Day 5 Node JS

Quick Revisit – NodeJS is a JavaScript Runtime Environment.

NodeJS is used to run the JS code outside the Browser

NodeJS = Google’s V8 Engine + Some Additional Libraries

It has many modules Buffer, DNS, OS, FS, Path, Streams etc.,

With the help of NodeJS, we can create any type of Javascript based applications.

Stand-alone, NetworkBased, Web- Based, Enterprise Applications

NodeJS Stable and LTS version is 16.17.0

LTS – Long Term Support.

Node & NPM are important tools.

NodeJS contains many commands, command options to run the JS code.

Similarly NPM (Node Package Manager) is a tool to manage JS based applications.

NPM also contains a utility called npm init, which will helps to create package.json file with the user input in interactive mode.

Express JS

Installing Express JS

Request & Response

Get, Post,

Routing & Cookies

Express JS – Is a Web Framework for NodeJS. Very fast, robust and Async in nature.

* Web Based Applications
* Mobile based Applications

Installing Express JS

Global Installation --- npm install –g express (C:\Users\syska\AppData\Roaming\npm\node\_modules)

Local Installation ---- npm install express (Installs in current folder)

Body-parser (NodeJS middlewarefor handling the JSON, Raw, Text and URL Encoded fomr)

Cookie-parser (Used to parse cookie header and populate req.cookies with an Object

Multer (For handling multipart form data)

Body Parser

**Node install body-parser –save**

Cookie Parser

**Npm I cookie-parser –save**

Multer

Npm I multer –save

Express JS is a JavaScript based server side component.

Client – Server Technology.

Client sends request to the server

Server responds for each client request, in the form of response object.

Client & Server Concepts (Request Object and Response Object)

Http contain many methods

* Get Method (Default method in http) Used to send non-secure data
* Post Method ( Create/Insert operation)
* Put Method (Used to do Update Operation)
* Delete Method (Used to delete a record from the DB Table)

Express JS Request Object

Req.app, req.baseurl, req.body, req.cookies, req.fresh, req.stale, req.hostname, req.ip, req.originalurl.

Req.accepts(‘html’) 🡺 html

Req.accepts(‘text/html’); 🡪 html and text allowed

Req.get(‘Content-type’)

Response object of Express JS

Res.app – holds a reference to the instance of express application

Res.headersSent – Boolean Prop (True/False)

Res.locals

Res.append

Res.attachment

Res.append(‘Link’, [‘<<http://localhost/>>’,’<https://localhost:3000/>’]);

Res.append(‘warning’, ‘Some sample warning message’);

Fetch data using JSON

Express Routing