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1. JavaScript Frameworks are a structure for creating and developing applications and web applications.

Vue.js is one of the Javascript framework used to create user interfaces for web applications. Some features of Vue.js include:

- Declarative Rendering, which helps us in rendering data into the DOM declaratively,
- Component-Based Architecture, is a self-contained unit that can be reused and includes layout, logic and style.
- Two-way Data Binding It entails automatic synchronization between the model and the user interface, simplifying updates and reducing manual manipulation of the DOM.

2. In programming and computer science, ellipsis is sometimes used to denote a variadic function. This is a function that can take a variable number of arguments.

3. . Explain animation properties below:

- a. **@keyframe**: Defines a series of stages that a CSS animation will go through. Used to create animation sequences by specifying styles for specific points in time. This rule is then referenced by the animation-name property.
- b. **animation-name** : Specifies the name of the @keyframes or animation rule to be applied to an element.
- c. **animation-duration** : Sets the animation duration, indicating how long one animation cycle will take to complete. is used to determine the time required for the animation to move from the initial state to the final state.
- d. **animation-iteration** : Determines how many times the animation should be repeated.is used to set the number of repetitions of the animation. You can use a numeric value or "infinite" for unlimited repetitions.
- e. **animation-direction** : Defines whether the animation should play backwards at each cycle.

4. The way lazy load works in javascript is by loading images, scripts or stylesheets only if needed or only visible in the initial display. resources that are not visible in the initial display do not need to be loaded, so the website has better performance because it can reduce the page size so that the page load is faster.

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

- a. **git init**: Initializes a new Git repository. in a project directory to start a new Git repository. This command creates a hidden subdirectory within the existing directory, which contains the internal data structure required for version control.
- b. **git pull**: Fetches changes from a remote repository and merges them into the current branch.Used to update the local repository with changes from the remote repository. It is a combination of git fetch and git merge.
- c. **git push**: Update the remote repository with changes that have been made locally. Sends the local commit to the remote repository. Used in conjunction with the branch name to specify the branch to be pushed.

- d. **git add:** Add changes in the working directory to the staging area. Used to place or mark changes so that they are ready for the next commit.
- e. **git commit:** Record the changes in the staging area into the repository. Commit the changes that have been added with git add. Need to include a commit message summarizing the changes made.