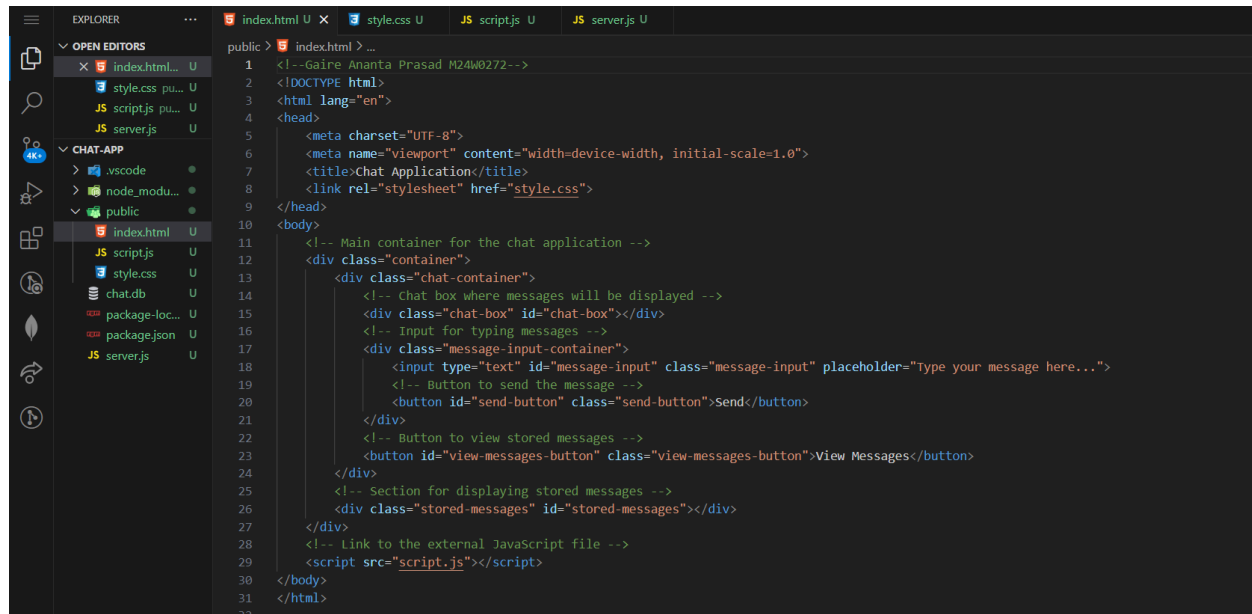


Gaire Ananta Prasad (M24W0272)

