

Tools Used: Postman for API testing, Browser for frontend testing, MySQL Workbench for database inspection.

Test Cases and Results:

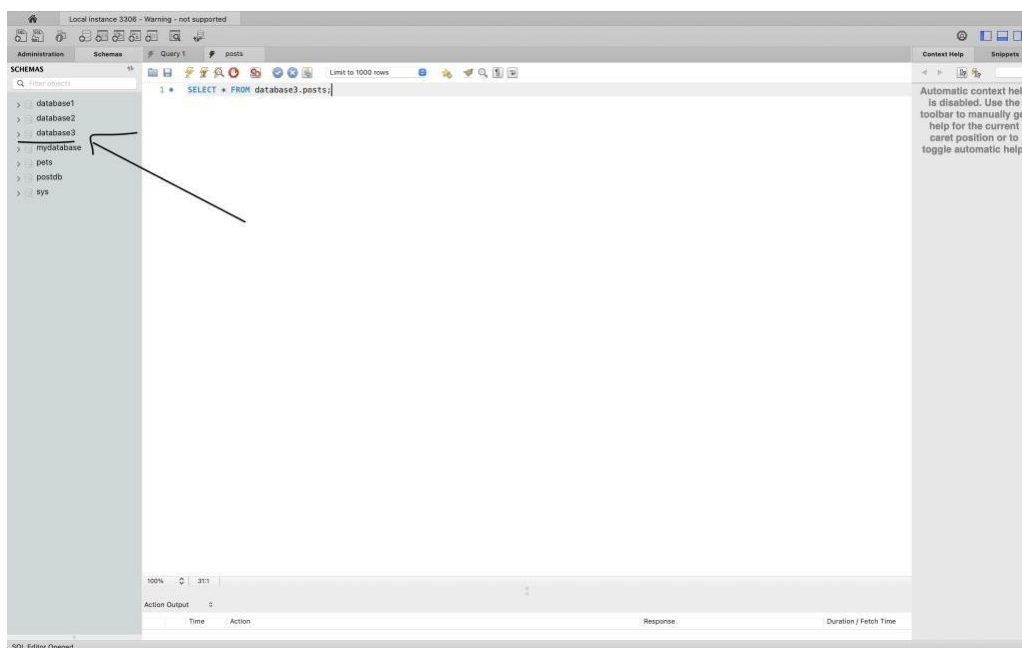
Test Case 1: Database and Table Creation

Objective: To verify that the MySQL database and the posts table are created successfully. Procedure: Inspect the database using MySQL Workbench after server initialization.

Expected Result: A new database named database3 and a table named posts should exist.

Actual Result: A new database named database3 and a table named posts were created as expected.

