2.2 Socket IO Integration

This section will guide you to:

* Integrate **socket.io** in the Node JS application.

This guide has mainly five subsections, namely:

2.2.1 Creating a new NodeJS project

2.2.2 Installing express-handlebars and **socket.io**

2.2.3 Creating **app.js**

2.2.4 Creating **index.html**

2.2.5 Pushing code to GitHub repositories

*Visual Studio Code and MongoDB are already installed in your practice lab. (Refer MEAN: Lab Guide - Phase 3)*

**Step 2.2.1:** Creating a new NodeJS project

* Make sure you have a database with the name **Simplilearn** and a collection with the name **peoples** created in MongoDB.
* Create a folder with the name **NodeMongo**
* Run the below command to install node dependencies to the project folder

**npm install**

**npm init**

**Step 2.2.2:** Install express and **socket.io**

* Run the below command to install express:

**npm install --save express**

* Run the below command to install **socket.io** package

**npm install --save socket.io**

**npm install --save socket.io client**

**Step 2.2.3:** Create **app.js**

* Open Visual Studio Code and open the created NodeMongo folder
* In the root directory create **app.js** and add the code given below:

var app = require('http').createServer(handler)

var io = require('socket.io')(app);

var fs = require('fs');

var app = require('express')();

var server = require('http').Server(app);

var io = require('socket.io')(server);

server.listen(80);

// WARNING: app.listen(80) will NOT work here!

app.get('/', function (req, res) {

res.sendFile(\_\_dirname + '/index.html');

});

io.on('connection', function (socket) {

socket.emit('news', { hello: 'world' });

socket.on('my other event', function (data) {

console.log(data);

});

});

//app.listen(80);

function handler (req, res) {

fs.readFile(\_\_dirname + '/index.html',

function (err, data) {

if (err) {

res.writeHead(500);

return res.end('Error loading index.html');

}

res.writeHead(200);

res.end(data);

});

}

io.on('connection', function (socket) {

socket.emit('news', { hello: 'world' });

socket.on('my other event', function (data) {

console.log(data);

});

});

**Step 2.2.4:** Creating **index.html**

* Create a file named **index.html** in root directory and add the code given below:

<script src="/socket.io/socket.io.js"></script>

<script>

var socket = io('http://localhost');

socket.on('news', function (data) {

console.log(data);

socket.emit('my other event', { my: 'data' });

});

</script>

* Run the project by executing the command given below and open **localhost:80** in the browser:

**node app.js**

**Step 2.2.6:** Pushing the code to your GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

Initialize your repository using the following command:

git init

Add all the files to your git repository using the following command:

git add .

Commit the changes using the following command:

git commit . -m “Changes have been committed.”

Push the files to the folder you initially created using the following command:

git push -u origin master