Chat App Using JavaScript, Html and CSS

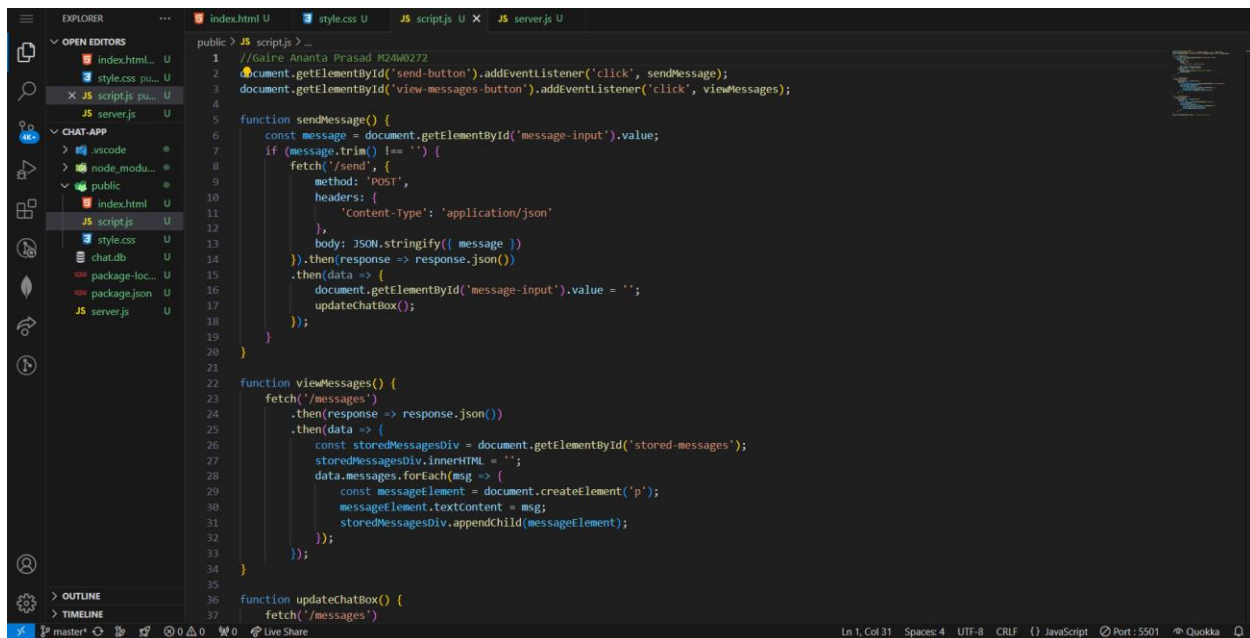
Html Code



The screenshot shows a Visual Studio Code editor with a dark theme. The Explorer sidebar on the left displays a project structure with folders 'CHAT-APP' and 'public'. The 'CHAT-APP' folder contains files like '.vscode', 'node_modules', 'package-lock.json', 'package.json', and 'server.js'. The 'public' folder contains 'index.html', 'script.js', 'style.css', and 'server.js'. The main editor area shows the 'index.html' file, which is a single-page HTML document. The code includes a DOCTYPE declaration, UTF-8 charset, a viewport meta tag, a title 'Chat Application', and a link to 'style.css'. The body contains a main container 'container' with a 'chat-container' inside. The 'chat-container' has a 'chat-box' for displaying messages, an input field for typing messages, and two buttons: 'Send' and 'View Messages'. A 'stored-messages' div is also present for displaying stored messages. A script tag at the bottom links to 'script.js'.

```
1 <!--Gaire Ananta Prasad M24W0272-->
2 <!DOCTYPE html>
3 <html lang="en">
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Chat Application</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10 <body>
11   <!-- Main container for the chat application -->
12   <div class="container">
13     <div class="chat-container">
14       <!-- Chat box where messages will be displayed -->
15       <div class="chat-box" id="chat-box"></div>
16       <!-- Input for typing messages -->
17       <div class="message-input-container">
18         <input type="text" id="message-input" class="message-input" placeholder="Type your message here...">
19         <!-- Button to send the message -->
20         <button id="send-button" class="send-button">Send</button>
21       </div>
22       <!-- Button to view stored messages -->
23       <button id="view-messages-button" class="view-messages-button">View Messages</button>
24     </div>
25     <!-- Section for displaying stored messages -->
26     <div class="stored-messages" id="stored-messages"></div>
27   </div>
28   <!-- Link to the external JavaScript file -->
29   <script src="script.js"></script>
30 </body>
31 </html>
```

