**HTML**

**CSS**

**JavaScript**

**DOM : document object model**

**Html, head, body, p, div tags**

**DOM parser.**

**jQuery**

**Ajax**

**SPA : Single Page application.**

**Difference between angular and react js**

Angular : Angular is a framework. Framework internally follow standard while developing any large or enterprise application framework is good option. Framework internally follow design pattern. Angular is component base architecture framework. Framework is complex.

React JS : React JS is library. React JS easy to learn. React is light weighted. In MVC react only focus on View. React JS doesn’t follow standard by default

React JS with redux or flux. React JS internally use virtual DOM.

Reat JS with JavaScript

Reat JS with Typescript

Node JS : Node JS is run time environment for JavaScript library or framework. Before Node JS JavaScript known as Client side scripting language. But after node JS JavaScript also known as Client side as well as server side scripting language.

MEAN Stack 🡪 Mongo DB, Express JS , Angular and Node JS

MERN Stack 🡪 Mongo DB, Express JS , React and Node JS

Npm (node package manager).

npm install -g @angular/cli

if we want to create react JS project

npm install -g create-react-app window

or

sudo npm install -g create-react-app non window or virtual lab.

after installation we can create the project

create-react-app project-name1

move inside that project folder using command as

cd project-name

npm install

npm start this command is use to run the project.

<http://localhost:3000>

react js as well as angular are component base. Which help to create SPA.

Component : component is use to control the view or part of view of web page.

In angular we can say component is a type of directive

Using directive we can add extra behaviour to dom or html page.

In angular 3 types

1. Component directive : using component directive we can create user-defined tags with help of selector. Using templateUrl we display static and dynamic content of web page.
2. Structure directive ngFor or ngIf we can add or remove html contents.
3. Attribute directive : ngClass and ngStyle apply css effect

In angular to create component we need to use typescript class concept.

But in react js we can create component using

1. Class base : ES6 style
2. Function base ES5 style
3. Arrow base : ES6 style

In React if we want to create component using function style

We need to create function and that function return JSX. (JavaScript and XML).

JSX provide us to write HTML code ie dynamic html inside JavaScript functions.

React js provide two modules

React and ReactDOM

React module is use to create component using class style or function style.

ReactDOM is use to render component code to actual DOM. It provide bridge between user-defined component html code to actual dom code.

Component mainly divided into two types.

1. Stateful component – we create using class style
2. Stateless component – we create using function style

(using react hook we can create stateful component using function style also possible).

Employee component in class style

Customer component in function style

Types of variables.

In react js variable are divided into 2 types.

1. State variable : state is use to describe the behaviour of component. State variable can be change the value using setState in class component or user-defined function in function component. State variable also known as mutable variable.
2. Props variable : it is use to pass the value from one component to another component.

Props is known as immutable variable because we can’t change the value.

App -🡪 parent component

Created city state variable using useState we can access within this component

Employee Customer -🡪 Child component

Class style function style

Id,name,age using id,name,age created state variable

State insider constructor using useState

We can access within this component we can access within this component in jsx.

In jsx.

React forms and events

create-react-app react-login-app

cd react-login-app

npm start

open this project in vs code.

JS event

onClick = functionName();

angular event

(click) = functionName(); this function is part of .ts file

React js event

onClick = {functionName} or {inlineFunction}