Node JS

→ "An asynchronous event-driven JavaScript runtime, Node.js is designed to build scalable network applications."

— According to node JS.

→ Node REPL

R → Read
E → Eval
P → Print
L → Loop

→ Node REPL is a computer environment where user inputs are read and evaluated, and then the results are returned to the user.

→ To initiate Node REPL we type the command node.
To exit command : .exit OR , Press Ctrl + C two times.

* Node.js Modules

→ A set of functions you want to include in your application. Considers modules to be same as JavaScript libraries.

→ To include a module, use the require() function with the name of the module
Eg:- var http = require('http');

→ Built-in Modules:-
Node.js has a set of built-in modules which you can use without any further installation.

→ Create your own Modules:
You can create your own modules and easily include them in your applications
Eg:-
```
// Create a module that returns the current
// date and time:
    exports.myDateTime = function () {
        return Date();
    };
```

Use exports keyword to make properties & methods available outside the module file.

* NPM (Node Package Manager)

→ NPM is a package manager for Node.js packages or modules if you like.

→ NPM program is installed on your computer when you install Node.js

→ Basically NPM is a place which collects modules that people have built for Node and its created by the GitHub organization and is a great place to find the code that other people have written

→ Initialize NPM:

```
npm init
```

[Use npm init command to create a package.json file for your application]

→ Initiate the Node.js File:

```
node filename.js
```

- **Nodemon**

→ tool that helps develop Node.js based applications by automatically restarting the node application when file changes in the directory are detected

→ Installation: npm install -g nodemon [One time installation]

→ Usage: nodemon [your node app]

Express.js

[need to do on every new project]

→ To install Express
$ npm install express

→ Documentation: expressjs.com

→ Usage: const express = require("express");

- **Body-parser**
  → allows us to parse the information that we get sent from the post request
  We parse it so that we have access to properties and variables, so we can do our calculations.
  → $npm install body-parser
  → Use;
  const bodyParser = require("body-parser");

Eg;

```
const express = require("express");
const bodyParser = require("body-parser");
const app = express();
app.use(bodyParser.urlencoded({extended: true}));
```