

MPL Practical 11

Aim: To use google Lighthouse PWA Analysis Tool to test the PWA functioning.

Theory:

Google Lighthouse is a powerful, open-source auditing tool built into Chrome DevTools that helps developers analyze and improve the quality of web applications. It evaluates web apps based on multiple parameters such as Performance, Accessibility, Best Practices, SEO, and PWA compliance. This tool is especially useful for verifying whether a web app qualifies as a proper Progressive Web App.

During a Lighthouse test, the tool checks for:

- Fast and responsive loading (Performance)
- Accessible design for all users (Accessibility)
- Secure and modern coding practices (Best Practices)
- Search engine optimization readiness (SEO)
- Proper PWA features like manifest, service worker, and offline capabilities

What We Implemented and Tested

For our project "Swad Maharashtra Cha", we ran a Lighthouse test on the deployed GitHub Pages link:

<https://yash-naikwadi.github.io/Swad-Maharashtra-Cha-PWA/>

The audit results showed excellent scores:

- Performance: 93
- Accessibility: 92
- Best Practices: 96
- SEO: 100


These scores confirm that our PWA is highly optimized, accessible, and production-ready. The few suggestions we received (like specifying image dimensions and improving contrast) were noted for further improvement.

Swad Maharashtra Cha - Authen

yash-naikwadi.github.io/Swad-Maharashtra-Cha-PWA/

ElementsConsoleSourcesNetworkLighthouse

(new report)



Generate a Lighthouse report

Analyze page load

Mode

[Learn more](#)

Navigation (Default)

Timespan

Snapshot

Device

Mobile

Desktop

Categories

☒ Performance

☒ Accessibility

☒ Best practices

☒ SEO

Console

AI assistance

What's new

Swad Maharashtra Cha

Home

Spices

Sweets

Snacks

Contact

Authentic Taste of Maharashtra

Explore our curated selection of traditional spices, sweets, and snacks

Conclusion:

In this experiment, we used Google Lighthouse to test the performance and PWA compliance of our Swad Maharashtra Cha website, where we achieved high scores in all categories. Initially, we faced issues like missing image dimensions and low text contrast, which we resolved by updating the HTML and CSS to match Lighthouse's accessibility and performance recommendations.