

## 1) Use cases For Quiz Application: -

### 1) Name: Registry

**Participating actor:** User

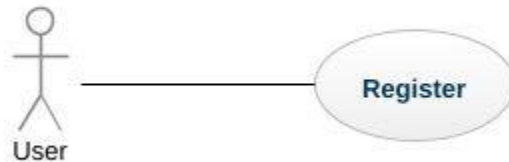
**Entry Condition:**

- User is on registry page
- User should have mail id

**Event Flow:**

- User enters Username
- User enters Email Id
- User enter & set their password
- User clicks on register button

**Exit Condition:** Users account is successfully created



### 2) Name: Login

**Participating actor:** User & Admin

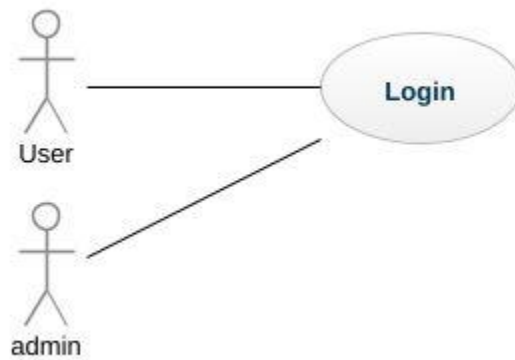
**Entry Condition:**

- Actor is on login page
- actor should have their own Login credentials

**Event Flow:**

- actor enters their Username
- actor enters their password
- actor clicks on login button

**Exit Condition:** actor successfully logon



### 3) Name: Viewing Categories

**Participating actor:** User

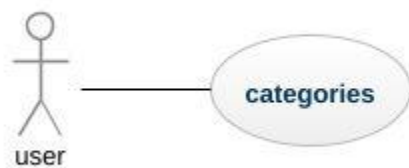
**Entry Condition:**

- User should login

**Event Flow:**

- User views the different categories displayed
- User selects a category

**Exit Condition:** Users enters into the desired category



### 4) Name: Beginner level

**Participating actor:** User

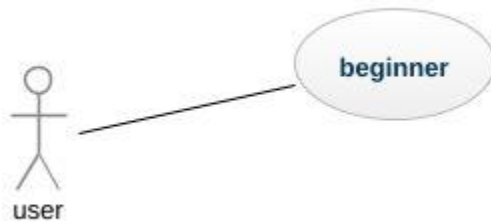
**Entry Condition:**

- User should have selected the desired category

**Event Flow:**

- User clicks on the beginner level category
- Users clicks on the start quiz button

- **Exit Condition:** Users successfully starts beginner level quiz



#### 5) Name: Intermediate level

**Participating actor:** User

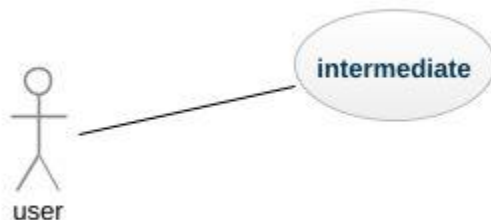
**Entry Condition:**

- User should have completed beginner level

**Event Flow:**

- User clicks on the intermediate level category
- Users clicks on the start quiz button

**Exit Condition:** Users successfully starts intermediate level quiz



#### 6) Name: Expert level

**Participating actor:** User

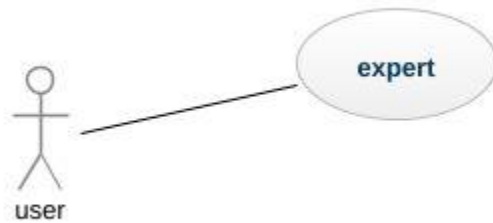
**Entry Condition:**

- User should have completed intermediate level

**Event Flow:**

- User clicks on the expert level category
- Users clicks on the start quiz button