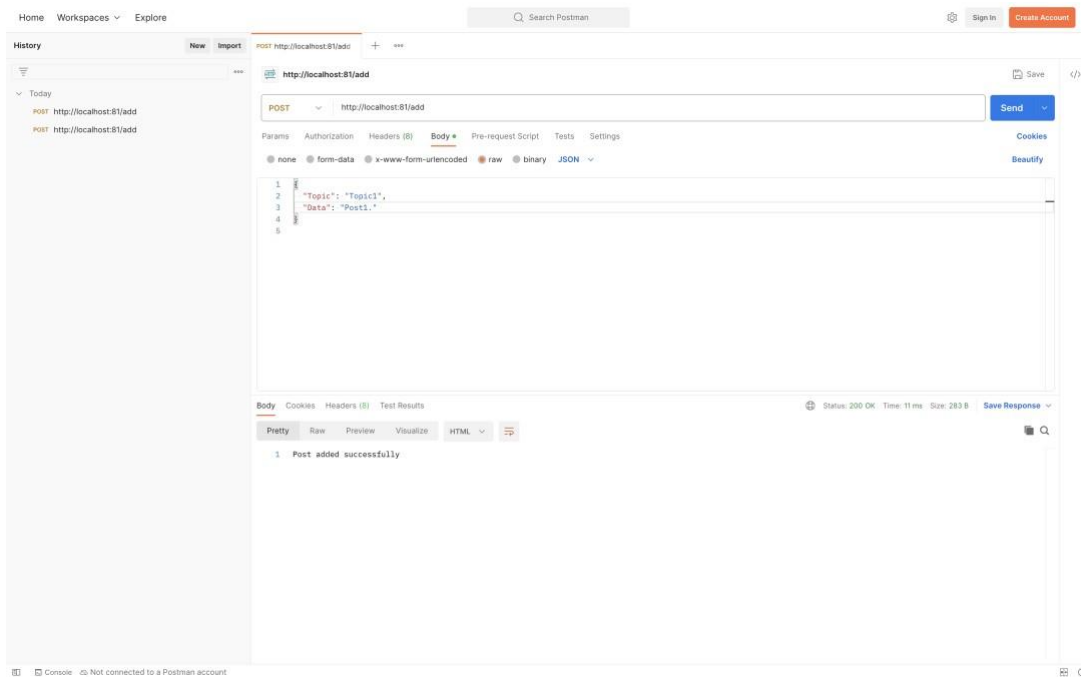
Status: Test Passed



Test Case 2: Adding a New Post

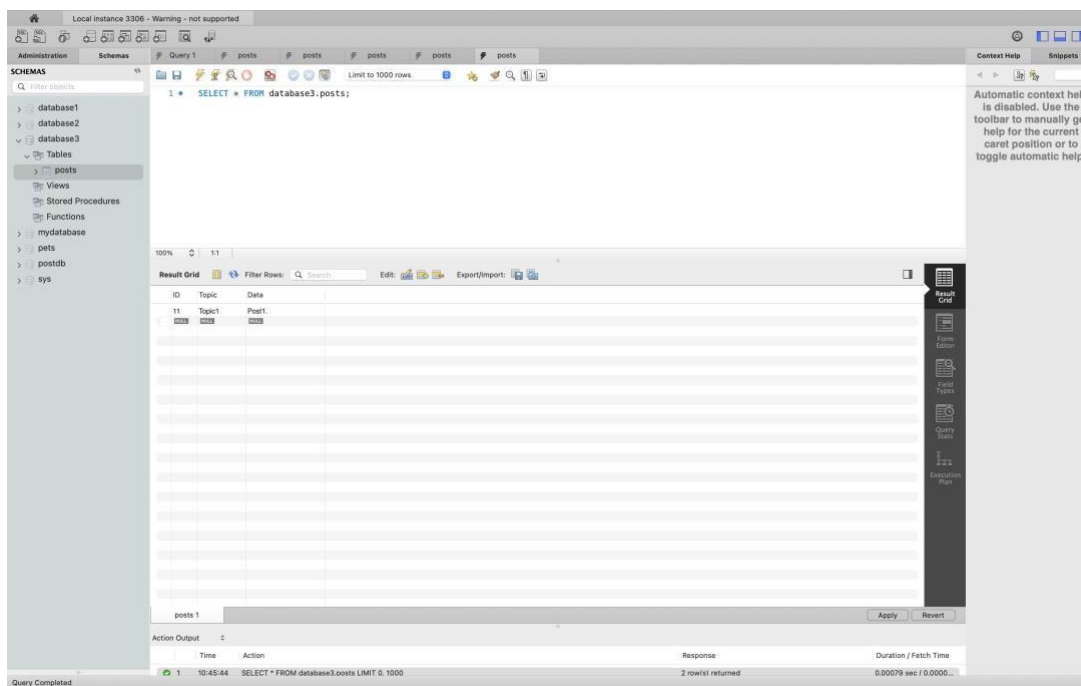
Objective: To ensure that the POST method adds a new post to the posts table.

Procedure: Used Postman to send a POST request to `http://localhost:81/add` with sample post data. Then, query the database to check if the post is added.



Expected Result: The new post should be added to the posts table.

Actual Result: The post was successfully added to the table in database3.



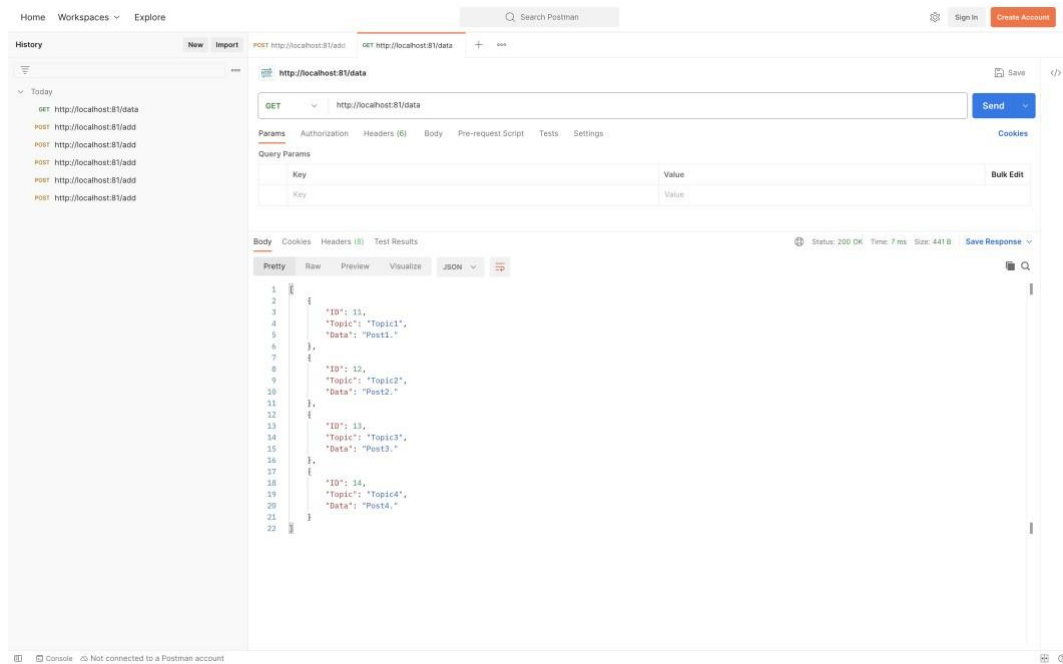
Status: Passed

Test Case 3: Retrieving All Posts

Objective: To verify that the GET method retrieves all posts from the posts table.

