Weeb Applications

# Final Report – CSE 134B

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This project has truly been a rollercoaster, and we have learnt a good deal from it. From the soaring highs of seeing our creation in action to the sweeping lows of ServiceWorker errors, we’ve come a long way and experienced many different technologies in the past week.

Current features:

* 3 different themes and layouts
  + Light, Dark, Pink
* Compact and Regular View
* 2 whole soundboards to choose from
* Compatible with multiple screen resolutions and mobile view

Problems encountered:

* Getting started with Service Workers and lack of extensive examples.
* Having to deploy each time to test changes to service worker.
* Finishing up the manifest.json as we didn’t understand its use initially.

(Problems not encountered):

* Refactoring: Besides removing global variables and changing variable names, the code was quite polished to begin with.
* Styling: All CSS & resizing was already meticulously designed
* Functionality: Javascript was completely done, only had to be updated with service worker functionality.

Performance results:

* More than 90 on Lighthouse Performance metrics.
* Good performance was achieved as a result of:
  + Having all our media files on our firebase storage for quicker access
  + Minimal CSS file instead of using Bootstrap
  + Clean Javascript code with few DOM manipulations.
* Network speeds are fast as we used moderate image sizes and small audio files.
* Compact mode does not load images and is faster

Lessons Learnt:

* While its important to know vanilla Javascript, JQuery is a lot more powerful and easy to use and made our lives a LOT easier.
* Git is a life saver.
* Service Workers are really powerful and allow you to do some cool stuff.

Application:

* We are proud of what we have accomplished as a team on this app.
* It looks polished and shippable, especially ‘Light’ Theme.

Takeaways:

* There are a LOT of things that you can do wrong / sub-optimally.
* It’s a constant, conscious effort to adhere to best practices in web dev.

# **Screenshots of Lighthouse Analysis:**