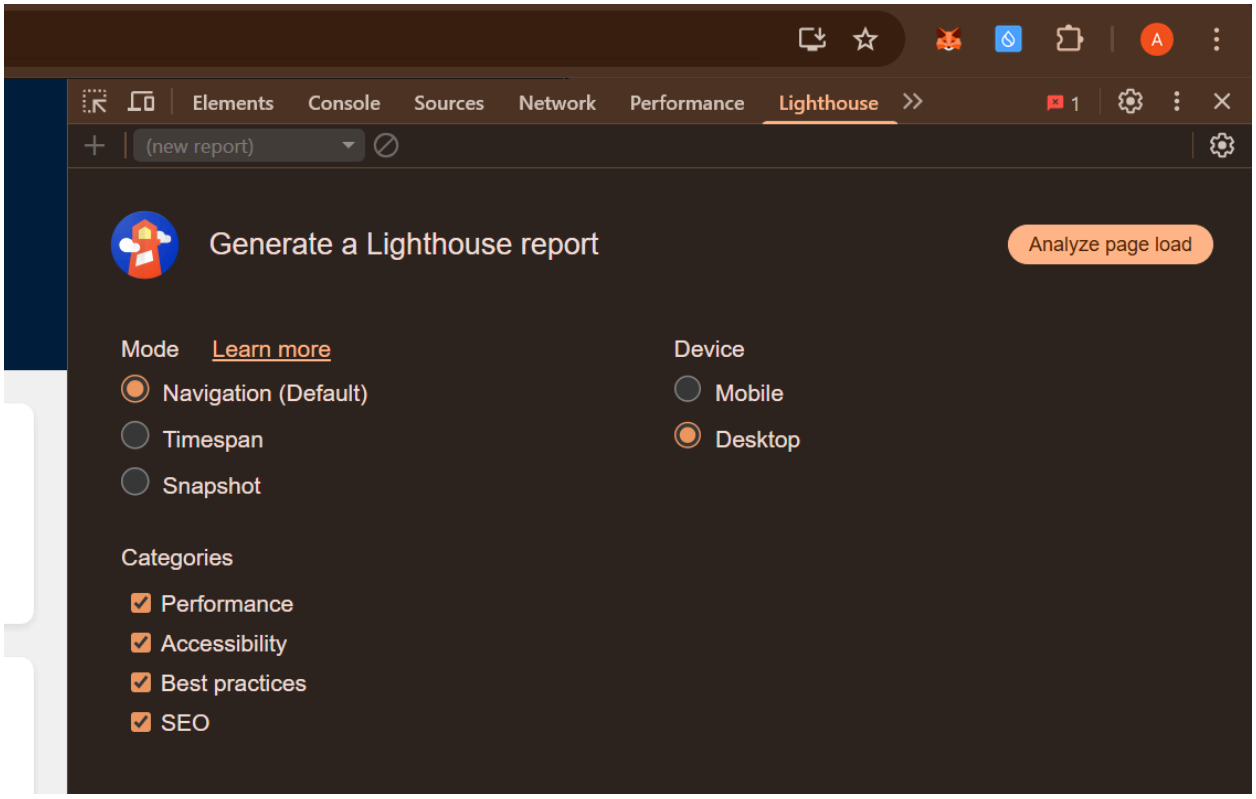
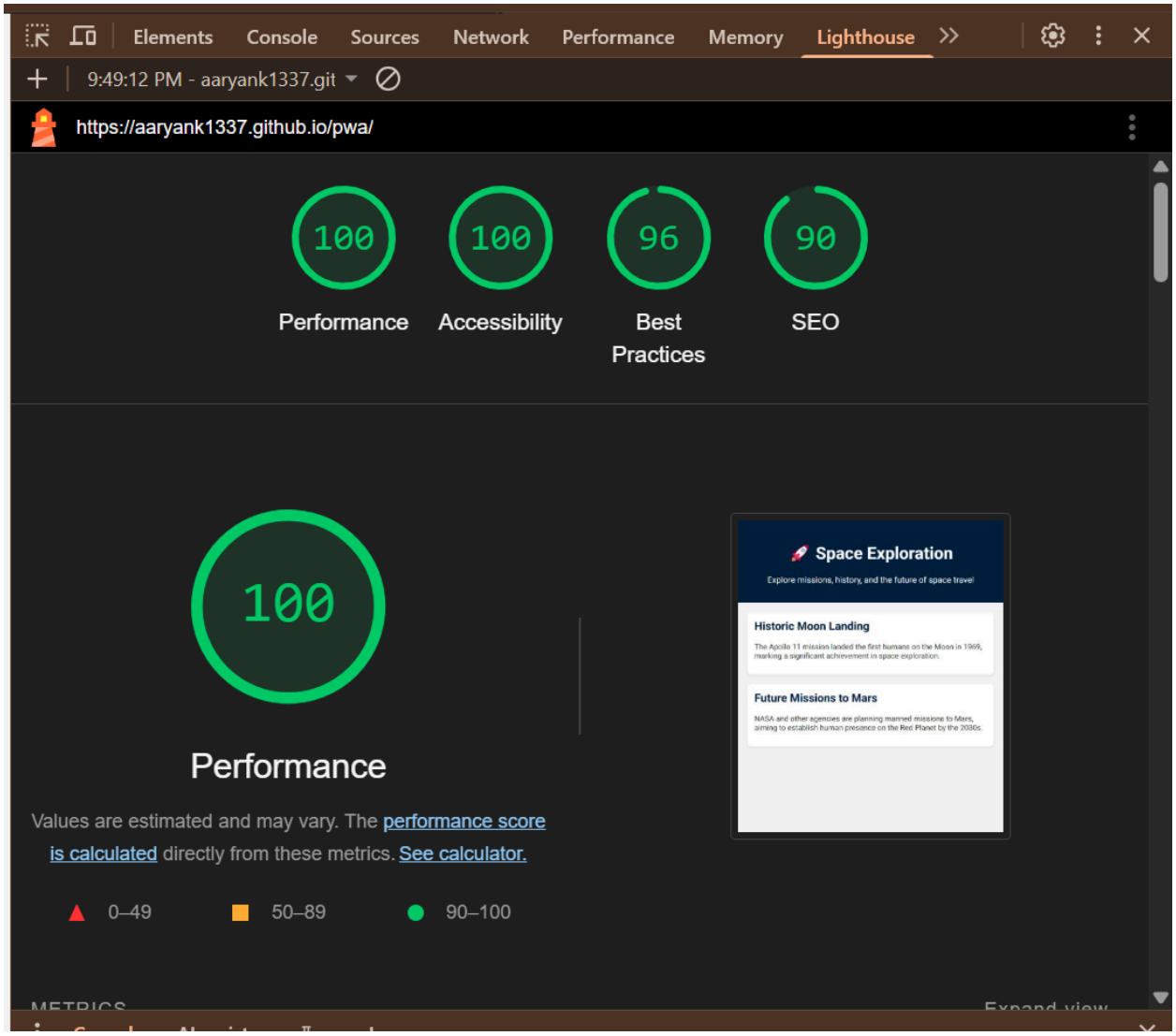
Name : Aaryan Kalbhor
Div : D15B
Roll No : 26

