**[CIS 634 OBJECT ORIENTED SOFTWARE ENGINEERING SECTION 50](https://bb-csuohio.blackboard.com/webapps/blackboard/execute/courseMain?course_id=_129878_1" \o "Fall 20 (1) CIS 634 Object-Oriented Software Engr Section 50)**

**SOFTWARE PROTOTYPE**

**QUIZ APPLICATION**

**Group 8**

**Group members:**

1. **Bheemavarapu kavya Chowdary**
2. **Nuthakki Bhargav**
3. **Chakkala Sai Pujith**

**About Application:**

**A platform for users to participate in various categories of quiz’s provided by the application.**

**Admin Features:**

1. Adding questions
2. Deleting questions
3. Updating questions
4. Adding ,deleting , Updating quiz’s categories

**User Features:**

1. Registering
2. Participating in quizzes
3. Viewing results

**Technologies : MERN STACK**

1. **Front-end: React Js**
2. **Middleware: Express Js**
3. **Database: MongoDB**
4. **Platform: Node Js**
5. **Environment: visual studio code**

MERN Stack is a Javascript Stack that is used for easier and faster deployment of full-stack web applications. MERN Stack comprises of 4 technologies namely: [MongoDB](https://www.geeksforgeeks.org/mongodb-an-introduction/), [Express](https://www.geeksforgeeks.org/introduction-to-express/), [React](https://www.geeksforgeeks.org/react-js-introduction-working/) and [Node.js.](https://www.geeksforgeeks.org/introduction-to-nodejs/) It is designed to make the development process smoother and easier.

React is an open-source, front end, JavaScript library for building user interfaces or UI components.

MongoDB is a NoSQL database where each record is a document comprising of key-value pairs that are similar to JSON (JavaScript Object Notation) objects. MongoDB is flexible and allows its users to create schema, databases, tables, etc. Documents that are identifiable by a primary key make up the basic unit of MongoDB.

Express is a Node.js framework. Rather than writing the code using Node.js and creating loads of Node modules, Express makes it simpler and easier to write the back-end code. Express helps in designing great web applications and APIs. Express supports many middlewares which makes the code shorter and easier to write

Node.js provides a JavaScript Environment which allows the user to run their code on the server (outside the browser).

**Tasks:**

**The project ,technologies ,functionalities and the UI design have been discussed and approved by the group members.**

**First step: Environment setup – Installations**

**Second step: Splitting and (Assigning)Taking up the tasks**

**Third step: Merging the individuals work**

**Fourth step: Testing the application**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **User story-Tasks** | **Assigned To** | **Start date** | **End date** |
| **1** | **Working on the project structure** | **kavya** | 09/16/20 | 09/18/20 |
| **2** | **Developing back end and setting up database** | **kavya** | 09/20/20 | 10/01/20 |
| **3** | **Front end – login page** | **kavya** | 10/02/20 | 10/05/20 |
| **4** | **Front end – welcome page** | **Pujith** | 09/24/20 | 09/28/20 |
| **5** | **Front end – Registration** | **kavya** | 10/06/20 | 10/08/20 |
| **6** | **Front end –Adding Assets** | **bhargav** | 09/19/20 | 09/23/20 |
| **7** | **Front end – questions page** | **bhargav** | 09/23/20 | 10/01/20 |
| **8** | **Front end – categories** | **bhargav** | 10/01/20 | 10/12/20 |
| **9** | **Front end – second page** | **Pujith** | 10/01/20 | 10/07/20 |
| **10** | **Front end – Testing** | **Pujith** | **1**0/14/20 | **1**0/16/20 |

**Application Specification:**

The landing page is a login page, any user or admin can login to the application using their respective login credentials.

For a new user ,they have to sign up for the application by filling out the required field on the registration page.

The welcome page of admin is different from the welcome page of user.

The admin can add , edit ,delete the quiz’s.There is a bulk upload feature in the app for admin to upload bulk data.The audio,picture and text format is acceptable for questions.

The user after login can select the categories of quiz which user wants to participate.

On completion of the quiz , results and overview of the correct answers will be displayed on request.

