

Solutions

2.1

- The loaded web page represented as a tree of objects that code can read and change.

2.2

- Click, submit, key press, or scroll.

2.3

- The elements may not exist in the DOM yet.
- The selector finds nothing, so later code cannot change the element.

3.1

- Select the button and panel from the DOM.
- Add a listener for the button's click event.
- The listener runs a function that changes the panel's hidden state.
- The browser waits for the event; the code does not need a loop.

3.2

- It gives immediate feedback to a user before submission.
- A visitor can bypass or change browser-side code.
- Therefore it cannot be trusted for security.
- The server must validate the same rules again.