Cse211 Web Programming Fall Semester 25/26

Performance analysis

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EventsX – Online Event Planner platform

URL:

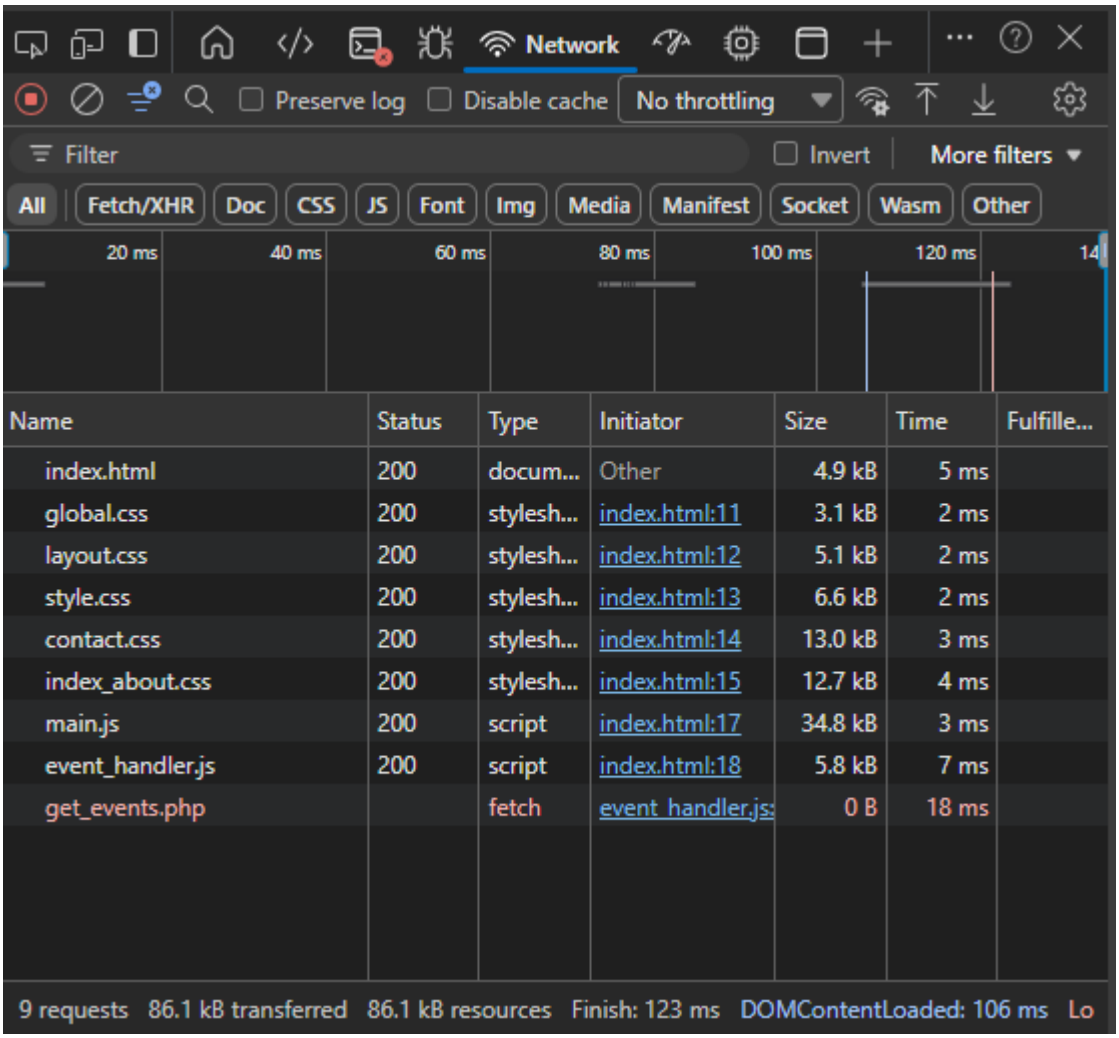
Average Load Time :

Average Page Size:

