

Part C:

Iterative testing with `console.log()` outputs were used while writing both `Server.js` and `posting.html`. Direct input and curl access were used in debugging and confirming backend functionality. Once the server was confirmed to be functioning as desired modular testing of the frontend. Console logs were used to confirm input from the Topic and Data fields before building the async POST function. The `readPosts()` function was tested, and originally showed raw JSON objects including the `{}`. They were reformatted to structure the output in a more readable output. The `readPosts` function continued to display the appended data captured from testing the POST function.

Testing the finalized front end, edge cases included:

- the full character set on my keyboard
 - ``~!@3#4$5%6^7&8*9(0)-_+=qQwWeErRtTyYuUiIoOpP[{}]\|aAsSdDfFgGhHjJkKlL;:~"zZxXcCvVbBnNmM,<.>/?`
- Grouped special characters:
 - `{}, {}, ` `, ' ', " ", ()`
- Empty fields:
 - Topic empty, Data "Empty Topic"
 - Topic: "Empty Data", Data empty
 - Topic empty, Data empty
- JSON like text:
 - `{topic,data}, {topic:"it's a",data:"trap"}`

Expected results of the submissions above were to receive Topic and Data fields as entered with a Timestamp at UTC-0.

I had some issues with receiving the JSON object through the fetch, which turned out to be a missing `"const express = require('express');"` in the server's loaded packages. I used console logs to trace where data was going, and cross referenced similar issues to identify the missing package.

Below is the results of a fresh page load, the posts were entered during testing, including where issues were present when Topic and Data were storing "undefined" (result of the JSON object not being unpacked by the server to save to file).

Topic:	Topic: undefined
<input type="text"/>	Data: undefined
	Timestamp: (UTC-0): 2025-1-27 1:1:29 YYYY-MM-DD hh:mm:ss
Data:	Topic: Now with
<input type="text"/>	Data: app.use(express.json)
	Timestamp: (UTC-0): 2025-1-27 1:3:15 YYYY-MM-DD hh:mm:ss
<input type="button" value="Submit"/>	Topic: Other posts
	Data: where are they?
	Timestamp: (UTC-0): 2025-1-27 1:26:14 YYYY-MM-DD hh:mm:ss
Topic: Old server test	Topic: New test
Data: This is testing the input from the XML request version. Replace shit with fetch API	Data: Now with formatting
Timestamp: (UTC-0): 2025-1-26 19:26:14 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-27 1:38:45 YYYY-MM-DD hh:mm:ss
Topic: Old server test	Topic: About time
Data: This is testing the input from the XML request version. Replace shit with fetch API	Data: Finally done
Timestamp: (UTC-0): 2025-1-26 19:26:16 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-27 1:40:20 YYYY-MM-DD hh:mm:ss
Topic: Test 3	Topic: {}
Data: Read button removed	Data: {}{
Timestamp: (UTC-0): 2025-1-26 20:0:9 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:47:41 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: {}
Data: undefined	Data: {}{
Timestamp: (UTC-0): 2025-1-26 20:44:46 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:47:43 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic:
Data: undefined	Data: Empty Topic
Timestamp: (UTC-0): 2025-1-26 20:56:8 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:47:57 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: Empty Data
Data: undefined	Data:
Timestamp: (UTC-0): 2025-1-27 0:38:14 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:48:7 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic:
Data: undefined	Data:
Timestamp: (UTC-0): 2025-1-27 0:42:19 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:48:15 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: '~!12@3#45%6^7&8*9()_-=+qQwWeErRtTyYuUiIoOpP[{}] aAsSdDfFgGhHjJkKL;:"zZcXcCvVbBnNmM,<>/?
Data: undefined	Data: '~!12@3#45%6^7&8*9()_-=+qQwWeErRtTyYuUiIoOpP[{}] aAsSdDfFgGhHjJkKL;:"zZcXcCvVbBnNmM,<>/?
Timestamp: (UTC-0): 2025-1-27 0:46:45 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:49:49 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: ''
Data: undefined	Data: ''
Timestamp: (UTC-0): 2025-1-27 0:52:11 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:53:9 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: ''
Data: undefined	Data: ()
Timestamp: (UTC-0): 2025-1-27 0:56:9 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:53:36 YYYY-MM-DD hh:mm:ss
Topic: undefined	Topic: {topic,data}
Data: undefined	Data: {topic:"it's a",data:"trap"}
Timestamp: (UTC-0): 2025-1-27 0:59:57 YYYY-MM-DD hh:mm:ss	Timestamp: (UTC-0): 2025-1-29 0:54:49 YYYY-MM-DD hh:mm:ss