Initializing a NodeJS project

# NodeJS is a runtime environment that executes JavaScript code.

In this tutorial we will be making and initializing an HTTP Server. For this tutorial all we will need is your File Explorer, Command Prompt, and an IDE. In this case the IDE we will be using is Atom. Assuming you have Atom installed you can continue with the tutorial.

Step One- open your File Explorer and go to Documents.

Step Two- make a new empty folder and name it to Server.

Step Three- double click into the folder you just made and copy the file path at the top of the screen.

Once you have created the new server folder and copied its file path, we can now head to Command Prompt.

Step Four- Once in command promp type in “cd \*CTRL+V\*”. When you hit CTRL+V it pastes the file path into the command line. Your command should look something like

|  |
| --- |
| cd    C:\Users\parke2023059\Documents\Server-Notebook1 |

Step Five- Once you have finished typing in the command hit enter.

Step Six- type in the command “npm init” and hit ENTER

|  |
| --- |
| npm init |

\*NOTE\*- typically you would fill out the following information accordingly but in the case of the tutorial we will skip all this information by hitting ENTER until you get to the “is this ok?” prompt. Type in yes. Now you have successfully initialized and created the server folder. Now onto creating the project itself.

Open up the Atom IDE.

Step one- once in Atom, up at the top left corner you will see file. Click on it and go down to where it says Add Project Folder. Once in the File Explorer, once again go to Documents and click on the Server folder we created earlier. Hit select folder.

Step Two- right click on notebook and click New File. When the new prompt pops up name the project server.js

Step Three- copy in the following code

|  |
| --- |
| const http = require('http');  const hostname = '127.0.0.1';  const port = 8080;  const server = http.createServer((req, res) => {    res.statusCode = 200;    res.setHeader('Content-Type', 'text/plain');    res.end('Hello World');  });  server.listen(port, hostname, () => {    console.log(`Server running at http://${hostname}:${port}/`);  }); |

As a quick recap of what the individual lines of code do – line one makes the server an HTTP server. Line 2 makes the IP the constant IP for the server for logging into it. Line Three makes port 8080 the port the server uses for income and outgoing information. Line four runs the command that actually runs the server. Line five is the line that sends the OK status code to the server to say everything is working properly. Line six creates Hello World on your screen when you run the server. Line seven makes the server always listen for incoming information that’s trying to connect it and reaches out and force connects it. Line eight logs when something happens on the server. Like when you turn it on or someone connects to the server it will log it.

Step Four- go back to Atom IDE and once again right click the server folder. Click Copy Full Path.

Step Five- go back to command prompt and type in the command “node server.js”. this is the command that opens and runs the server.

|  |
| --- |
| node server.js |

Step Six- once you hit enter,  you should have a website that opens and successfully shows the text, hello world.