

## What is EMMET?

Emmet is a plug-in/toolkit for text-editors/IDEs to improve the HTML and CSS workflow.

Emmet snippets and expansion is built in VS Code, no extensions required.

Emmet abbreviation and snippets expansion are enabled by default in HTML, CSS, JSX, XML and can be used with programming languages.

When you start typing an Emmet abbreviation, you'll see the abbreviation displayed in the suggestion list.

With the help of Emmet, developers can save time and keystrokes.

## Difference between Library and Framework?

Both library and framework are CODE written by someone that helps us to perform some common tasks in less expansive way.

The technical difference between them lies in a term called inversion of control.

When you're using a library, you're in charge of the flow of application. You're Choosing when and where to call the LIBRARY.

Library doesn't invert the control of the program. A Programmer calls the library where and when to use as needed.

Ex: - React, jQuery

When you're using a framework, the framework is in charge of the flow of the application. It provides some places for us to place/plug our code, but it calls the code we placed in as required.

Framework inverts the control of the program. It tells the developer what it needs

Ex: - Angular, Vue.js

## What is CDN? Why do we use it?

A CDN, or Content Delivery Network, is a Network or Collection of servers in locations all over the World. CDN also known as Content **Distribution** Network. A CDN can refer to many types of Content Delivery services such as Load balancing and Video streaming.

A CDNs' network of servers allows companies to deliver content from their website and mobile applications to Customers more quickly and efficiently, based on their geographical location. In a nutshell, CDN moves data and applications close to the end user with increasing speed, enhancing security, and improving in the user experience.

There're many benefits of a Content Delivery Network, from improved user experience to increasing security at lower costs.

## **BENEFITS OF CDN**

- 1.Reduce Page load time
- 2.Improved availability
- 3.Increased Scalability
- 4.Increase Security

Both React and React DOM are available over CDN

### **1.ReactJs**

```
<script cross origin src="https://unpkg.com/react@18/umd/react.development.js"></script>
```

### **2.React DOM**

```
<script cross origin src="https://unpkg.com/react-dom@18/umd/react-dom.development.js"></script>
```

## **Why is React known as React?**

React was developed for Meta (formerly Facebook) applications that have constantly changing data. Since React is a frontend JavaScript Library or the View in MVC (Model View Controller) for building user interfaces based on UI components, which means when the user clicks around and changes the app's data, the view should "REACT" or change with the user events. User events being Typing, submitting a form, like, share etc

## **What is Cross origin in Script Tag?**

- The cross-origin attribute in the <script> tag specifies that CORS is supported when loading an external script file from a third-party server or domain.
- CORS stands for CROSS ORIGIN RESOURCE SHARING.
- CORS is a standard mechanism to retrieve files from third party domain or server.
- If specified, the script file request will be sent with or without credentials.
- Cross-origin attribute is only relevant when the script retrieved from third party domain or server. Do not use this attribute these files are on our own server.

## **What is the difference between React and React DOM?**

When building web applications in React, we use two packages- react and reactDOM.

Why is there React and ReactDOM? What is difference?

React library is responsible for creating views and React DOM library is responsible to render the UI in the browser.

- i. The React package holds the react source for components, state, props and all the code that is react.

- ii. The React DOM package as the name implies is the glue between React and the DOM. Often, we'll only use it for one single thing: mounting our application to the index.html file with ReactDOM.render().

### **Why Separate them?**

The reason why react and react DOM are split into two libraries was due to the arrival of React Native. React Native is a platform for mobile development.

React Components are great way to organize UI that it has spread to mobile and thus react is used in web and in mobile. Whereas react-dom is only used in web apps.

### **What is the difference between react.development.js and react.production.js files via CDN?**

React provides us with two versions: an uncompressed version for development and a minified version for production.

The development version includes extra warnings about common mistakes and give us access to tools that make development and debugging easier.

The production version includes extra performance optimizations and strips all error messages. Production version minifies our code and better represents the performance our app will have on end user's devices.

### **What is Async and Defer?**

In Async, the script is downloaded in Parallel with the parsing of page and executed as soon as it's available before parsing completes.

In Defer, the script is downloaded in parallel with the parsing of page and executed after the page has finished parsing.

If neither Async or defer is present, the script is downloaded and executed immediately, blocking parsing until the script is completed.