CLASS: F.Y. MCA SEM: I

COURSE CODE: MC504 SUBJECT NAME: WEB TECHNOLOGY LAB

ROLL NO. 2022510059 BATCH: <u>D</u>

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EXPERIMENT NO: 10

EXPERIMENT TITLE: Build a chat application.

Objective:

Building a real time chat application is the starting point for developing many applications with socket connections, which involve two way communication between server and client. We will be building a chat application using Node JS back-end and Angular front-end. Furthermore, we will be using socket.io for socket communication Index.html

CODE:

Index.html

```
<!DOCTYPE html>
<html>
    <title>Socket.IO chat</title>
    <style>
      body { margin: 0; padding-bottom: 3rem; font-family: -apple-system,
BlinkMacSystemFont, "Segoe UI", Roboto, Helvetica, Arial, sans-serif; }
      #form { background: rgba(0, 0, 0, 0.15); padding: 0.25rem; position:
fixed; bottom: 0; left: 0; right: 0; display: flex; height: 3rem; box-sizing:
border-box; backdrop-filter: blur(10px); }
      #input { border: none; padding: 0 1rem; flex-grow: 1; border-radius:
2rem; margin: 0.25rem; }
      #input:focus { outline: none; }
      #form > button { background: #333; border: none; padding: 0 1rem;
margin: 0.25rem; border-radius: 3px; outline: none; color: #fff; }
      #messages { list-style-type: none; margin: 0; padding: 0; }
      #messages > li { padding: 0.5rem 1rem; }
      #messages > li:nth-child(odd) { background: #efefef; }
    </style>
  </head>
  <body>
    ul id="messages">
    <form id="form" action="">
     <input id="input" autocomplete="off" /><button>Send</button>
```

```
</form>
   <script src="/socket.io/socket.io.js"></script>
   <script>
     var socket = io();
     var messages = document.getElementById('messages');
     var form = document.getElementById('form');
     var input = document.getElementById('input');
     form.addEventListener('submit', function(e) {
       e.preventDefault();
       if (input.value) {
         socket.emit('chat message', input.value);
         input.value = '';
     });
     socket.on('chat message', function(msg) {
       var item = document.createElement('li');
       item.textContent = msg;
       messages.appendChild(item);
       window.scrollTo(0, document.body.scrollHeight);
     });
   </script>
 </body>
</html>
```

Index.js

```
const app = require('express')();
const http = require('http').Server(app);
const io = require('socket.io')(http);
const port = process.env.PORT || 3000;

app.get('/', (req, res) => {
    res.sendFile(__dirname + '/index.html');
});

io.on('connection', (socket) => {
    socket.on('chat message', msg => {
        io.emit('chat message', msg);
    });
});

http.listen(port, () => {
    console.log(`Socket.IO server running at http://localhost:${port}/`);
});
```

OUTPUT:

