

Group project reflection

The following is an informal reflection of how we observed the scrum process and worked as a team. The goal was to organize our thoughts and think about what we learned in this project.

Evan Galea

I learned quite a bit about how software was developed in the real world in teams. I am glad I was able to apply skills learned from 4p01 and from other projects.

I went into this project with a few misconceptions about how it would go and so fixing them was a valuable experience. When setting up the architecture of the site I was initially more concerned with setting up the architecture and page routing of the site quickly, and using stuff that would look good on a resume, than with building something that would work in the long term. In particular, I had trouble with getting the react website to work with multiple pages. In the end I wound up having to throw out a lot of work, and the others had to help and get the setup of the site. However I am glad how things turned out as I learned quite a bit about how to build the architecture of programs and how to work with others.

I also learned to communicate better and to leverage others strengths to compensate my weaknesses. I guess you could say it was specialisation. For example, After I had set up the page for adding artifacts and the image uploading system, Henry, Yannick, Fahad, Arshdeep, and the others were very helpful in formatting, adding functionality, and linking it with the database. If it had just been me working on that I would have had a lot of trouble.

Working with 8 others was quite the team effort, I was used to only small groups of 2-4 until now. Our group managed to stay quite organised and on track, with each of us taking the initiative on tasks. We used and adapted the scrum process well, in particular I think Steven did a good job keeping us on track, Reet managed our repository well, and George and Yannick have done well to organise and report on our contributions. Our meetings were concise and productive, with us knowing how to both start and end a discussion and to stay focused. I sometimes have trouble in conversations with finding my chance to speak, but during our meetings everyone's input was valued and everyone had a chance to contribute.

I am very grateful to the entire rest of the team for their contributions and help.

Reet Chahil

Throughout the term of this project, my understanding and proficiency of Git and GitHub has improved rapidly. I can easily use Git to create branches, revert commits, and merge branches by rebasing and squashing. I coordinated the merges of everyone's work and assisted them in resolving merge conflicts which really helped me become comfortable with GitHub. I also learned how to create CI/CD workflows to automate testing, integration and deployment of our project. I also learned how to use the React JS framework to build the app's UI. I've become

very comfortable with using React's various features such as hooks, conditional rendering, routing, etc. I also improved my CSS skills as I styled various pages and created animations. I learned a lot about how to maintain a large project with many collaborators by using an organized project structure, and writing clean, readable, and reliable code that others can understand.

I managed the GitHub repository for our project, so I took responsibility for coordinating merges, reviewing pull requests, and ensuring that the main branch was working. I attended all meetings including sprint planning, weekly standups, sprint reviews, and sprint retrospectives. During each meeting, I discussed what I completed, and what work I am going to do for the rest of the sprint. I also demonstrated the project on some of the sprint review meetings, so that we could identify new bugs or required changes.

One of the biggest challenges, was handling the conflicts between each member's branch. There were times when the main branch would break after merging a pull request. It took a lot of time to fix the branch while keeping everyone's work. Another challenge is that CSS styles written by multiple members would conflict with each other and affect other pages in the app. After converting the CSS files to CSS modules, it fixed many issues but there were still problems with conflicting styles that arose from the use of modules. After enough research, I figured out a solution for the conflicting styles. I discussed it with the team in our next meeting and we fixed the styling for the pages.

We all learned a lot as we developed the app. For many of us, it was the first time using technologies such as JavaScript, React, Firebase, CSS, and Git. We communicated often to share what we learned so that no one was left behind. We were always reachable to our group members whenever they needed help in using these technologies.

George Barakat

Throughout the course I gained a comprehensive understanding of various programming languages such as (JS, HTML, and CSS). I also learned how to work with a group of developers to implement helpful software professionally using git.

Being the product owner, I had the chance to experience Jira and use it to manage our product backlog. That also helped me better understand the scrum management framework, and how to properly apply it in developing software.

Figma software was also a good tool to learn and use to implement wireframes design for our product.

Overall, It was a very good experience, I enjoyed working with my group, everyone has done a good job in this achievement.

Yannick De Caluwe

This project was a good experience where I was able to learn new tools that I have never used with people that would help me where they could. I have done databases before, but this was my first non-SQL database which allowed me to get familiar with how it works. Also, since we are in a group it allowed me to get some feedback from others on recommendations for how the database could be improved. Even though I didn't go with exactly what they suggested their opinions pushed me to re-design the database in a better, more efficient and clean way.

I have also gotten more used to using git and GitHub since it allowed for easy collaboration on the program. By needing to use git for this project it has pushed me into learning the different commands and how to work efficiently with it. Also, before this project I never did any web development and was able to learn from others and now I understand the html and CSS. By creating some of my own pages and then once the functionality was working others updated parts of the front end to function better. This allowed me to get some front-end experience while still doing good work on the back end and keeping the quality of the front-end consistent.

Throughout the semester we were using the scrum process and were able to get used to trying to work as a group. We were not experts at using scrum since it was our first time but throughout the sprints, we found things that worked well for our group and things that didn't. With this experience, I am more ready to work in a software engineering environment. It will be different when working in an actual work environment, but I have been able to see the importance of keeping a consistent meeting schedule to keep everyone on track.

