CSE 134B - Homework #3
February 18, 2017

Findings

Work Effort

- Lines of Code:
  - Vanilla CSS: 886 lines
  - Bootstrap: 800 lines
- Hours Taken:
  - Vanilla CSS: 13.5 hours
  - Bootstrap: 6 hours

User Impact

	Load Times		Byte Count	
	Vanilla CSS	Bootstrap	Vanilla CSS	Bootstrap
actor-info.html	453 ms	1832 ms	179.5 KB	194.1 KB
edit-actor.html	56 ms	42 ms	1.6 KB	1.8 KB
Delete-actor dialog	48 ms	333 ms	1.2 KB	1.4 KB
favorites.html	443 ms	1927 ms	156.9 KB	157.1 KB
index.html	192 ms	836 ms	3.161 KB	180.9 KB
login.html	48 ms	184 ms	1.5 KB	1.5 KB
movie-inception.html	1784 ms	3376 ms	1342.7 KB	1342.8 KB
notifications.html	49 ms	167 ms	1.2 KB	1.3 KB

- Does-not-exist.html and unfavorite-dialog will be implemented as modals via JS later
- We assume that we are using a cache by calculating shared files on first visit (example: loading shared.css and shared.js on the index page)

Discussion

Each approach of using either vanilla CSS or a framework, such as Bootstrap, is valid depending on the situation. If the concern is about the length of development time, using a framework might be the optimal solution. Using a framework can shorten the development time by half in comparison to using vanilla CSS, due to predefined classes and structure provided by these frameworks. For example, it took for our team 6 hours to complete the Bootstrap implementation. In comparison, it took 13.5 hours to complete the vanilla CSS implementation, due to having to build a responsive website from scratch. If the concern is about load time or byte count, using vanilla CSS might be the optimal solution as a large portion of framework classes are not even used and instead create needless bloat (from both the classes and external scripts required). For example, using Bootstrap required the index.html page to load 60 times more bytes than the vanilla CSS version. Using Bootstrap also increases the load time by up to 4 times as long in comparison to the vanilla CSS version.