API Documentation: Check User API

Description

This API checks if a user exists in the database based on the provided user_id. If the user exists, it returns the user's details. If not, it returns an error message indicating that the user doesn't exist.

Endpoint

arduino
Copy code
http://<your-server-host>/check_user.php

HTTP Method

POST

Headers

Key Value

Content-Type application/json

Request Parameters

The API expects a JSON payload with the following fields:

Parameter Name Type Required Description

```
user_id string Yes Unique ID of the user.
```

Example Request Body:

```
json
Copy code
{
   "user_id": "12345"
}
```

Response Structure

The API returns a JSON response. The structure depends on whether the user exists or not.

1. Successful Response (User Exists)

If the user exists in the database, the API returns the following:

Field Name Type Description

```
user_id string The ID of the user.
user_name string The name of the user.
```

Example Response:

```
json
Copy code
{
   "user_id": "12345",
   "user_name": "John Doe"
}
```

2. Error Response (User Does Not Exist)

If the user is not found in the database, the API returns an error message.

Field Name Type Description

```
error boolean Indicates an error (true).
message string Description of the error.
```

Example Response:

```
json
Copy code
{
   "error": true,
   "message": "User doesn't exist"
}
```

3. Error Response (Missing user_id)

If user_id is not provided in the request, the API returns the following:

Field Name Type Description

```
error boolean Indicates an error (true).
message string Description of the error.
```

Example Response:

```
json
Copy code
{
   "error": true,
   "message": "Invalid input data"
}
```

4. Error Response (Invalid HTTP Method)

If a method other than POST is used, the API responds with a method not allowed error:

Field Name Type Description

```
error boolean Indicates an error (true).
message string Description of the error.
```

Example Response:

```
json
Copy code
{
   "error": true,
   "message": "Method not allowed"
}
```

Error Codes

HTTP Status Code Description

200 Success

400 Bad Request (e.g., missing user_id).

405 Method Not Allowed

Example Usage

Using Postman

- 1. Set the HTTP method to POST.
- 2. Enter the endpoint URL: http://<your-server-host>/check_user.php.

- 3. In the Headers section, set Content-Type: application/json.
- 4. In the Body section, select raw and enter:

```
json
Copy code
{
   "user_id": "12345"
}
```

5. Send the request and check the response.

Using cURL

```
bash
Copy code
curl -X POST \
-H "Content-Type: application/json" \
-d '{"user_id": "12345"}'\
http://<your-server-host>/check_user.php
```

Implementation Details

This API connects to the attendance_system database and performs the following steps:

- 1. Reads the request body and extracts user_id.
- 2. Queries the database to check if a user with the given user_id exists.
- 3. Responds with user details if the user exists.
- 4. Returns an error if the user does not exist, the input is invalid, or the method is not POST.

Improvements

- **Authentication**: Add an API key or token mechanism for security.
- Validation: Validate user_id to prevent SQL injection.
- Rate Limiting: Prevent abuse by limiting the number of API calls per user.