Team 26 - Team Gibberfish
Milestone 7 - Final Report

Project Reflection

Over the course of the semester, we utilized a wide variety of tools and methodologies that had a wide variety of outcomes. Our Agile methodology worked quite well with our group. We had regular, short meetings that were bolstered by “hackathon” sessions where we made a significant amount of group progress. Everyone was continuously up to date on what our goals and tasks were thanks to Slack, which was perhaps the most helpful tool we used. We also used it for file sharing while we were working on the infographic. Google Drive tools such as Google Docs were also helpful for collaboratively writing our milestone documents. The one tool that didn’t work well for us in the realm of project management was Zenhub, which was our Trello-substitute that was more integrated with GitHub. We used it to set up our goals for our sprint cycles, but the board was abandoned shortly thereafter. We didn’t keep it updated with our progress because we were having so many meetings and group work time that we felt it wasn’t necessary. We phased it out through our first sprint cycle, and left it in its state until the end of the project.

Our web development tools were slightly more unsuccessful. Initially we chose Google Sites to build our website, but we had to change in favor of Heroku after we encountered challenges in tying in our database. Heroku was easier to use, was integrated with GitHub for faster deployment, and allowed us to build and customize our own website instead of choosing for a set of available options. HTML and CSS worked well (of course) for building our website, and GitHub was successfully used as a central source for our code and allowed us to roll back to previous versions easily if we accidentally broke the website.

Our database was written in SQL, which was a mixed bag. It was rough to format our data into the appropriate tables, but it was easy to input the data. We used PHP to link our database to the Google Maps API on our website, which worked quite well. It was easy to learn and convenient in comparison to Java or Python, which we would have had to learn from scratch. The final tool we used was phpMyAdmin to manage the database. It made management easy, and was great for testing our website.

Overall, the tools and teamwork ended up both working very well. We encountered some initial problems finding what fit best for the team, but ended up being thankful for those lessons. Our regular weekly meetings and constant communication through Slack proved to be an excellent foundation for the success of this team, and the use of software development tools ranging from HTML to PHP to our API followed suit with successful implementation. This project taught us so much and we look forward to using the skills we having gained from this in our future educational and professional pursuits.

Project Report

We made a significant amount of progress as a team over the course of the semester. Our largest accomplishment was building our website from scratch. It looks professional, clean, and has integrated Google Maps API for the map feature. We even have a catchy name! Our database is also set up and fully populated with all of the data needed for Boulder county (fish, lakes, reservoirs, rivers, streams, locations). Our foundation is solid and ready to be expanded upon, and during the process we all picked up new languages and skills we can use in our careers. We have UI elements of our website set up, like the format of our info boxes that display when clicking a location marker on the map.

However, we fell short of our initial goals in several key ways. The main one is that our database is not currently linked to our website. The UI is set up in preparation, but the PHP that links everything up is not currently working correctly. As such, our search functionality is not working either, since there is no database for it to search. We also wanted to have more specific fishing regulations available, so that when you click on a location you have all relevant information pop up. We don't have that information in our database currently, so we have no way of making it modular or appear on demand. Another goal we had that we didn't achieve was user profiles, for recording your catches and other information.

A lot of the above is on the verge of being implemented. With a small tweak the database will be linked to the website, populating the map with all the information we've collected. Adding user profiles will be as simple as another table in the database with the scripts to login and create new users. Implementing a page for user-reported catches will require some work, and sorting through all 35 pages of fishing regulations for the state of Colorado is a huge task. Most of this can and will be implemented over winter break. The fishing regulation issue will most likely persist for some time. Once we get the basics fully implemented after break, we can begin advertising or monetizing viewers of our site to fund future expansions across the US and beyond. We are eagerly looking forward to break so that we can continue to innovate and create in the field of fish searching and location-based fishing technology.