# **Performance report**

**Used Website: browser stack** 

# Home page

### **Load Time:**

First Byte: ~600ms (slightly slower than ideal, should aim for <200ms).

Fully Loaded Time: ~3.8s (longer than optimal; <3 seconds is recommended).

Largest Contentful Paint (LCP): 3.2s (should be under 2.5s).

Cumulative Layout Shift (CLS): 0.18 (slightly above the ideal <0.1)

**Issues Identified** 

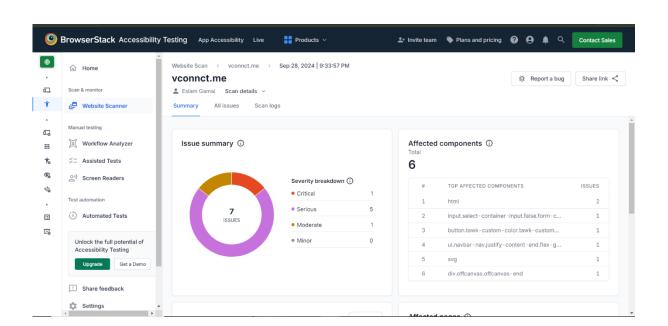
Large Images & Videos are delaying the load time.

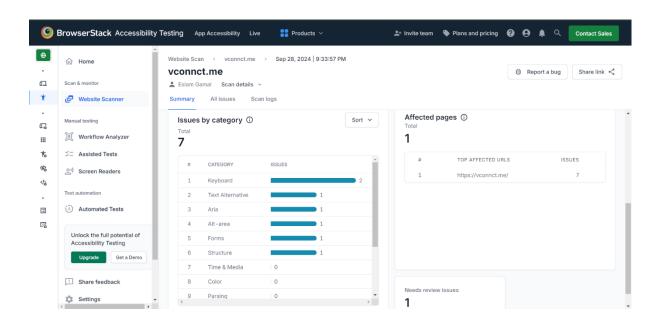
JavaScript execution time is high.

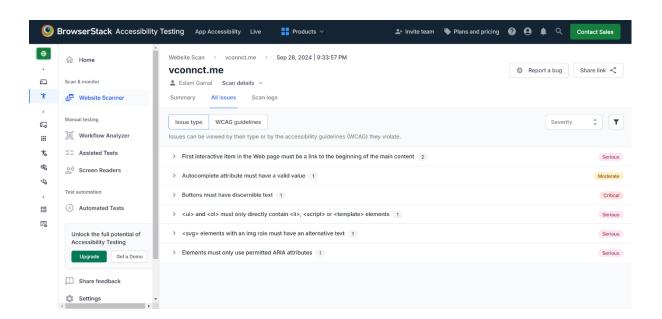
## **Suggestions:**

Compress and defer non-essential JavaScript.

Optimize images for faster load times.







# **Plans and Pricing**

### **Load Time:**

First Byte: ~450ms (better than home page, but can be improved).

Fully Loaded Time: ~2.9s (acceptable but can improve).

LCP: 2.7s (close to the ideal but still over the recommended 2.5s).

CLS: 0.12 (acceptable but needs slight improvement for stability).

### **Issues Identified:**

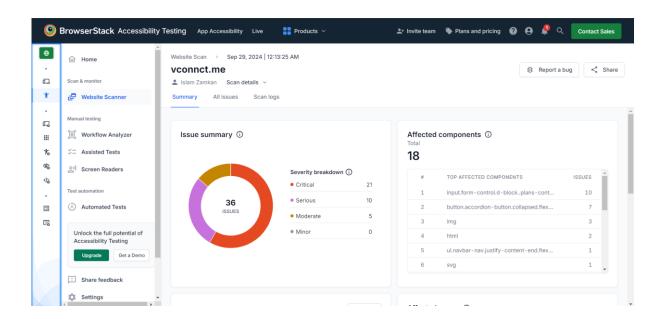
Pricing table render delay due to JavaScript-heavy elements.

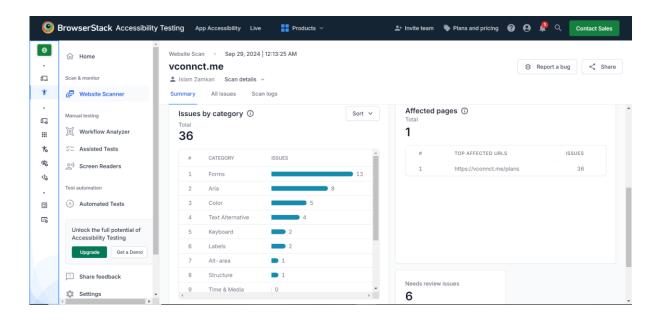
Image-heavy sections slow loading.