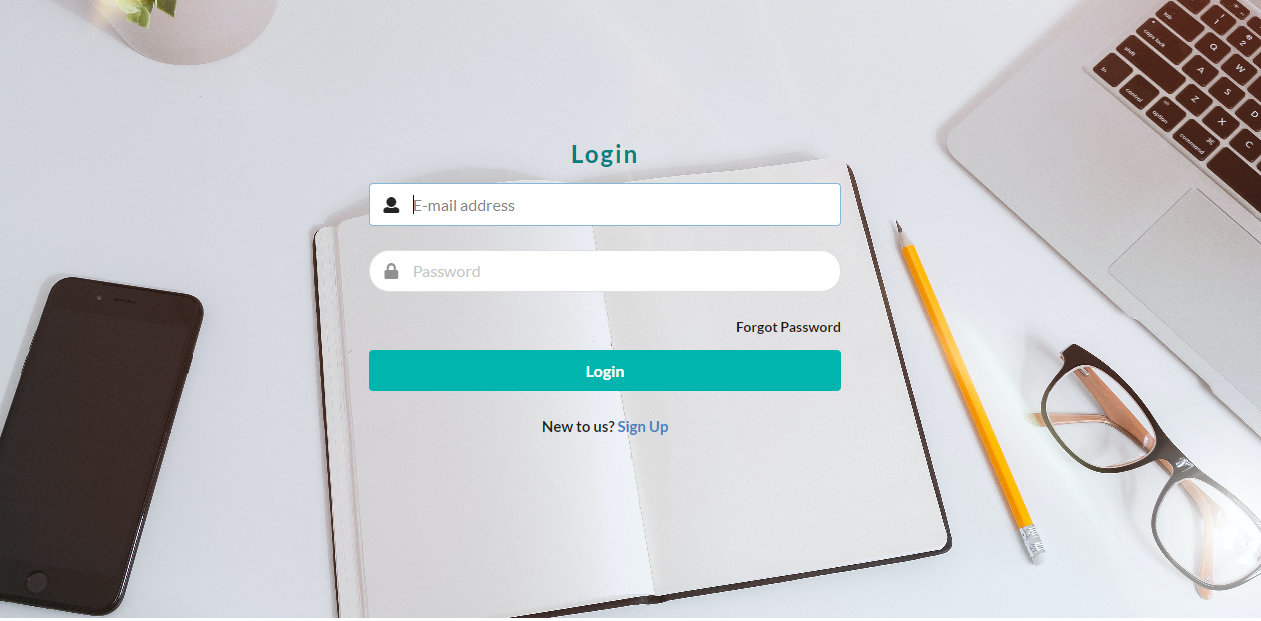
Note: There are few features which we are still working on.New features will be provided as a updated version of the application.

**SNAPSHOTS:**

**User story:**

As a admin or user ,Rachel wants to keep his activity secured , to prevent the unauthorized access to the application he wants a secured login access to his account .

