1. What is Emmet?

Emmet is a free add-on for your text editor. It allows you to type shortcuts that are then expanded into full pieces of code. By using Emmet, developers type less, they save both on keystrokes and time.

2.Difference between a Library and Framework?

In contrast to pure code, a library is not an independently executable unit, but an additional module that is requested by a programme.

To put it simply, libraries are collections of classes and functions, which is why they are sometimes also called component or class libraries. With the help of a programme interface (API / Application Programming Interface), access to the necessary functions from the library is made possible. However, access is only limited to the “public” functions; libraries also have “private” functions that work in the background but remain hidden from the outside world.

The framework, provides the blueprint and the basic framework and also shows what is still needed from the programmer in terms of customisation. The framework provides the flow of a software application and tells the developer what it needs and calls the code provided by the developer as required. If a library is used, the application calls the code from the library.

3.What is CDN? Why do we use it?

A CDN is essentially a network of geographically dispersed servers. Each CDN node (also called Edge Server) caches the static content of a site like the images, CSS/JS files and other structural components. The majority of an end-user’s page load time is spent on retrieving this content, and so it makes sense to provide these “building blocks” of a site in as many server nodes as possible, distributed throughout the world.

When a user requests your site, the node closest in proximity to user will deliver the static content, ensuring the shortest distance for the data to travel (reduced latency), therefore providing the fastest site experience.

4. Why is React known as React?

React was developed for applications (Facebook) that have constantly changing data. Since React is a front-end framework or the “View” in MVC, this means that as the user clicks around and changes the app’s data, the view should “react” or change with those user events. User events being mouse clicks, typing, submitting a form.

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.

6. What is diference between React and ReactDOM?

React is a JavaScript library for building User Interfaces and ReactDOM is the JavaScript library that allows React to interact with the DOM.

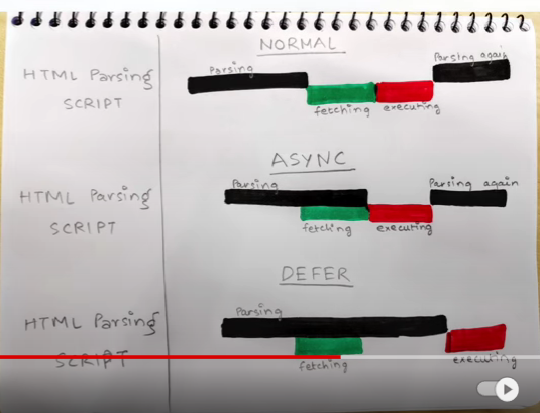
React library is responsible for creating views and ReactDOM library is responsible to actually render UI in the browser.

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

an uncompressed version for development and a minified version for production.

8. What is async and defer?

Async - means execute code when it is downloaded and do not block DOM construction during downloading process. Defer - means execute code after it's downloaded and browser finished DOM construction and rendering process.



9. What is `NPM`?

npm is two things: first and foremost, it is an online repository for the publishing of open-source Node.js projects; second, it is a command-line utility for interacting with said repository that aids in package installation, version management, and dependency management.

10. - What is `Parcel/Webpack`? Why do we need it?

Developers describe Parcel as "📦🚀 A fast, zero configuration web application bundler". Parcel is a web application bundler, differentiated by its developer experience. It offers blazing fast performance utilizing multicore processing, and requires zero configuration. On the other hand, Webpack is detailed as "A bundler for javascript and friends". A bundler for javascript and friends. Packs many modules into a few bundled assets. Code Splitting allows to load parts for the application on demand. Through "loaders" modules can be CommonJs, AMD, ES6 modules, CSS, Images, JSON, Coffeescript, LESS, ... and your custom stuff.

Parcel and Webpack belong to "JS Build Tools / JS Task Runners" category of the tech stack.

11. What is `.parcel-cache`

cache folder (or . parcel-cache in parcel v2) stores information about your project when parcel builds it, so that when it rebuilds, it doesn't have to re-parse and re-analyze everything from scratch. It's a key reason why parcel can be so fast in development mode.

11 - What is `npx` ?

The command npm is used to download JavaScript packages from [Node Package Manager](https://www.npmjs.com/), and NPX stands for **Node Package eXecute**. It is simply an NPM package runner. It allows developers to execute any Javascript Package available on the NPM registry without even installing it..

Running npx with the name of a package will search node\_modules for that package and run it. Packages that are not found will first be downloaded and then run.

12- - What is difference between `dependencies` vs `devDependencies?

"dependencies" : Packages required by your application in production. "devDependencies" : Packages that are only needed for local development and testing.

13 What is Tree Shaking?

**Tree shaking** is a term commonly used within a JavaScript context to describe the removal of dead code.

It relies on the [import](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/import) and [export](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/export) statements to detect if code modules are exported and imported for use between JavaScript files.

In modern JavaScript applications, we use module bundlers (e.g., [webpack](https://webpack.js.org/) or [Rollup](https://github.com/rollup/rollup)) to automatically remove dead code when bundling multiple JavaScript files into single files. This is important for preparing code that is production ready, for example with clean structures and minimal file size.

14 What is Hot Module Replacement?

Hot Module Replacement (HMR) exchanges, adds, or removes modules while an application is running, without a full reload. This can significantly speed up development in a few ways: Retain application state which is lost during a full reload. Save valuable development time by only updating what's changed.

15 What is the difference between `package.json` and `package-lock.json?

The “package.json” file defines the rules required to run your application and install dependencies. **On the other hand, the “package-lock.json” file holds detailed information on all the dependencies installed based on the package.json rules.**

To avoid differences in installed dependencies on different environments and to generate the same results on every environment we should use the package-lock.json file to install dependencies.

16. - Why should I not modify `package-lock.json`?

Lock files are intended to lock all versions for the entire dependency tree at the time that the lock file is created. Make sure you don’t change package-lock.json directly. That’s being handled automatically by NPM. It reflects changes made to package.json to package-lock.json and keeps it up to date.

However, this only happens if you use NPMs’ CLI to make changes. If you manually change package.json, don’t expect package-lock.json to update. Always use the CLI commands, like install, uninstall, etc.

17. What is the `dist` folder?

The shortform dist stands for distributable and refers to a directory where files will be stored that can be directly used by others without the need to compile or minify the source code that is being reused.

Actually! "dist folder" is the result you get after modifying a source code with "npm run build" or "ng build" or "ng build --prod" for production.

18. What is `browserlists`?

 Browserslist is a tool that allows specifying which browsers should be supported in your frontend app by specifying "queries" in a config file. Browserslist helps you keep the right balance between browser compatibility and bundle size.

19. ^ - caret and ~ - tilda in package.json?

**Tilde (~) notation:**It is used to match the most recent patch version. Tilde ~ notation freezes the major version and minor version. As we know patch updates are bug fixes that’s why we can say ~ notation allows us to automatically accept bug fixes.

**Example:**The ~1.2.0 will update all the future patch updates. We have to write just ~1.2.0 and all the next patch update dependencies. For example, 1.2.**1,**1.2.**2,**1.2.**5**……………1.2.x.

**Note:**Patch updates are very small security changes in a package that is why the **~version**is approximately equivalent to the version.

**Caret (^) notation:**It is used for automatically updating the minor updates along with patch updates.

**Example:**The^1.2.4 will update all the future **Minor**and **patch**updates, for example, ^1.2.4 will automatically change the dependency to **1.x.x** if any update occurs.

Using caret notation it is important to look at our code regularly if it is compatible with the newest version or not.

20. Script types in html