

Name: _____

Date: _____

Invisible Logic, Visible Style: 10th Grade Web Architecture Quiz

Step into the shoes of a full-stack engineer and debug the friction between DOM manipulation, responsive layouts, and asynchronous programming.

1. A developer uses 'async' and 'await' when fetching a remote JSON resource to prevent the UI thread from freezing. This design pattern is an example of what concept?

- A. Synchronous Execution
- B. Non-blocking Asynchrony
- C. CSS Keyframe Animation
- D. Lexical Scoping

2. In the CSS Box Model, the space between the element's content and its border is known as _____.

- A. Margin
- B. Gutter
- C. Padding
- D. Outline

3. The 'Document Object Model' (DOM) provides a tree-like representation of an HTML document that JavaScript can navigate and modify at runtime.

- A. True
- B. False

4. Which of the following CSS strategies is most effective for creating a layout that automatically rearranges columns based on the viewport width without using fixed pixel values?

- A. Inline Block styling
- B. Absolute Positioning
- C. CSS Flexbox or Grid with Media Queries
- D. Z-index Layering

5. In JavaScript, if you want to store a value that can be updated but is confined to a specific block of code, you should use the _____ keyword.

- A. var
- B. let
- C. const
- D. define

6. The HTML <section> and <article> tags perform the exact same functional role as <div> and are used only for aesthetic purposes in the code editor.

- A. True
- B. False

Name: _____

Date: _____

7. What happens when a 'Promise' in JavaScript moves from a 'pending' state to a 'rejected' state?

- A. The .then() block is executed successfully
- B. The script restarts the entire browser
- C. The .catch() block handles the error
- D. The HTML is automatically deleted

8. To ensure an image is accessible to users with visual impairments, developers must include the _____ attribute within the tag.

- A. src
- B. alt
- C. title
- D. id

9. In the context of Cascading Style Sheets, if an ID selector (#bio) and a Class selector (.text) both target the same element with conflicting color rules, which rule wins?

- A. The Class selector because it is more common
- B. The ID selector because it has higher specificity
- C. The rule written first in the CSS file
- D. The browser ignores both and defaults to black

10. Local Storage in web browsers allows developers to save data (like a user's dark mode preference) that persists even after the tab is closed and reopened.

- A. True
- B. False