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*SE Project Report On*

# **Online Examination Management System**

*Submitted by*

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**Under the expert guidance of :**

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*in partial fulfilment for the award of the degree*

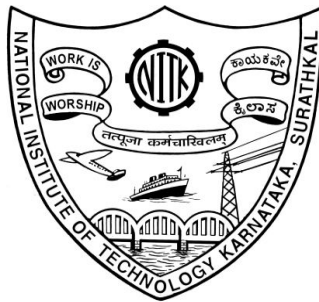
*Of*

**Bachelor of Technology**

**In**

**Information Technology**

**At**



**Department of Information Technology**  
**National Institute of Technology Karnataka, Surathkal.**

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# **1. Introduction**

This Web Application provides facility to conduct online examination worldwide - It saves time as it allows a number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. The purpose of the project is to provide online facilities to Institutes to conduct online exams and to Students to give online exams. Institutes can enter and edit the questions along with the students' list. Also, they can view the result. Students can log in and give their respective exams and view their score then and there. Others can view sample papers to get look and feel of the online examination system. It is automatically generated by the server. - The administrator has a privilege to create, modify and delete the test papers and its particular questions. - The user can register, login and give the test with his specific id, and can see the results as well.

This project aims to eliminate the inconsistencies experienced when giving internship/placement tests in NITK. The platform will ensure that the UX is the same for every single test, which will make it easier for users to attain their objectives. This also ensures that poorly functioning platforms do not hamper the recruitment process.

## 2. Software Requirement Specifications

### Revision History

| Name      | Date       | Reason For Changes  | Version |
|-----------|------------|---|---------|
| Version 1 | 25/01/2019 | Adding content about system features  | 1       |
| Version 2 | 15/02/2019 | Adding content about Non-functional requirements                              | 2       |
| Version 3 | 28/02/2019 | Adding use case diagram, user classes, references and communication interface | 3       |
| Version 4 | 20/03/2019 | Adding design analysis diagrams (UML diagrams)                                | 4       |
| Version 5 | 10/04/2019 | User interface design   | 5       |

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to build a college online examination management system. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli.

### 1.2 Document Conventions

To make the document more effective and readable Times New Roman font style was used and font size 18 for the title, 14 for headings and 12 for the content. The headings and title are in bold and have been indexed. When writing the SRS document for Online Examination Management System the following terminologies are used:

- Web server (WS)- The localhost server used is XAMPP server which uses phpMyAdmin and SQL
- DB - Database For our project we have used MySQL

### **1.3 Intended Audience**

This document has been prepared for the developers and the users of the web application. It has been implemented as a course project of the Software Engineering Course.

### **1.4 Overall Description**

In Online examination system institute can register to conduct an online test and view the records later. Students can give the test and their respective records, which include their marks for each test given by them, will be maintained separately. No student can take a particular exam more than once.

### **1.5 Benefits**

This website reduces manual work, maintaining accuracy, increasing efficiency and saving time. Also, institutes need not go to develop new software each time, instead they just register and conduct a test. For students, it saves the time of going too far away centers for the exams and the quizzes and also they can view their results then and there.

### **1.6 Roles**

Admin: The admin has root access to all the information and controls everything about the software.

Examiner: Has access to the test questions and some limited information which is for the purpose of conducting the test only.

User: Has access to the questions only. Gives the test.

## **2. General Description**

### **2.1 Description of Project**

This Web Application provides facility to conduct online examination worldwide. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server.

Administrator has a privilege to create, modify and delete the test papers and its particular questions. User can register, login and give the test with his specific id, and can see the results as well.

## **2.2 Product Perspective**

This Web Application provides facility to conduct online examination worldwide

- It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server.
- Administrator has a privilege to create, modify and delete the test papers and its particular questions.
- User can register, login and give the test with his specific id, and can see the results as well.

## **2.3 Product Functions**

The website will allow access only to authorised users with specific roles (Administrator-maintains the website, Institutes-Register to conduct the exams, Students-Give the exams online) A summary of the major functions that the website will perform:

- a. Provide facility to institutes to register to conduct an online test.
- b. Institutes can enter the number of questions, +ve, -ve marks, questions and answers and the list of eligible students.
- c. Students can login and give the tests

## **2.4 User Characteristics:**

- a. Educational level: Users should be comfortable with the English language.
- b. Experience: Users should have prior information regarding the online examinations.
- c. Skills: Users should have basic knowledge and should be comfortable using general purpose applications on computers.

## **2.5 Operating Environment**

1. This product will operate on any operating system and version
2. This will require setting up Xampp server in the development environment
3. Software requirements:- Xampp server, phpMyAdmin and MySQL

4. SQLite DB
5. Javascript

## 2.6 Assumptions

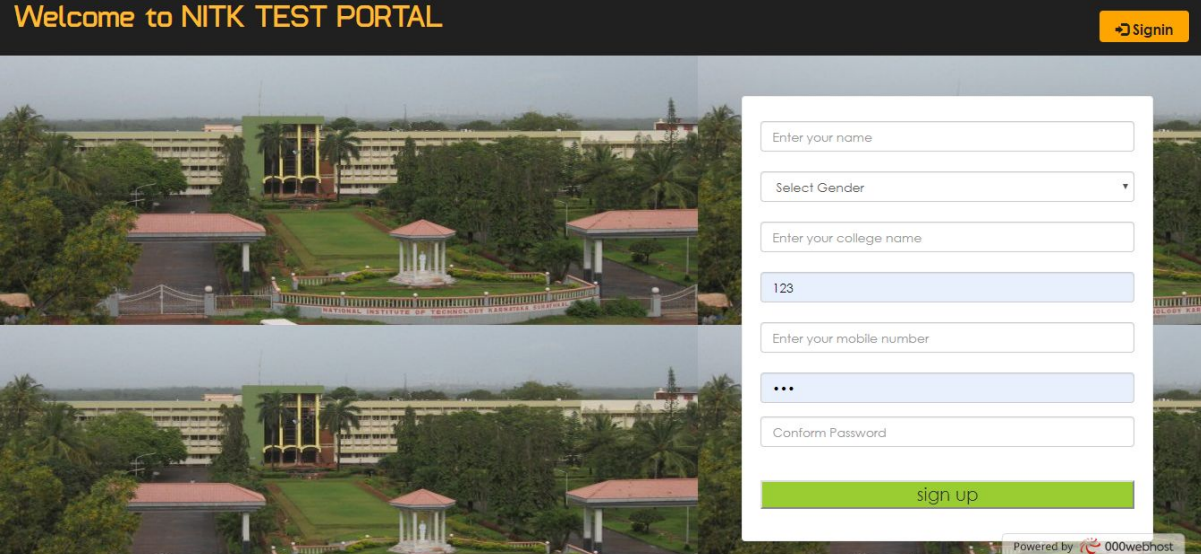
The examinations are all objective. Students can only one option at a time. The web application will be run locally and attempts will be made to host the web application on xampp server.

## 3. Specific Requirements

### 3.1 External Interface Requirements

#### 3.1.1 User Interfaces

The application will have a user friendly and menu based interface.



The screenshot displays the 'Welcome to NITK TEST PORTAL' header. On the right, there is a 'Signin' button. The main content area features a background image of a college campus. Overlaid on the right is a sign-up form with the following fields: 'Enter your name' (text input), 'Select Gender' (dropdown menu), 'Enter your college name' (text input), a field containing '123' (text input), 'Enter your mobile number' (text input), a field containing '...' (text input), and 'Conform Password' (text input). A green 'sign up' button is at the bottom of the form. A footer at the bottom right reads 'Powered by 000webhost'.

#### 3.1.2 Hardware Requirements

1. The application demands that all the PCs must be present in the internet
2. Pc should be sufficiently fast with adequate memory at least 2 GB RAM and 2 GB hard –disk space is required to run this application.
3. Screen resolution of at least 800\*600 required to properly view the screen.
4. It should be supporting the printers

### **3.1.3 Software Requirements**

1. Any Window Operating System.
2. The PHP must be installed. For the database handling MYSQL must be installed.
3. The final application must be packaged in a set up program, so that the product can be easily installed on the clients-machine.

### **3.1.4 Communications Interfaces**

- It requires connectivity to the Internet. The application can be accessed using a web browser. It also includes an email option. We will be using HTTP as the communication standard.
- The system should support registration for maximum number of Students.

## **4 System Features**

### **4.1 Functional Requirements**

The Online Examination System is developed for handling the activities for various users such as student, staff, exam staff. Every teacher should have laptop with wireless internet connection.

In order to create the authentication module:-

REQ 1:- A valid form needs to be present. For eg:- the password entered needs to match with the rules, eg - password needs to be of min 6 characters, 1 number needs to be present, a special character needs to be present etc

REQ 2:- The submit button should trigger the validation module.

REQ 3:- Only in case of successful validation, the page should redirect to dashboard.

### **4.2 Stimulus/Response Sequences**

1. Users will need to enter data in text boxes and click on the register button to create an account.
2. They will then need to go to the login page and re-enter their credentials.
3. This will take the user to their dashboard.

