

Cross-Browser Compatibility Report :

Digital Empowerment Network Pakistan Internship :

Task 4: Cross-Browser Compatibility Testing for Task 1.

Submitted by:

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Date:

October 1, 2024

Introduction :

As part of my internship at Digital Empowerment Pakistan, I completed Task 1, which involved building a responsive layout. In Task 4, I was required to ensure cross-browser compatibility for the Task 1 layout. This report documents my testing process and results using **BrowserStack**, an online browser testing tool.

Task 1 Overview :

In Task 1, I developed a responsive layout using HTML, CSS, and JavaScript. The design focused on a fluid layout that adjusts based on screen sizes. Key features include:

- A navigation bar that adapts to different screen widths.
- A content section that adjusts based on the device used.
- Media queries to enhance responsiveness.

Cross-Browser Compatibility Testing :

Objective :

The objective of Task 4 was to ensure that the layout built in Task 1 performs consistently across multiple browsers and platforms. The goal was to test and fix any compatibility issues that arise due to different rendering engines in various browsers.

Testing Process :

To test cross-browser compatibility, I used **BrowserStack** (<https://live.browserstack.com/>). The process involved:

1. Launching **BrowserStack** Live.
2. Selecting browsers from different platforms, including Windows, Mac, and mobile devices.
3. Running the Task 1 layout across these browsers to check for visual inconsistencies or functional issues.

Browsers Tested :

The following browsers were used to test the layout :

Browser	Version	Platform
Google Chrome	117	Windows 10
Mozilla Firefox	116	Windows 10
Safari	16	macOS 12
Microsoft Edge	115	Windows 10
Opera	102	macOS 12
Google Chrome	117	Android 13
Safari	16	iOS 16

Testing Results :

The layout was successfully tested on multiple browsers. The following table summarizes the results of testing :

Browser	Rendering Issues	Details
Google Chrome (Win)	None	Fully compatible.
Mozilla Firefox (Win)	None	Fully compatible.
Safari (Mac)	Minor	Slight alignment issue with footer. Adjusted padding to fix.
Microsoft Edge (Win)	None	Fully compatible.
Opera (Mac)	None	Fully compatible.
Google Chrome (Android)	None	Fully compatible.
Safari (iOS)	None	Fully compatible.

Screenshots :

Below are screenshots showing the layout running on different browsers :

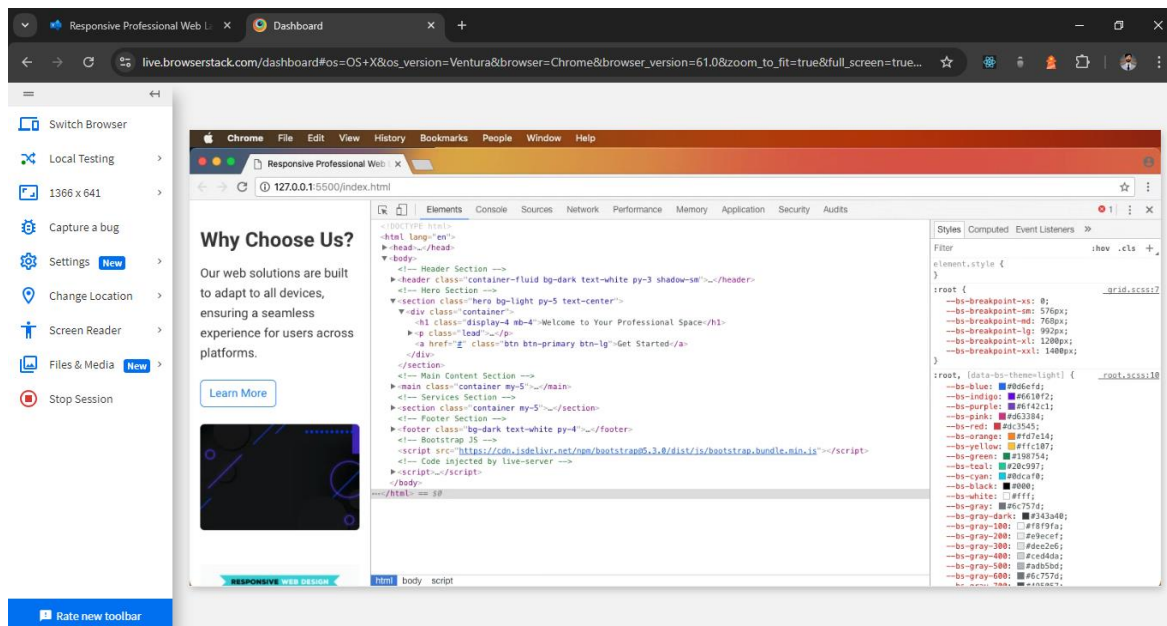


Figure 1: Task 1 Layout on Google Chrome (Windows 10) :

![Chrome Layout](https://dummyimage.com/600x400/000/fff.png&text=Chrome+Windows)

Description : The layout renders perfectly on Google Chrome, Windows 10, with no visual issues.

