```
***********
BEFORE changes
************
index.php
No Throttling: Finish 403ms
             21.3K transferred
             DOMLoaded 321ms
             Loaded 407ms
Slow 3G:
             Finish 6.49s
             21.3KB
             DOMLoaded 4.21s
             Loaded 6.49s
publicBoard.php
   ._____
(Boardname: Efficiency Check, 12 images(1.3MB), 12 sounds(180KB))
No Throtting: Finish 11.59s
            1.4MB
            DOMLoaded 10.58s
            Load 11.55s
Slow 3G:
            Finish 33.93s
            1.4MB
            DOMLoaded 4.18s
            Load 33.94s
myboards.php
No Throtting: Finish 318ms
            DOMLoaded 263ms
            21.3KB
            Load 321ms
Slow 3G:
            Finish 6.44s
            DOMLoaded 6.16s
            21.3KB
            Load 6.44s
board.php
(Boardname: Efficiency Check, 12 images(1.3MB), 12 sounds(180KB))
No Throtting: Finish 1.22s
            DOMLoaded 238ms
            1.4MB
            Loaded 1.22s
Slow 3G:
            Finish 32.51s
            DOMLoaded 4.27s
            1.4MB
```

Load 32.52s

AFTER changes

We already had a pretty well performing site; however, we did a lot of polishing and we specifically added MOD_PAGESPEED to Apache. This improved

our performance times by approximately 5%.

We also added pagination which improved performance by only fetching the

necessary amount of data from the server, depending on the page the user

is viewing.

We also made many security improvements, including locking down our assets

directory as well as our database access configurations. We added client-side

file type checks (besides the back-end file type checks) so that clients cannot

upload files that are not image or audio files.

We also improved validation by sanitizing fetching scripts to prevent malicious $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

code being run on our fetch scripts.

We also polished further by making sure error messages like bad username/password

or bad signup/bad email are clearly shown to the user.