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**Section “D”**

**DBMS Project Name: Quiz App**

This is the README file for the Quiz App, a semester project of database subject developed by using React.js, Node.js, and MySQL database. The Quiz App allows users to participate in a quiz by answering multiple-choice questions and stores the user's information and score in a MySQL database.

**Project Structure**

The project consists of two main components: the frontend and the backend.

**Frontend:**

The frontend is developed using React.js, a popular JavaScript library for building user interfaces. The frontend provides a user-friendly interface for users to interact with the Quiz App. The following are the main components of the frontend:

**Login Page:** This page prompts the user to enter their name and email. It provides an input field for each and a login button to proceed to the quiz.

**Quiz Page:** This page displays three multiple-choice questions for the user to answer. The user can select one option for each question.

**Score Page:** After submitting the answers, the score page is displayed, showing the user's final score in the quiz.

**Backend**

The backend of the Quiz App is developed using Node.js, a JavaScript runtime environment, and utilizes the MySQL database for storing user data. The backend handles the following tasks:

**Database Connection:** The backend establishes a connection with the MySQL database.

**User Registration:** When a user logs in with their name and email, the backend stores the user's information in the database.

**Quiz Submission:** After the user completes the quiz, the backend calculates the user's score and saves it in the database along with their name and email.

**Prerequisites:**

To run the Quiz App on your local machine, ensure that you have the following software installed:

Node.js: <https://nodejs.org>

MySQL: <https://www.mysql.com>

**Usage:**

1. Go to `localhost:3000` in your browser

2. Enter your name and email and click `Login`

3. Answer the three simple questions.

4. Your score will be displayed

**Setup Instructions:**

To set up the Quiz App project, follow these steps:

Navigate to the project directory in the terminal run following commands:

cd Quiz-Frontend

npm install

npm start

**Configure the backend:**

Create a MySQL database for the project.

Add details of the your database (user, password and database name) in server.js file.

Open new terminal in the main project directory(Database Project):

Start the backend server run following command:

node server.js

Open your web browser and access the Quiz App at <http://localhost:3000>.

**Database Schema:**

The MySQL database schema for the Quiz App consists of a single table named quiz-info. This table stores the user's information and quiz score. The table schema is as follows:

**MySQL Query:**

CREATE TABLE quiz-info (

user\_name VARCHAR(25) NOT NULL,

email VARCHAR(50) NOT NULL,

quiz\_score INT NOT NULL

);

**Conclusion:**

The Quiz App is a semester project that demonstrates the use of React.js, Node.js, and MySQL database. It provides a simple and interactive quiz experience for users, allowing them to enter their name and email, answer multiple-choice questions, and view their final score. The project also integrates with a MySQL database to store user information and scores for future reference.