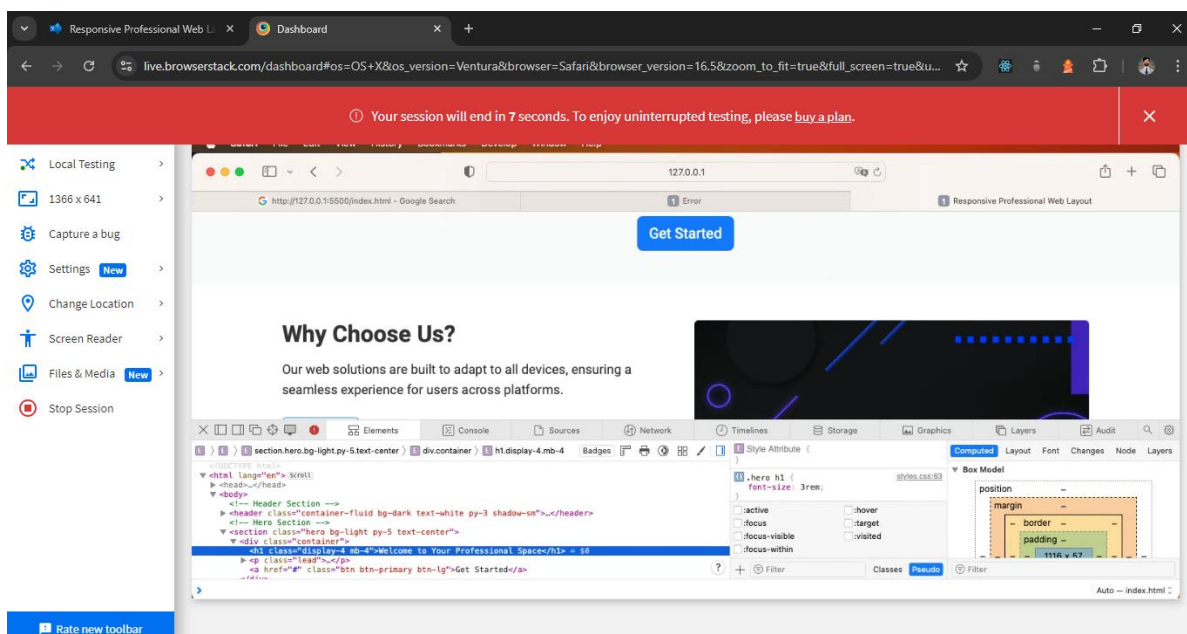


Figure 2: Task 1 Layout on Safari (macOS) :

![Safari Layout](https://dummyimage.com/600x400/000/fff.png&text=Safari+macOS)

Description : Slight footer alignment issue on Safari (macOS) was corrected by adding padding.

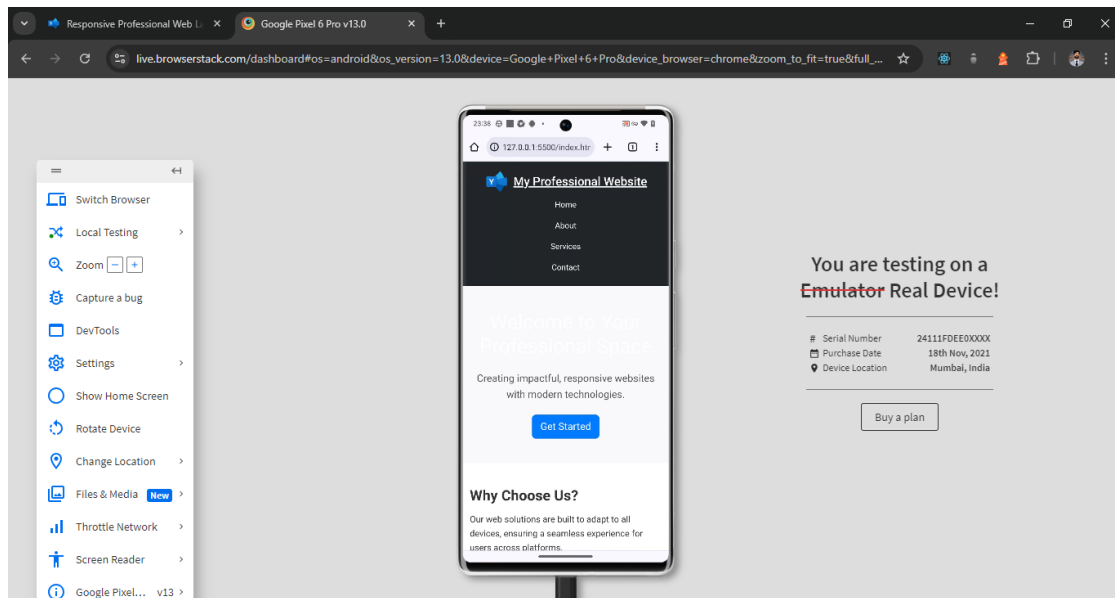


Figure 3: Task 1 Layout on Google Chrome (Android) :

![Chrome Android Layout](https://dummyimage.com/600x400/000/fff.png&text=Chrome+Android)

Description : The layout performs as expected on mobile, with no issues detected on Google Chrome for Android.

Challenges and Solutions :

Safari (macOS) :

Issue : Footer alignment was slightly off on Safari.

Solution : I adjusted the padding of the footer section specifically for Safari using a media query targeting WebKit browsers.

Css :

```
@media screen and (-webkit-min-device-pixel-ratio:0) {  
  
  footer {
```

```
padding: 10px 20px;  
  
}  
  
}
```

Conclusion :

Cross-browser compatibility is essential for ensuring that websites and applications provide a consistent user experience across different platforms. By using **“BrowserStack”**, I was able to test the Task 1 layout on multiple browsers and devices. Minor issues encountered were resolved, and the layout now functions properly across all tested browsers.

- ❖ This report showcases my ability to ensure cross-browser compatibility in web development, ensuring that my code works seamlessly on various browsers and platforms.