**19-04-2022**

**Using JavaScript we can read, write and update DOM ie html content dynamically.**

**jQuery : jQuery is a third party open source library which provided lot of pre-defined function which help to read, write and update dom every easily.**

**Library is not a standard. Easy to learn and light weighted.**

**Framework follow standard. It follow set of rules and regulation. Design pattern. The implementation of all design pattern is taken care by framework. So we develop the application using framework by default we are following standard. If we develop the application using framework 60 to 70 task taken care by framework. But framework is not a final product. It is template or protocol.**

**Angular is Framework : it heavy. Complex and but follow standard. Angular MVC (Model View Controller /Component).**

**React is Library . light weighted. Easy to learn. But doesn’t follow standard.**

**React with Redux or Flux to make standard.**

**Angular is a framework.**

**Angular is a open source web framework provided by google. Which help to create SPA (Single page application).**

**Angular JS : 1.0 1.x**

**Base upon html, css and JavaScript using ES5**

**Angular Framework**

**2.x to 13.x**

**Base upon HTML, CSS, JavaScript and Typescript and node js**

**Typescript is a type of scripting language which also known as super set of JavaScript which support all features of ES6 mainly data types.**

**Browser can’t understand typescript language so we have to convert ts to js using transpiler.**

1. **Typescript : in angular we use typescript transpiler**
2. **Babel :in react we use babel.**

**Node Js is a run time environment for JavaScript, library or Framework.**

**Before Node JS JavaScript is known as client side scripting language. But after node js JavaScript also known as Client side as well as server side scripting language.**

**Using node js we create web application, rest full web service, we can do file handling program, we can connect database ie mysql or mongo db etc.**

**MEAN Stack Mongo DB / My SQL Express JS Angular and Node JS**

**MERN Stack Mongo DB / My SQL Express JS React and Node JS**

**Before Node js We were not able to run JavaScript program without taking the help of html page.**

**But after node js we can run js program on console or terminal.**

**In Node JS we can’t use DOM and BOM :**

**Create the folder typescript**

**welcome.ts**

**console.log(“Welcome to Typescript”);**

**to convert ts to js we have to install transpiler**

**npm install –g typescript**

**tsc welcome.ts This command is use to convert ts to js**

**node welcome.js This command is use to convert js program**

**dataTypes**

**var/let variableName:datatype;**

**var/let variableName:datatype=value;**