API ENDPOINTS REQUIRED

ADMIN SIDE -

1. **Create Quiz** (Admin only):

Request: /api/rooms/create

Generates a new roomCode and stores admin credentials.

Players can join this room via the code.

{

"title": "Math Quiz",

"roomCode": "XYZ123",

"adminPassword": "adminPass123",

"questions": [

{

"questionText": "What is 2 + 2?",

"options": ["1", "2", "3", "4"],

"correctAnswer": "4"

}

]

}

Response:

{

"id": 1,

"title": "Math Quiz",

"roomCode": "XYZ123",

"questions": [

{

"id": 1,

"questionText": "What is 2 + 2?",

"options": ["1", "2", "3", "4"],

"correctAnswer": "4"

}

{

"id": 2,

"questionText": "What is 2 - 2?",

"options": ["1", "2", "0", "4"],

"correctAnswer": "0"

}

]

}

1. Join room:

{

"username": "player1",

"inviteCode": "XYZ123"

}

Response:

{

"message": "Player joined",

"roomCode": "XYZ123",

"players": [

{ "username": "player1" },

{ "username": "player2" }

]

}

1. Submit Answer:

{

"username": "player1",

"roomCode": "XYZ123",

"id": "1",

"selectedAnswer": "4"

}

Response:

{

"roomCode": "XYZ123",

"players": [

{

"username": "player1",

"selectedAnswer": "4",

"isCorrect": true

},

{

"username": "player2",

"selectedAnswer": "3",

"isCorrect": false

}

]

}

1. Result Page:

/api/results/{roomCode}/all

- get room code in url parameter

- provide results array in reponse

PLAYER SIDE –

1. Landing Page:

Request:

{

"username": "player1",

"roomCode": "12345" }

Response:

{

"status": "success", "message": "Joined successfully"

}

* Validate the roomCode.
* Add the player's username to the room in the database.
* Return a success or failure response.

1. QuizRoom:

Request: roomCode as a URL parameter - /api/roomCode.

Response:

{

"players": ["player1", "player2", "admin"]

}

1. QuizPage:

Request: roomCode as a URL parameter - /api/quiz/roomCode.

Response:

{

"questions": [

{

"questionText": "What is 2 + 2?",

"options": ["2", "3", "4", "5"],

"correctAnswer": "4"

},

...

]

}

1. ResultPage:

Request: roomCode as a URL parameter and username in api request body query parameter.

/api/results/roomCode.

Response:

{

"username": "player1",

"score": 8,

"answers": [

{ "questionId": 1, "isCorrect": true },

...

]

}

BACKEND ROLE –

1. **Room Management**:
   * Create, join, and manage rooms.
   * Maintain lists of players in each room.
2. **Quiz Management**:
   * Allow admins to create quizzes and store questions.
   * Provide quiz questions to players.
3. **Real-Time Updates**:
   * Notify players about quiz starting and ending.
   * Provide response of each question after attempting of user.
   * Getting proper input and giving response on basis of –
     1. roomCode
     2. questionId
     3. username
     4. userInput
4. **Results Management**:
   * Store and calculate quiz results.
   * Give individual results to players and combined results to admins on receiving url and body parameters.