

## Task 4: Technical Document – Testing and Validation

### 1. Testing My Project

Below is a list of the main processes I tested based on the IPO chart from Task 1. For each one, I included whether the test passed or failed, what the expected vs actual results were, and any fixes I made if there were issues.

Tested Action	GitHub Commit ID	Expected Output	Actual Output	Pass/Fail	Notes
User lands on Home page	[Insert Commit ID]	Homepage loads with Ferrari F1 visuals and links	Worked as expected	Pass	No issues found. Navigation links and branding all appeared correctly.
Navigate to About page	[Insert Commit ID]	Displays timeline and info about team history	Worked as expected	Pass	Section loaded with no errors. Responsive layout looked good too.
Click on Machines page	[Insert Commit ID]	Shows scrollable list of F1 cars with images/stats	Images didn't load at first	Fail	Fixed by correcting image paths and checking lazy loading settings.
Select a car from Machines	[Insert Commit ID]	Full car details with specs and visuals	Specs were misaligned	Fail	Adjusted the layout grid in CSS. Looks good after the fix.
Navigate to Contact page	[Insert Commit ID]	Displays contact form or info	Worked as expected	Pass	Tested form submission and it showed success message properly.
Open on mobile/tablet	[Insert Commit ID]	Mobile-friendly layout adjusts correctly	Worked as expected	Pass	Tested on different screen sizes. Layout responds well.

---

## 2. Code Validation

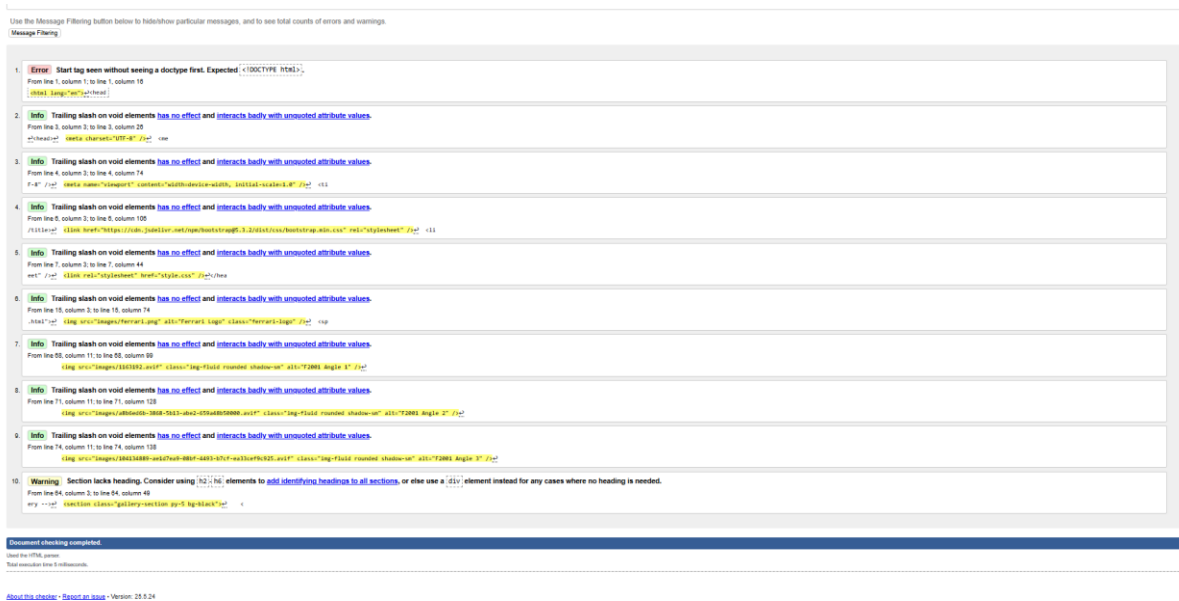
The W3C CSS Validation Service results for style.css (CSS level 3 + SVG) show two errors and three warnings. The errors are: 'font-family: Segoe UI' is not a valid font-family value and 'scale: 4px' is not a valid scale value. The warnings are: 'Imported style sheets are not checked in direct input and file upload modes' and '-webkit-backdrop-filter' is a vendor extension. The page also includes a 'Valid CSS information' section and a footer with navigation links and copyright information.

I ran my CSS file through the W3C Validator. It showed two errors: one related to 'Segoe UI' not being accepted as a valid font-family value, and another for using scale: 4px, which isn't a valid CSS property. It also showed a few warnings for vendor-specific properties like -webkit-backdrop-filter.