### **4.3 Technical Issues**

This product will work on client-server architecture. It will require an internet connection and which will be able to run PHP application. The product should be support



some commonly used browsers such as Internet Explorer, Mozilla Firefox. External interfaces include keyboard and mouse, enabling navigations across the screens. Also, in addition we have used the speech-to-text conversion using the annyang API in javascript which enables the some impaired users to also use the application.

## **5. Other Nonfunctional Requirements**

In this section, last group of the requirements which is nonfunctional requirements will be explained in detail. Nonfunctional requirements include performance requirements, security requirements and portability requirements.

### **1) Performance Requirements**

The system must be interactive and the delays involved must be less. So in every action-response of the system, there are no immediate delays. In case of opening windows forms, of popping error messages and saving the settings or sessions there is delay much below 2 seconds, In case of opening DBs, sorting questions and evaluation there are no delays and the operation is performed in less than 2 seconds for opening, sorting, computing, posting. Also when connecting to the WS the delay is based editing on the distance of the 2 systems and the configuration between them so there is high probability that there will be or not a successful connection in less than 20 seconds for sake of good communication.

Performance requirement by the user side is, the web application must be developed as a lightweight app so that it can work on almost any platform even with slower internet connections.

#### **1.1 Safety Requirements**

The safety requirements include managing and keeping the user's data secure as in case of any failure, the user data must not be lost nor should be vulnerable to attack by any malicious source. Information transmission should be securely transmitted to server without any changes in information.

#### **1.2 Security Requirements**

Since this software will be hosted on xampp server, all the user data will be kept on the xampp server and the mySQL. Product should be able to protect privacy of user data. Workspace of the user should only be accessed through user own credentials and any other user should not be able to access any other user's private data.

The user will be restricted in terms of user rights and should be restricted so as to not harm the system by the programs they run or by the commands they run on the terminal.

Since all the data will be transferred on the web, the system should also use an encryption and decryption mechanism so that only the intended user can decode and work on the data.

### **1.3 Software Quality Attributes**

The quality of the system is maintained in a way that is user friendly to all users. The software quality attributes assumed include:

#### **1.3.1 Availability**

If the internet service gets disrupted while sending information to the server, the information can be send again for verification.

#### **1.3.2 Usability**

As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverses quickly between its states.

#### **1.3.3 Reliability**

The application should be highly reliable and it should generate all the updated information in correct order.

#### **1.3.4 Security**

Application will allow only valid users to access the system. Access to any will application resource depend upon user's designation. There are two types of users namely Administrator and Student. Security is based upon the individual user ID and Password.

#### **1.3.5 Maintainability**

The installation and operation manual of examination management system will be provided to user.

#### **1.3.6 Portability**

The application should be portable on any windows based system

### 3. Design

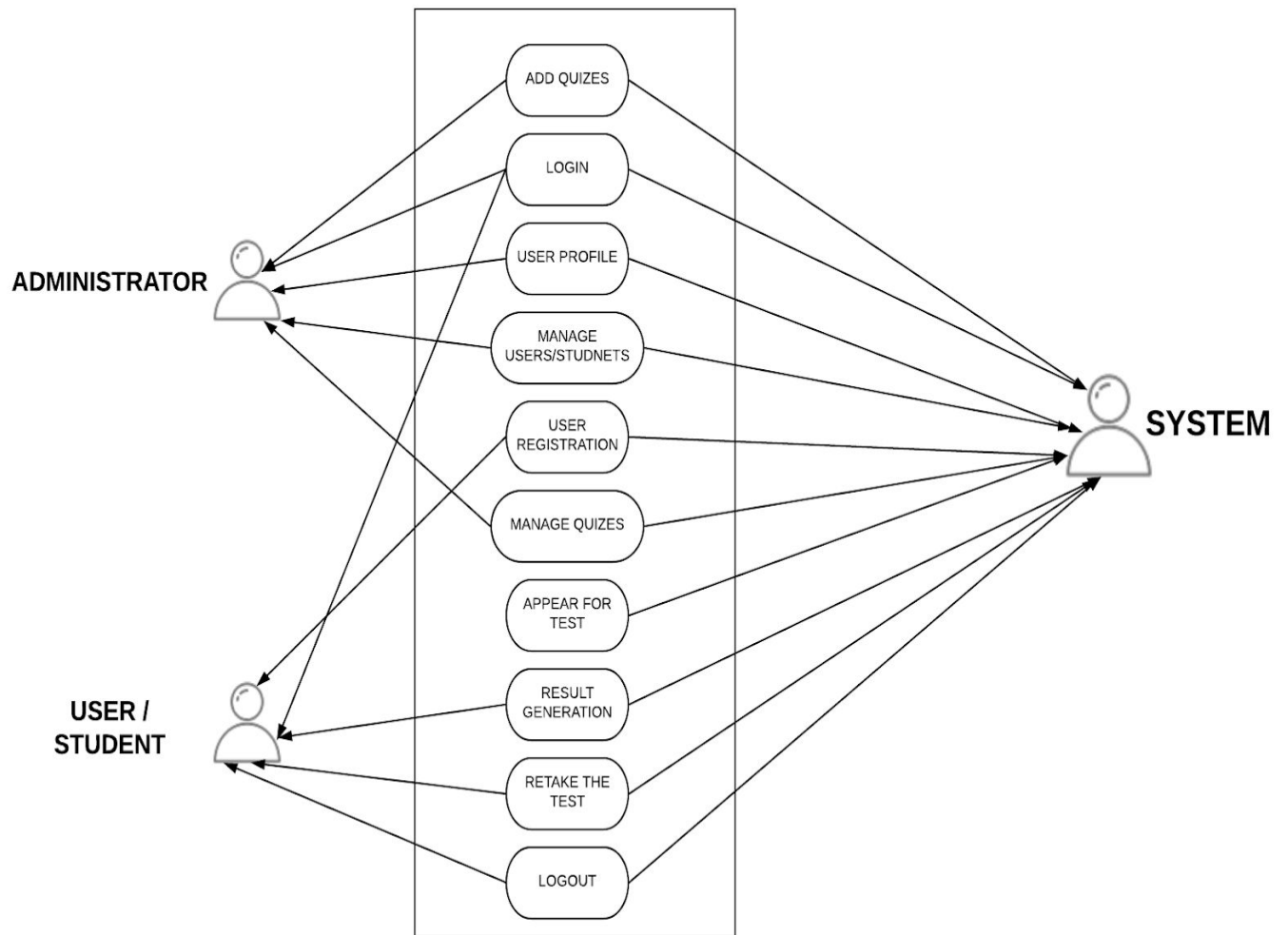
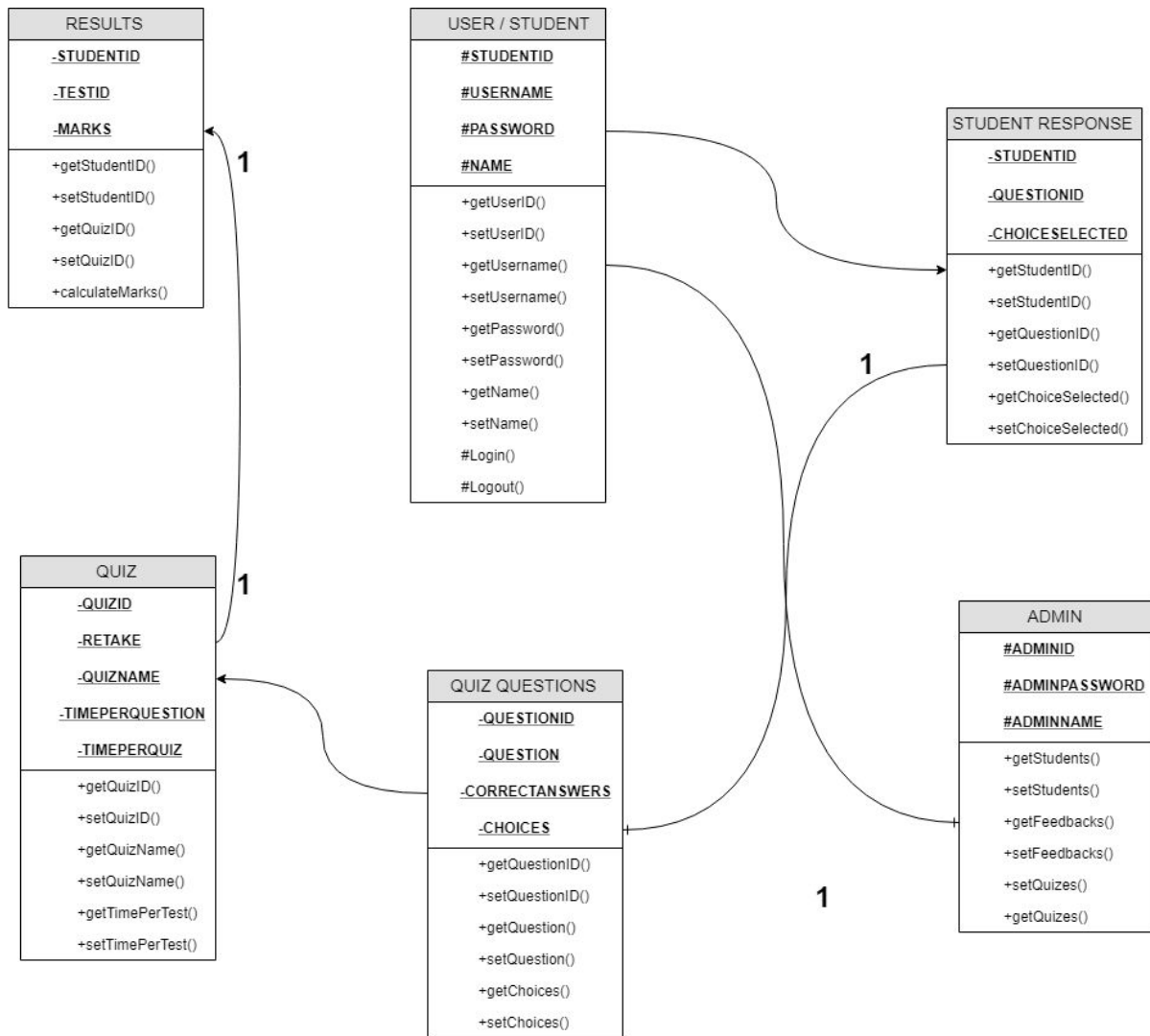