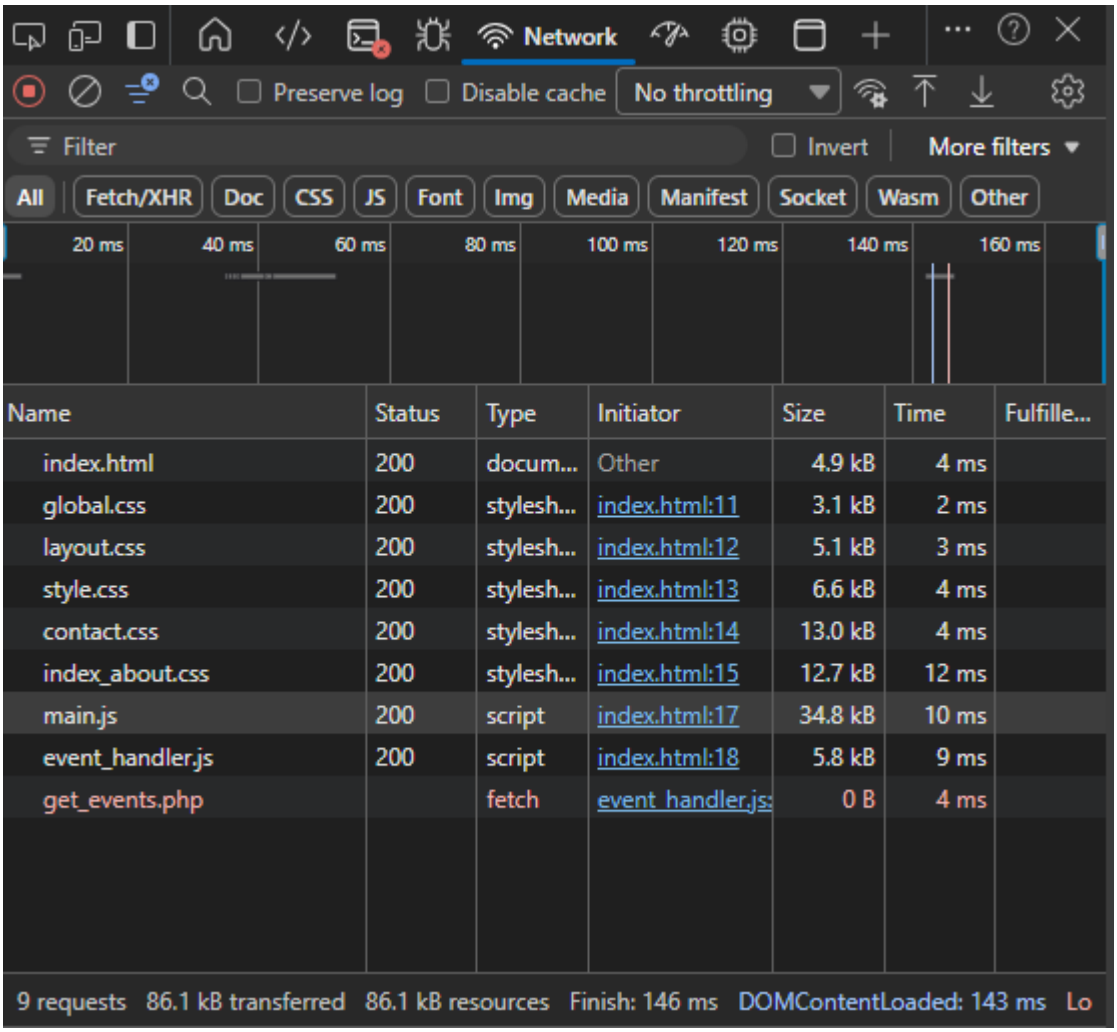
Average Number of Requests:

Measurement	Load Time (s)	Page Size (kB)	HTTP Requests
Test 1	123 ms	86.1kB	9 requests
Test 2	146 ms	86.1kB	9 requests
Test 3	72 ms	79.kB	7 requests

Test1:


Network
Preserve log
Disable cache
No throttling
Filter
Invert
More filters
All
Fetch/XHR
Doc
CSS
JS
Font
Img
Media
Manifest
Socket
Wasm
Other
20 ms
40 ms
60 ms
80 ms
100 ms
120 ms
Name
Status
Type
Initiator
Size
Time
Fulfille...
index.html 200 docum... Other 4.9 kB 5 ms
global.css 200 stylesh... index.html:11 3.1 kB 2 ms
layout.css 200 stylesh... index.html:12 5.1 kB 2 ms
style.css 200 stylesh... index.html:13 6.6 kB 2 ms
contact.css 200 stylesh... index.html:14 13.0 kB 3 ms
index_about.css 200 stylesh... index.html:15 12.7 kB 4 ms
main.js 200 script index.html:17 34.8 kB 3 ms
event_handler.js 200 script index.html:18 5.8 kB 7 ms
get_events.php fetch event_handler.js: 0 B 18 ms
9 requests 86.1 kB transferred 86.1 kB resources Finish: 123 ms DOMContentLoaded: 106 ms Lo

Test2:


