

## Namaste React Assignment1

### What is Emmet?

- It is a plugin used in most popular text editors (VS CODE) which improves the CSS and html workflows.
- Link for Emmet Cheatsheet:<https://docs.emmet.io/cheat-sheet/>

### Difference between a Library and a Framework?

Framework	Library
Provides ready to use tools, standards, templates, and policies for fast application development	Provides reusable function for our code
The framework controls calling of libraries for our code.	Our code controls when and where to call a library
To leverage the benefit of a framework, a fresh application can be developed following the framework's guideline	Library can be added to augment the features of an existing application
Easy to create and deploy an application	Facilitates program binding
Helps us to develop a software application quickly	Helps us to reuse a software function
Intent of a framework is to reduce the complexity of the software development process	Intent of a library is to provide reusable software functionality

### What is CDN?

A content delivery network (CDN) is a group of servers spread out over a region or around the world. They are also called POP(Point of presence) that work together to speed up content delivery on the web. The servers in a CDN temporarily store (or [cache](#)) webpage content like images, HTML, JavaScript, and [video](#). They send the cached content to users who load the webpage. Today, almost all websites and applications rely on a CDN to help serve content to their users.

### Why do we use it?

Web applications use CDNs largely because they offer four important benefits: better performance, increased reliability, cost savings, and resilience against cyber attacks.

### Why is React known as React?

- React is named React because of its ability to react to changes in data. When the data in a React component changes, React will automatically re-render the component so that it reflects the new data. This makes it easy to create performant user interfaces that always look up-to-date.
- 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.

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

- The [crossorigin](#) attribute on a `<script>` tag specifies that CORS is supported when loading an external script file from a third party server or domain.
- CORS is a standard mechanism used to retrieve files from other domains.
- The [crossorigin](#) attribute specifies that the script element supports CORS.
- CORS stands for *Cross Origin Resource Sharing*.
- CORS is a standard mechanism to retrieve files from a third party domain or server.
- If specified, the script file request will be sent with or without credentials.

### What is the difference between React and ReactDOM?

- React is a open-source JS library. to develop UI (User Interface) on web application or site. Its fully component base.
- React DOM is the glue between React and the DOM. When u want to show your react component on DOM u need to use this ReactDOM.render(); from React Dom.

OR

In short, React is a library for building UI components, and ReactDOM is a library that is use to render those components to the DOM. They are commonly used together, but they are distinct libraries with different functions

- ReactDOM is responsible for updating the DOM to reflect the changes made to a React Component.

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

The react.development.js file is a version of the React library that is optimized for development. It includes extra warnings and error messages that can help you find problems with your code, and it is generally larger in size than the production version of the library.

On the other hand, the react.production.js file is a version of the React library that is optimized for production. It has been minified and stripped of unnecessary code, so it is smaller in size and runs more efficiently in the browser. It does not include the extra warnings and error messages that are present in the development version of the library.

### **What are 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. Mostly prefer defer If order of execution of scripts doesn't matter then use async.