Fig 1: Use Case diagram for student registration and authentication



Sequence Diagram for User Login

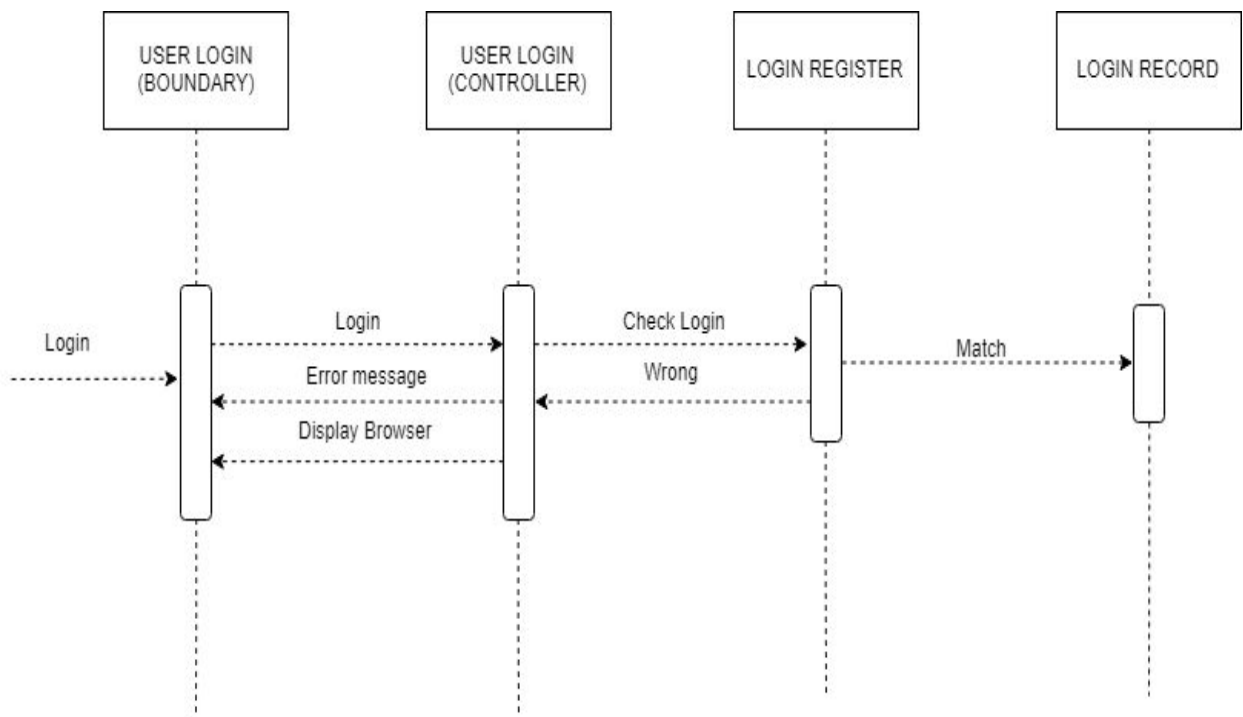


Fig 2: Sequence diagram for Registration and Login

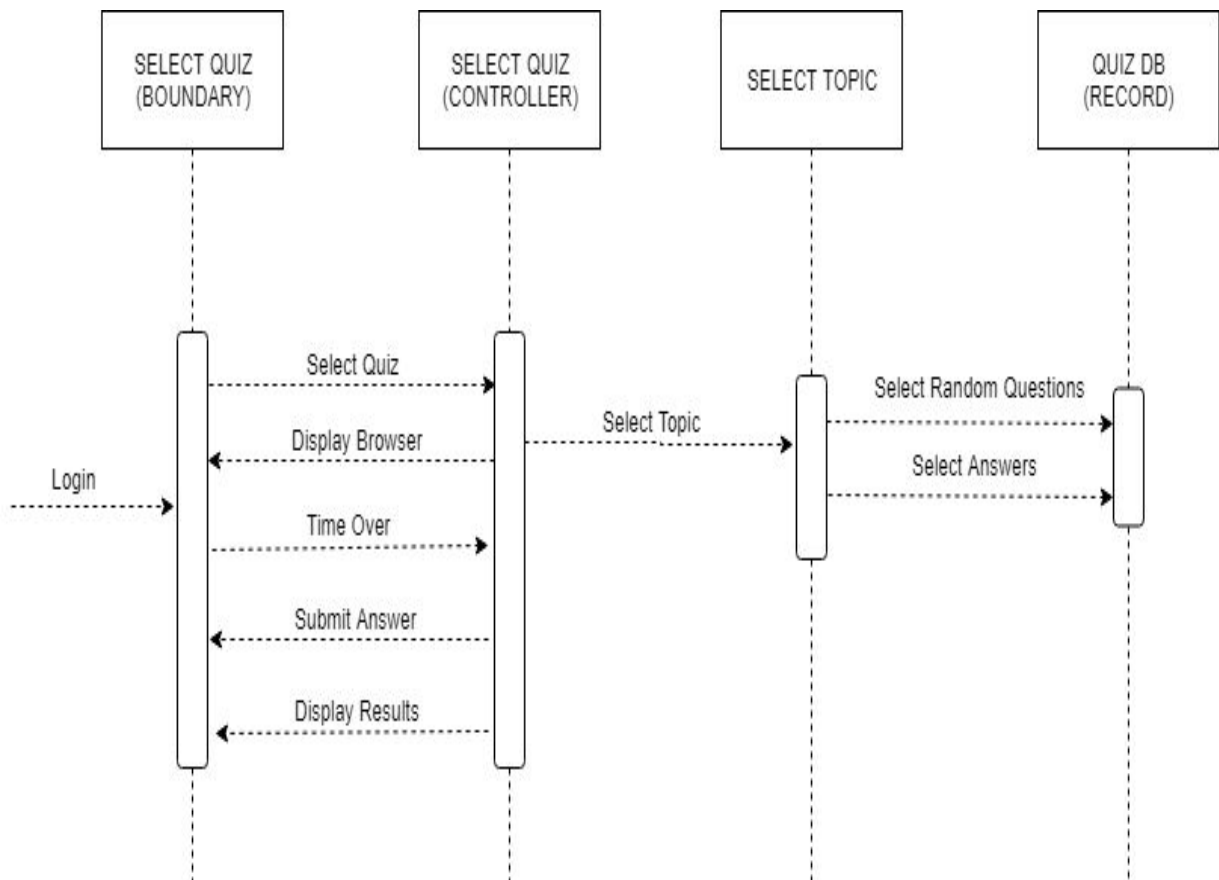
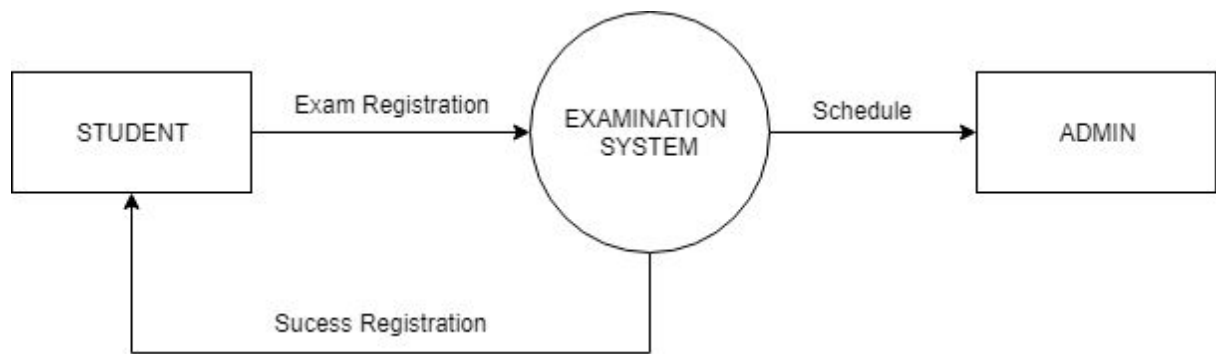


