

A. Written Test

1. What is a JavaScript Framework and explain about Vue.js as one of the JavaScript Framework!

Answer:

JavaScript Framework:

A JavaScript framework is a collection of pre-written JavaScript code that provides a standardized way to build and structure web applications. Frameworks offer a set of tools, libraries, and conventions to simplify and facilitate the development process. They can include features such as data binding, templating, and component architecture. Vue.js is one of the JavaScript frameworks.

Vue.js:

Vue.js is a progressive JavaScript framework used to build user interfaces. It is designed from the ground up to be incrementally customizable or can use as much or as little as needed. Vue.js focuses on the display layer of the application and easily integrates with existing libraries or projects. Vue.js supports reactive data binding, component-based architecture, and has a rich ecosystem of libraries and tools.

2. What is the use of ellipsis?

Answer:

- **Operator Spread (...):** It is used to spread elements of an iterable (like an array or string) into individual elements.
- **Parameter Rest (...):** It is used to represent an indefinite number of arguments as an array. It allows a function to accept any number of arguments.
- **Animation Properties**

3. Explain animation properties below:

- a. @keyframe
- b. animation-name
- c. animation-duration
- d. animation-iteration
- e. animation-direction

Answer:

- **@keyframes:** Defines the animation behavior at different points in time. It is used to create animations using the animation property
- **animation-name:** Specifies the name of the @keyframes rule or the built-in none value to disable animations.
- **animation-duration:** Sets the duration of the animation. It defines how long the animation takes to complete one cycle.
- **animation-iteration-count:** Specifies the number of times an animation should run. It can take values like infinite for continuous animation.

- **animation-direction:** Defines whether the animation should play in reverse (reverse), alternate back and forth (alternate), or maintain its normal direction (normal).

4. Please explain how lazy load works in JavaScript!

Answer:

Lazy loading is a technique used to defer the loading of non-essential resources until they are actually needed. In JavaScript, lazy loading is commonly used for images, scripts, or other assets to improve page load performance.

The basic idea is to load resources asynchronously or on-demand rather than loading everything when the page initially loads. This can be achieved using JavaScript by dynamically creating and appending elements to the DOM when they are required.

5. Mention at least 5 git commands and describe each function of them!

Answer:

- a. **git init:** Initializes a new Git repository, creating a .git directory with the necessary data structures for version control.
- b. **git clone <repository-url>:** Creates a copy of a remote Git repository on your local machine.
- c. **git add <filename>:** Adds changes in a file to the staging area, preparing them to be committed.
- d. **git commit -m "commit message":** Records changes to the repository with a descriptive commit message.
- e. **git push:** Uploads local branch commits to a remote repository.

These are just basic examples; each command has more advanced options and use cases.