**Triggering a Render:**

* A render is triggered when there is a state update or during the initial application run.
* State changes trigger renders for the entire application, not just a single component.
* The render is scheduled for when the JavaScript engine has free time, often just a few milliseconds later.
* Multiple state updates can be batched together.

**Render Phase:**

* React calls component functions to figure out how to update the DOM based on state changes.
* This phase does not produce visual changes; it happens internally within React.

**Commit Phase:**

* React updates the DOM based on the calculations from the render phase.
* New elements may be added, and existing elements may be updated or removed.

**Browser Repaint:**

* The browser notices the DOM updates and repaints the screen.
* This step is handled by the browser and produces the visual changes seen by users.

**Important Notes**

* The render process looks at the entire component tree, not just the component where the state update occurred.
* Render scheduling and batching help optimize performance.
* Rendering in React refers to the internal process of figuring out DOM updates, while committing involves the actual DOM updates.



