

Name : Muhammad Ali Bin Hasnain Zafar (B122320036)

Week 3 Exercise – Lab Report Answers

Building a Ride-Hailing REST API with Express.js

1 POST Request

Question: What HTTP status code is returned when a ride is created successfully? What is the structure of the response body?

Answer:

- HTTP Status Code: 201 Created
- Response Body Example:

```
{
  "message": "Ride created successfully!",
  "id": "6906fe79424cebd007e26e1e"
}
```

Explanation: The 201 status confirms the ride was added successfully. The response body includes a message and the unique MongoDB ID.

2 GET Request

Question: What happens if the rides collection is empty? What data type is returned in the response?

Answer: If the collection is empty, the API returns an empty array [] with status 200 OK. The response type is an array.

Example: []

3 PUT / PATCH and DELETE Errors

Answer:

- If invalid ID or ride not found: Status code = 404 Not Found
- If successfully updated:

```
{
  "message": "Ride status updated successfully!",
  "updated": 1
}
```

- If successfully deleted:

```
{
  "message": "Ride deleted successfully",
  "deleted": 1
}
```

Explanation: The API checks matchedCount and deletedCount to differentiate between successful and failed operations.

Users Endpoints

Similar CRUD endpoints for users can be created using the same structure as rides:

```
app.get('/users', ...)
app.post('/users', ...)
app.put('/users/:id', ...)
app.delete('/users/:id', ...)
```

Explanation: These endpoints allow user account management similar to rides CRUD operations.

Front-End (Optional)

The Postman collection JSON was uploaded to an AI tool to generate an HTML/JS dashboard that displays rides, allows adding new ones, and updating or deleting them.

Summary

Action	Method	URL	Status Code	Description
Create Ride	POST	/rides	201	Adds a new ride
Get All Rides	GET	/rides	200	Returns list of rides
Update Ride	PUT	/rides/:id	200	Changes ride status
Delete Ride	DELETE	/rides/:id	200	Deletes a ride