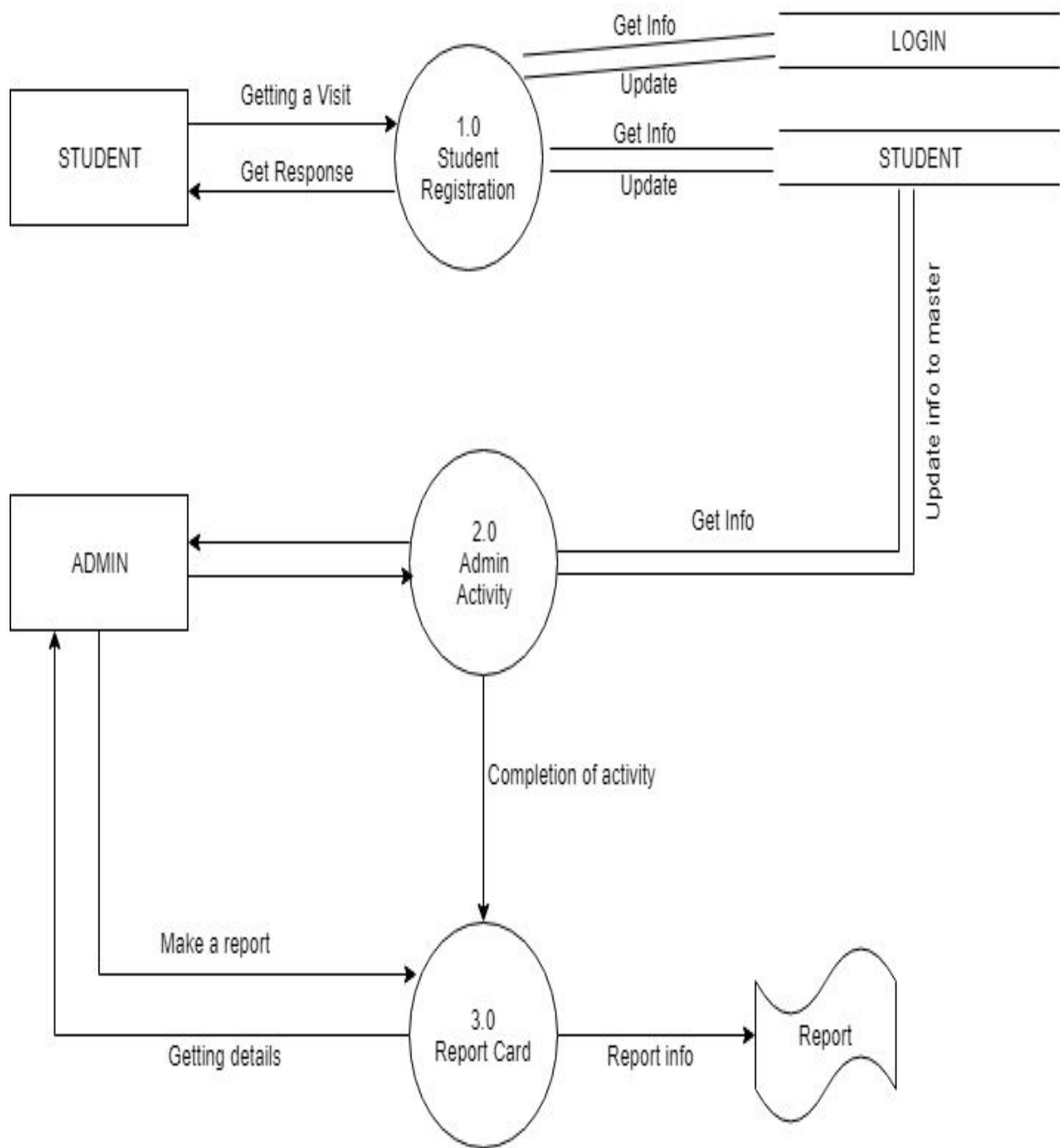
Fig 3: Sequence diagram for giving online quizzes