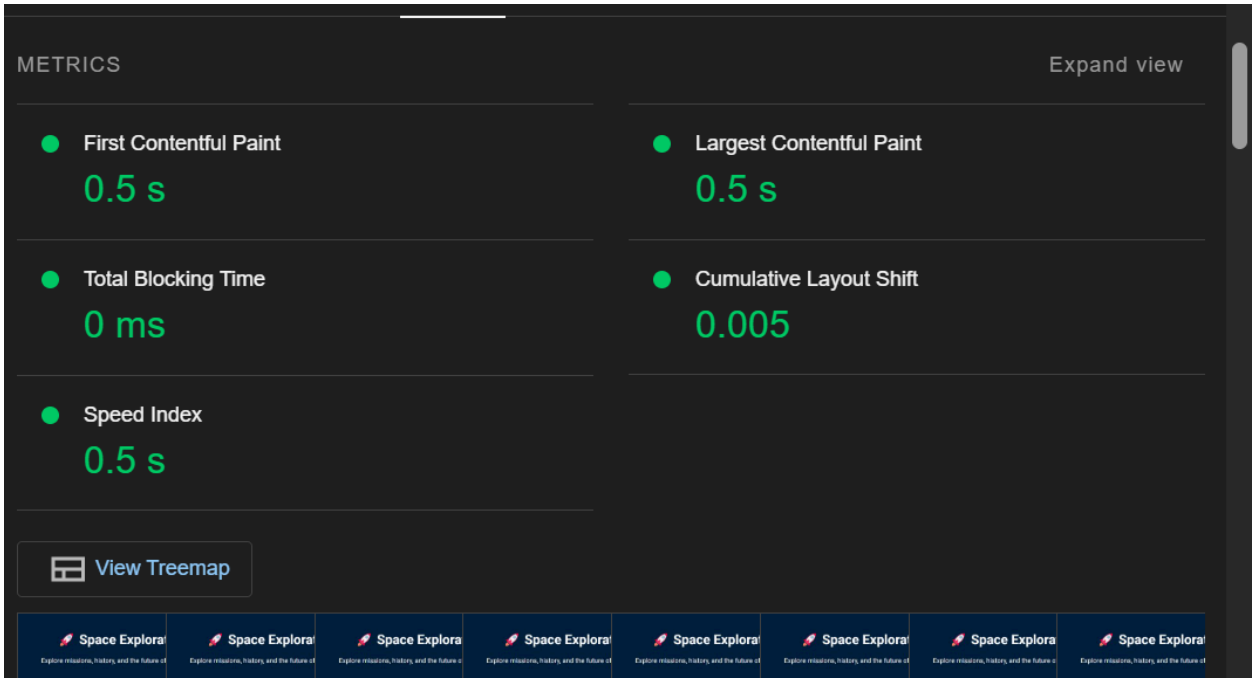
MAD 11

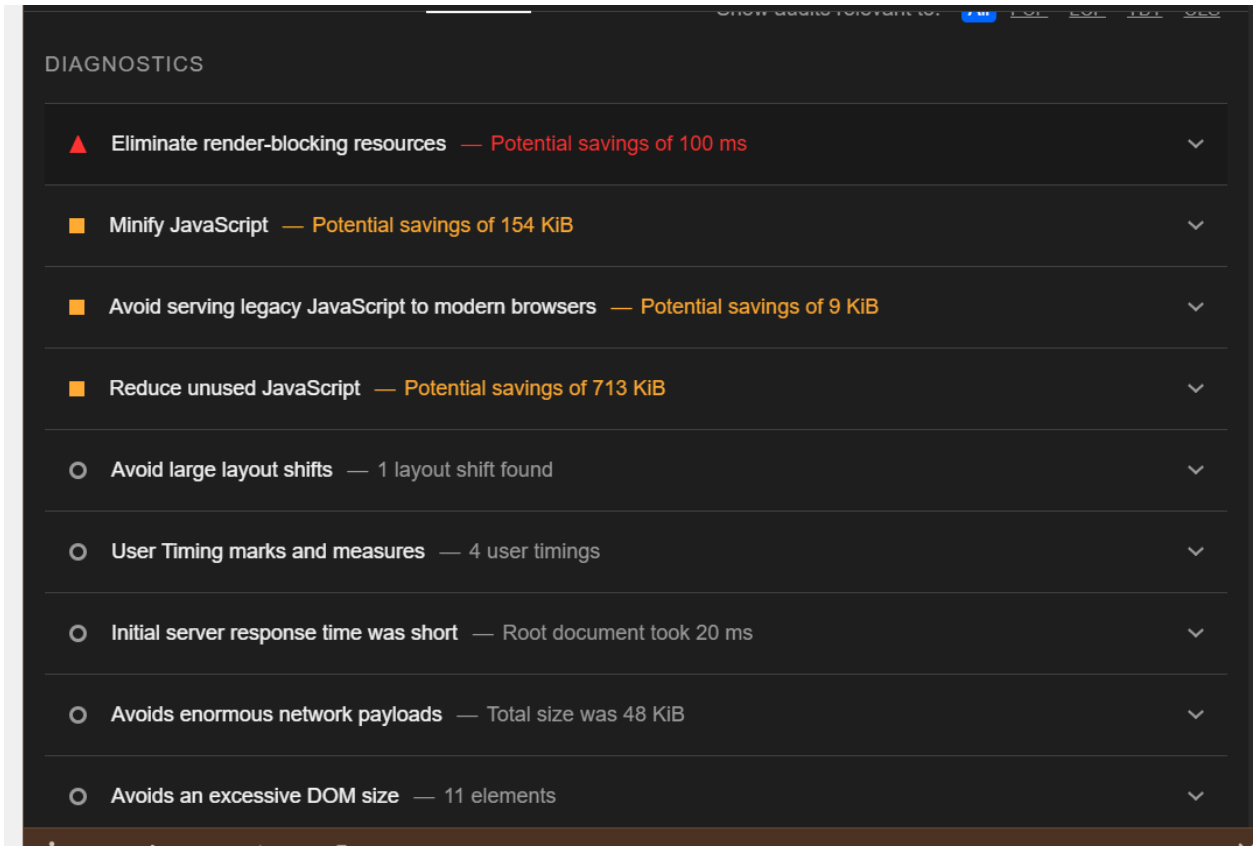
Steps to Use Google Lighthouse for PWA Analysis