**Exit Condition:** Users successfully starts expert level quiz



#### 7) Name: User feedback

**Participating actor:** User

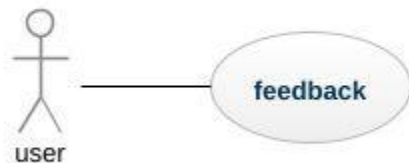
**Entry Condition:**

- User should have completed a quiz

**Event Flow:**

- User enters feedback in the box displayed
- User clicks submit button

**Exit Condition:** Users successfully gives feedback



#### 8) Name: Certificate of Appreciation

**Participating actor:** User

**Entry Condition:**

- User should have completed quiz at expert level

**Event Flow:**

- User clicks on view certificate button

**Exit Condition:** Users successfully views certificate



#### 9) Name: View results

**Participating actor:** User

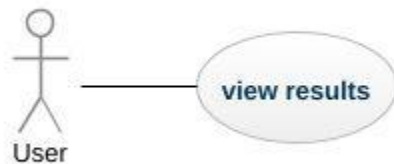
**Entry Condition:**

- User starts the quiz

**Event Flow:**

- User answers the quiz questions
- User clicks on submit button

**Exit Condition:** Users successfully views results



#### 10) Name: Creating Categories

**Participating actor:** Admin

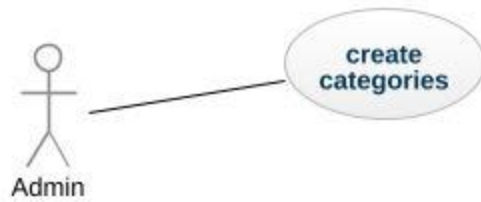
**Entry Condition:**

- Admin should have Logged in

**Event Flow:**

- Admin clicks on create/add category button
- Admin names the category that he created
- Admin clicks on done button

**Exit Condition:** A new category is successfully created



### 11) Name: Editing Categories

**Participating actor:** Admin

**Entry Condition:**

- Category should already be existing

**Event Flow:**

- Admin selects the category
- Admin clicks on edit category button
- Admin makes the changes in the category
- Admin clicks on done button

**Exit Condition:** Admin successfully edits the category



### 12) Name: Deleting Categories

**Participating actor:** Admin

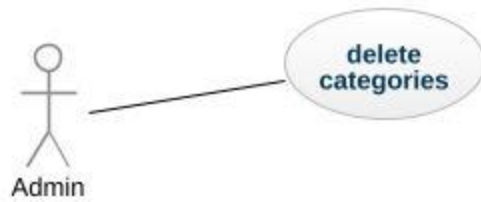
**Entry Condition:**

- Category should already be existing

**Event Flow:**

- Admin selects the category
- Admin clicks on the delete button

**Exit Condition:** Admin successfully deletes the category



**13) Name: Viewing Categories**

**Participating actor:** Admin

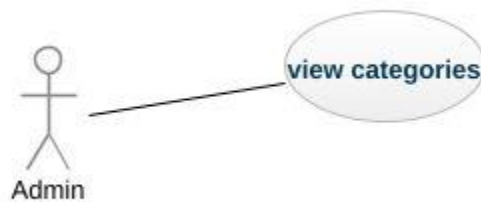
**Entry Condition:**

- Category should already be existing

**Event Flow:**

- Admin selects the category that he desires to view

**Exit Condition:** Admin can successfully view the category



**14) Name: Creating Quiz**

**Participating actor:** Admin

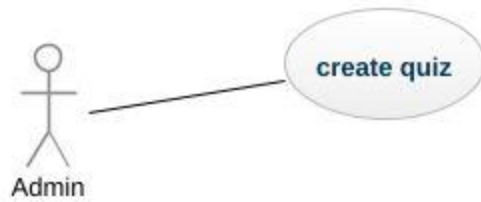
**Entry Condition:**

- Admin should select a category

**Event Flow:**

- Admin clicks on create/add quiz button
- Admin names the quiz that he creates
- Admin clicks on done button

**Exit Condition:** Admin successfully creates quiz



### 15) Name: Editing Quiz

**Participating actor:** Admin

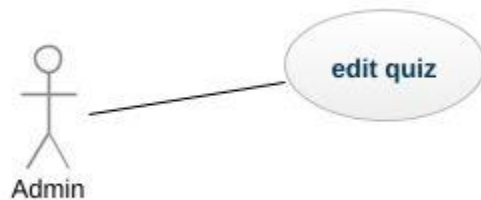
**Entry Condition:**

- Admin should select a category
- Admin should select a quiz that is existing

**Event Flow:**

- Admin clicks on edit button
- Admin makes the necessary changes
- Admin clicks on done button