**Login page - Can login by existing user**



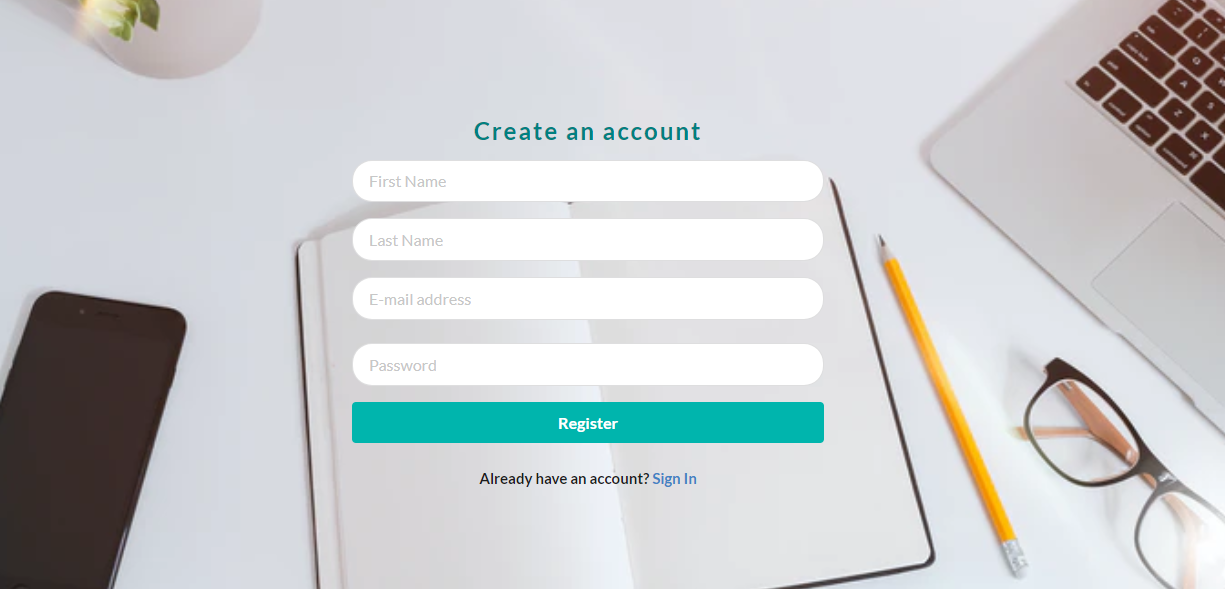
**Features of login page:**

Access is granted only if email id and password is matched in the database.

**User story:**

As a user, Rebecca wants to use the application in which her activity is secured and unauthorized access is denied.

**Registration Page – To register for participation by new user**



**Feature:**

A new user have to enter name, valid email id and password to create a account.

**User story:**

As a user Rebecca wants to check whether she is logged into her account or not.

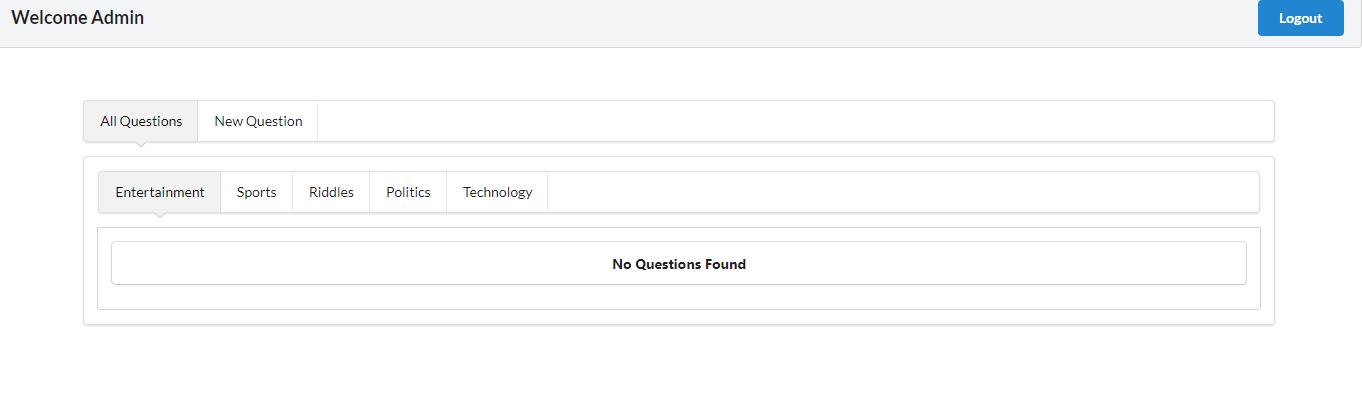
**User Quiz home page**



**User story:**

As a admin, Rachel wants to see what quiz’s are available and number of questions in each quiz.