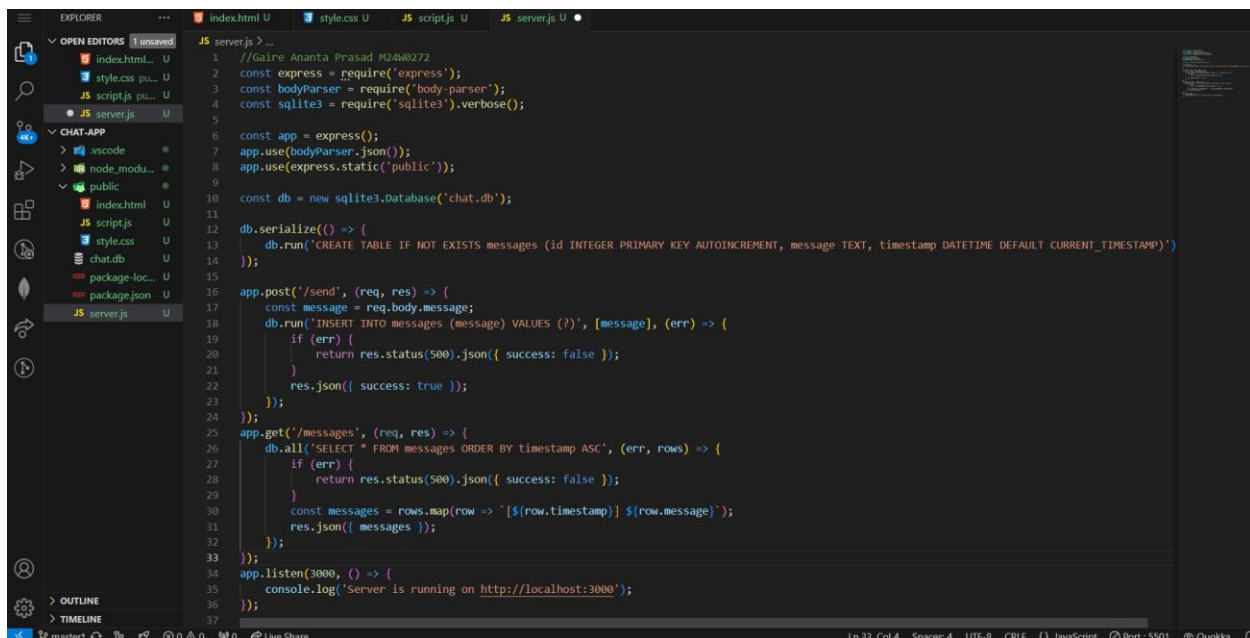
JavaScript Code



```
public > JS script.js > ...
1 //Gaire Ananta Prasad M24W0272
2 document.getElementById('send-button').addEventListener('click', sendMessage);
3 document.getElementById('view-messages-button').addEventListener('click', viewMessages);
4
5 function sendMessage() {
6     const message = document.getElementById('message-input').value;
7     if (message.trim() !== '') {
8         fetch('/send', {
9             method: 'POST',
10            headers: {
11                'Content-Type': 'application/json'
12            },
13            body: JSON.stringify({ message })
14        }).then(response => response.json())
15        .then(data => {
16            document.getElementById('message-input').value = '';
17            updateChatBox();
18        });
19     }
20 }
21
22 function viewMessages() {
23     fetch('/messages')
24     .then(response => response.json())
25     .then(data => {
26         const storedMessagesDiv = document.getElementById('stored-messages');
27         storedMessagesDiv.innerHTML = '';
28         data.messages.forEach(msg => {
29             const messageElement = document.createElement('p');
30             messageElement.textContent = msg;
31             storedMessagesDiv.appendChild(messageElement);
32         });
33     });
34 }
35
36 function updateChatBox() {
37     fetch('/messages')
```



