

## EP-01 Inception (Assignment)

### ❖ What is Emmet?

- Emmet is an essential toolkit for web-developers or a free add-on for our text-editor. It allows you to type shortcuts that are then expanded into a full piece of code. By using emmet, developers type less, they save both on keystrokes and time.
- It also helps in fewer typo errors and tags, leading to more robust and valid files.

### ❖ Difference between a library and framework.

- A framework is a set of pre-written code that provides a structure for developing software applications.
- A library is a collection of pre-written code that can be used to specific tasks.
- Framework can be more rigid and may limit the developers ability to customize certain aspects of an application.
- Libraries are generally more flexible and can be easily replaced or swapped out if necessary.

### ❖ What is CDN? Why do we use it?

- A content delivery network (CDN) is a geographically distributed group of servers that caches content close to end users.
- A CDN allows for the quick transfer of assets needed for loading internet content, including HTML pages, javascript files, stylesheets, images and videos.
- There are many benefits of using a CDN depending on the size and needs of an internet property such as.
  - **Improving website load times :-**
    - By distributing content closer to website visitors by a CDN server.
  - **Reducing bandwidth costs:-**
    - Website hosting cost is a primary expense for a website but by using CDN, it will reduce the amount of data and origin server must provide, thus reducing host cost.

- **Increasing content availability and redundancy.**
  - Large amounts of traffic or hardware failure can interrupt normal website function. Thanks to their distributed nature, A CDN can handle more traffic.

#### ❖ Why is React known a React?

- React called as React because it was designed to be **Reactive, declarative, efficient, and flexible** javascript library for building use interfaces.
- The name react chosen because the library was designed to allow developer to “react” to change in state and data within an application, and to update the user interface in a declarative and efficient manner.

#### ❖ What is the difference between react and reactDOM?

- **React :-** React is a javascript library, designed for building better user interfaces.
- **React DOM :-** React DOM is a complimentary library of react which gives react to the browser DOM.
  - In a nutshell, whenever we use components, class, elements etc. where we are using React and whenever we use methods like **render()** or **findDOMNode()** we're using ReactDOM.
  - So react has some packages like react-native, react-art ect. That doesn't require a DOM library that's why they have separate libraries.

#### ❖ What is cross-origin in the script tag?

- The crossorigin attribute sets the mode of request to an HTTP CORS request.

Web pages often make requests to load resources on other servers. Here is where CORS comes in.

A cross-origin request is a request for a resource (e.g. style sheets, iframes, images, fonts, or scripts) from another domain.

CORS is used to manage cross-origin requests.

CORS stands for Cross-Origin Resource Sharing, and is a mechanism that allows resources on a web page to be requested from another domain outside their own domain. It defines a way of how a browser and server can interact to determine whether it is safe to allow the cross-origin request. CORS allows servers to specify who can access the assets on the server, among many other things.

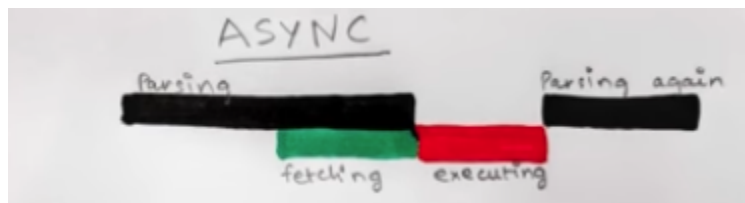
❖ **What is the difference between react.development.js and react.production.js file via CDN?**

- Development CDN is used for the development phase because it is build for development and it's slow as compared to production.
- Production CDN is used for production phase means in the build and it's fast and optimised as compared to development..

❖ **What are async and defer?**

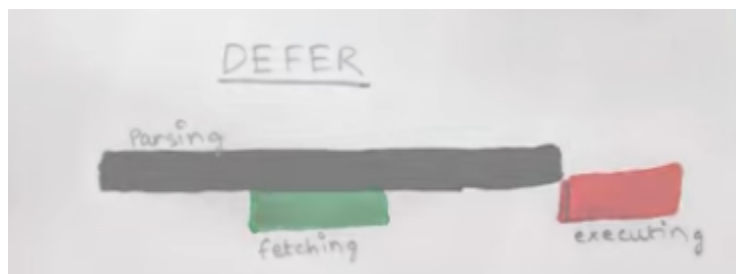
- Async and Defer are used in script tag as attributes but for different purposes.

■ **ASYNC**



- In async, script will fetch data while parsing HTML and when data is fetched then HTML parsing pauses and executing the script then starts the HTML parsing.

■ **DEFER**



- In Defer, script will fetch data while parsing HTML and when HTML parsing completed then only script will start executing.