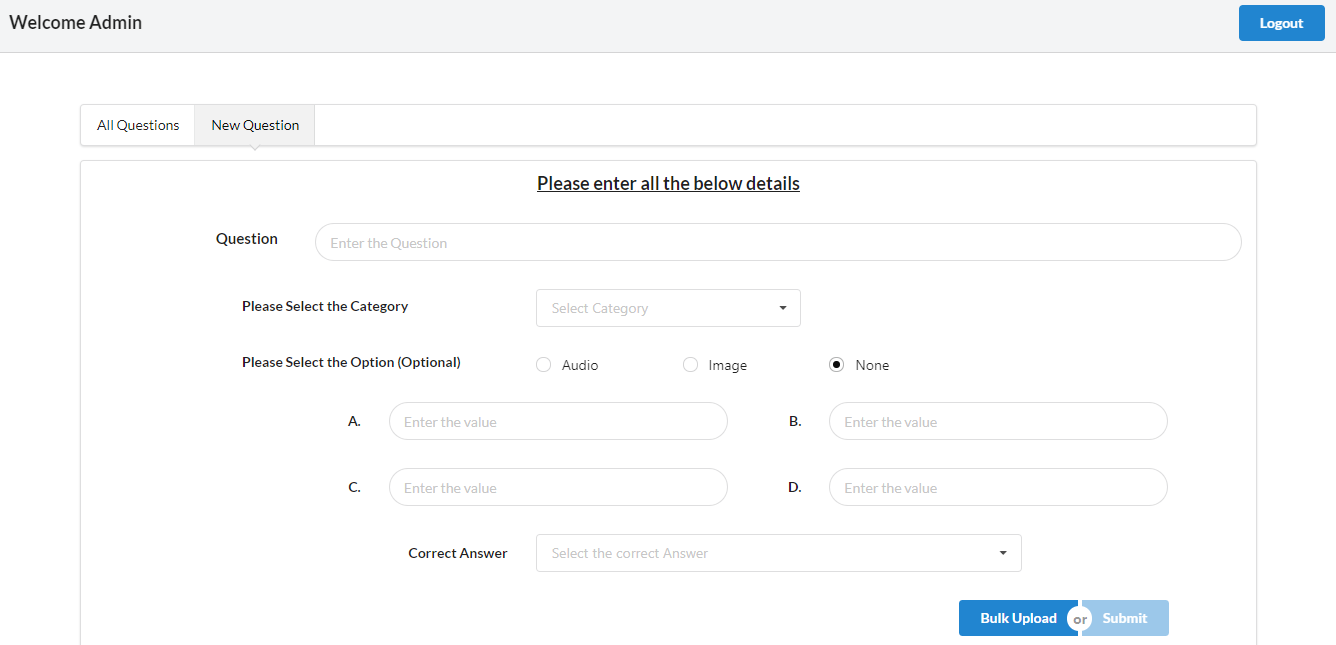
**Welcome page - admin**



**User story:**

As a admin ,Rachel wants to add different types of questions in each quiz.