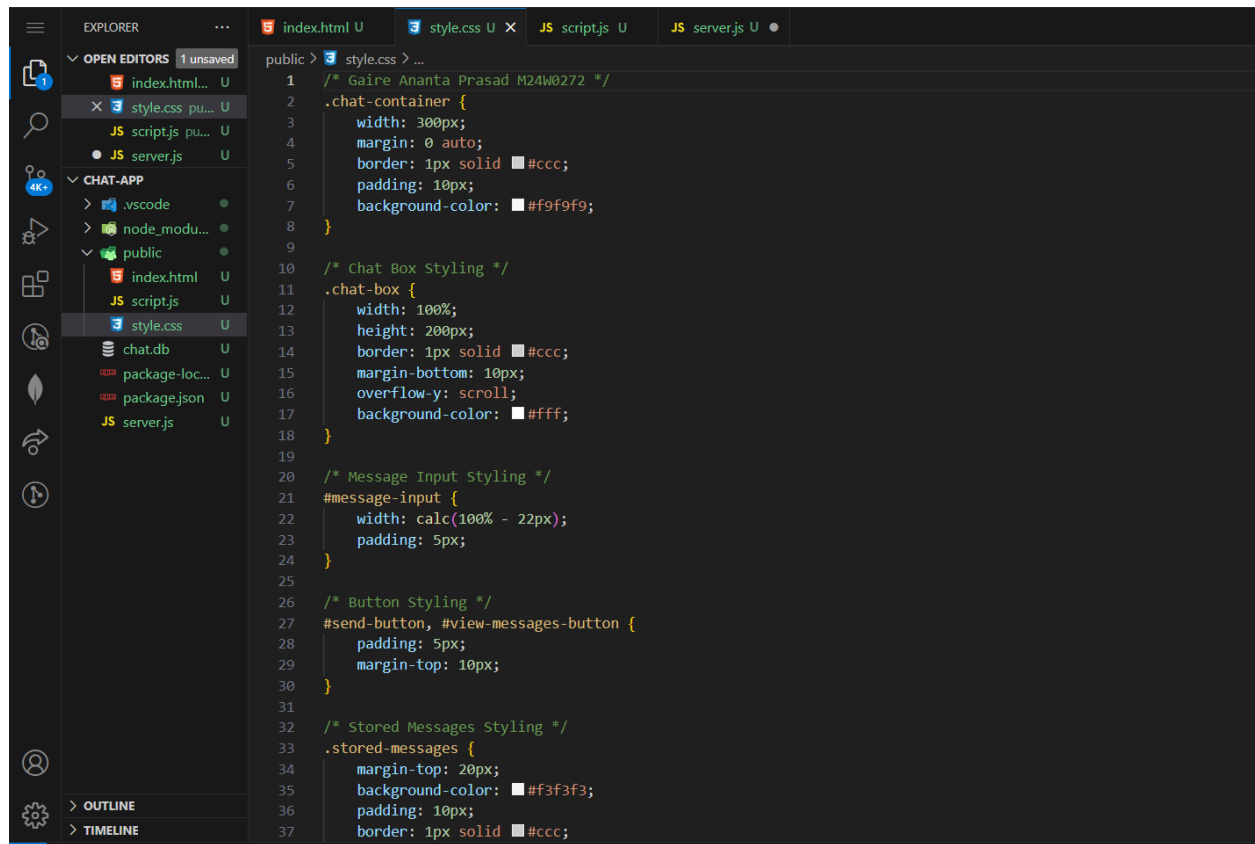
```
38     .then(response => response.json())
39     .then(data => {
40         const chatBox = document.getElementById('chat-box');
41         chatBox.innerHTML = '';
42         data.messages.forEach(msg => {
43             const messageElement = document.createElement('p');
44             messageElement.textContent = msg;
45             chatBox.appendChild(messageElement);
46         });
47     });
48 }
49
50 setInterval(updateChatBox, 1000); // Polling every second
51
```



```
JS server.js > ...
1 //Gaire Ananta Prasad M24W0272
2 const express = require('express');
3 const bodyParser = require('body-parser');
4 const sqlite3 = require('sqlite3').verbose();
5
6 const app = express();
7 app.use(bodyParser.json());
8 app.use(express.static('public'));
9
10 const db = new sqlite3.Database('chat.db');
11
12 db.serialize(() => {
13     db.run('CREATE TABLE IF NOT EXISTS messages (id INTEGER PRIMARY KEY AUTOINCREMENT, message TEXT, timestamp DATETIME DEFAULT CURRENT_TIMESTAMP)');
14 });
15
16 app.post('/send', (req, res) => {
17     const message = req.body.message;
18     db.run('INSERT INTO messages (message) VALUES (?)', [message], (err) => {
19         if (err) {
20             return res.status(500).json({ success: false });
21         }
22         res.json({ success: true });
23     });
24 });
25
26 app.get('/messages', (req, res) => {
27     db.all('SELECT * FROM messages ORDER BY timestamp ASC', (err, rows) => {
28         if (err) {
29             return res.status(500).json({ success: false });
30         }
31         const messages = rows.map(row => ` ${row.timestamp} ${row.message}`);
32         res.json({ messages });
33     });
34 });
35
36 app.listen(3000, () => {
37     console.log('Server is running on http://localhost:3000');
```

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CSS



The image shows a screenshot of the Visual Studio Code editor interface. The Explorer sidebar on the left displays a project structure for 'CHAT-APP' with files like 'index.html', 'style.css', 'script.js', and 'server.js'. The main editor area shows the 'style.css' file with the following CSS code:

```
1 /* Gaire Ananta Prasad M24W0272 */
2 .chat-container {
3     width: 300px;
4     margin: 0 auto;
5     border: 1px solid #ccc;
6     padding: 10px;
7     background-color: #f9f9f9;
8 }
9
10 /* Chat Box Styling */
11 .chat-box {
12     width: 100%;
13     height: 200px;
14     border: 1px solid #ccc;
15     margin-bottom: 10px;
16     overflow-y: scroll;
17     background-color: #fff;
18 }
19
20 /* Message Input Styling */
21 #message-input {
22     width: calc(100% - 22px);
23     padding: 5px;
24 }
25
26 /* Button Styling */
27 #send-button, #view-messages-button {
28     padding: 5px;
29     margin-top: 10px;
30 }
31
32 /* Stored Messages Styling */
33 .stored-messages {
34     margin-top: 20px;
35     background-color: #f3f3f3;
36     padding: 10px;
37     border: 1px solid #ccc;
```

