**Chapter 01 – Inception**

1. **What is Emmet?**

Emmet is a free add-on for our text editors that allows us to write shortcuts in our code which is then expanded into a full piece of code.

**Ex-** table>tr\*3>td>img+p+a **(**This piece of code will expand into a table have three row and each row will have img, para and anchor tag inside each td).

1. **Difference between Library and Framework?**

* Frameworks and libraries are both code written by someone else that helps you perform some common tasks in easier ways.
* A framework inverts the control of the program. It tells the developer what they need. A library doesn’t. The programmer calls the library where and when *they* need it.
* **Example-** A library is like going to Ikea. You already have a home, but you need a bit of help with furniture. You don’t feel like making your own table from scratch. Ikea allows you to pick and choose different things to go in your home. You are in control.
* A framework, on the other hand, is like building a model home. You have a set of blueprints and a few limited choices when it comes to architecture and design. Ultimately, the contractor and blueprint are in control. And they will let you know when and where you can provide your input.

1. **What is CDN? Why do we use it?**

A Content Delivery Network or a CDN is a globally-distributed network of servers that helps provide high-availability, faster performance, and security to websites distributing their content via it.

It is a globally distributed network of servers that store (commonly referred to as "cache") and deliver some or all of your website's content. Each of these servers in the CDN's network is called a Point of Presence (PoP) or an edge server.Instead of delivering your website resources directly from your website server, you deliver them via a CDN's PoPs or edges.

1. **Why is React Known as React ?**

React is named React because of its ability to react to changes in data. React is called React because it was designed to be a declarative, efficient, and flexible JavaScript library for building user interfaces.

1. **What is cross origin in script tag?**

The cross origin attribute sets the mode of the request to an HTTP CORS Request.

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

CORS (Cross-Origin Resource Sharing) is used to manage cross-origin requests.

1. **What is the difference between React and React DOM?**

* React is a JavaScript library for building User Interfaces whereas ReactDOM is also JavaScript library that allows React to interact with the DOM.
* In a nutshell, whenever we use **component, classes, elements**, etc. We’re using **React** and whenever we use methods like render() or findDOMNode() we’re using **React-DOM.**
* **React-DOM binds the idea of React to a web browser**. And ideally, **React has nothing to do with a browser or web for that matter**. That’s why we’re seeing tools and frameworks like React-Native, React-Three being developed. These tools and frameworks don’t use React-DOM, but they do in fact use the idea behind React.

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

React.Production.js is much faster than react.developemnt.js because it is the more minified and optimized version of React.

1. **What is async and defer?**

Async allows your script to run as soon as it’s loaded, without blocking other elements on the page. Defer means your script will only execute after the page has finished loading.

**Without async and defer –** Html parsing goes on and as soon as it encounters the script tag it stops HTML parsing and script is fetched from the network and it is then and there executed and after that HTML parsing continues.

**Async –** Html parsing goes on and as soon as it encounters the script tag the HTML parsing and script is fetched parallelly. Once the script is available it is executed and then the HTML parsing continues.

**Defer -** Html parsing goes on and as soon as it encounters the script tag the HTML parsing and script is fetched parallelly. Once the HTML parsing gets completed then only the script is executed.

**Async does not guarantee the order of execution of scripts but defer does.**