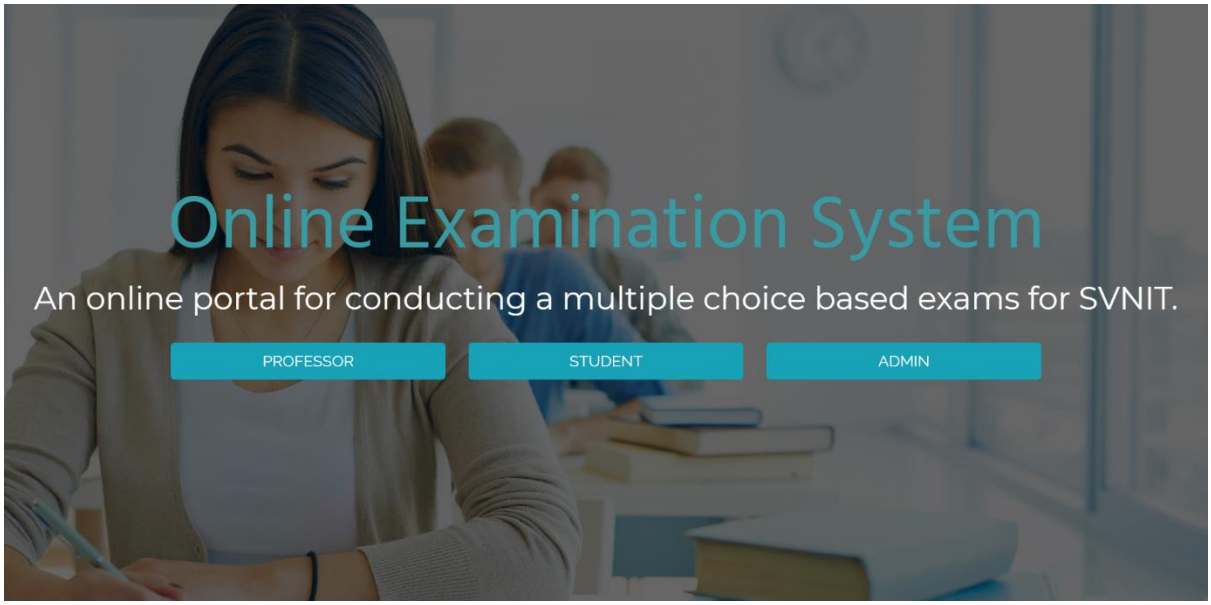
   A detailed description of the working is given forward in the project

