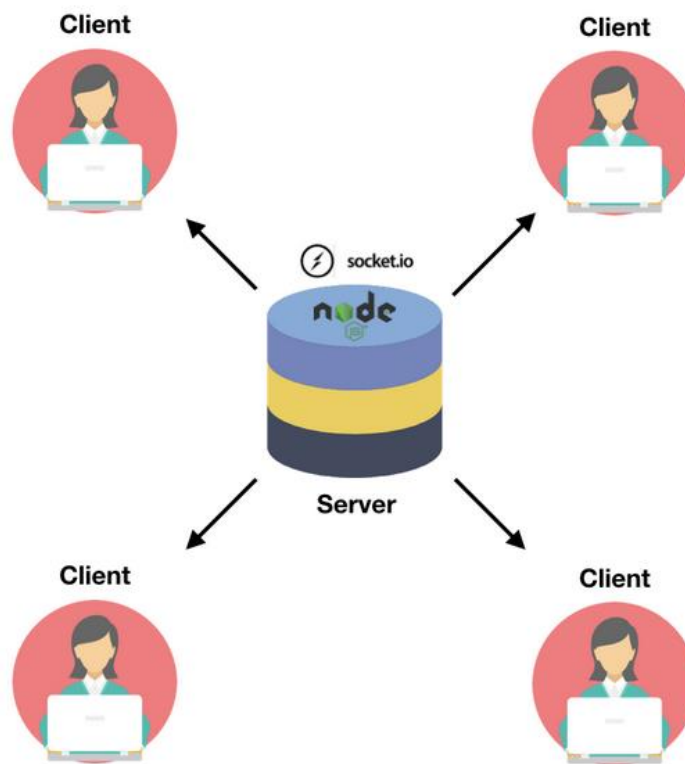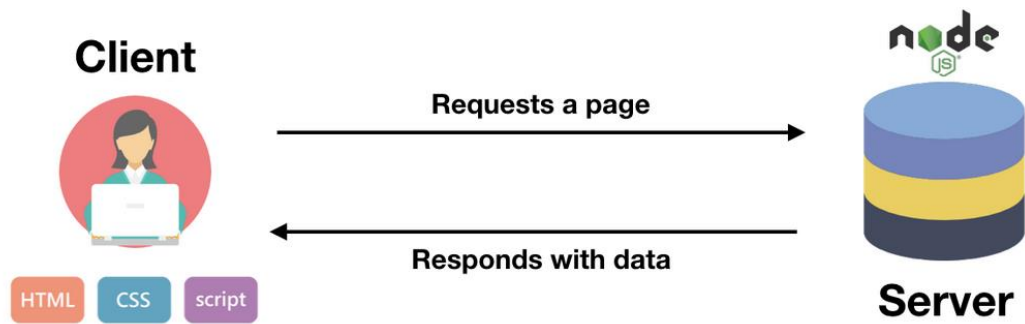# Write Up – Project "Super-Secret Chat"

Basic Architecture:

Technical stack:

- WebSockets and socket.io - to allow a bilateral synchronous exchange between a client and a server
- Node.js - backend technology

- Express.js - micro web framework for node.js
- Nodemon – package that detects any changes and restart our server

How to run and access the project:

In order to access it as a client the application can be seen at: 34.69.66.124

In order to locally run (recommended, especially for the server monitoring – service messages):

- docker build -t csagan/chatapp:latest .
- docker run -p 80:80 csagan/chatapp:latest

Side notes:

One of the requirements of the project was not implemented - "Server should be able to disconnect a particular client from the chat". I understand how to implement this in the server part:

- Given the socket_id of the client we want to disconnect we send to the client a socket message saying 'disconnect' the code would look something like this (note that the code below is written according to the variables I implemented already):

```
//on the server side
var clients = []  // list of clients connected

socket.on('disconnect_user', (socket_id) =>{
  socket_id.send('disconnect')
  socket_id.close()
})


//on the client side
socket.on('disconnect', function(){
  //write or redirect client to friendly error page
})
```

I could not implement this part because as I never worked with javascript before I had a hard time figuring out how to transfer the socket_id that we are choosing to disconnect from the admin page to the server. I tried to dynamically create buttons and set their attribute to the socket.id of the client chosen, but then on javascript usually we call the button action like #id_button.click(function(){}), so I could not find an optimal way of calling the id when the button is clicked. I will try to research and find what can I do in this case but because of lack of time for the submission of the project this feature is not available.

Next steps:

➢ Implement the Disconnect Clients feature
➢ Add password protection to the admin page so only those with the password could access the page