1. **Open Chrome DevTools** – Open Google Chrome and press F12 or right-click on the page and select **Inspect**.
2. **Go to Lighthouse Tab** – Navigate to the **Lighthouse** tab in DevTools.
3. **Select Audit Criteria** – Choose **Performance, PWA, Accessibility, Best Practices**, and other relevant metrics.
4. **Run the Audit** – Click the **Generate Report** button and wait for the analysis to complete.
5. **Review Results** – Check the generated report, which includes PWA compliance, performance, and accessibility insights.
6. **Make Necessary Changes** – Modify **theme color, icons, manifest.json**, and other settings to improve PWA compliance.
7. **Re-run Lighthouse** – Test again to verify improvements and ensure all PWA requirements are met.


Elements
Console
Sources
Network
Performance
Lighthouse
1
(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


Elements
Console
Sources
Network
Performance
Memory
Lighthouse
9:49:12 PM - aaryank1337.git
https://aaryank1337.github.io/pwa/
100
Performance
100
Accessibility
96
Best Practices
90
SEO
100
Performance
Values are estimated and may vary. The performance score is calculated directly from these metrics. See calculator.
0–49
50–89
90–100
Space Exploration
Explore missions, history, and the future of space travel
Historic Moon Landing
The Apollo 11 mission landed the first humans on the Moon in 1969, marking a significant achievement in space exploration.
Future Missions to Mars
NASA and other agencies are planning manned missions to Mars, aiming to establish human presence on the Red Planet by the 2030s.
METRICS
Expand view


METRICS
Expand view
First Contentful Paint
0.5 s
Largest Contentful Paint
0.5 s
Total Blocking Time
0 ms
Cumulative Layout Shift
0.005
Speed Index
0.5 s
View Treemap


DIAGNOSTICS
Eliminate render-blocking resources — Potential savings of 100 ms
Minify JavaScript — Potential savings of 154 KiB
Avoid serving legacy JavaScript to modern browsers — Potential savings of 9 KiB
Reduce unused JavaScript — Potential savings of 713 KiB
Avoid large layout shifts — 1 layout shift found
User Timing marks and measures — 4 user timings
Initial server response time was short — Root document took 20 ms
Avoids enormous network payloads — Total size was 48 KiB
Avoids an excessive DOM size — 11 elements