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PWA EXP11

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

Theory:
Google Lighthouse :
Google Lighthouse is a tool that lets you audit your web application based on a number of parameters including (but not limited to) performance, based on a number of metrics, mobile compatibility, Progressive Web App (PWA) implementations, etc. All you have to do is run it on a page or pass it a URL, sit back for a couple of minutes and get a very elaborate report, not much short of one that a professional auditor would have compiled in about a week.
The best part is that you have to set up almost nothing to get started. Let's begin by looking at some of the top features and audit criteria used by Lighthouse.

Key Features and Audit Metrics:
Google Lighthouse has the option of running the Audit for Desktop as well as mobile version of your page(s). The top metrics that will be measured in the Audit are:
● Performance:
Measures loading speed, content display time, and overall site efficiency
(score out of 100).
● PWA Score (Mobile):
Evaluates adherence to Google's Baseline PWA checklist, including Service Worker implementation, offline functionality, and script-disabled performance.
● Accessibility:
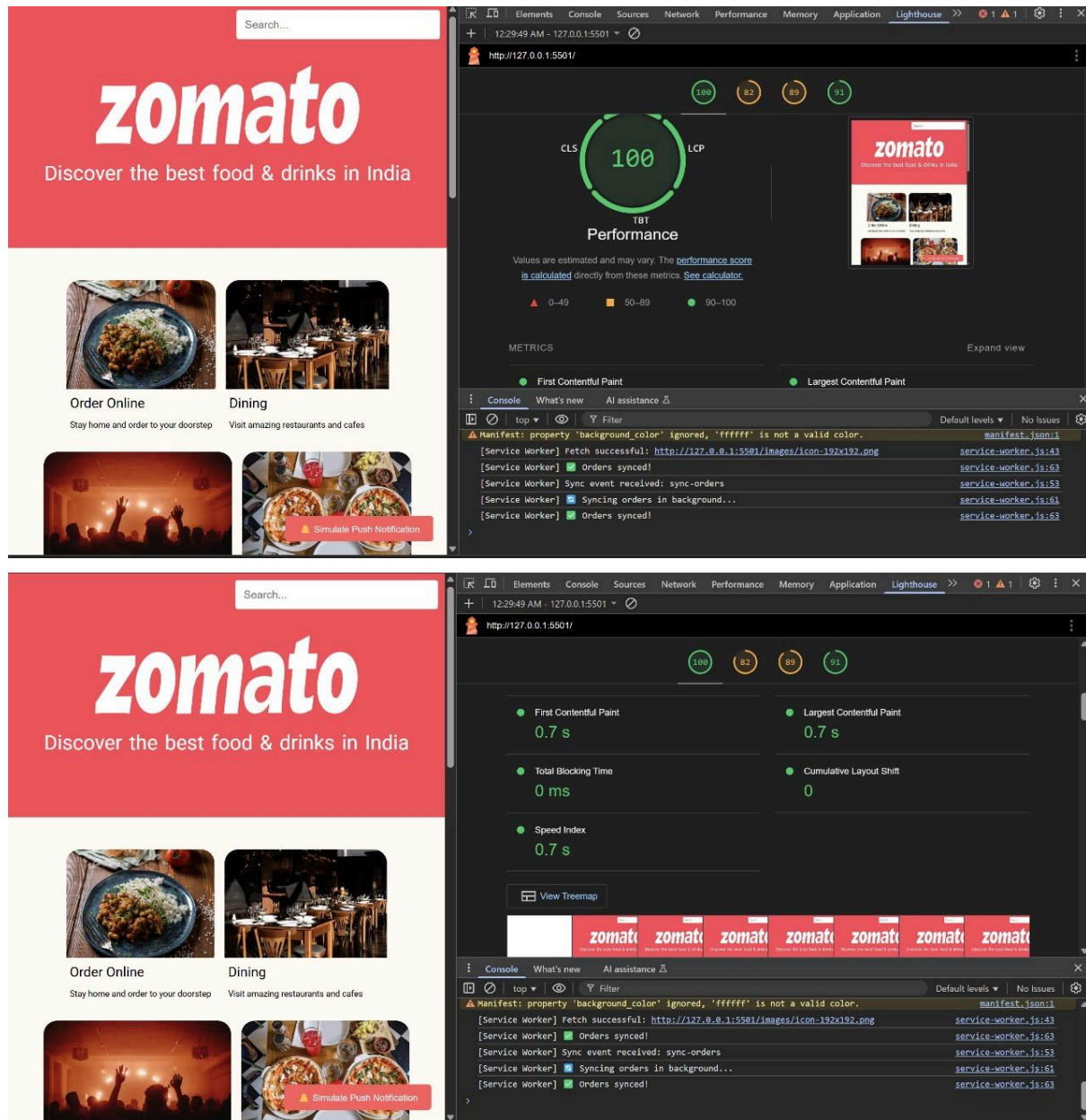Assesses website accessibility features like aria- attributes, screen-reader compatibility, and semantic HTML tags. Scores are pass/fail.
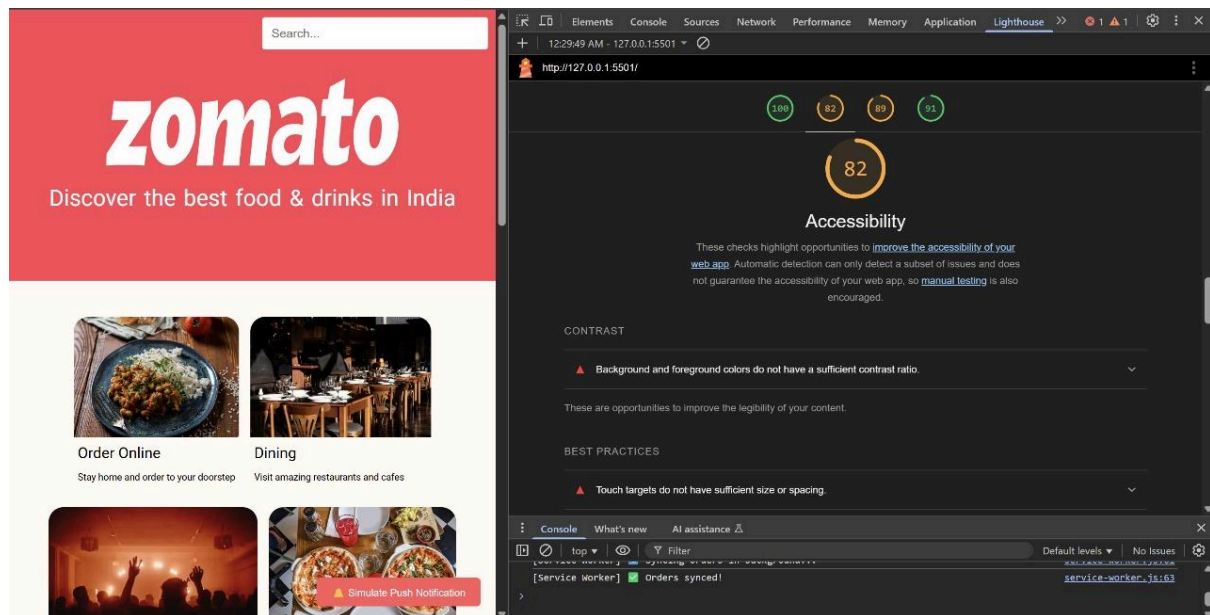● Best Practices:
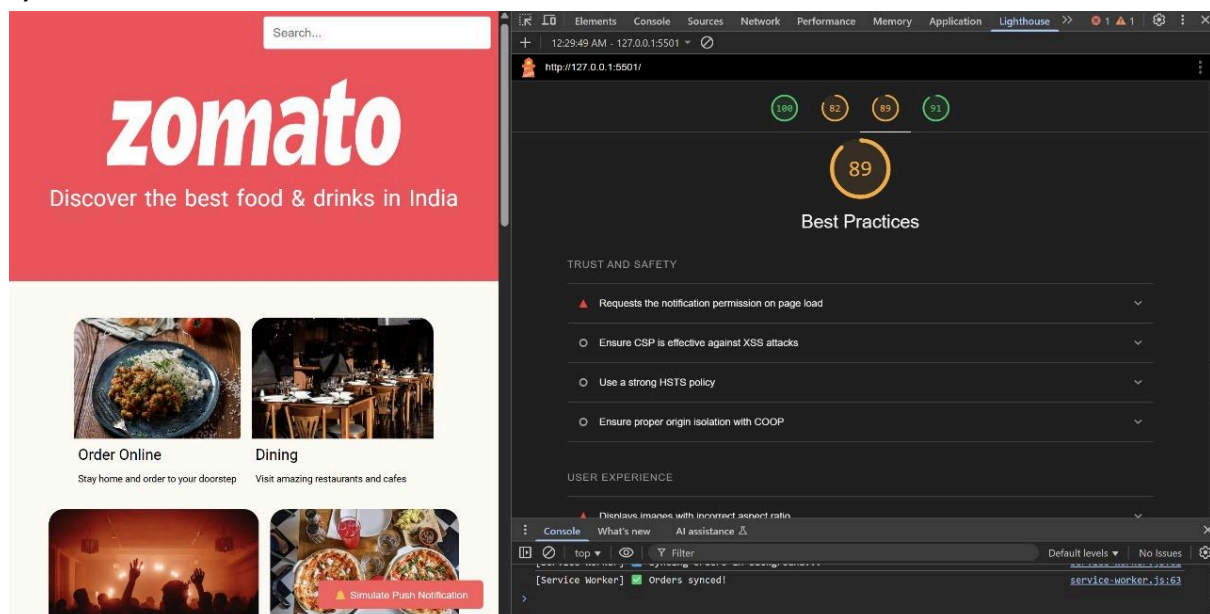Checks adherence to industry standards, including HTTPS usage and security measures.
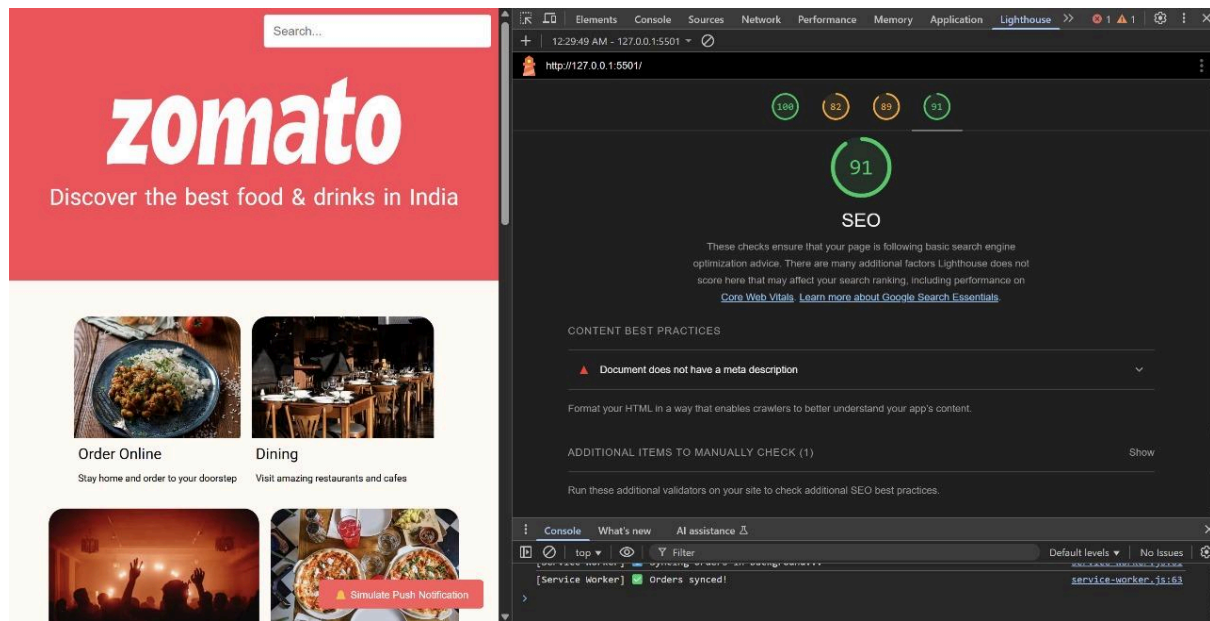
Output:
a) Performance

b)Accessibility

c) Best Practices

d) Search Engine Optimization (SEO)

Conclusion:

Thus we successfully used google Lighthouse PWA Analysis Tool for testing the PWA functioning.