Process Flow Diagram



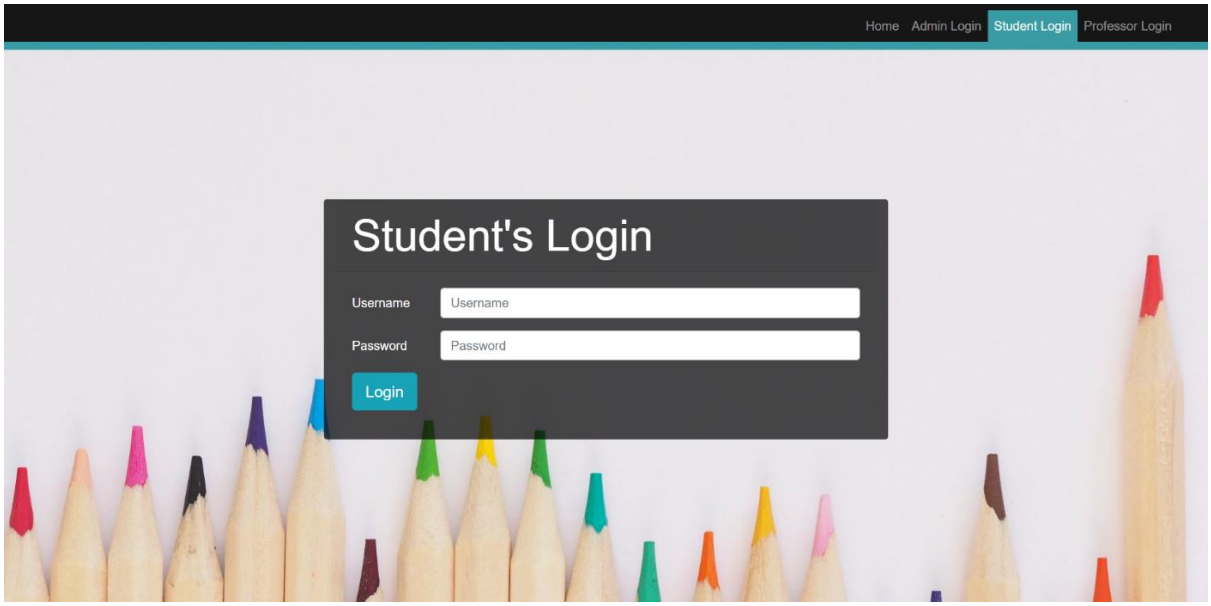
A Detailed Look Into The Project

The Home Page



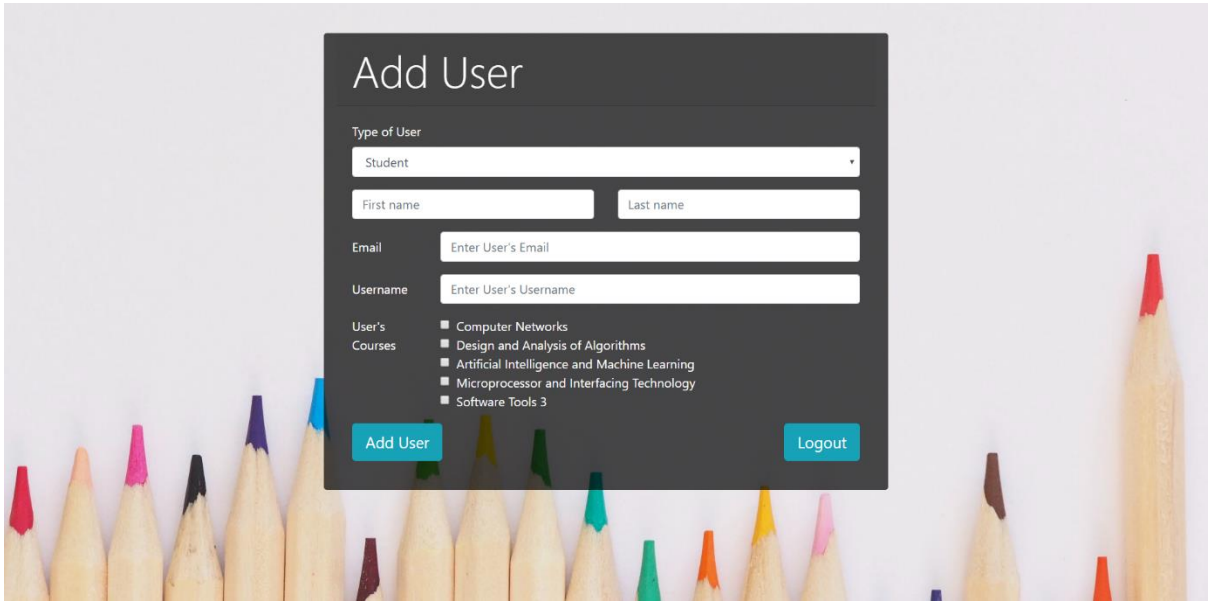
This the root page of the system which has links to various user's login page. This is a simple HTML page and serves as the index page of the website.

The Login Pages



There are in total 3 login pages for three different category of user's. Whenever a user login's into the system a cookie is set for that user so that if he opens the page again next time, he don't have to login again. There is similar page as above for both professor login and admin login as well. Whenever a user logs in, his credentials are verified by checking into the database before setting the cookie.

