

Inception Assignments

(1) What is Emmet?

Emmet is a free add-on for your text editor that allows you to type shortcuts that are then expanded into full pieces of code. By using Emmet, email designers type less, saving both keystrokes and time when building a campaign.

(2) 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, on the other hand, is a collection of pre-written code that can be used to perform specific tasks.

Framework defines the overall architecture of the application and provides a common set of conventions for building and maintaining the code. Library is typically smaller in scope than a framework and is intended to be used as a tool to help developers accomplish specific tasks.

(3) What is CDN? Why do we use it?(CDN : Content Delivery Network)

A CDN is a network of servers that distributes content from an “origin” server throughout the world by caching content close to where each end user is accessing the internet via a web-enabled device. The content they request is first stored on the origin server and is then replicated and stored elsewhere as needed. By caching content physically close to where a user is and reducing the distance it has to travel, latency is reduced. This process also decreases stress on origin servers by distributing the load geographically across multiple servers.

Advantages :

(i)Improving website load times - By distributing content closer to website visitors by using a nearby CDN server (among other optimizations), visitors experience faster page loading times.

(ii)Reducing bandwidth costs - Bandwidth consumption costs for website hosting is a primary expense for websites. Through caching and other optimizations, CDNs are able to reduce the amount of data an origin server must provide, thus reducing hosting costs for website owners.

(iii)Increasing content availability and redundancy - Large amounts of traffic or hardware failures can interrupt normal website function. Thanks to their distributed nature, a CDN can handle more traffic and withstand hardware failure better than many origin servers.

(iv)Improving website security

(4) Why is React known as React?

React was developed by Facebook and released in 2013, and it has since become one of the most popular JavaScript libraries for building web and mobile applications. The name "React" was chosen because the library was designed to allow developers to "react" to changes in state and data within an application, and to update the user interface in a declarative and efficient manner.

(5) What is crossorigin in script tag?

The crossorigin attribute sets the mode of the 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 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

(6) What is difference between React and ReactDOM?

The reason React and ReactDOM were split into two libraries was due to the arrival of React Native. React contains functionality utilised in web and mobile apps. ReactDOM functionality is utilised only in web apps.

(7) What is difference between react.development.js and react.production.js files via CDN?

Your project will always run in either development or production mode. Development mode includes useful warnings and gives you access to

tools that make development and debugging easier. Production mode minifies your code and better represents the performance your app will have on end users' devices.

(8) What is async vs defer?

Async in script tag in JavaScript is a way to load scripts asynchronously. That means, if a script is async, it will be loaded independently of other scripts on the page, and will not block the page from loading. If you have a page with several external scripts, loading them all asynchronously can speed up the page load time, because the browser can download and execute them in parallel.

(`<script async src=""></script>`)

By using the defer attribute in HTML, the browser will load the script only after parsing (loading) the page. This can be helpful if you have a script that is dependent on other scripts, or if you want to improve the loading time of your page by loading scripts after the initial page load.

(`<script defer src=""></script>`)

The async and defer attributes both allow the browser to continue parsing the HTML document while JavaScript files are being downloaded, but they differ in when those files are executed.

Async downloads and executes JavaScript as soon as it's available, while defer attribute waits until the HTML document has been parsed before downloading and executing any external scripts. In most cases, it doesn't matter which attribute you use – both will improve performance by allowing the browser to continue parsing while waiting for JavaScript to download. However, there are some situations where one attribute may be preferable to the other.