## Data Flow Diagrams (DFD)

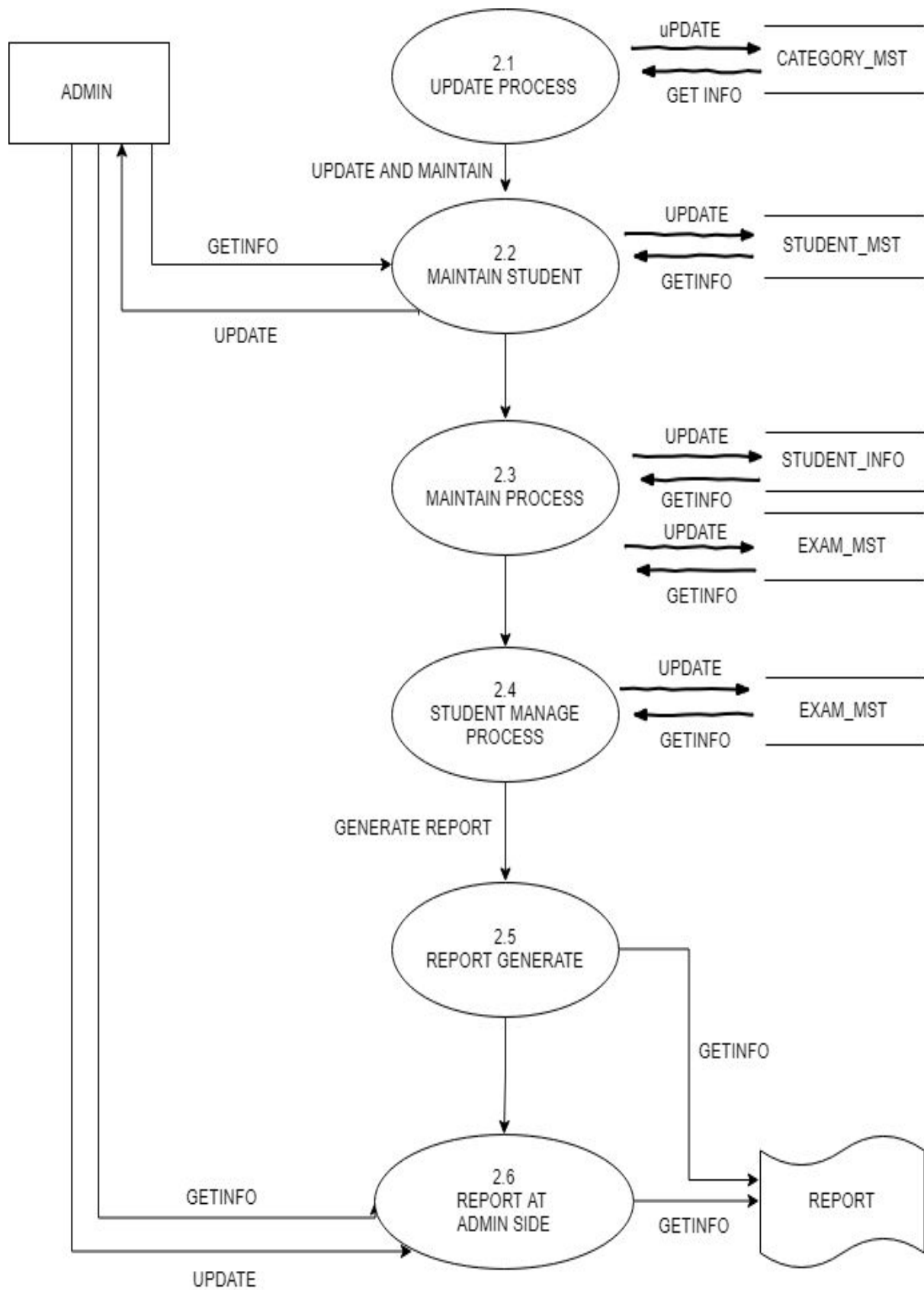
Level 0



Level 1



LEVEL 2





## Activity-Diagrams

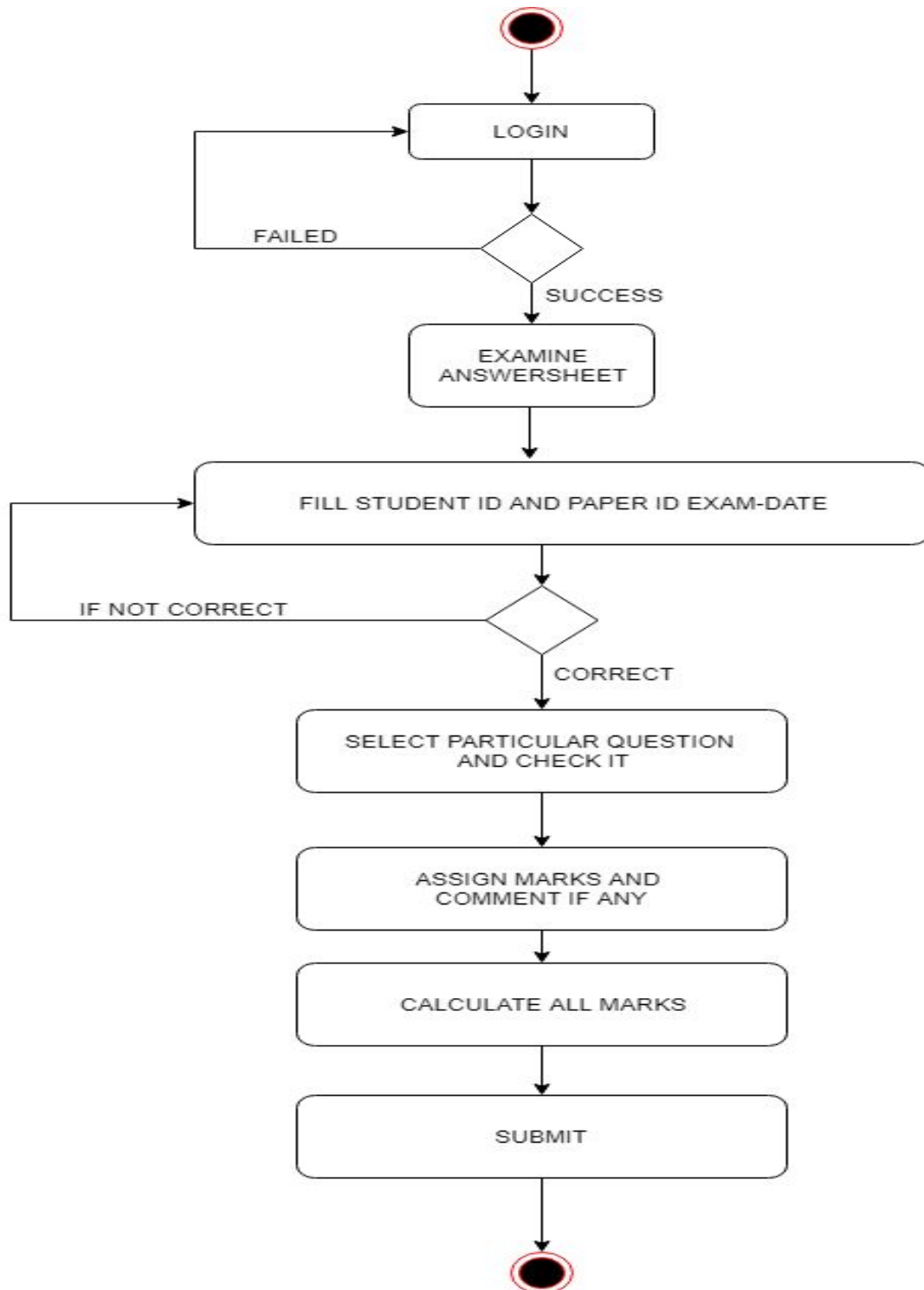
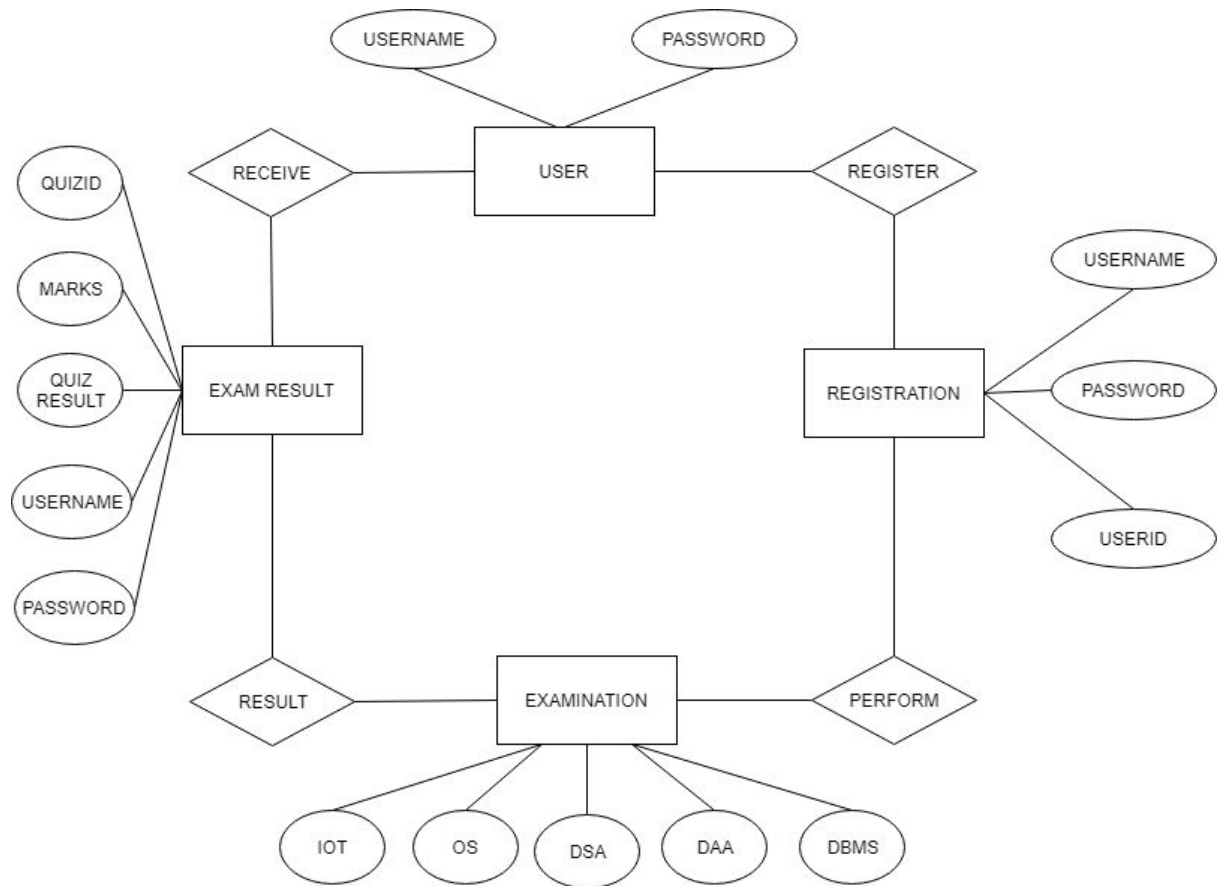


Fig 7: Activity diagram

## State-Transition Diagrams (STD)



## Manual test case design

[illegible]

### Test cases for the login of the user

| Test Case Description |  | Test all functionalities for user |  |            |                           |   |                    |  |  |  |  |
|-----------------------|--|-----------------------------------|--|------------|---------------------------|---|--------------------|--|--|--|--|
| Tester's Name         | Nimish Mangal                                |                                   | Date Tested  | 12/04/2019 |                           | Test Case Status                          | Pass               |  |  |  |  |
| Test Case ID          | Test 2                                       |                                   |  |            |                           |   |                    |  |  |  |  |
| S #                   | Prerequisites:                               |                                   |  |            | S #                       | Test Data                                 |                    |  |  |  |  |
| 1                     | Access to Chrome Browser                     |                                   |  |            | 1                         | Userid = 123 (for admin)                  |                    |  |  |  |  |
| 2                     | Access to xampp server                       |                                   |  |            | 2                         | Pass = 123 (for admin)                    |                    |  |  |  |  |
| 3                     | Xampp server to work properly                |                                   |  |            | 3                         | Username for login(user) = qwer@gmail.com |                    |  |  |  |  |
| 4                     | Selenium IDE should work properly            |                                   |  |            | 4                         | Password for login(user) = qwertyuiop     |                    |  |  |  |  |
| 5                     | MySQL should work properly                   |                                   |  |            |                           |   |                    |  |  |  |  |
| Step #                | Step Details                                 |                                   | Expected Results   |            | Actual Results            |   | Pass /Not executed |  |  |  |  |
| 1                     | Give the first quiz on data structures       |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 2                     | Give the second quiz                         |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 3                     | Give the third quiz                          |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 4                     | Give the fourth quiz                         |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 5                     | Give the fifth quiz                          |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 6                     | Give the sixth quiz                          |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 7                     | Give the seventh quiz                        |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 8                     | Give the eight quiz                          |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 9                     | Give the ninth quiz                          |                                   | The user must be able to finish the quiz without any problem and after           |            | As Expected               |   | Pass               |  |  |  |  |
| 10                    | After giving all the quizzes check the total |                                   | The user now must be able to see the total score cumulative of the               |            | As Expected               |   | Pass               |  |  |  |  |
| 11                    | Click on Ranking in the Ranking Tab          |                                   | Must display all the users logged in and ranked in terms of their overall scores |            | As Expected               |   | Pass               |  |  |  |  |
| 12                    | Click on History in the History Tab          |                                   | Must display all the users logged in till now and with all their details         |            | As Expected               |   | Pass               |  |  |  |  |
| 13                    | Change the details on someone else in the    |                                   | The user must not be able to change the records and details of any other         |            | The user could not change |   | Fail               |  |  |  |  |
| 14                    | Change the details on someone else in the    |                                   | The user must not be able to change the records and details of any other         |            | The user could not change |   | Fail               |  |  |  |  |
| 15                    | Reanswer an already answered quiz            |                                   | The user must be able to restart the quiz again from the start and then          |            | As Expected               |   | Pass               |  |  |  |  |
| 16                    | Signout                                      |                                   | The user now must be able to signout from the application and return             |            | As Expected               |   | Pass               |  |  |  |  |