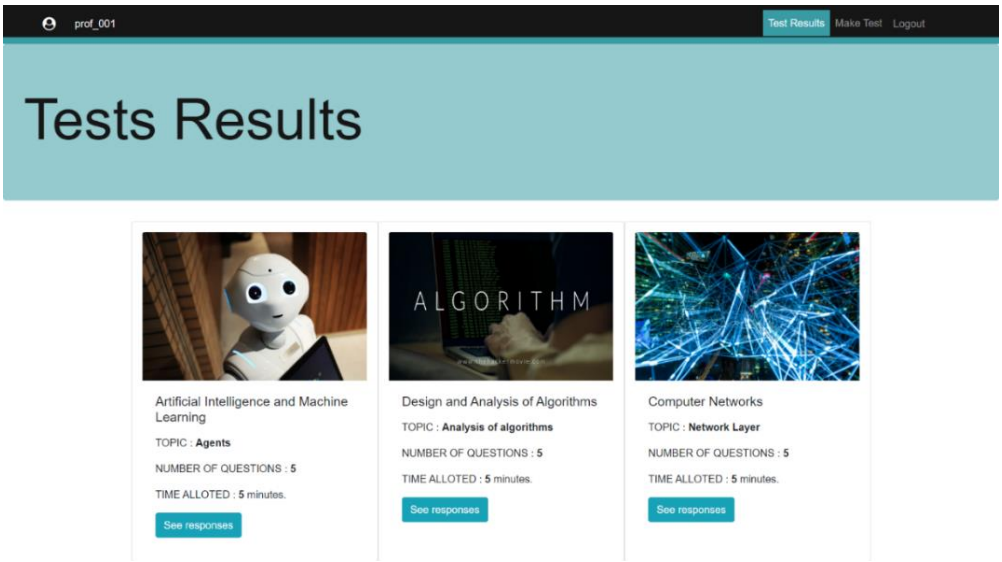
The Add User Page



This page is accessible by the Administrator upon login. The administrator can add a user to the application using this page. He needs to fill the credentials of the new user correctly. This page has data validation as well. Also the username and email should be unique. On successful addition, the new user is **sent a mail** informing him/her their usernames and passwords which is the username itself.

