The product our group made was called Buffstuff. The basic idea was to create a website to provide information to students that was valuable to them. The vision we used to guide us in development was “To simplify the connection between students and Boulder organization, collect, compress, and convey all available relevant events and various information, and to provide a clear and constant media outlet, acquainting students to exclusive campus events, news, and day to day necessities.” We used numerous tools to communicate, store data, and do web development. Through our experience we better learned to work well as a team, utilize the agile method, and develop a working website.

               The main tool we used for storing data useful to the product was MySQL. This was an effective choice because each one of us learned to utilize MySQL commands in lab. We set up an initial hosting for the database with Freesqlhosting.net. Unfortunately, the company that offered that service went out of business midway through the project. Fortunately, we had the code that generate our tables backed up so we were not overly set back. It was easy to set up a new hosting with Digital ocean. Other than that issue there was no other issues with our database. We were able to set up our website to pull information from our database without any major troubles. MySQL lived up to the requirement we expected from it.

For our project management tool, we chose to use Trello. Since every team member was familiar with the features of Trello it helped us stay organized and on schedule. We assigned tasks via Trello for every milestone with due dates to assure the work would get done on time. Unlike Trello, Slack was not as big of a success with our team. We started off using Slack as our main form of communication but quickly learned that a simple group message was much more responsive. Over the first couple of weeks we managed to meet in person in the computer lab of the UMC. These meetings were crucial for the brainstorming and beginning stages of development but as our vision became more clear and our schedules got crazier we began to meet remotely via Skype. Our Skype meetings, where we discussed the progress of our sprints and gave the other team members updates, were very successful. All progress updates were also clear to see on our GitHub repository. Video meeting links, HTML and CSS code for the website, and SQL files were all uploaded to our repository over the course of development.

Initially, all of us had little/no experience with web development. After deciding on a basic layout for our website, we set out to learn more CSS, HTML, and PHP in order to help us build our idea. This proved to be a somewhat complicated task because we didn't know how well these languages would work together due to our inexperience. In order to adapt to this situation, we did extensive research on what would comprise our website: sports scores that would require web scraping, an interactive Google maps API that would help users gain understanding of the layout of campus, and an intuitive yet elegant user interface. After doing research, we were able to build our product.

We found that we were able to learn the languages relatively quickly. We used iMessage to communicate specific aspects that we felt were conducive to a good website. Occasionally, we hit roadblocks. For example, we had an issue getting our Google Maps' API to work. In order to fix this, we changed all of the location data in our MySQL database to a form that Google Maps' API could recognize. Overall, our experience in gaining a deeper understanding of building websites was positive, and in the future we will look to keep these skills polished by updating and maintaining our website with information that we feel will be relevant to the typical student.