**Toolchain for building React Application**

* In computing technologies toolchain refers to a set of software tools required for building, debugging, testing and deploying application.

**You can use React in existing web application:**

**Setup Environment:**

* + **Download and Install Node.js 10+ version [for Package Manager NPM 5+]**  
    [Package Manager is tool used to download and install library for your project]  
    **Ex:** *Yarn, NPM, RubyGems, Grunt, NuGet, etc.*   
    <https://nodejs.org/en/download/>
  + **Check the Version of NPM and Node.**js   
    C:\>node -v   
    C:\>npm -v
  + **Download and Install “Visual Studio Code” editor**<https://code.visualstudio.com/>
  + **Download and Install Following Extensions in VS-Code Editor**Live Server  
    vscode-icons

**Create a Traditional Web Application**

* Create a new Folder on your PC  
  **C:\ReactApplication**
* Open the folder the Vs-Code Editor
* Open “Terminal” [use command prompt]
* Run the following command  
  **C:\ReactApplication> npm init**
* This will generate “package.json”, which contains meta data.
* Add following folders
  + public [to keep all your static resources]
  + src [to keep all your dynamic resources]
* Install bootstrap for project  
  **> npm install bootstrap**[this will install bootstrap 5] *npm install* [*bootstrap@4.6*](mailto:bootstrap@4.6)
* This will add **“node\_modules”** folder
* Add a following files into public folder

**Index.html**

<!DOCTYPE html>

<html>

<head>

<title>Index</title>

<link rel="stylesheet" href="../node\_modules/bootstrap/dist/css/bootstrap.css">

</head>

<body class="container-fluid">

<div class="text-center">

<h2 class="text-primary">Web Application</h2>

<a href="home.html">Home</a>

</div>

</body>

</html>

**Home.html**

<!DOCTYPE html>

<html>

<head>

<title>Home</title>

<link rel="stylesheet" href="../node\_modules/bootstrap/dist/css/bootstrap.css">

<script crossorigin src="https://unpkg.com/react@17/umd/react.development.js"></script>

<script crossorigin src="https://unpkg.com/react-dom@17/umd/react-dom.development.js"></script>

<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>

<script type="text/babel">

ReactDOM.render(

"Welcome to React.js",

document.getElementById("container")

)

</script>

</head>

<body class="container-fluid">

<div class="bg-danger text-white mt-3 p-4 text-center">

<h1>Home</h1>

<div id="container"></div>

<div>

<a href="index.html" class="btn btn-light">Back to Index</a>

</div>

</div>

</body>

</html>