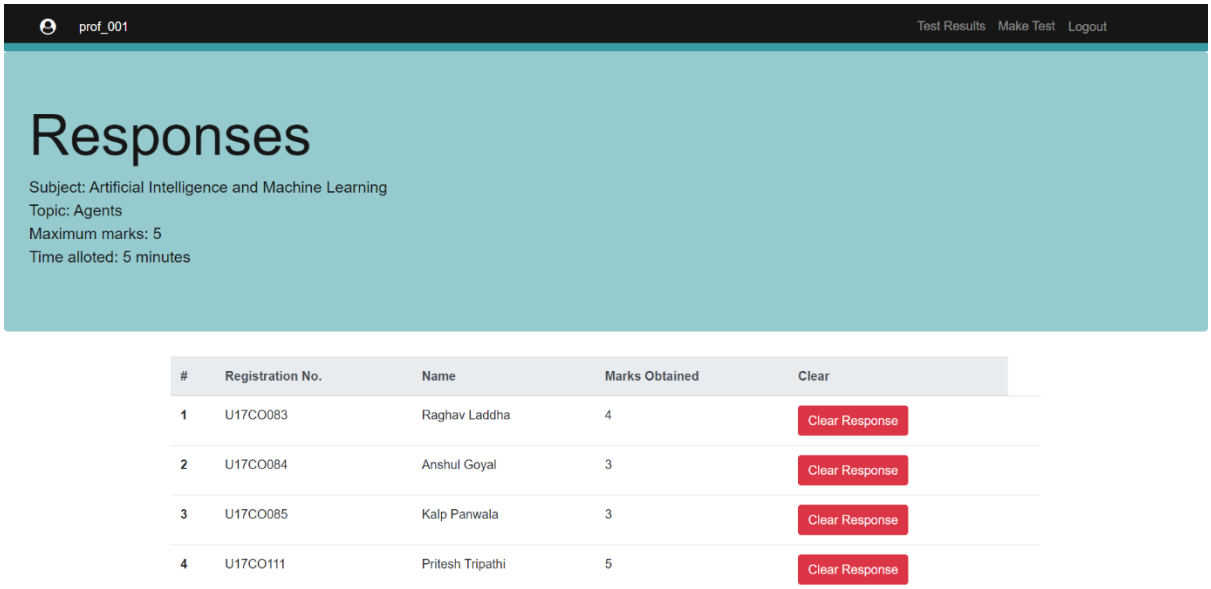
Professor's pages

Test Results Page



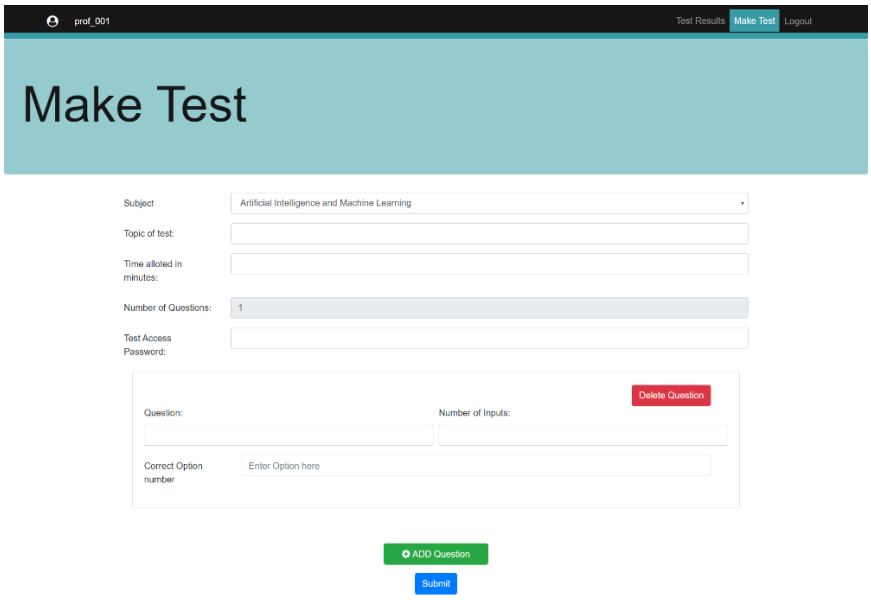
This page is accessible by the professor upon login. This page shows all the tests which were made by the professor. The button on each test card to **see responses** takes the professor to see the results of various students who have attempted the test till now.

See Response Page



This page shows the response of the various students who have attempted the test. Upon click on the see response button of the previous image, a get request is sent to the server with the submit button name as the test_id name. Then using that all the details about the test and responses are fetched from the database and presented as above. The column of Clear Response is used to clear response of any student in case of server failure or other reason so that he can attempt the test again.

