## Chat install tutorial

First you will need to install node.js onto your computer.

https://nodejs.org/en/

// display the template page

You can find the download at the URL above.

```
Next, create an empty directory that will hold EXPRESSJS, Jade, and Socket.io dependencies.
In that directory create a file called package.json with the following:
{
        "name": "RealTimeWebChat",
        "version": "0.0.0",
        "description": "Real time web chat",
        "dependencies": {
        "socket.io": "latest",
        "express": "latest",
        "jade": "latest"
        },
        "author": "developer"
}
Navigate to this directory from the command line (terminal) and run the following command
$ npm install
You now have everything you need to get your express app running.
Create a file named index.js and paste the following code into it.
var express = require("express");
var app = express();
var port = 3700;
// gets the socket.io server to listen first
var io = require('socket.io').listen(app.listen(port));
io.sockets.on('connection', function (socket) {
  socket.emit('message', { message: 'welcome to the chat' });
  socket.on('send', function (data) {
    io.sockets.emit('message', data);
        });
});
console.log("Listening on port " + port);
```

```
app.set('views', __dirname + '/tpl');
app.set('view engine', "jade");
app.engine('jade', require('jade').__express);
app.get("/", function(req, res){
  res.render("page");
});
// look for the chat.js file here
app.use(express.static( dirname + '/public'));
**************
This will set up server to run the chat application listening on port 3700, and provides a route for the
server to use.
Next create a new directory named tpl and create a file called page.jade in it with the following code:
html
       head
       title= "Real time web chat"
       script(src='/chat.js')
       script(src='/socket.io/socket.io.js')
       body
       #content(style='width: 500px; height: 300px; margin: 0 0 20px 0; border: solid 1px #999;
overflow-y: scroll; background-color:lightgray; font-family: Courier New; font-size:24px;')
    .controls
  input#field(style='width:350px; background-color:lightgray; font-family:Courier New; font-size:20px;')
  input#send(style='font-family:Courier New; font-size:20px;' type='button', value='send')
 ********************************
Now your html page should be set up to display the chat module.
Lastly, create a new directory called public and add the following code to a file named chat.js:
window.onload = function() {
       var messages = [];
       var socket = io.connect('http://localhost:3700');
       var field = document.getElementById("field");
       var sendButton = document.getElementById("send");
       var content = document.getElementById("content");
  socket.on('message', function (data) {
       if(data.message) {
      messages.push(data);
       var html = ";
      for(var i=0; i<messages.length; i++) {
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html += '<b>' + ('Server') + ': </b>';
        html += messages[i].message + '<br />';
        }
      content.innerHTML = html;
        // Set the text back to nothing.
      field.value = "";
        } else {
      console.log("There is a problem:", data);
        }
        });
  sendButton.onclick = function() {
    document.title="Message sent";
        console.log(name);
        if(name.value == "") {
       alert("Please type your name!");
        } else {
        var text = field.value;
      socket.emit('send', { message: text });
        }
        };
}
```

Now if you navigate to the root folder and run

\$ node index.js

Then type localhost: 3700 into your browser the chat module will be displayed!

Congratulations you have installed the chat module!