Web Performance Quiz

freecodecamp.org/learn/front-end-development-libraries-v9/quiz-web-performance/quiz-web-performance

To pass the quiz, you must correctly answer at least 18 of the 20 questions below.

1.
- What is the key difference between real performance and perceived performance in web development?

Real performance focuses on the number of HTTP requests made by the browser, while perceived performance is based on CSS rendering speed.

Real performance is only about load times, while perceived performance relates to visual elements like animations and loading indicators.

Real performance is how fast content is loaded, while perceived performance is how quickly users believe the page loads.

Correct!

Real performance only includes server-side processing times, while perceived performance is entirely client-side.

2.

- Which metric best indicates how quickly content appears on a web page?

  Page Load Time (PLT)

  Last Contentful Paint (LCP)

  Time to Interactive (TTI)

  First Contentful Paint (FCP)

  Correct!

3.

- Which of the following is NOT a way to reduce page loading times?

  Using only JPEG files.

  Correct!

  Minifying and Compress Files.

  Optimizing Media Assets.

  Leveraging Browser Caching.

4.

- What is "time to usable"?

  It is the interval from when a user requests a page to when they can interact with forms on the page.

  This is the time it takes for all CSS and JavaScript animations to load on the screen.

  It is the time it takes for all images and animations to become available and usable.

  It is the interval from when a user requests a page to when they can meaningfully interact with it.

  Correct!

5.

- What does First Contentful Paint (FCP) measure?

  The time taken for all stylesheets to fully load and apply.

  Incorrect.

  The time it takes for the first piece of text or image to render.

  Correct!

  The overall load time for all JavaScript files on the page.

  The delay before a user can interact with any elements on the page.

6.

- Which of the following is NOT a commonly used performance measurement tool?

  Lighthouse

  Chrome DevTools

  WebMeasure

  Correct!

  WebPageTest

7.

- What are Performance Web APIs used for?

  It lets developers track how efficiently a webpage loads and responds directly from code.

  Correct!

  It is used to measure the performance for CSS animations only.

  It provides a detailed table of performance metrics for the user.

  It is used to automatically speed up the performance for a web page.

8.

- Which strategy can effectively enhance perceived performance?

Loading CSS styles last to prioritize content rendering.

Using large images to improve the overall visual quality.

Displaying a loading skeleton while content is being fetched.

Correct!

Preloading all scripts to ensure they are ready when needed.

9.

- Which of the following refers to the time it takes for a request to travel between the browser and the server?

CDN

rendering

INP

latency

Correct!

10.

- How does optimizing CSS impact page performance?

It prevents the browser from executing unnecessary JavaScript.

It reduces the overall file size of images.

It eliminates the need for lazy loading images.

It speeds up the parsing of HTML.

Correct!

11.
Which of the following shows how long the main thread is blocked by heavy JavaScript tasks?

Total Blocking Time

Correct!

WebPageTest

Bounce rate

Source order

12.
When measuring Interaction to Next Paint (INP), what is being evaluated?

The interval between JavaScript execution and the browser refreshing the page content.

The delay between a user's interaction and the browser's ability to register the next user input.

The time between a user's interaction and the browser responding by rendering the next frame.

Correct!

The time it takes for the page to fully load all styles and images after a user interaction.

13.
Which of the following APIs gives you high-precision timestamps (in milliseconds) to measure how long different parts of your site take to load?

`performance.delay()`

`performance.now()`

Correct!

`performance.previous()`

`performance.next()`

14.

- Which of the following APIs gives you a breakdown of every stage of page loading from DNS lookup to `DOMContentLoaded`?

Perform Timing API

Permit Timing API

Performance Text API

Performance Timing API

Correct!

15.

Which of the following listens for performance events such as layout shifts, long tasks, and user interactions?

-

```
const observer = new PermitObserve((list) => {
  list.getEntries().forEach((entry) => {
    console.log(`Long task detected:
${entry.duration}ms`);
  });
});

observer.observe({ type: "longtask", buffered: true });
```

Incorrect.

-

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const observer = new PerformObserver((list) => {
  list.getEntries().forEach((entry) => {
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-

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Correct!

-

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});

observer.observe({ type: "longtask", buffered: true });
```

16.

- How does lazy loading images enhance page performance?

  It delays loading non-essential images until they are in view.

  Correct!

  It reduces the size of image files to speed up loading.

  It preloads images to prevent any loading delays.

  It ensures all images load immediately for a better user experience.

17.

- What is code splitting?

  It involves splitting your HTML code into modules that perform only non-critical tasks.

  It involves splitting your React code into modules that perform only critical tasks

  It involves splitting your JavaScript code into modules that perform critical and non-critical tasks.

  Correct!

  It involves splitting your CSS code into modules that perform critical and non-critical tasks.

18.

- Which of the following is the correct way to lazy load an image?

  Correct!

19.

- Which of the following is NOT a way to improve INP?

  Deferring or lazy-loading heavy assets.

  Optimizing event handlers.

  Using only PNG and JPEG images.

  Correct!

  Reducing the main thread work by breaking up long JavaScript tasks.

20.

- Why is energy efficiency a crucial aspect of web performance?

  It minimizes the amount of JavaScript used on a webpage.

  It reduces the load on hardware, conserving energy and improving sustainability.

  Correct!

  It enhances the overall visual appeal of the webpage.

  It decreases the number of CSS files needed and makes your CSS run faster.

You have 18 out of 20 questions correct.
Navigated to Web Performance Quiz