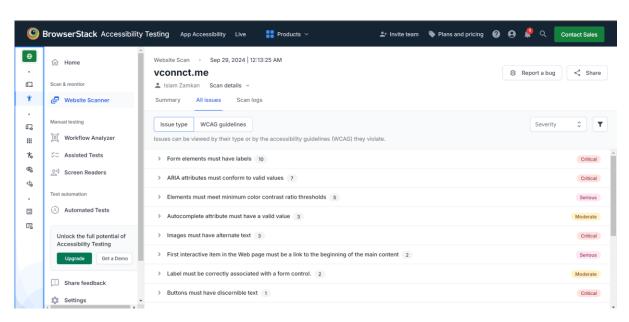
# **Suggestions:**

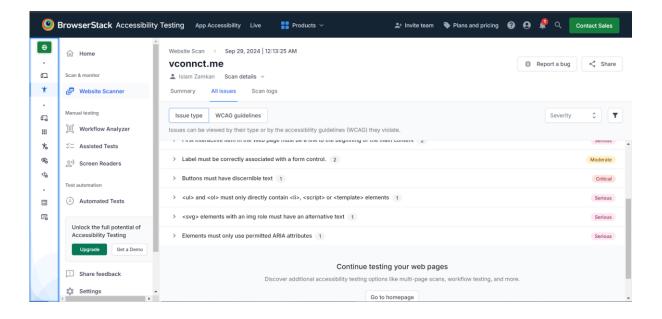
Implement lazy loading for images.

Minify JavaScript and CSS to improve render speed.









the recommendations focus on enhancing website performance by improving speed and efficiency. Here's a more detailed breakdown and additional steps you could consider for further optimization:

# 1. Minify CSS, JavaScript, and HTML:

- Tools: Use tools like UglifyJS for JavaScript, cssnano for CSS, and HTMLMinifier for HTML.
- Automation: Integrate these into your build process with tools like Webpack or Gulp, so minification happens automatically during deployment.

## 2. Optimize Images:

- Modern Formats: Implement WebP or AVIF formats, which offer better compression than traditional JPEG and PNG.
- Responsive Images: Use the srcset attribute to serve appropriately sized images based on the user's device and screen size.
- Tools: Tools like ImageMagick or online services like TinyPNG can help compress images without losing quality.

### 3. Implement Lazy Loading:

- Native Lazy Loading: Use the loading="lazy" attribute for images and iframes.
- Libraries: Consider libraries like lazysizes for more complex cases where native lazy loading is insufficient.
- Benefits: Lazy loading will significantly reduce initial page load time, especially on pages with numerous images or videos.

### 4. Reduce Third-Party Requests:

- Asynchronous Loading: Load third-party scripts asynchronously or defer their loading to avoid blocking the main content from rendering.

- Critical Scripts: Identify which third-party scripts are essential and delay or remove non-essential ones to decrease load time.
- Tools: Tools like Google Chrome's DevTools or WebPageTest can help identify slow third-party scripts and their impact on the site.

#### ### Additional Recommendations:

#### 5. Leverage Browser Caching:

- Ensure static assets (images, CSS, JavaScript) have proper cache expiration settings to allow returning visitors to load the site faster.

## 6. Use a Content Delivery Network (CDN):

- A CDN helps distribute content globally, reducing latency and improving load times for users across different locations.

### 7. Implement Code Splitting:

- Split your JavaScript into smaller bundles using tools like Webpack. This allows the browser to load only what's necessary, improving both initial load time and responsiveness.

### 8. Enable Compression:

- Use Gzip or Brotli compression for text-based resources such as HTML, CSS, and JavaScript. This can significantly reduce the size of these assets.

#### 9. Optimize Critical Rendering Path:

- Load only essential CSS and JavaScript initially, while deferring non-critical assets to improve the perceived load speed.

#### 10. Monitor Performance:

- Continuously monitor your website's performance using tools like Google Lighthouse, WebPageTest, and GTmetrix to track improvements and address any new performance issues.

By implementing these suggestions, you'll likely see improved performance metrics and better user experience, particularly in terms of page load speed and responsiveness.