Make Test Page

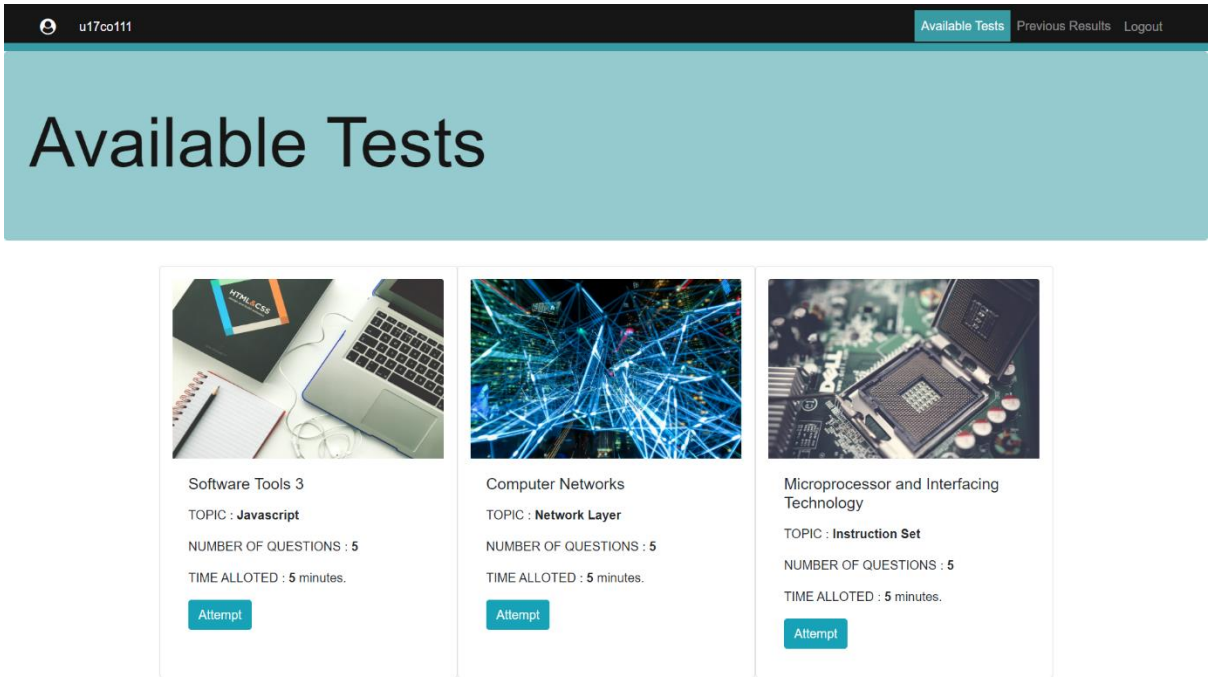


This is the page through which a professor can create a new test. The information required to create a new test are : the **topic of test**, **time allotted in minutes**, and **test**

password without which a student can't access the test. Also the add question, number of options and delete question is implemented using JavaScript. On reloading or leaving this page, the professor is alerted using jQuery as all the things done will be lost. On the top right is the logout option, clicking upon which the user is logged out and his cookie is reset.