**Exit Condition:** Admin successfully edits quiz



### 16) Name: Deleting Quiz

**Participating actor:** Admin

**Entry Condition:**

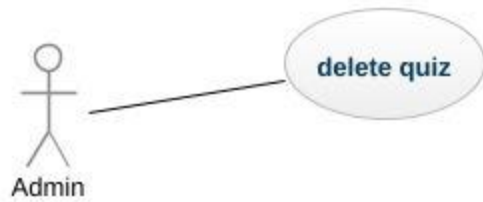
- Admin should select a category
- Admin should select a quiz that is already existing

**Event Flow:**

- Admin clicks on delete quiz button
- Admin clicks on done button

**Exit Condition:** Admin successfully deletes quiz





**17) Name: Viewing Quiz**

**Participating actor:** Admin

**Entry Condition:**

- Quiz should be already existing

**Event Flow:**

- Admin selects a quiz

**Exit Condition:** Admin successfully views quiz



**18) Name: Creating Quiz Questions**

**Participating actor:** Admin

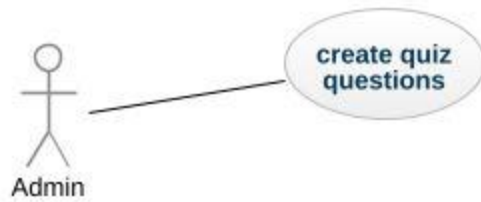
**Entry Condition:**

- Admin should select a category
- Admin should select a quiz level

**Event Flow:**

- Admin clicks on create/add quiz question button
- Admin enters the details for the question
- Admin clicks on done button

**Exit Condition:** Admin successfully creates quiz question



### 19) Name: Editing Quiz Questions

**Participating actor:** Admin

**Entry Condition:**

- Admin should select quiz level
- Quiz question should be existing

**Event Flow:**

- Admin clicks on Edit quiz question button
- Admin edits the details of question
- Admin clicks on done button

**Exit Condition:** Admin successfully edits quiz question



### 20) Name: Deleting Quiz Questions

**Participating actor:** Admin

**Entry Condition:**

- Admin should select quiz level
- Quiz question should be existing

**Event Flow:**

- Admin clicks on delete quiz question button
- Admin clicks on done button

**Exit Condition:** Admin successfully deletes quiz question



### 21) Name: Viewing Quiz Question

**Participating actor:** Admin

**Entry Condition:**

- Admin should select a category
- Quiz question should already be existing

**Event Flow:**

- Admin selects a quiz question

**Exit Condition:** Admin successfully views quiz question



### 22) Name: Viewing Scores

**Participating actor:** Admin

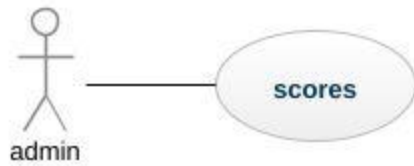
**Entry Condition:**

- User should have taken quiz.

**Event Flow:**

- Admin should select a particular category
- Admin should click on the view progress button

**Exit Condition:** admin can successfully view the scores.



### 23) Name: Viewing Feedback

**Participating actor:** Admin

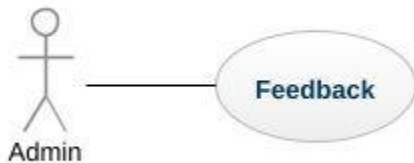
**Entry Condition:**

- User should take quiz.
- User should have provided a feedback

**Event Flow:**

- Admin clicks on view progress button
- Admin selects a particular users progress

