

Environment and Tools:

Operating System	macOS 10.15.7
Backend	Node.js 15.13.0
	Node.js modules: mysql@2.18.1 ws@7.4.4
Frontend	Element UI 2.15.1
Database	MySQL 8.0.23

Usage:

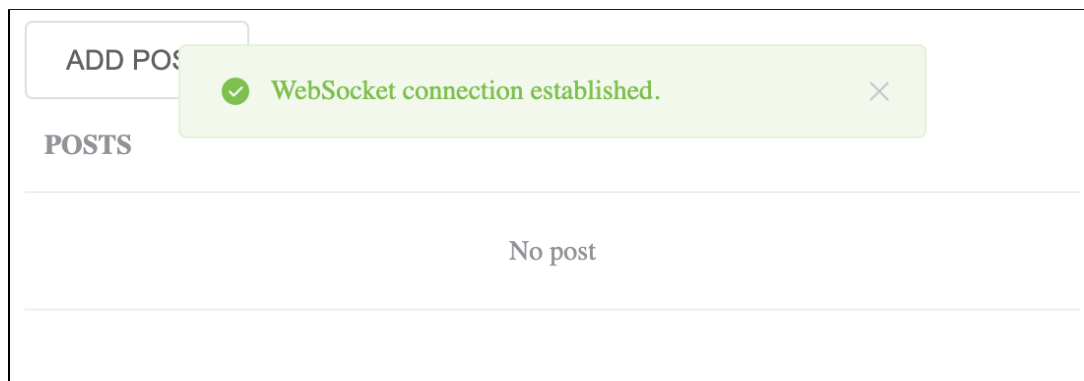
MySQL server is required to save the posts received by the server.

Open `demo_server.js` with a text editor. Change the value of 'user' and 'password', so that the server can connect to a MySQL server.

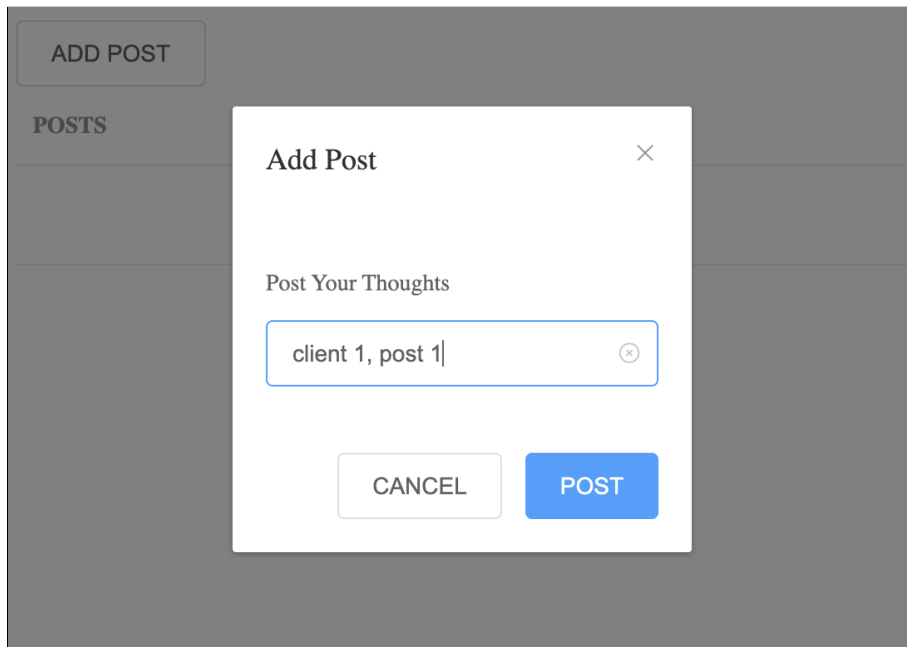
Open a Terminal window. Change directory to the `coding_exercise_web_service` folder. Run the following command to start the server:

```
node demo_server.js
```

Open `index.html` in a few web browser windows as clients. Each client will try to establish a WebSocket connection with the server. If the connection is successfully, a message will be displayed:



Click 'ADD POST'. Input a post, and click 'POST'.



ADD POST

POSTS

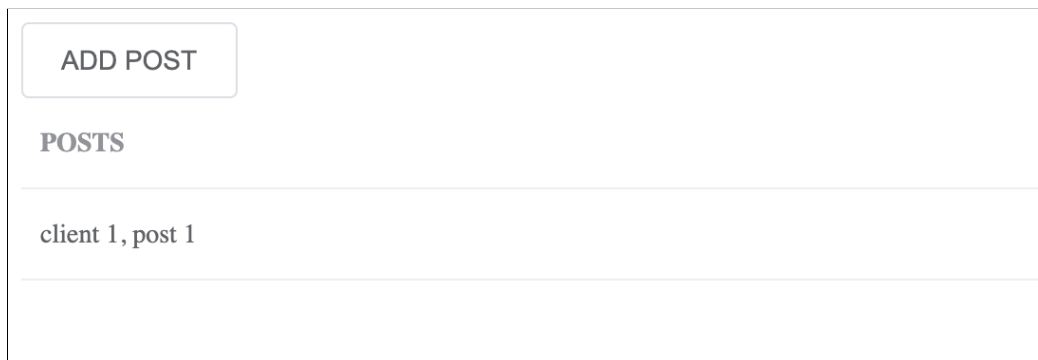
Add Post

Post Your Thoughts

client 1, post 1

CANCEL POST

The published post is shown on the page, and is pushed to all other connected clients.



ADD POST

POSTS

client 1, post 1

All posts are saved in a MySQL database.

```
mysql> select * from posts;
+-----+
| post          |
+-----+
| client 1, post 1 |
| client 2, post 1 |
| client 1, post 2 |
+-----+
3 rows in set (0.00 sec)
```