### Test cases for a user giving the quizzes

|                              |  |   |            |   |   |                  |  |  |  |
|------------------------------|--|---|------------|---|---|------------------|--|--|--|
| <b>Test Case Description</b> | Test form filling to sign up             |   |            |   |   |                  |  |  |  |
| <b>Tester's Name</b>         | Nimish Mangal                            | <b>Date Tested</b>  | 12/04/2019 | <b>Test Case Status</b>                           | Pass                                      |                  |  |  |  |
| <b>Test Case ID</b>          | Test 3                                   |   |            |   |   |                  |  |  |  |
| <b>S #</b>                   | <b>Prerequisites:</b>                    |   |            | <b>S #</b>  | <b>Test Data</b>                          |                  |  |  |  |
| 1                            | Access to Chrome Browser                 |   |            | 1   | Userid = 123 (for admin)                  |                  |  |  |  |
| 2                            | Access to xampp server                   |   |            | 2   | Pass = 123 (for admin)                    |                  |  |  |  |
| 3                            | Xampp server to work properly            |   |            | 3   | Username for login(user) = qwer@gmail.com |                  |  |  |  |
| 4                            | Selenium IDE should work properly        |   |            | 4   | Password for login(user) = qwertyuiop     |                  |  |  |  |
| 5                            | MySQL should work properly               |   |            |   |   |                  |  |  |  |
|                              |  |   |            |   |   |                  |  |  |  |
| <b>Step #</b>                | <b>Step Details</b>                      | <b>Expected Results</b>   |            | <b>Actual Results</b>                             |   | <b>Pass /Not</b> |  |  |  |
| 1                            | Enter the details in the form            | the user must be able to enter the details in the form              |            | As Expected                                       |   | Pass             |  |  |  |
| 2                            | Give the same name in another form       | The user must be able to use the same name for filling another form |            | As Expected                                       |   | Pass             |  |  |  |
| 3                            | Give the email id in the form            | Email should be provided by the user                                |            | As Expected                                       |   | Pass             |  |  |  |
| 4                            | Enter an Invalid email id                | The email id must be accepted by the server                         |            | Since the email id is invalid it is not accepted, |   | Fail             |  |  |  |
| 5                            | Enter the mobile number                  | The given mobile number must be accepted by the server              |            | As Expected                                       |   | Pass             |  |  |  |
| 6                            | Enter an invalid number with less digits | The given mobile number must be accepted by the server              |            | Since the number is invalid it is not accepted,   |   | Fail             |  |  |  |
| 7                            | Enter the password                       | Password should be filled in by the user                            |            | As Expected                                       |   | Pass             |  |  |  |
| 8                            | Enter a password with 3-4 characters     | The password must be accepted by the server                         |            | Since the password is invalid it is not           |   | Fail             |  |  |  |
| 9                            | Click Sign Up                            | Credentials must be accepted and user should see the quiz section   |            | As Expected                                       |   | Pass             |  |  |  |
| 10                           | Give "Feedback"                          | User should be able to give the feedback to the admin using the     |            | As Expected                                       |   | Pass             |  |  |  |
| 11                           | See "About Us"                           | When the user clicks on about us, direct to the nitk home page      |            | As Expected                                       |   | Pass             |  |  |  |
| 12                           | See "Developers"                         | When the user clicks on about us, he should see the developers      |            | As Expected                                       |   | Pass             |  |  |  |

Test cases for form filling



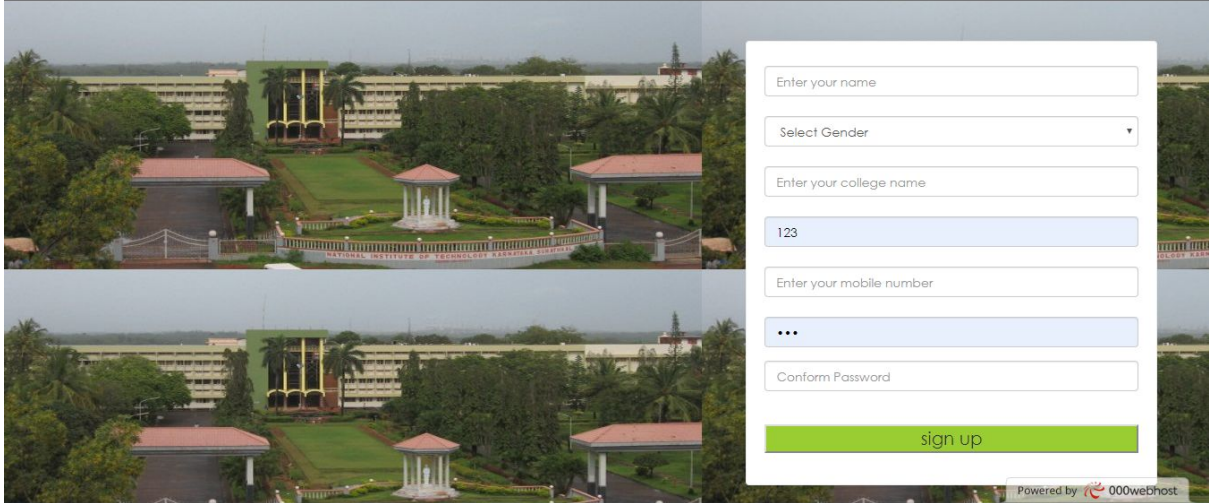


## Tools Used

- ➔ Selenium
- ➔ PageSpeed insights
- ➔ webPageTest
- ➔ gMetrix

## Screenshots of the application

Welcome to NITK TEST PORTAL [Signin](#)



Powered by 000webhost

| S.N. | Topic                       | Total question | Marks | Time limit |                       |
|------|-----------------------------|----------------|-------|------------|-----------------------|
| 1    | Data Structures             | 15             | 45    | 12 min     | <a href="#">Start</a> |
| 2    | Database Management Systems | 10             | 30    | 5 min      | <a href="#">Start</a> |
| 3    | Current Affairs             | 20             | 80    | 10 min     | <a href="#">Start</a> |
| 4    | Linux :vi Editor            | 5              | 10    | 10 min     | <a href="#">Start</a> |
| 5    | Linux:startup               | 5              | 10    | 10 min     | <a href="#">Start</a> |
| 6    | Networking                  | 2              | 4     | 5 min      | <a href="#">Start</a> |
| 7    | C++ Coding                  | 2              | 4     | 5 min      | <a href="#">Start</a> |
| 8    | Php Coding                  | 2              | 4     | 5 min      | <a href="#">Start</a> |
| 9    | Linux : File Managment      | 2              | 4     | 5 min      | <a href="#">Start</a> |



## Welcome to the admin section

Warning: session\_start(): Cannot send session cache limiter - headers already sent (output started at /storage/ssd2/9142052/public\_html/dash.php:1) in








Dashboard Home User Ranking Feedback Quiz

| Rank | Name          | Gender | College | Score |
|------|---------------|--------|---------|-------|
| 1    | Tarun Pratap  | M      | 123     | 20    |
| 2    | Nimish Mangal | M      | NITK    | 4     |
| 3    | 111           | M      | 111     | 1     |
| 4    | Nimish Mangal | M      | NITK    | 0     |
| 5    | Nimish Mangal | M      | NITK    | 0     |
| 6    | Nimish Mangal | M      | NITK    | -4    |

## Welcome to the admin section

Warning: session\_start(): Cannot send session cache limiter - headers already sent (output started at /storage/ssd2/9142052/public\_html/dash.php:1) in










Dashboard Home User Ranking Feedback Quiz









| S.N. | Name           | Gender | College | Email                        | Mobile   |
|------|----------------|--------|---------|------------------------------|--|
| 1    | 111            | M      | 111     | 123@gmail.com                | 1111111111  |
| 2    | Akshay Pandita | M      | dsd     | akshaypandita20000@gmail.com | 8825079635  |
| 3    | Tarun Pratap   | M      | 123     | honpra@gmail.com             | 3456789     |
| 4    | Nimish Mangal  | M      | NITK    | nimish.mangal910@gmail.com   | 123456789   |
| 5    | Nimish Mangal  | M      | nitk    | nimish@gmail.com             | 8602453008  |
| 6    | Nimish Mangal  | M      | NITK    | nimishmangal98@gmail.com     | 8602453008  |
| 7    | Nimish Mangal  | M      | NITK    | nimishmangal@gmail.com       | 1234567890  |

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## Enter Quiz Details









Write description here...