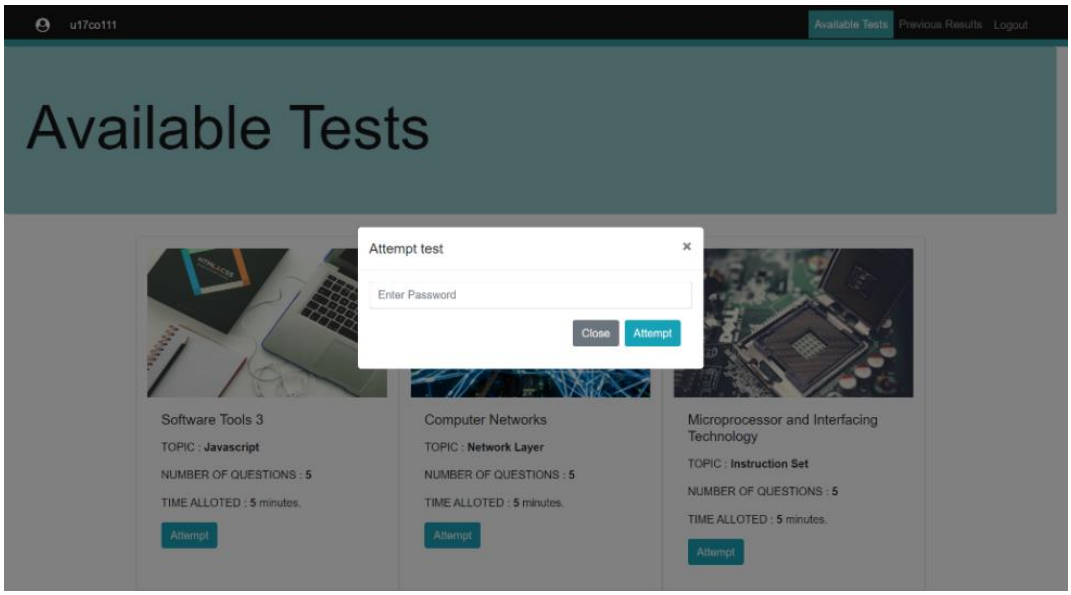
Student's Pages

Available Test Page

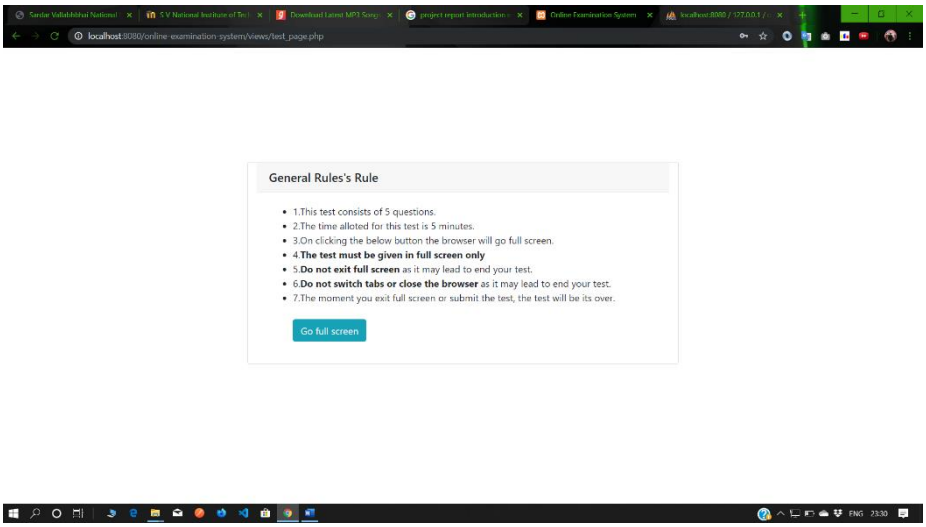


The page shown above is accessible by the student upon login. This page enlists all the tests that the student hasn't attempted and belong to his registered course.

Attempt test page

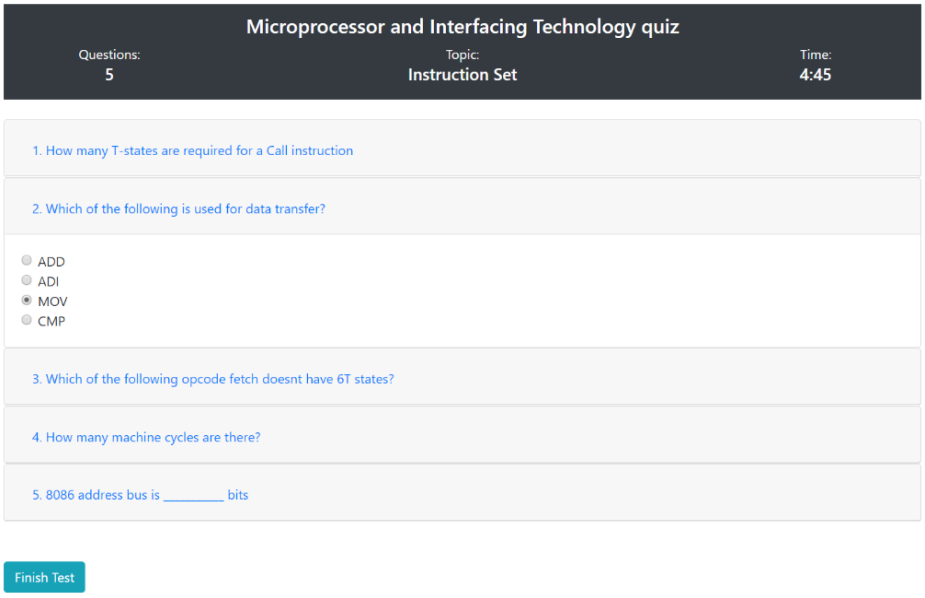


To attempt the test, the student must know the password of the test, which is only known by the professor. On entering the password, its verified and sent to attempt test page. If incorrect then the student is alerted about so.



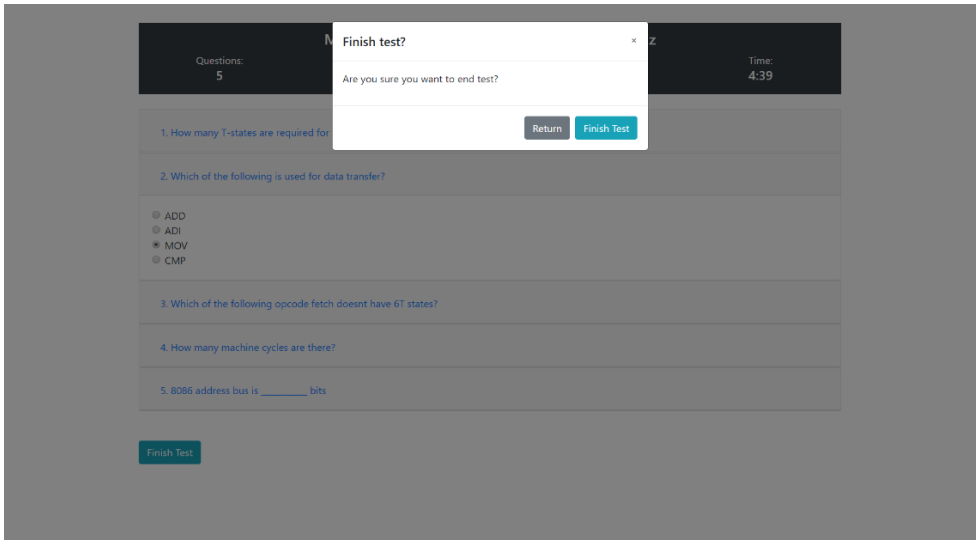
On entering the test page the student get to know the rules of the test and also the test details like the number of questions and etc. Upon clicking the go full screen button the browser goes to full screen so that there is no tab switching or any other kind of activities.