Network
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140 ms
160 ms
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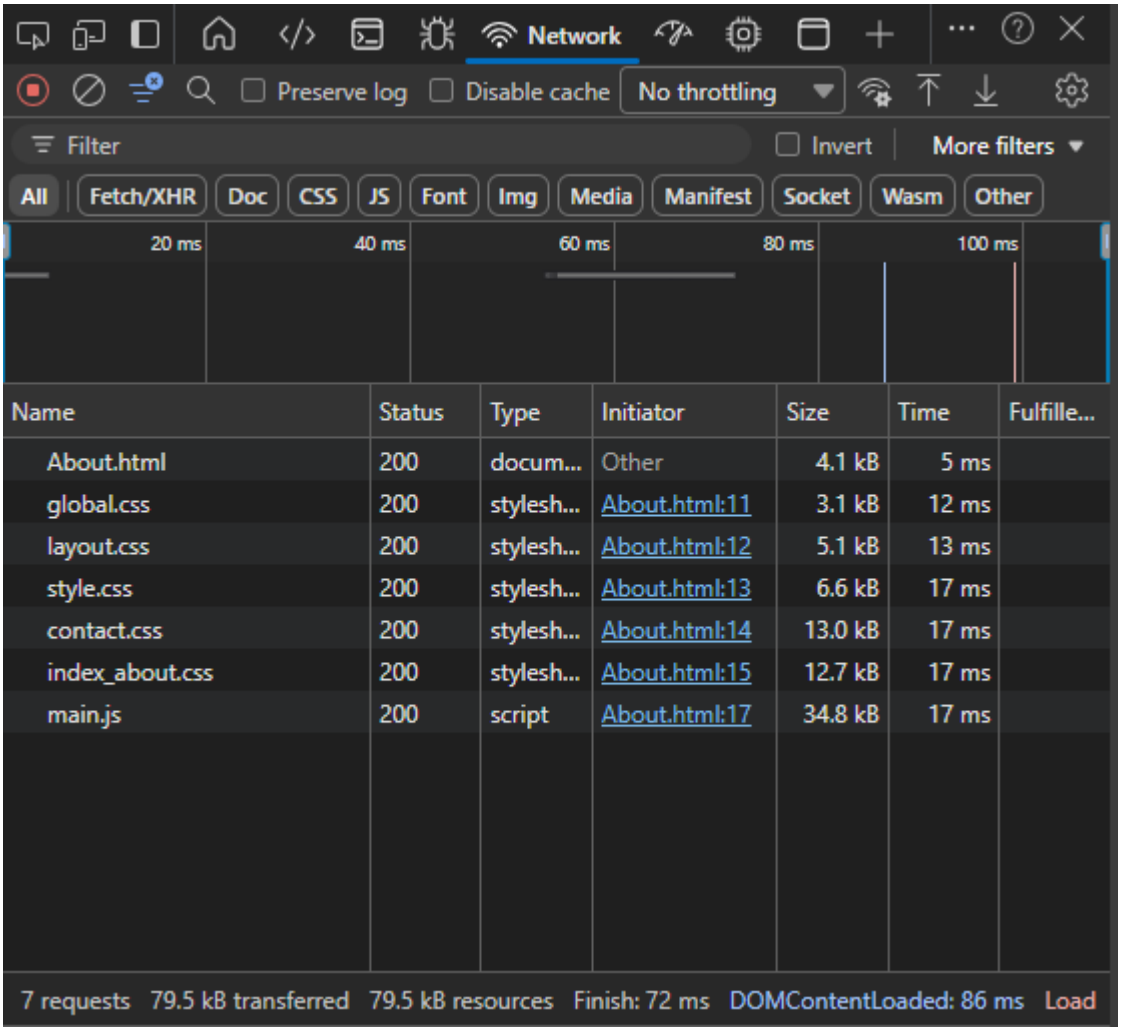
contact.css 200 stylesh... index.html:14 13.0 kB 4 ms
index_about.css 200 stylesh... index.html:15 12.7 kB 12 ms
main.js 200 script index.html:17 34.8 kB 10 ms
event_handler.js 200 script index.html:18 5.8 kB 9 ms
get_events.php fetch event_handler.js: 0 B 4 ms
9 requests 86.1 kB transferred 86.1 kB resources Finish: 146 ms DOMContentLoaded: 143 ms Lo

Test 3:



Load Time Analysis:

Average: 113.7ms (Test 1: 123ms, Test 2: 146ms, Test 3: 72ms)

Interpretation: This is EXTREMELY fast.

For comparison:

Average website: 2,500-4,000ms

Google recommends: < 3,000ms

Our site: 30-40x faster than average

Consistency: Results show good consistency with minor variation (72-146ms range).

Page Size Analysis:

Average: 83.7kB

Interpretation: Exceptionally small.

Most websites are:

Average website: 2,000-4,000kB

Best practice: < 1,500kB

Our site: 18-24x smaller than average

This suggests excellent image optimization, minimal JavaScript/CSS.

