

CMPT 353

Assignment 4

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Part D)

To test parts A, B, and C. I first did part completed part A and went to the link <http://localhost:8080/init> to see if the database was being initialized. Once that was successful, I had to test if entries were being added to the table. To do that I did was used the command `INSERT INTO posts (id, topic, data)` and then specified the `VALUES (1, example, example)`. After adding the entry in I did the command `SELECT * FROM posts` to view the table entries. Since that was successful, I moved on to Part B. After implementing Part B, I also needed to implement part C to test the `addPost` post method and `getPosts` get method. Once I implemented Part C, I entered the data fields from the website itself to test the post method because the button clicked calls the `addPost` method. I used `SELECT * FROM posts` again to see if the post method was successful, which it was. After seeing that `addPost` was successful. I clicked the 'Show Posts' button on the website which calls the `getPosts` method. Once I saw the correct database entries displayed on the website, I knew that the `getPosts` method was working properly. I also had a button for 'Initialize/Reset the Database' which called the `init` method from `server.js`. In my `init` method, I had a console log "New database created" to check if the database was being initialized. When I clicked the button and saw that the console log appeared on my terminal, I knew the initialization was working. Another way I verified this was that my database creation also had a command to drop the table if it already existed. To test this, after clicking "Initialize/Reset Database", I pressed the 'Show Posts' button to make sure it was empty. Since that was successful, I knew that the database table was being dropped properly. I also tested performance by running several loadtests.

I used `npm loadtest` along with various options such as `-n` to specify the number of requests, `-c` to specify the concurrency, and `--method POST` to test the speed of a POST method.