Gaire Ananta Prasad M24W0272

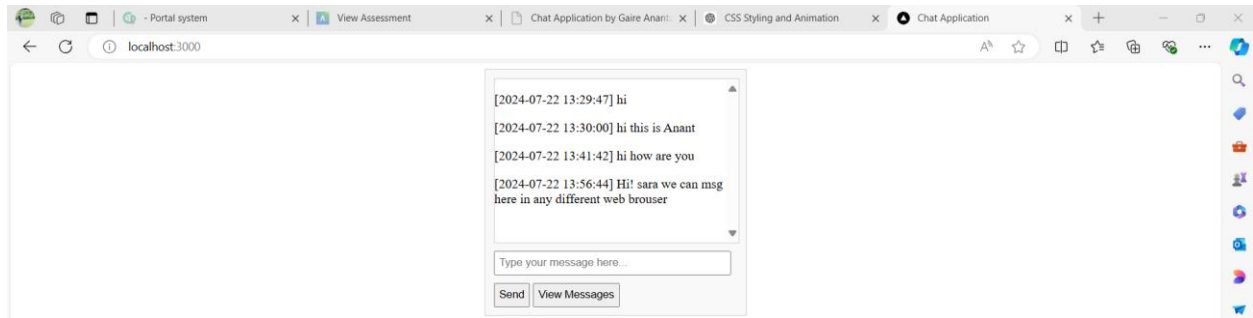
This screenshot shows the VS Code editor interface with the Explorer sidebar on the left. The Explorer sidebar displays the project structure, including a 'CHAT-APP' folder containing files like '.vscode', 'node_modules', 'public', 'index.html', 'script.js', 'style.css', 'chat.db', 'package-lock.json', 'package.json', and 'server.js'. The main editor area shows the 'style.css' file with the following CSS code:

```
public > style.css > ...
33 .stored-messages {
34   padding: 10px;
35   border: 1px solid #ccc;
36 }
37
38 /* Additional CSS code provided by the user */
39 body {
40   font-family: Arial, sans-serif;
41   background-color: #f4f4f4;
42   margin: 0;
43   padding: 0;
44 }
45
46 .container {
47   width: 500px;
48   margin: 0 auto;
49   padding-top: 50px;
50 }
51
52 .chat-window {
53   border: 1px solid #ccc;
54   padding: 10px;
55   background-color: #fff;
56   margin-bottom: 20px;
57   overflow-y: auto;
58   max-height: 400px;
59 }
60
61 .message-input-container {
62   display: flex;
63   justify-content: space-between;
64 }
65
66 .message-input {
67   width: calc(100% - 80px);
68   padding: 10px;
69   border: 1px solid #ccc;
```

This screenshot shows the VS Code editor interface with the Explorer sidebar on the left. The Explorer sidebar displays the project structure, including a 'CHAT-APP' folder containing files like '.vscode', 'node_modules', 'public', 'index.html', 'script.js', 'style.css', 'chat.db', 'package-lock.json', 'package.json', and 'server.js'. The main editor area shows the 'style.css' file with the following CSS code:

```
public > style.css > ...
74 }
75
76 .send-button {
77   padding: 10px 20px;
78   background-color: #28a745;
79   color: white;
80   border: none;
81   border-radius: 4px;
82   cursor: pointer;
83 }
84
85 .send-button:hover {
86   background-color: #218838;
87 }
88
89 .view-messages-button {
90   padding: 10px 20px;
91   background-color: #007bff;
92   color: white;
93   border: none;
94   border-radius: 4px;
95   cursor: pointer;
96   margin-top: 10px;
97   display: block;
98 }
99
100 .view-messages-button:hover {
101   background-color: #0056b3;
102 }
103
104 .message {
105   margin-bottom: 10px;
106   padding: 10px;
107   border: 1px solid #ddd;
108   border-radius: 4px;
109   background-color: #f9f9f9;
```

Output in Microsoft edge



Output in chrome