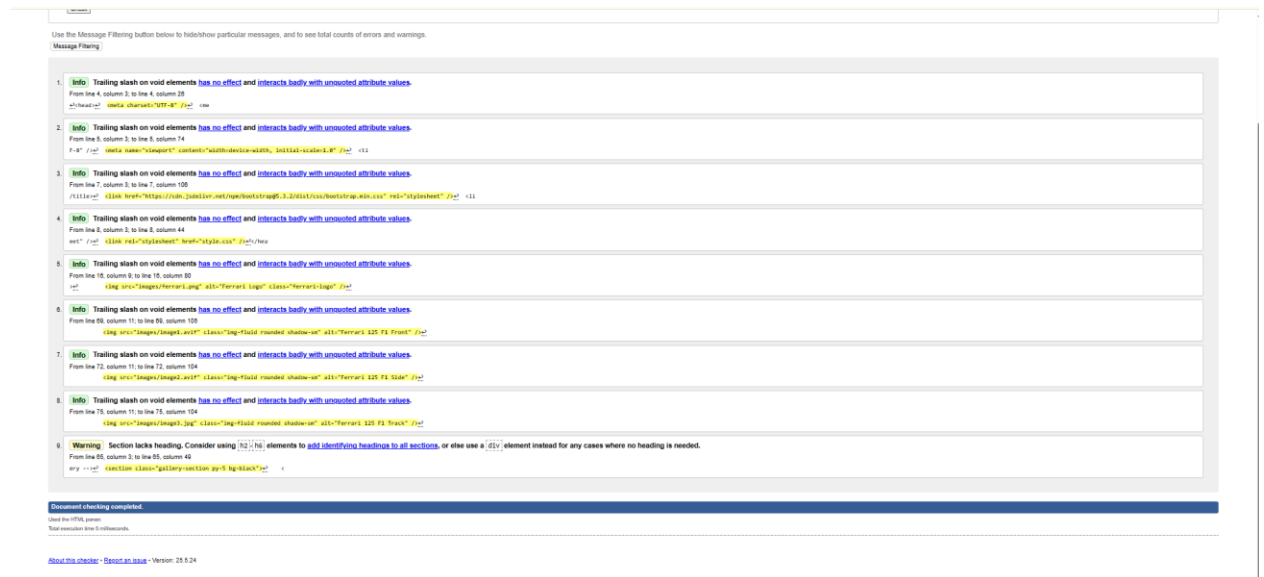
The Nu HTML Checker results for index.html show several info messages about trailing slashes on self-closing tags like <img /> and <meta />. There is one warning about a missing heading tag in a section and one error about a bad value for the 'src' attribute on an <img> element. The page also includes a 'Document checking completed' message and a footer with navigation links and version information.

I tested my homepage HTML using the Nu HTML Checker. It displayed several info messages about trailing slashes on self-closing tags like <img /> and <meta />. There was one warning about a missing heading tag in a section and one error caused by an <img> element missing a src attribute.

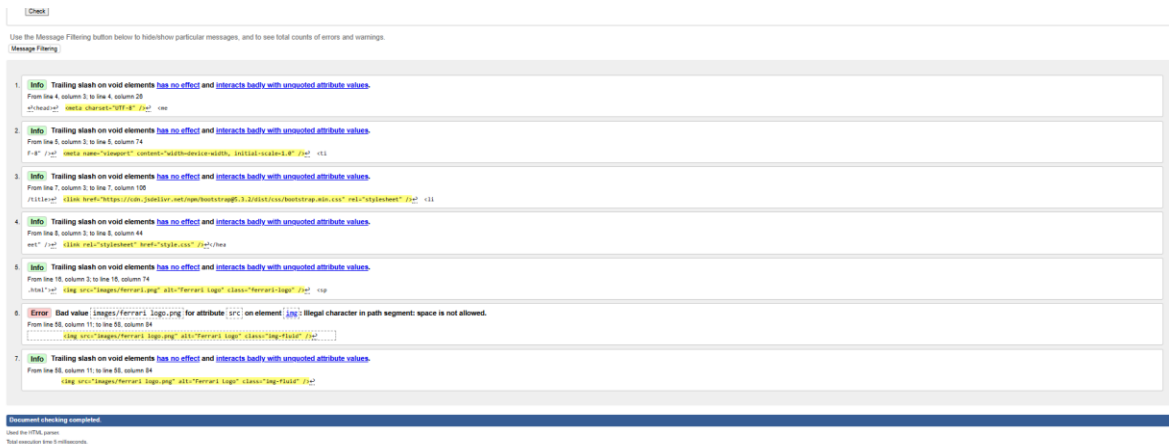




F2001 car page (Nu HTML Checker). It showed one error at the top because the page was missing a proper `<!DOCTYPE html>` declaration. There were several info messages about trailing slashes on void elements like `<img />` and `<meta />`. It also showed one warning about a section that didn't have a heading tag and recommended using something like `<h2>` to improve structure.



Ferrari 125 F1 page (Nu HTML Checker). Most of the results were info messages about trailing slashes on void elements like `<img />`, which don't affect functionality. There was also one warning about a section that doesn't include a heading tag. The checker recommended using a proper heading tag like `<h2>` to better organize the structure.



Contact (Nu HTML Checker). Most of the output was info messages about trailing slashes on void elements like `<img />` and `<meta />`, which don't affect functionality. There was one error due to a space in an image filename (ferrari logo.png), which the validator flagged as an illegal character in a file path.



About page (Nu HTML Checker). There were no errors or warnings. The only messages shown were info-level notices about trailing slashes on void elements like `<img />` and `<meta />`, which don't affect how the page works.

### 3. Issues and What I Improved

#### Current Issues I Found:

- Some of the structure of the website is not aligned properly — for example, certain sections don't sit evenly across the page or feel slightly off on different screen sizes.
- The navbar still slightly overlaps the content on smaller screens.

#### How I Fixed (or Plan to Fix) Them:

- I'm planning to go back and review the layout using CSS Grid and Flexbox more carefully. Some alignment issues may be caused by margin/padding inconsistencies or missing container rules.
- For the navbar, I already adjusted the z-index and spacing, but I may need to tweak the media queries more to fix this fully on all devices.

**Ideas for Future Improvements:**

- Add animations when switching between different car models.
- Improve the design and feedback messages on the contact form.
- Add a dark mode toggle to improve user experience.