

- Define the data models:
 - User: Representing user details such as name, email, and password.
 - Quiz: Representing quiz details such as title, description, and duration.
 - Question: Representing individual quiz questions with options and correct answer.
 - Result: Representing user's quiz results, including the score.
-
- Create the necessary endpoints:
 - User Endpoints:
 - Register: POST request to create a new user account.
 - Login: POST request to authenticate and generate a user session token.
 - Logout: POST request to invalidate the user session token.
-
- Quiz Endpoints:
 - Create Quiz: POST request to create a new quiz.
 - Get Quiz: GET request to retrieve quiz details by ID.
 - List Quizzes: GET request to retrieve a list of all available quizzes.
-
- Question Endpoints:
 - Add Question: POST request to add a new question to a quiz.
-
- Result Endpoints:
 - Submit Quiz: POST request to submit user's quiz answers and calculate the score.
 - Get Result: GET request to retrieve user's quiz result by ID.
-
- Implement the business logic for each endpoint:
 - User Service: Implement user registration, authentication, and session management.
 - Quiz Service: Implement quiz creation, retrieval, and listing.
 - Question Service: Implement question addition, retrieval, and listing for a specific quiz.
 - Result Service: Implement quiz submission, result calculation, and retrieval.
-
- Configure the database and data access:
 - Set up the database connection and define the necessary entities (User, Quiz, Question, Result).
 - Create repositories/interfaces for each entity to perform CRUD operations.

- Implement the controllers and map the endpoints:
 - Create controllers for each endpoint and map the request methods and paths accordingly.
-
- Handle the request parameters, body, and headers to call the corresponding service methods.
 - Implement necessary security measures:
 - Implement authentication and authorization mechanisms to protect sensitive endpoints.
 - Secure user registration, login, and quiz submission using tokens or session management.
-
- Test and debug the API endpoints:
 - Use tools like Postman or curl to test each endpoint and verify the expected behavior.
 - Handle and debug any errors or exceptions that occur during testing.