Questions of the test



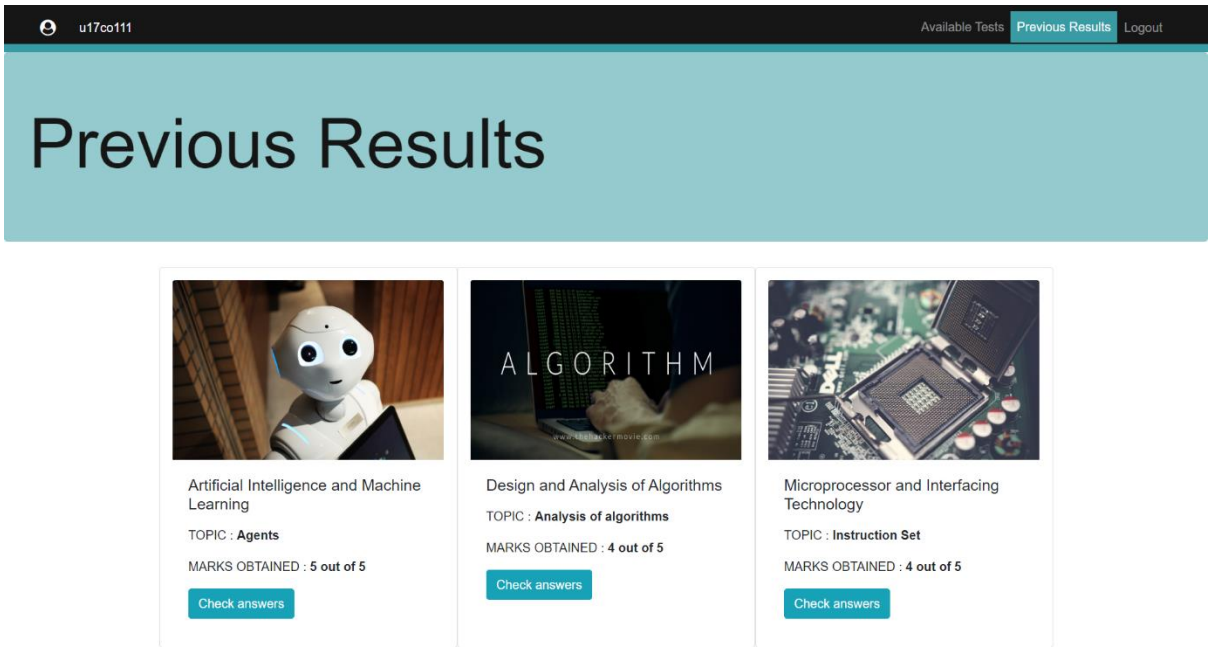
This page shown above is available in **full screen mode** only. The questions of the tests are fetched from the database and shown as above. The timer of the test is also started which on

expiring will itself submit the responses. The finish test button on clicking asks for user confirmation to end the test. Which on clicking submits the test to the database. Also **an email informing the student about his test score is sent** to his registered e-mail id given by the admin. During the full screen mode any kind of **activity in the browser is prohibited** like tab switiching, minimizing the browser.



