## CIS 4250 – Software Design V Instructor: Prof. S. Scott Individual Accountability Report (IAR) #5

Q1. Student Name: Jake Goode

Q2. Student ID: 1202742

Q3. Sprint 3

Q4. