

Assignment (Theory):

① What is Emmet?

Ans: Emmet is a Essential toolkit for web-developers.

- * Emmet is a plugin for many popular text editors which greatly improves HTML & CSS workflow by providing useful snippets.
>:child, +:Siblings.

② Difference between Library & Framework?

Ans: * Both frameworks & libraries are code written by someone else that is used to help solve common problems.

Ex: React is library build by Facebook engineers.

- * we developers use React to build websites.

* The technical difference between a framework & library lies in a term called Inversion of control.

* when we use a library, we are in charge of the flow of the application. we are choosing when and where to use/call the library. (parts of project or full project depends).

* when we use a framework, the framework is in charge of the flow. It tells you where to plug the code because it needed to run the project.

Library (React): Library (React) can be used whenever & whenever we want to. Like library can be used in only header or sidebar etc.

- * Library can be used in full project to, depends on our requirements.

* It comes with some functionalities.

Frameworks (Angular): Frameworks come with bunch functionalities. It has to be used in full project. It provides routing.

③ What is 'CDN'? why do we use it?

Ans: 'Content Delivery Network' (CDN) is a geographically distributed network of servers which help to us to get the data from the server.

Scenario: CDN is a place where React library is hosted.

Some are just pulling/Fetching that React from CDN geographically distributed Network & putting it into our projects/code through/using CDN links.

④ Why is React known as React?

Ans: React goal is to react/respond ^{accordingly} to ~~the~~ whenever state changes.

⑤ What is 'crossorigin' in script tag?

Ans: 'cross-Origin Resource Sharing (CORS)' is a HTTP-header based mechanism that allows a server to indicate any origins (domain, scheme, port) other than its own from which a browser should permit loading resources.

Scenario: when we start developing Fullstack (MERN) app then we have frontend & Backend running on different ports (Frontend: 3000, Backend: 8000) & while calling REST API'S By posting data to backend or ~~fetching~~ from frontend or Fetching data from backend to frontend we will have different domain names.

∴ CORS provides Browser to permit loading from different resources (different ports / different domains).

⑥ what is difference between 'React' & 'ReactDOM'?

Aus: React: * It has core React Algorithms.

~~React~~ * It is responsible for ~~the~~ creating React Elements
(Ex: `document.createElement()`).

ReactDOM: * It is used for DOM manipulation.

* responsible for rendering React Elements to the DOM (Ex: `root.render(parent)`).

NOTE: The reason that React & ReactDOM are separate is because ReactJS support other platforms as well like React Native & React 3D.

⑦ what is difference between `react.development.js` & `react.production.js` files via CDN?

Aus: `react.development.js` \Rightarrow used when we are in development.
`react.production.js` \Rightarrow used when we have to launch our web-app in production (mainly app).