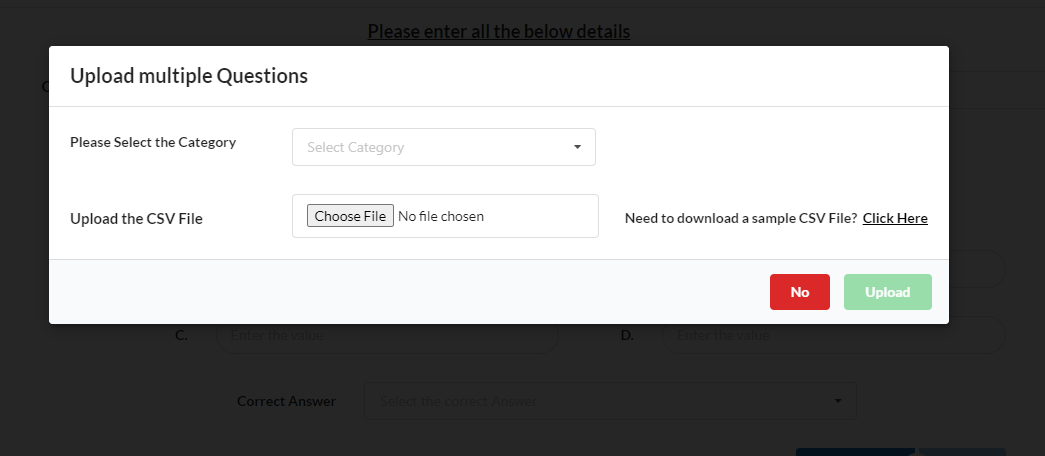
**Welcome page - admin**



**User story:**

As a admin ,Rachel wants to add many number of questions into a quiz at a time

**Welcome page - admin**



**User story:**

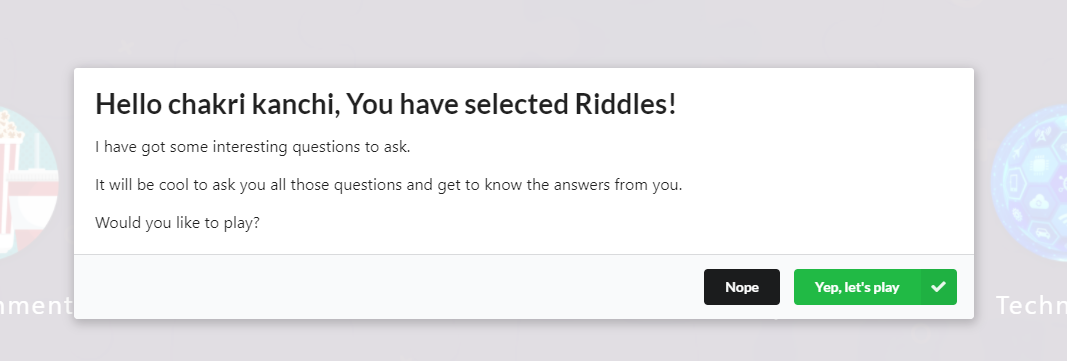
As a user,Rebecca wants to choose the category of quiz in which she wants to participate.

**Categories**



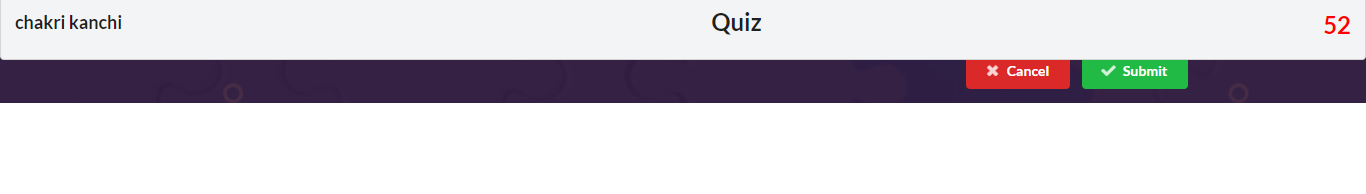
**User story:**

As a user,Rebecca wants to see if the category of quiz which she has selected is the one she is participating in .



**User story:**

As a user,Rebecca wants to know the time limit of the quiz and how much time has left

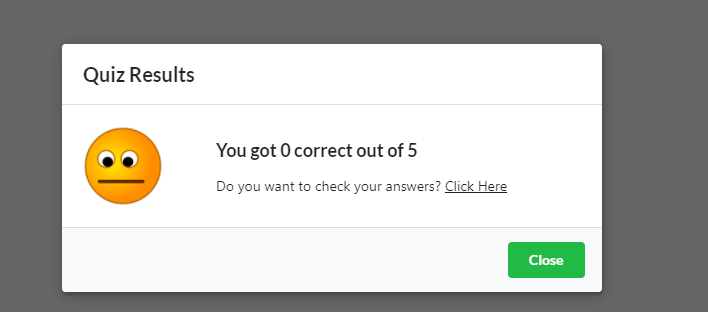


**Functionality:**

Timer will start from max limit to 0 when the quiz starts.

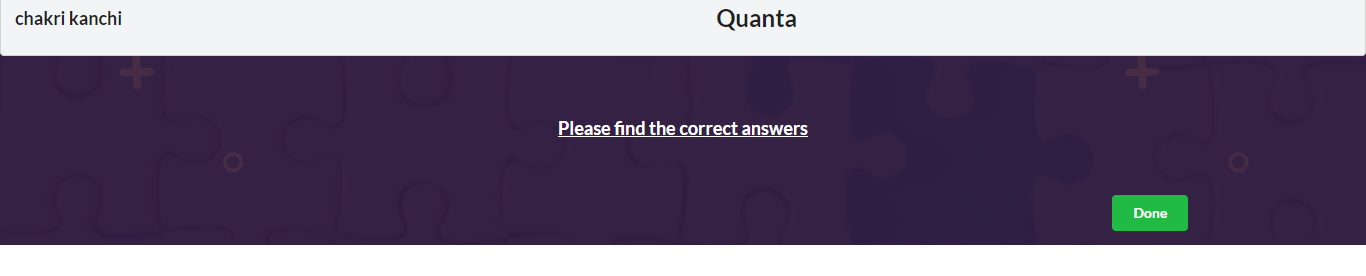
**User story:**

As a user, Rebecca wants to know how many answers of quiz which she has attempted are correct.



**User story:**

As a user, Rebecca wants see the correct answers of the quiz which she has participated.



**Need to add features :**

1. **Forgot password**
2. **Updating quiz categories**

**Additional features**

1. **Chat bot**
2. **Group quiz’s**