All in all, I did enjoy parts of the project and got to learn lots of new tools and better my understanding of the Scrum process. Also, I got some very good experience in problem-solving when certain parts don't work the way they were expected to. When tools don't accomplish what is needed, we either add to them or combine multiple tools to accomplish the desired task. This was done when I found out that Firestore does not have a good name search feature. From a group member's suggestion, I integrated Alogia with the program to supplement the name searching, while still using Firestore as the main database.

Steven Sabharwal

This project served as a good opportunity for experiencing what working on a coding project in a larger team is like, including getting exposure to the types of tools that might be used in the workplace. I personally learned a lot more about git commands, and developed a greater understanding for how git works and can be used in larger collaborative efforts. Although the process of resolving git merge conflicts is still a bit fuzzy for me, I feel that I attained enough exposure to it to pick it up relatively quickly once I formally enter a work setting. I further got the experience to serve as our team's scrum master, getting a feeling for what it would be like to be in the shoes of a senior developer managing a team of junior developers. I found filling the shoes of this role to be difficult and stress-inducing, and I hope to use that experience to better analyze professional scrum masters to glean insights from their processes. I also learned a lot about React and responsive CSS development for browsers of multiple sizes. Through my work focusing on the CSS of the project, I did my best to make the site scale for both desktop views and mobile views, and learned a lot about this kind of technique doing so.

I specifically applied the scrum process by serving as the scrum master, and organizing the team to meet once a week to discuss what everyone was working on, what they planned to work on for the upcoming week, and used this information to establish collaboration between parties working on similar features/aspects. On a bi-weekly basis we would also have a sprint review and a sprint retrospective, where we would discuss the work that we have pushed to the main branch over the 2 week sprint, and discuss how we are following the scrum process to try and improve it for the next 2 week sprint. The sprint reviews helped us make sure everyone was on the same page for the current state of the site, and the sprint reviews did help us evolve our process. In particular, we changed the way we did scrum meetings, as it was initially less guided and more of an open-mic meeting. We later evolved the scrum meetings to become more of a guided Q&A, where I would poll each person on the work they did and their upcoming plans.

Since the Scrum process is somewhat tailored for development teams that are consistently working on a project, I found that the scrum process was challenging to use effectively during a school semester where each week not everyone was fully available. This resulted in us having very unbalanced individual sprints where only a few members were really able to work on the project during a sprint. Since we would plan out the sprints based on the assumption that everyone was available, we found ourselves pushing tasks back to future sprints.

Henry Tu

This course provided an excellent opportunity for me to practice coding in a large group environment. I learned about working in the react framework and creating websites using it. In the past I only had experience with basic HTML and CSS to create a website. I also gained practice working in a Github repository with multiple branches and in a group as I had only

previously used it by myself or with a partner and only on the main branch. Branching and merging was new to me and I was uncomfortable with making changes to our group's work at first.

I applied the scrum process as a developer who regularly attended meetings. The consistent sprint meetings keep me on task and on time and keep me responsible for my work. It helped me be more organized as the consistent cycles kept me on track and I had specific tasks to be responsible for rather than accomplishing tasks at random.

Fahad Umair

This course gave me an opportunity to apply all the course material we learned in COSC 4P01 into a real life project. I had been coding professionally for the past three years but the team usually consisted of me and my manager or one other person. It was the first time I had worked with a team this big, so coordinating with the team members and dealing with merge conflicts were some of the issues I had faced. However, the team members were very helpful in resolving these issues and they got resolved pretty quickly.

Dealing with merge conflicts made me learn a lot about Git which according to me is one of the most important tools for any developer. I also gained more experience working with Firebase and React js. I also gained more experience in reading through other people's code to find the components that I would want on my page as well.

I applied the scrum process by working as a developer. I would attend all the meetings that were held weekly/bi-weekly and would present the work that I am going to do in the following week or the work I had done in the previous week. All the scrum process was new for me as it was for everyone so it was a learning process for all of us. The scrum meetings kept everyone on track as each team member got asked the amount of work they had gotten done.

According to me the scrum process is excellent for teams however, maybe because of school it is a bit difficult to meet deadlines and things have to be pushed further. However, in a job environment, I think scrum is the best type of framework to use.

Arshdeep

This course gave me the opportunity to apply various concepts from all the courses I have learned throughout my university. I really got the chance to know the feel of working in a team environment and in a closed group. It was the first time I had never worked with a team this big before. One of the most valuable things I gained was a deeper understanding of how to do

projects in a professional environment. At times the course was challenging, but I was able to push through.

I learned the use of lots of new technologies such as Git, Figma, etcetera. I learned a lot of Js, CSS, Testing, React, Firebase, in the process. I was able to extract the knowledge and in the overall project, I was able to take help from my teammates wherever I needed help.

We regularly had meetings to discuss our progress and talk about the project progress. From there, each one of us could check with others' work and merge it together. Hence, we were able to coordinate and complete our project in a professional manner.

Looking back on the course, I can see how much I've learned and how far I've come. I plan to apply the knowledge and skills I gained in my personal and professional life. Overall, the course was a valuable experience that has left a lasting impact on me.