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Info Sys 371  
Final Project Report  
<https://info-sys-371-project.web.app/>

**What worked well, and why?**

Bulma worked very well, for the most part. I really enjoyed working with Bulma and thought it made designing the site a lot easier. The documentation on the Bulma website was very nice, and I was constantly checking it and implementing the Bulma classes to refine my website. My favorite part about Bulma is how the page is automatically responsive when you build the site using the Bulma stylesheet. That saves a lot of hassle. I also thought Google Firebase worked very well for what I needed. Once it was setup, the website was very easy to deploy, and the Firestore database was just what I needed for the reviews page. It was easy to store and pull data from the database with Javascript, and I enjoyed using a NoSQL database for the first time – I thought it was very user-friendly and appreciated the flexibility compared to SQL.

**What didn’t work well, and why not?**

The log-in/sign-out feature works, but there were some imperfections with it that wouldn’t fly in an actual website. The navbar changes, but the content on the page stays the same even once the user has logged out, until the page is manually refreshed (I noticed this with my reviews page because it requires the user to be signed in). In order to make the log-in/sign-out feature fully functional, I need to go beyond what we learned with the Endless Recipes example.

**If you were to do the same project again, what would you do differently?**

Now that I know how to use Firestore database, I would have pulled more of the site’s content directly from the database instead of hard-coding it in. Right now, all the reviews are stored in the database, but if I were to re-build the entire website, I would also make all the product information part of the database as well. Although this would involve lots of inner HTML injection using JavaScript, I think it would help eliminate some redundancy in my HTML code while also providing a more centralized database for me to keep track of the products currently listed on the website.

If I were to re-do the website, I would also make sure to be tidier with my programming. Since I was slowly building out the site as we learned more and more in class, my coding style was evolving throughout the project. For example, some of my div IDs would use hyphens and some would use underscores, when I should be using underscores for all of them. If I were to re-create the website, I would try to stay more consistent.

**What are your takeaways after completing the project?**

I learned that I enjoy front-end web development, and that it is not as intimidating as I thought because there are tools like Bulma and Google Firebase to help lighten the load. I also learned that JavaScript is a very friendly programming language, for example, the variable types do not need to be defined when the variable is initialized. I feel that I have a much better insight as to how websites function after diving into HTML, CSS, and JavaScript myself, and making a simple website from start to finish. When I started this class, I had little interest in these languages, but after completing this project, I plan to continue working on my front-end development skills and hopefully put them to use in my next job.

**Describe a scenario that you thought would be hard to go through, but it turned out to be easier than originally thought. Describe another for the other way around.**

One scenario that I thought would be challenging was creating the log-in/sign-out functionality. When I first read over the instructions, I had no idea how I was going to accomplish that in my website. However, I didn’t know about Google Firebase at the time, and I was unaware of how simple the process would be once we had implemented Firebase into the project. The in-class example with Endless Recipes also helped a lot and I was able to use some of that code as a reference point throughout my project.

One situation I thought would be easy was taking my multi-page application and collapsing it into a single-page application. In the end, my solution was very simple, but I struggled to find examples online that fit my needs and I needed to experiment with the code quite a bit before I got it working. Even after it was working, I would occasionally find that I made a careless mistake, like missing a </div> somewhere, causing multiple pages to appear at once. This was frustrating to debug, and I could have avoided some of this frustration by making the application single-page from the start.

**Have you showed your project to people outside your class? What was the impression?**

I showed the website to a few family members. They were impressed with how clean the website looked considering it was coded with HTML and JavaScript and did not use any website-creation templates like Wix or SquareSpace. (I did not tell them how easy Bulma made it to design the website). They don’t care much for snowboarding so they were somewhat uninterested in the content of the site.

**Other features you would like to add if you have more time**

I experimented with adding a search functionality to the reviews page where the user could type a fraction of a board’s name in the search bar, and it would return all boards that included that string of letters in the title. For example, if the user searched for “Burt,” the Burton Ripcord 2021 Review would appear as a result. Unfortunately, Google Firebase did not have a built-in command for this, unless I missed it during my research (they have “==”, but that requires the search input to be exactly the same as the entry in the database, which I did not want). In order for me to implement this version of search, I would need to write a lot more code, and I ran out of time. Given more time, I would like to add this feature.