**Exit Condition:** Admin can successfully view the feedback.



### 24) Name: Logout

**Participating actor:** User & Admin

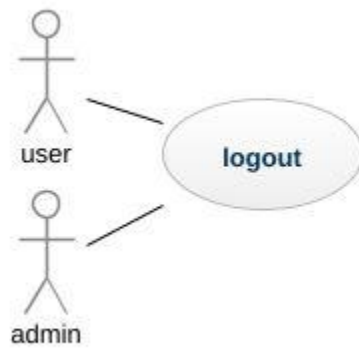
**Entry Condition:**

- Actor should be logged in

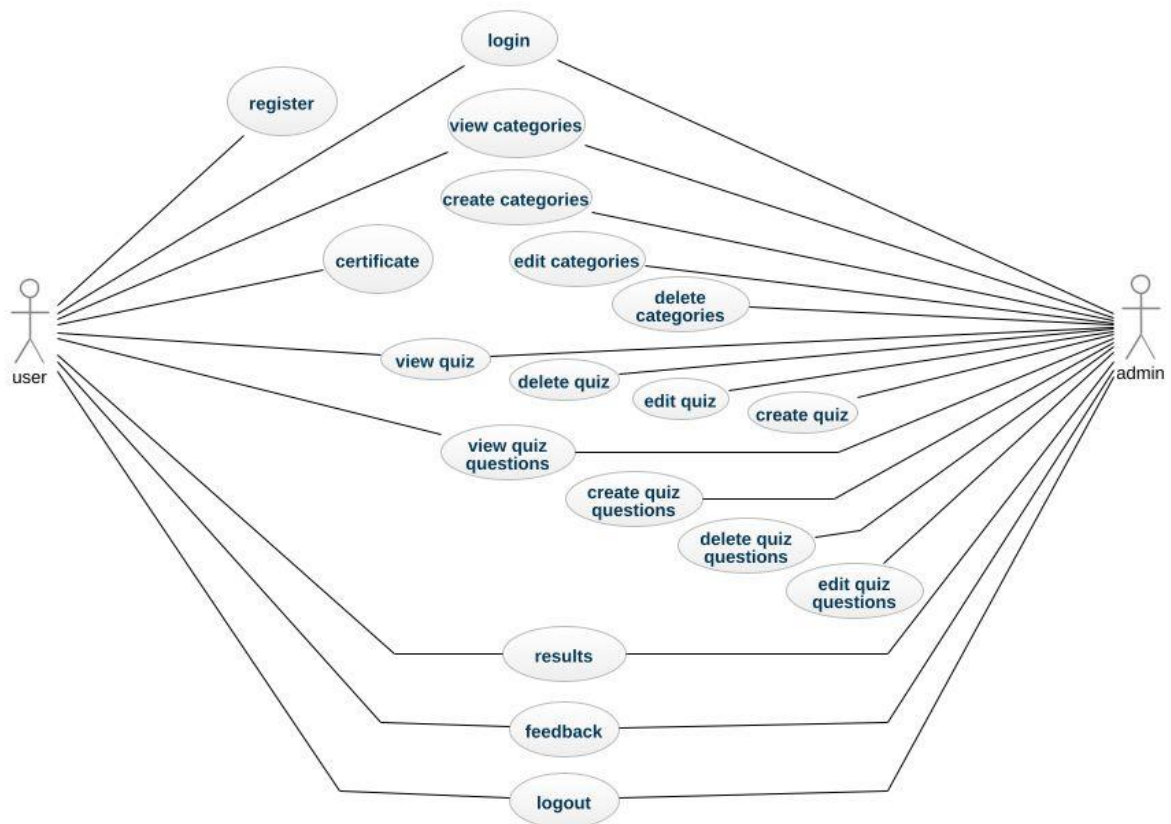
**Event Flow:**

- actor clicks on logout button after completing their operations

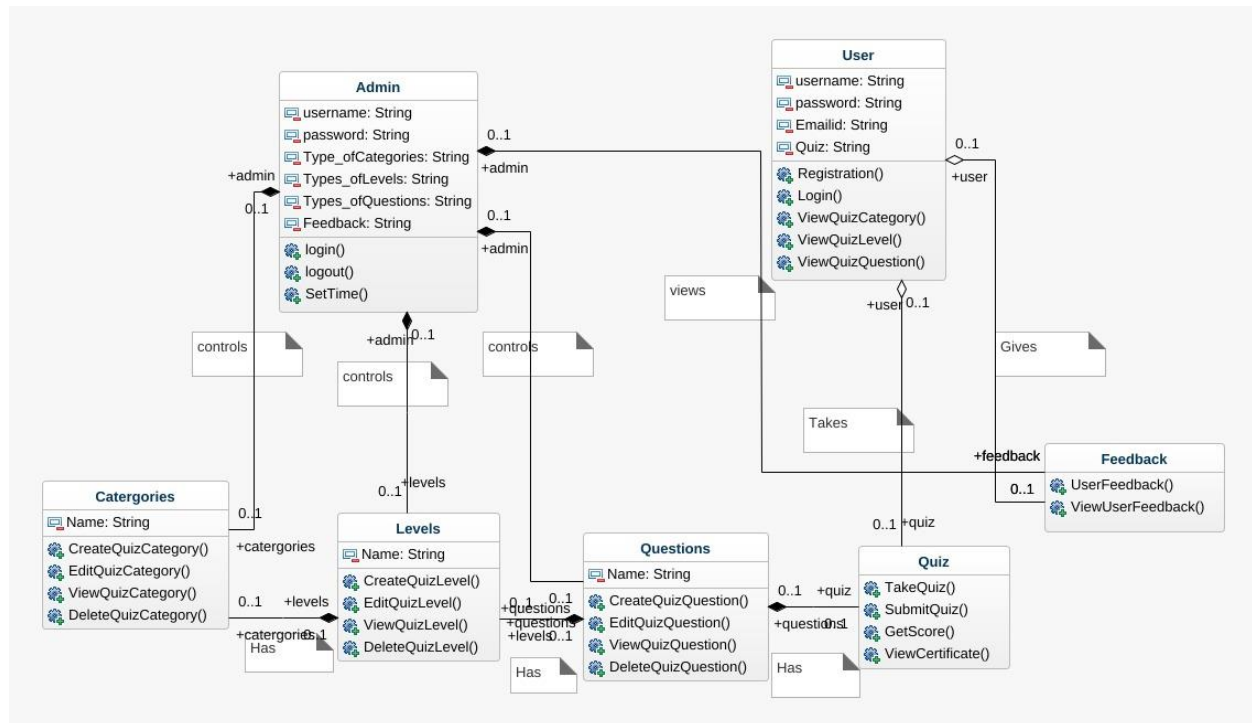
**Exit Condition:** actor successfully gets logged out



### Use Case Diagram: -



## Class Diagram: -



The reason we have decided to make the classes mentioned in the diagram are class diagrams are the blueprints of our project. We can use class diagrams to model the objects that make up the system, to display the relationships between the objects, and to describe what those objects do and the operations that they perform. Class diagrams are useful in many stages of system design, during the implementation phase it can be applied to generate source code by checking the classes and their operations.

The relationship between the class Admin and classes (Category, Levels, Questions) is **Composition** as Admin (Parent object) owns the child objects (Category, Levels, Questions). And the relationship between class User and classes (Quiz, Feedback) is **Aggregation** as objects of class User and classes (Quiz, Feedback) have separate lifetimes and has no owner. And the classes (Categories, levels, questions and quiz) has **composition** relationship between them as they are linked to each other and Has –A relation

## 3) Validation Tests: -

Test Case No.	Traces to Requirement No.	Test Steps	Expected Output	Comments	Pass/Fail
1	3.i. A. i	1. Launch the Quiz web application. 2.the user clicks on sign up 3.The User enters his username as "BobDave23" Password as QWERTY@123 First name as Bob Last name as dave Mobile as 4655466782 Email as <a href="mailto:bobdave23@gmail.com">"bobdave23@gmail.com"</a> And selects a profile pic from his PC 4.clicks on sign up	The User successfully gets registered	This test worked successfully	Pass
2	3.i. A. i	1. Launch the Quiz web application. 2..The User enters his username as "BobDave23" And types his Password as "QWERTY@1"	The User doesn't get registered Successfully as user entered incorrect inputs.	This test worked successfully	Pass
3	3.i. A. ii	1. Launch the Quiz web application. 2. .The User enters his username as "BobDave23" and types his Password as "QWERTY@123"	The User gets logged on to the quiz application	This test worked successfully	Pass