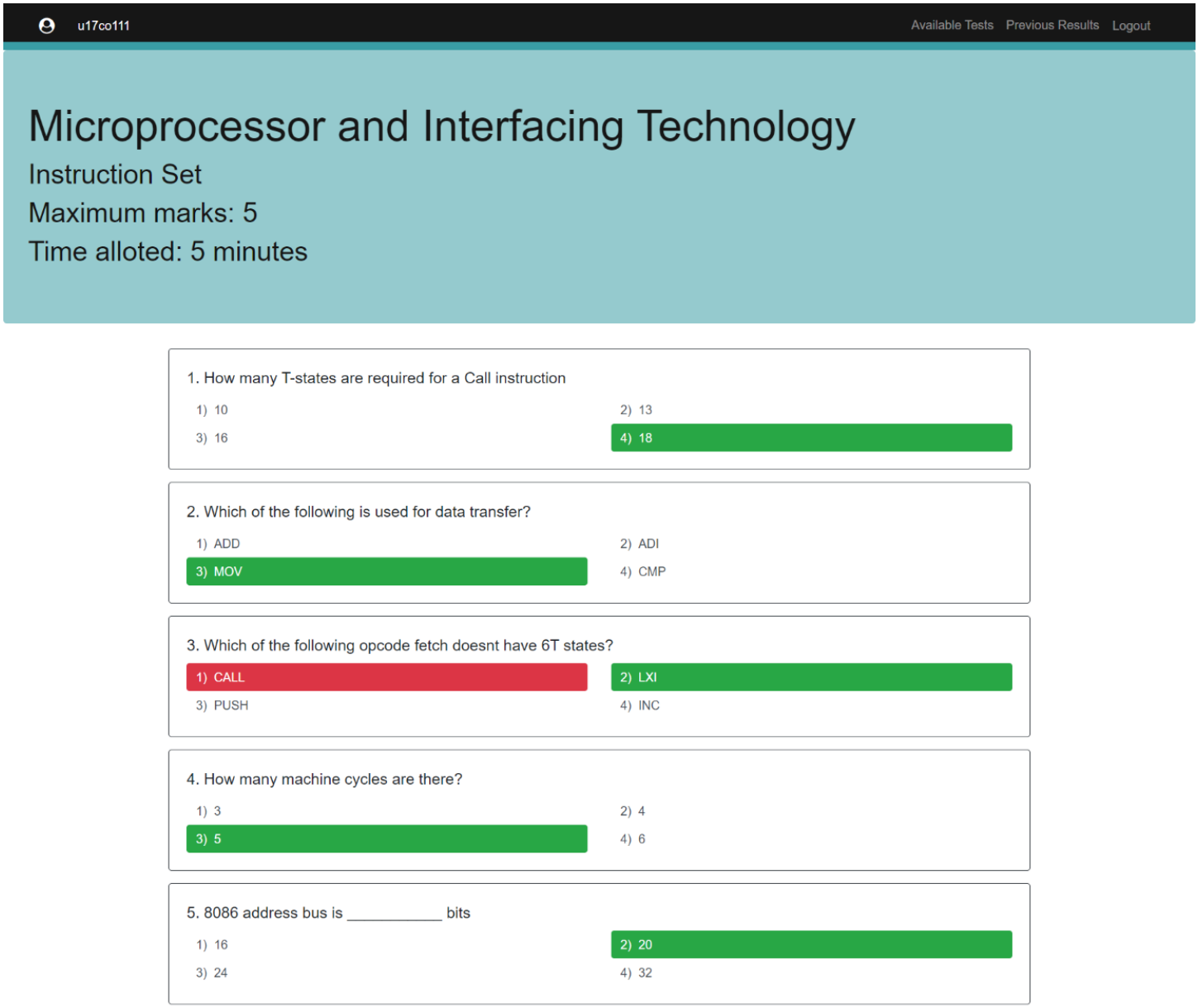
On escaping the full screen mode the student is alerted to return to full screen else the test will end at that moment itself. Also any kind of **reload is prohibited**. On **tab switching or minimizing the browser, the test will end**.

Previous Results Page



This page shows the student their previously attempted tests along with his score and correct response of each question. The details are fetched from the database from responses table using the set cookie of the student with his username. On clicking check answers the user can see all his correct or wrong answers.

Check Answers Page



This page shows the student all his chosen option and whether they are correct or not. If not correct then he/she can check the correct answer for that question.

THE END