Procedure: After adding a few posts, used Postman to send a GET request to <http://localhost:81/data>. Expected Result: A list of all posts should be returned.

Actual Result: All added posts were retrieved successfully.



Status: Passed

Test Case 4: React Application - View Posts

Objective: To confirm that the React application can display all posts.

Procedure: Navigated to the “Show Posts” page in the React application.

Expected Result: All posts stored in the database should be displayed. Actual

Result: The posts were displayed as expected.

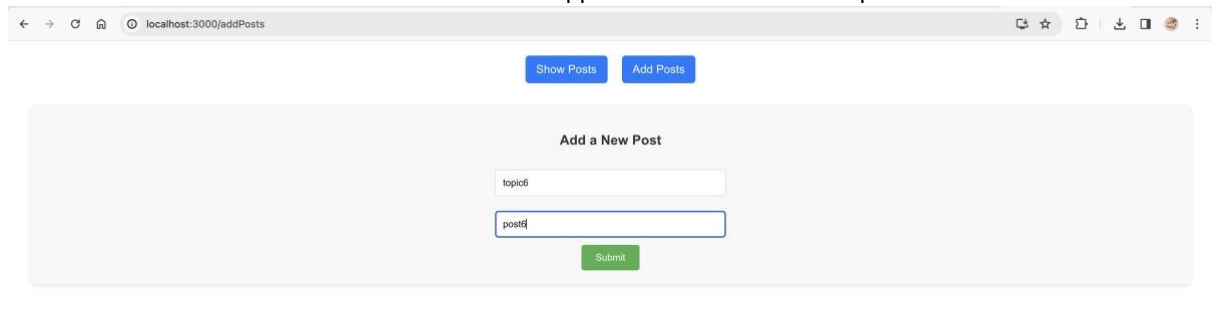


Status: Passed

Test Case 5: React Application - Add New Post

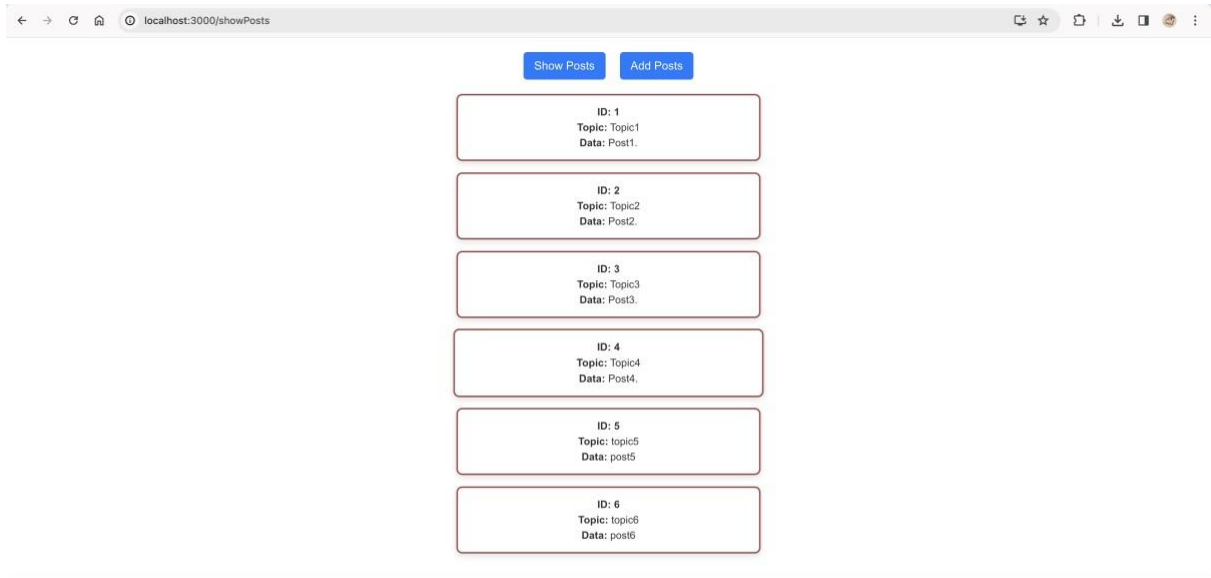
Objective: To check if the React application can add a new post.

Procedure: Used the “Add Posts” form in the React application to submit a new post.



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/addPosts'. The page has a light gray background. At the top, there are two blue buttons: 'Show Posts' and 'Add Posts'. Below these buttons is a large, light gray rectangular box containing the 'Add a New Post' form. The form has the title 'Add a New Post' centered at the top. Below the title are two input fields: the first is labeled 'topic6' and the second is labeled 'post6'. Below the input fields is a green 'Submit' button.

Expected Result: The new post should be added to the database and be viewable in the “Show Posts” page.



Actual Result: The post was added and visible on the “Show Posts” page.

Status: Passed