4	3.i.A.iii	1.The user clicks on edit profile 2.the user clicks on choose profile photo 3.user clicks on submit	The User has successfully added profile picture	This test has worked correctly	pass
5	3.i.A.iii	1.The user clicks on edit profile 2.the user checks on clear profile photo option 3.user clicks on submit	The User has successfully edited/deleted profile picture	This test has worked correctly	pass
6	3.i.B. iv	1.the user clicks on exam	The User gets to view all the available quiz categories.	This test has worked correctly	pass
7	3.i.B. v	The User clicks on the Python Quiz category.	The python Quiz category opens up to the user.	This test has worked correctly	Pass



8	3.i.B.vi	<p>1. User will be able to see three cards with beginner level, intermediate level and expert level respectively. (Provided intermediate and expert levels are non-clickable or shadowed)</p> <p>2. Clicking a beginner level card</p>	Corresponding questions will be opened post clicking beginner level button	This test has worked correctly	Pass
9	3.i.B.vi	<p>1. The User will be able to see three cards with beginner level, intermediate level and expert level respectively. (Provided intermediate and expert levels are non-clickable or shadowed)</p> <p>2. The User clicks on the intermediate level button</p>	No action is done	This test has worked correctly	Pass
10	3.i.B.vi	<p>1. The User will be able to see three cards with beginner level, intermediate level and expert level respectively. (Provided intermediate and expert levels are non-clickable or shadowed)</p> <p>2. The User clicks on the expert level button</p>	No action done	This test has worked correctly	Pass
11	3.i.B.vi	<p>1. The User clicks on the Beginner level</p> <p>2. The User chooses answers "c,d,a,c,d,a,a,b.c.b". The student clicks submit and he completes the beginner level quiz</p> <p>3. the user gives feedback after quiz</p>	The User finishes the beginner level of the quiz.	This test has worked correctly	pass

12	3.i.B.vi	<p>1.The User clicks on the Intermediate level</p> <p>2.The User chooses answers "c,a,c,d,a,c,b,a,b,c".</p> <p>3.The User clicks submit and he completes the intermediate quiz</p> <p>4.The user gives feedback after the quiz</p>	The User finishes the intermediate level of the quiz.	This test worked correctly	Pass
13	3.i.B.vi	<p>1.The User clicks on the expert level</p> <p>2.The User chooses answers "b,b,a,d,c,d,b,c,d,c".</p> <p>3.The User clicks submit and he completes the quiz</p> <p>4.the user gives feedback after quiz</p>	The User finishes the expert level of the quiz	This test worked correctly	Pass
14	3.i.B.vi	<p>1.The User clicks on the expert level.</p> <p>2.The User chooses answers "b,b,a,d,a,a,a,a,a ".</p> <p>3.The User clicks submit and he completes the quiz</p>	The User will not get the certification as user didn't finished expert level with 100% score	This test worked correctly	Pass
15	3.i.B.vi	1.the user clicks on get certificate after completing the expert level with 100% score	The User will be able to view his certificate	This test worked correctly	Pass

16	3.i.B.vii	1.the user clicks on marks category 2.the user clicks on view marks	The User can see the score of the taken quiz	This test worked correctly	pass
17.	3.i.B.viii	1.after every attempt of quiz the user will be prompted with feedback box 2.the user enters feedback 3.the user clicks on submit	The User gives feedback	This test worked correctly	pass
18	3.i.B.ix	1.The quiz starts with a timer of 60 seconds per question (10 questions * 60secs per questions = 10mintues) 2.user clicks on submit within the given time	The User completes the quiz and move on to next quiz	This test worked correctly	pass
19	3.i.B.ix	1.The quiz starts with a timer of 60 seconds per question (10 questions * 60secs per questions = 10mintues) 2.The user doesn't click on submit	The quiz is auto-submitted if the user answers all correctly he moves onto next quiz or he fails	This test worked correctly	Pass
20	3.i.B.X	1.the user clicks on marks category 2.the user clicks on view marks	The user will be able to pass marks and attempts	This test worked correctly	Pass

