## Q1. What is Emmet?

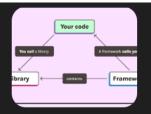
Emmet is a free, open-source toolkit of plugins for text editors that helps developers code faster and more efficiently in HTML, XML, XSLT, and other structured code formats:

• How it works: Emmet allows developers to type abbreviations, or expressions, that are then expanded into full pieces of code with a single keystroke. For example, the abbreviation ul#nav>li.item\$\*4>a{Item \$} can be expanded into the following code:

Code

# Q2. Difference between a library and a framework?

The main difference between a library and a framework is that a library gives you tools to use as you wish, while a framework provides a structured environment that guides how you build your application.



Here are some other differences between libraries and frameworks:

#### Inversion of control

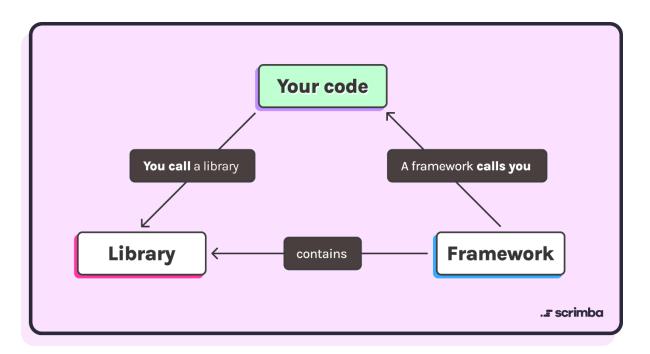
With a library, you control the application flow, but with a framework, the framework controls the flow.

#### Ease of use

Libraries can be easily linked into existing programs, but frameworks are difficult to incorporate into an existing project.

#### Code

Developing a library requires less code, which improves performance and load time. Constructing a framework requires a lot of code, which can reduce performance and increase load time.



More you can learn → <u>Library Vs Framework</u>

# Q3. What is CDN? Why do we use it?

A content delivery network (CDN) is a group of servers that speeds up the delivery of web content to users by storing copies of files in data centers around the world. CDNs are used to improve performance, increase reliability, save costs, and protect websites from cyber attacks.



### Here are some reasons why CDNs are used:

#### **Performance**

CDNs reduce the distance between the user and the server, which speeds up the delivery of content. This can result in load times that are 50% faster or more.

## Reliability

CDNs can help with reliability by reducing the number of issues that can occur on the internet, such as server downtime, network congestion, and connection interruptions.

#### **Cost savings**

CDNs can help save costs.

#### Cybersecurity

CDNs can help protect websites from cyber attacks, such as Distributed Denial of Service (DDOS) attacks.

CDNs are used by almost all websites and applications, including major sites

CDN keeps Local Copy of content geographically nearer to the consumers.

# Q4. Why is React known as react?

React is called React because it reacts to changes in a user's actions without reloading the entire web page:

### **Reacts to changes**

React is responsive to changes in a user's actions, such as clicking, typing, or submitting. For example, if a user adds an item to their shopping cart, only the shopping cart component updates, not the entire page.

#### **Uses the Virtual DOM**

React uses the Virtual DOM (Document Object Model) to efficiently update only the necessary parts of a webpage. The DOM is like a tree structure where each node is an object representing a part of the document.

### **Built with components**

React's name also reflects its approach to building Uls, which is made up of components. A component can be a button, menu, picture, or even a whole section of a page.

# Q5. What is crossorigin in script tag?

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.

## Q6. Difference between React and ReactDOM?

React is a JavaScript library for building user interfaces, while ReactDOM is a separate package that provides DOM-specific methods for managing React components:

#### React

A JavaScript library that's used to build user interfaces. React uses components, classes, and elements. Some of its features include JSX, Virtual DOM, one-way data binding, and component-based architecture.

#### **ReactDOM**

A package that's used to render components and elements on the web. It's used to create user interfaces, dynamic web applications, and reusable components.

ReactDOM is used for methods like render() or findDOMNode().

React and ReactDOM were split into two libraries because of the introduction of React Native, a React platform for mobile development. React is used in both web and mobile, while ReactDOM is only used in web apps.

Q7. What is difference between react.development.js and react.production.js files via CDN?

Learn More <u>Development vs Production</u>

Q8. What is HTML Parsing?

HTML parsing is the process of converting HTML code written as text into a format that a browser can use. The browser engine performs this parsing.

Parsing is a computer science technique that breaks down complex data structures or code into smaller, more manageable components. The goal is to analyze and interpret the syntax of the code to extract relevant information.

Q9. What is async and defer?

Learn Here

# **Coding Section**

Que: Using React

- use CDN Links
- Create an Element
- Create nested React Elements
- Use root.render

**ENJOY!**