| S.N. | Topic                       | Total question | Marks | Time limit |  |
|------|-----------------------------|----------------|-------|------------|--|
| 1    | Data Structures             | 15             | 45    | 12 min     |  Remove |
| 2    | Database Management Systems | 10             | 30    | 5 min      |  Remove |
| 3    | Current Affairs             | 20             | 80    | 10 min     |  Remove |
| 4    | Linux :vi Editor            | 5              | 10    | 10 min     |  Remove |
| 5    | Linux:startup               | 5              | 10    | 10 min     |  Remove |
| 6    | Networking                  | 2              | 4     | 5 min      |  Remove |
| 7    | C++ Coding                  | 2              | 4     | 5 min      |  Remove |
| 8    | Php Coding                  | 2              | 4     | 5 min      |  Remove |
| 9    | Linux : File Managment      | 2              | 4     | 5 min      |  Remove |

| S.N. | Topic                       | Total question | Marks | Time limit |  |
|------|-----------------------------|----------------|-------|------------|--|
| 1    | Data Structures             | 15             | 45    | 12 min     |  Remove |
| 2    | Database Management Systems | 10             | 30    | 5 min      |  Remove |
| 3    | Current Affairs             | 20             | 80    | 10 min     |  Remove |
| 4    | Linux :vi Editor            | 5              | 10    | 10 min     |  Remove |
| 5    | Linux:startup               | 5              | 10    | 10 min     |  Remove |
| 6    | Networking                  | 2              | 4     | 5 min      |  Remove |
| 7    | C++ Coding                  | 2              | 4     | 5 min      |  Remove |
| 8    | Php Coding                  | 2              | 4     | 5 min      |  Remove |
| 9    | Linux : File Management     | 2              | 4     | 5 min      |  Remove |

|         |                      |                         |                         |  |                                       |
|---------|----------------------|-------------------------|-------------------------|--|---------------------------------------|
| N.I.T.K | <a href="#">Home</a> | <a href="#">History</a> | <a href="#">Ranking</a> | <input type="text" value="Enter tag"/> | <input type="button" value="Search"/> |
|---------|----------------------|-------------------------|-------------------------|--|---------------------------------------|

| S.N. | Topic                       | Total question | Marks | Time limit |   |
|------|-----------------------------|----------------|-------|------------|---|
| 1    | Data Structures             | 15             | 45    | 12 min     |  Start |
| 2    | Database Management Systems | 10             | 30    | 5 min      |  Start |
| 3    | Current Affairs             | 20             | 80    | 10 min     |  Start |
| 4    | Linux :vi Editor            | 5              | 10    | 10 min     |  Start |
| 5    | Linux:startup               | 5              | 10    | 10 min     |  Start |
| 6    | Networking                  | 2              | 4     | 5 min      |  Start |
| 7    | C++ Coding                  | 2              | 4     | 5 min      |  Start |
| 8    | Php Coding                  | 2              | 4     | 5 min      |  Start |

## Result

|   |    |
|---|----|
| Total Questions   | 2  |
| right Answer   | 0  |
| Wrong Answer   | 2  |
| Score          | -2 |
| Overall Score  | -2 |

# Automation Test Cases

## 1.User Login

| Untitled    | Command | Target          | Value                      |
|-------------|---------|-----------------|----------------------------|
|             | 1       | open            |                            |
| about       | 2       | set window size |                            |
| developers  | 3       | close           |                            |
| feedback    | 4       | click           | css=b                      |
| log-in*     | 5       | mouse over      | css=b                      |
| login test  | 6       | mouse out       | css=b                      |
| sign-up     | 7       | click           | id=email                   |
| user log-in | 8       | type            | id=email<br>qwer@gmail.com |
|             | 9       | click           | id=password                |
|             | 10      | type            | id=password<br>qwerly      |
|             | 11      | click           | css= btn:nth-child(2)      |
|             | 12      | click           | linkText=Signin            |
|             | 13      | mouse over      | linkText=Signin            |

## 2.About

| Untitled    | Command | Target              | Value                             |
|-------------|---------|---------------------|-----------------------------------|
|             | 1       | open                | http://localhost/Online/index.php |
| about       | 2       | set window size     | 1346x708                          |
| developers  | 3       | click               | linkText=About us                 |
| feedback    | 4       | store window handle | root                              |
| log-in      | 5       | select window       | handle=\${win953}                 |
| login test  | 6       | close               |                                   |
| sign-up     | 7       | select window       | handle=\${root}                   |
| user log-in |         |                     |                                   |

## 3.Developers

| Untitled    | Command | Target          | Value                                      |
|-------------|---------|-----------------|--|
|             | 1       | open            | http://localhost/Online/index.php          |
| about       | 2       | set window size | 1346x708                                   |
| developers  | 3       | click           | linkText=Developer                         |
| feedback    | 4       | click           | css=#developers .close > span:nth-child(1) |
| log-in      |         |                 |  |
| login test  |         |                 |  |
| sign-up     |         |                 |  |
| user log-in |         |                 |  |

## 4.Feedback

| Untitled    | Command           | Target                            | Value         |
|-------------|-------------------|-----------------------------------|---------------|
| about       | 1 open            | http://localhost/Online/index.php |               |
| developers  | 2 set window size | 1346x708                          |               |
| feedback    | 3 click           | linkText=Feedback                 |               |
| log-in      | 4 select window   | handle=\$(win1585)                |               |
| login test  | 5 click           | id=name                           |               |
| sign-up     | 6 type            | id=name                           | nimish        |
| user log-in | 7 send keys       | id=name                           | \${KEY_ENTER} |
|             |                   |                                   |               |

## 5.Login

| Untitled    | Command           | Target                                       | Value         |
|-------------|-------------------|--|---------------|
| about       | 2 set window size | 1346x708                                     |               |
| developers  | 3 click           | linkText=Admin Login                         |               |
| feedback    | 4 click           | name=username                                |               |
| log-in*     | 5 type            | name=username                                | 123           |
| login test  | 6 type            | css= form-group:nth-child(2) > .form-control | 123           |
| sign-up     | 7 send keys       | css= form-group:nth-child(2) > .form-control | \${KEY_ENTER} |
| user log-in | 8 click           | css=tr:nth-child(4) .pull-right              |               |
|             | 9 click           | css=.bg                                      |               |
|             | 10 click          | css=input:nth-child(11)                      |               |
|             | 11 click          | css= btn:nth-child(15)                       |               |
|             | 12 click          | css= btn:nth-child(15)                       |               |
|             | 13 click          | css=input:nth-child(5)                       |               |
|             | 14 click          | css= btn:nth-child(15)                       |               |