21.	3.i.B. xi	1.The User clicks on the “logout” button on the top corner of the application page	The User is logged out from the application	This test worked correctly	Pass
22	3.i.B.xii	1.The user clicks on edit profile 2.the user edits his details Username Bobmarly Password 12345 First name as bob Last name as marly Email as bob@gmail.com Phone as 0123456789 3.user clicks on submit	The user successfully edits his details	This test worked correctly	Pass
23.	3.ii.A. i	1.Launch the Quiz web application. 2.The Admin enters his username as “admin” and types his Password as “admin” 3.The admin clicks on login button	The Admin gets logged on to the quiz application	This test worked correctly	Pass
24.	3.ii.A.i	1.Launch the Quiz web application. 2.The Admin enters his username as “Bob” and types his Password as “Admin@1”	The Admin doesn’t get logged on to the quiz application	This test worked correctly	Pass
25.	3.ii.B. ii	1.The admin clicks on student category 2.the admin clicks on total students 3.admin clicks on a particular user	The Admin will be able to view the details of the student/user	This test worked correctly	Pass

26	3.ii.B. ii	1.The admin clicks on student category 2.the admin clicks on total students 3.admin clicks on update button 4.the admin makes changes 5.the admin clicks on submit	The Admin successfully edits user details	This test Worked correctly	Pass
27	3.ii.B. ii	1.The admin clicks on student category 2.the admin clicks on total students 3.admin clicks on delete button	The Admin successfully deleted a student/user	This Test worked correctly	Pass
28	3.ii.B.iii	1.the admin clicks on questions category 2.the admin clicks on add question 3.the user selects course Level, enter a desired question, gives marks, gives the options and selects the correct option 3.clicks on submit	The Admin will create quiz questions successfully.	This test worked successfully	Pass
29	3.ii.B.iii	1.the admin clicks on questions category 2.the admin clicks on view questions category 3.clicks on view questions button	The Admin will view quiz questions successfully.	This test worked correctly	Pass
30	3.ii.B.iii	1.the admin clicks on questions category 2.the admin clicks on view questions category 3.clicks on view questions button 4.the user clicks on edit button 3.the user selects course Level, enter a desired	The Admin will edit the quiz questions successfully.	This test worked correctly	Pass

		question, gives marks, gives the options and selects the correct option 5.clicks on submit			
31	3.ii.B.iii	1.the admin clicks on questions category 2.the admin clicks on view questions category 3.clicks on view questions button 4.The admin clicks on delete button	The Admin will delete the quiz questions successfully.	This test worked correctly	Pass
32	3.ii.B.iv	1.The admin clicks on courses category 2.clicks on add course 3.gives the course name, total questions and total marks 4.clicks on add button	The Admin will create quiz category successfully.	This test worked correctly	Pass
33	3.ii.B.iv	1.admin clicks on course category 2.clicks on view course	The Admin will view categories of quizzes successfully.	This test worked correctly	Pass
34	3.ii.B.iv	1.admin clicks on course category 2.clicks on view course 3.clicks on edit button 4.gives the course name, total questions and total marks 5.clicks on submit button	The Admin will edit the categories of quizzes successfully.	This test worked correctly	Pass

35	3.ii.B. iv	1.admin clicks on course category 2.clicks on view course 3.clicks on delete button	The Admin will delete categories of quizzes successfully.	This test worked correctly	Pass
36	3.ii.B. v	1.the admin clicks on questions category 2.the admin clicks on add question 3.the user selects course Level, enter a desired question, gives marks, gives the options and selects the correct option 3.clicks on submit	The admin successfully selects the answer for the question	This test worked correctly	Pass
37	3.ii.B.vi	1.the admin selects student category 2.admin clicks on student marks category 3.admin clicks on view marks for a specified user 4.clicks on a view marks on a particular quiz	Admin is successfully able to see the marks and progress of the user	This test works correctly	Pass
38	3.ii.B.vii	1. Admin clicks on the course category 2. clicks on view courses 3.clicks on feedbacks	The admin will be able to view the feedbacks given by the users	This test worked correctly	Pass
39	3.ii.B.viii	The admin clicks on the "logout" button on the top corner of the application page	The admin will be successfully logged out of the application.	This test worked correctly	Pass