

PROBLEM STATEMENT:

Create a static express real-time chat server.

CODE :

Create a directory cs215\_Lab12.

It will have the directory structure

```
app.js
node_modules
package.json
package-lock.json
scripts
views
```

app.js will be the express server, views will contain html files, and scripts will contain user created javascript files. For this lab, you will need to create a client-side javascript file called clientscript.js

Obtain the provided cs215L12\_index.html and drop it into the views directory. Rename it to index.html  
Read the html file and observe that you will need to add src links to some js files. More on that later

Observe the console log output of our completed running server:

```
[streller@somehost cs215Lab12_S18_ANS]$ node app.js
```

Server is at ip 192.168.236.666, running on port 8080

Our server displays not only the port but also the ip address of the server machine.

Now, as usual, using npm, bring in all the needed modules. This lab requires that we have modules socket.io and ip. Dont forget to run init after all the modules are installed. The ip module is needed to get the ip address of the server machine. The ip address ( as above ) is not hard-coded into the app.js file.

Create the server app.js

Reading the API (<https://www.npmjs.com>) for the ip module, add to your console.log output the code to display the ip addy of the server.

Now for socket io. Read the API at

<https://socket.io/docs>  
<https://socket.io/docs/server-api/>

Since this is for a chat session, we will need to write server AND client-side ( index.html ).

You are to add no more than 5 lines of code to the server ( app.js ) for socket.io functionality.

Your index.html will only add 2 lines of code ( one for the script socket.io include and one script include for your clientscript.js ).No other additions permitted

Your clientscript.js will be no more than 10 lines of code.

One line declaring the socket and its connection to an ip address:port  
one line to "getElementByld"  
the form submit will have a callback to emit the message;  
lines for socket to "push", using a callback, to place the data in a p tag after the form

Of course, use jQuery for you clientscript.js

**Call instructor over to demo this lab for credit.**

1. start server on one machine. Record from console.log the ip address on which the server is running
2. on another machine, open firefox and point the browser to the correct ip:port
3. on a third machine, repeat step 2.
4. "perform" a chat between the 2 browsers.

**DELIVERABLES :**

Send to [streller@ecc.edu](mailto:streller@ecc.edu) an email this the exact subject

cs215\_Lab\_12

In this email attached the above named zip file

LastName\_ Lab\_09\_cs215.zip

Due Date : 8 May 2018

The zip file must include your app.js and your clientscript.js and your ReadMe. This file that contains your name at the top, the lab number, any comments regarding the assignment,  
The ReadMe file must be in the top level project folder.

Grading will be based on **correctness of the html, css and js files** and how the page is rendered in a browser, and the server response.

**NO submissions of any lab accepted after  
11:00am 9 May 2018**

**ALL lab demos completed by  
11 May 2018**