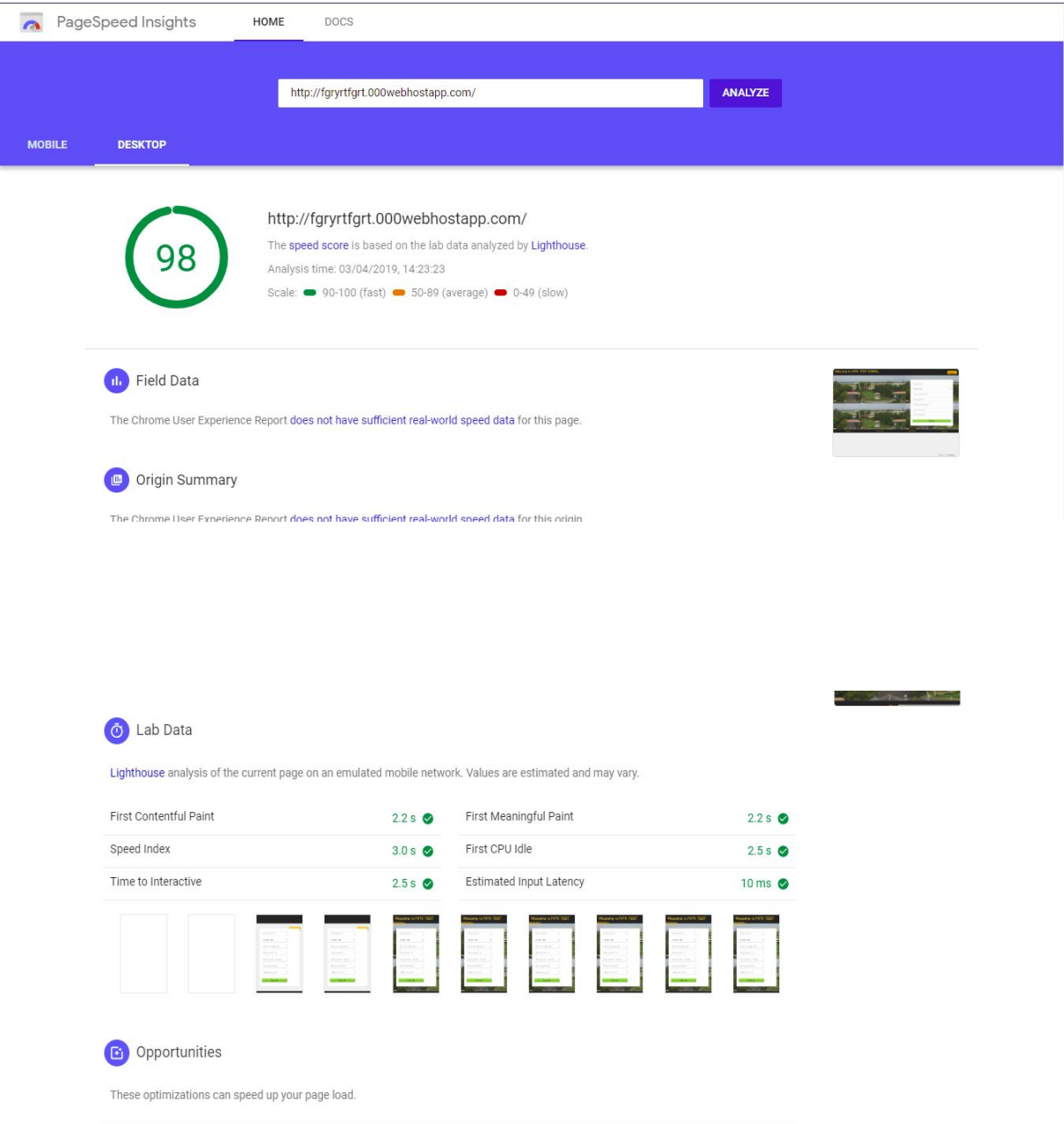
## 6.login test

| Untitled    | Command           | Target                            | Value          |
|-------------|-------------------|-----------------------------------|----------------|
| about       | 1 open            | http://localhost/Online/index.php |                |
| developers  | 2 set window size | 1346x708                          |                |
| feedback    | 3 click           | css=b                             |                |
| log-in*     | 4 click           | id=email                          |                |
| login test  | 5 type            | id=email                          | qwer@gmail.com |
| sign-up     | 6 click           | id=password                       |                |
| user log-in | 7 click           | id=password                       |                |
|             | 8 double click    | id=password                       |                |
|             | 9 type            | id=password                       | qwertyuiop     |
|             | 10 click          | css= btn:nth-child(2)             |                |
|             | 11 click          | linkText=Ranking                  |                |
|             | 12 click          | linkText=History                  |                |
|             | 13 click          | css=li:nth-child(1) > a           |                |

## 7.Signup

| Untitled    |    | Command         | Target                            | Value              |
|-------------|----|-----------------|-----------------------------------|--------------------|
|             | 1  | open            | http://localhost/Online/index.php |                    |
| about       | 2  | set window size | 1346x708                          |                    |
| developers  | 3  | click           | id=name                           |                    |
| feedback    | 4  | type            | id=name                           | nimish mangalaaa   |
| log-in*     | 5  | select          | id=gender                         | label=Male         |
| login test  | 6  | type            | id=college                        | nitk               |
| sign-up     | 7  | type            | css=col-md-12 > #email            | nimish11@gmail.com |
|             | 8  | type            | id=mob                            | 1234567890         |
| user log-in | 9  | type            | css=col-md-12 > #password         | qwertyuiop         |
|             | 10 | type            | id=cpassword                      | qwertyuiop         |
|             | 11 | click           | css=sub                           |                    |
|             | 12 | click           | css=tr:nth-child(8).glyphicon     |                    |
|             | 13 | click           | css=btn:nth-child(3)              |                    |

# Performance Testing



|    |  |                           |   |
|----|--|---------------------------|---|
| ✓  | Passed audits                          | 14 audits                 | ^ |
| 1  | Defer offscreen images                 | ✓                         | ✓ |
| 2  | Minify CSS                             | ✓                         | ✓ |
| 3  | Efficiently encode images              | ✓                         | ✓ |
| 4  | Enable text compression                | ✓                         | ✓ |
| 5  | Preconnect to required origins         | ✓                         | ✓ |
| 6  | Server response times are low (TTFB)   | Root document took 230 ms | ✓ |
| 7  | Avoid multiple page redirects          | ✓                         | ✓ |
| 8  | Preload key requests                   | ✓                         | ✓ |
| 9  | Use video formats for animated content | ✓                         | ✓ |
| 10 | Avoids enormous network payloads       | Total size was 876 KB     | ✓ |
| 11 | Avoids an excessive DOM size           | 161 nodes                 | ✓ |
| 12 | User Timing marks and measures         | ✓                         | ✓ |
| 13 | JavaScript execution time              | 0.2 s                     | ✓ |
| 14 | Minimizes main-thread work             | 0.7 s                     | ✓ |

## After changing the grades in the performance testing



http://fgryrtfgt.000webhostapp.com/  
 The **speed score** is based on the lab data analyzed by [Lighthouse](#).  
 Analysis time: 03/04/2019, 14:31:36  
 Scale: ■ 90-100 (fast) ■ 50-89 (average) ■ 0-49 (slow)

### Field Data

The Chrome User Experience Report **does not have sufficient real-world speed data** for this page.



### Origin Summary

The Chrome User Experience Report **does not have sufficient real-world speed data** for this origin.

### Lab Data

[Lighthouse](#) analysis of the current page on an emulated mobile network. Values are estimated and may vary.

First Contentful Paint

0.6 s ✓


First Meaningful Paint

0.6 s ✓



## Lab Data


Lighthouse analysis of the current page on an emulated mobile network. Values are estimated and may vary.

|  |       |   |                         |       |   |
|--|-------|---|-------------------------|-------|---|
| First Contentful Paint   | 0.6 s | ✓ | First Meaningful Paint  | 0.6 s | ✓ |
| Speed Index  | 1.2 s | ✓ | First CPU Idle          | 0.6 s | ✓ |
| Time to Interactive  | 0.6 s | ✓ | Estimated Input Latency | 10 ms | ✓ |
|  |       |   |                         |       |   |

## Opportunities

These optimizations can speed up your page load.

| Opportunity                           | Estimated Savings |
|---------------------------------------|-------------------|
| 1 Eliminate render-blocking resources | 0.54 s            |
| 2 Properly size images                | 0.48 s            |

|  |       |   |                         |       |   |
|--|-------|---|-------------------------|-------|---|
| First Contentful Paint   | 0.6 s | ✓ | First Meaningful Paint  | 0.6 s | ✓ |
| Speed Index  | 1.0 s | ✓ | First CPU Idle          | 0.6 s | ✓ |
| Time to Interactive  | 0.6 s | ✓ | Estimated Input Latency | 10 ms | ✓ |
|  |       |   |                         |       |   |

## Opportunities

These optimizations can speed up your page load.

| Opportunity                           | Estimated Savings |
|---------------------------------------|-------------------|
| 1 Eliminate render-blocking resources | 0.54 s            |
| 2 Properly size images                | 0.48 s            |
| 3 Serve images in next-gen formats    | 0.4 s             |

## Diagnostics

More information about the performance of your application.



## PageSpeed Insights

HOME DOCS

|    |  |                              |
|----|--|------------------------------|
| 1  | Defer offscreen images                 | ✓                            |
| 2  | Minify CSS                             | ✓                            |
| 3  | Minify JavaScript                      | Potential savings of 45 KB ✓ |
| 4  | Defer unused CSS                       | Potential savings of 26 KB ✓ |
| 5  | Efficiently encode images              | ✓                            |
| 6  | Enable text compression                | ✓                            |
| 7  | Preconnect to required origins         | ✓                            |
| 8  | Server response times are low (TTFB)   | Root document took 250 ms ✓  |
| 9  | Avoid multiple page redirects          | ✓                            |
| 10 | Preload key requests                   | ✓                            |
| 11 | Use video formats for animated content | ✓                            |
| 12 | Avoids enormous network payloads       | Total size was 876 KB ✓      |
| 13 | Avoids an excessive DOM size           | 161 nodes ✓                  |
| 14 | User Timing marks and measures         | ✓                            |
| 15 | JavaScript execution time              | ✓                            |

https://www.webpagetest.org/performance\_optimization.php?test=190403\_77\_fa62f253f9e6d602c738c0aded38f1e&run=1#use\_of\_cdn

AppsWhatsAppList of MBA Speciali...Linear Regression T...An Introduction to...Engi Marketing-17...Adding a Google M...Slides for CIS 675 [...Dashboard | IRIS127.0.0.1

Details

First Byte Time (back-end processing): 100/100

153 ms First Byte Time  
298 ms Target First Byte Time

Use persistent connections (keep alive): 100/100



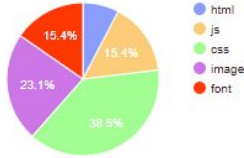
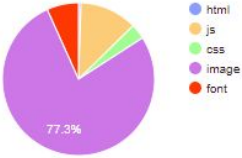
Use gzip compression for transferring compressable responses: 88/100

182.2 KB total in compressible text, target size = 159.4 KB - potential savings = 22.8 KB  
FAILED - (41.1 KB, compressed = 18.3 KB - savings of 22.8 KB) - http://fgrtyrtgrt.000webhostapp.com/fonts/typo.ttf

Compress Images: 99/100

673.2 KB total in images, target size = 665.3 KB - potential savings = 7.8 KB  
WARNING - (53.5 KB, compressed = 45.7 KB - savings of 7.8 KB) - http://fgrtyrtgrt.000webhostapp.com/image/oppo.jpg

Test Results

|                        |   |   |
|------------------------|---|---|
| Run 1:                 | Waterfall   | Screenshot  |
| First View<br>(1.816s) |   |  |
| Content Breakdown      | <div><div>Requests</div><div><div>html</div><div>js</div><div>css</div><div>image</div><div>font</div></div></div> <div><div>Bytes</div><div><div>html</div><div>js</div><div>css</div><div>image</div><div>font</div></div></div> |   |

Page Details

|                             |                            |                  |
|-----------------------------|----------------------------|------------------|
| Fully Loaded Time<br>1.1s ^ | Total Page Size<br>881KB ^ | Requests<br>14 ^ |
|-----------------------------|----------------------------|------------------|