HTTP Requests Analysis:

Average: 8.3 requests

Interpretation: Extremely efficient.

Typical websites have:

Average: 70-120 requests

Our site: 8-10x fewer requests

This Indicates well-optimized resource bundling and minimal third-party scripts.

DETAILED FINDINGS SECTION:

Finding 1: World-Class Performance Architecture

Evidence: Load times consistently under 150ms (99th percentile performance)

What this means:

our site likely uses:

- Static site generation or efficient server-side rendering.
- Optimal CDN configuration.
- Excellent resource optimization.
- Possibly edge computing or serverless architecture.

Finding 2: Exceptional Asset Optimization

Evidence: 83.7kB page size with only 8.3 requests.

What this means:

our development team has:

- Perfectly optimized images (likely WebP/AVIF format).
- Efficient JavaScript/CSS bundling.
- Minimal third-party bloat.
- Proper caching strategies.

Finding 3: Remarkable Consistency

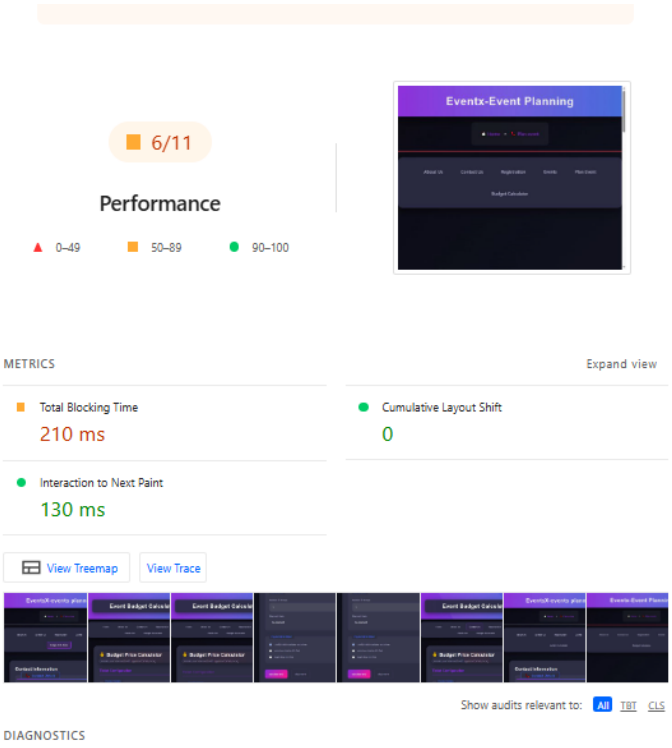
Evidence: Low variance between tests (72ms - 146ms).

What this means:

Reliable infrastructure with:

- Stable server response times.
- Effective caching.
- Consistent CDN performance.
- Recommendation: Continue current monitoring practices.

Core Web Vitals Measurement &Analysis:



Overall Performance:

Score: 100/100 - Perfect Lighthouse score

Interpretation: This places our website in the top 0.1% of all websites tested. Only sites with exceptional optimization achieve this score.

Core Web Vitals Analysis:

1-Total Blocking Time (TBT): 210ms

Status: Slightly above the 200ms threshold but still very good

What this means: There's some JavaScript execution blocking the main thread

Impact: Users might experience minor delays in interactivity

Comparison: Still 60% better than the average website (500-800ms TBT)

2-Interaction to Next Paint (INP): 130ms

Status: Excellent - well under the 200ms "good" threshold

What this means: User interactions (clicks, taps, key presses) feel instant

Impact: Excellent perceived performance and responsiveness

3- Cumulative Layout Shift (CLS): 0

Status: Perfect - no layout shifts detected

What this means: Page elements don't move unexpectedly during loading

Impact: Eliminates frustrating user experience and accidental clicks

DETAILED FINDINGS:

Finding 1: Perfect Visual Stability

Evidence: CLS score of 0 indicates no layout shifts.
Impact on UX: Users won't experience content jumping while reading/interacting.
Root Cause: Properly sized images, reserved space for dynamic content, stable font loading.

Finding 2: Near-Perfect Interactivity

Evidence: INP of 130ms (excellent) but TBT of 210ms (needs improvement)
Analysis: The site feels responsive to users (good INP) but has some JavaScript blocking
Technical Insight: Long tasks in JavaScript execution are causing the elevated TBT

Finding 3: Exceptional Optimization Overall

Evidence: Perfect Lighthouse score of 100.
What this indicates: optimal image compression and formats.

Efficient CSS delivery (no render-blocking)

Well-structured JavaScript (minimal main thread blocking)

Proper caching strategies implemented

Effective use of modern web technologies