BrandLume Website Speed Optimization Example

Client: spiritofmath.com
Challenge: To do the speed optimization without making any changes to the plugins and website template which is very old. Also, the website hadn’t been updated since 4 years.
The Google PageSpeed Score increasing from merely 14% to 73% and number of requests reducing from 151 to just 109.

Also the fully loaded time came down to 4.1s from 8.6s.
BEFORE
Time to first byte is way below average which is 3.1 seconds in this case. The challenge was to optimize the resources in a way that it doesn't effect the website functionality in any way. The website is built on very old template with plugins that were causing caching issues.

We had set up a staging environment to do a debugging for entire website and removed all unnecessary resources and plugins, fixed the caching issue and optimized the website to be able to bring down the TTFB to just 353 ms from 3.1 s.

Also, the first paint time reduced from 5.2s to just 1.5s & contentful paint time reduced from 5.4s to 1.5s.

AFTER
Page Load Timings
Note: Marker spacing not to scale
RUM Speed Index: 1,619

353ms TTFB
1.5s First paint
1.5s Contentful paint
2.0s DOM int.
2.0s (211ms) DOM loaded
3.6s (8ms) Onload

Page Load Timings
Note: Marker spacing not to scale
RUM Speed Index: 5,598

3.1s TTFB
5.2s First paint
5.4s Contentful paint
5.8s DOM int.
5.8s (196ms) DOM loaded
7.1s (9ms) Onload

PageSpeed Score
F (26%)

PageLoad Score
F (42%)

Fully Loaded Time
8.8s

Total Page Size
5.00MB

Requests
151

PageSpeed
YSlow
Waterfall
Timings
Video
History

PageSpeed Score
C (73%)

PageLoad Score
E (51%)

Fully Loaded Time
4.1s

Total Page Size
2.58MB

Requests
109

PageSpeed
YSlow
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Page Speed Index: 1,619

Page Speed Index: 5,598
15 Days performance and optimization history
Web Speed Test: PingDom

The fully load time reduced from 5.21 s to 1.47 s with number of requests reducing from 149 to just 104.

Also page size decreased drastically from 6.8MB to 2.6MB
Web Speed Test: Google Desktop Page Speed Test:

The overall score increased from merely 16 to 76 with first contentful paint time reducing from 2.6s to just 1.0s.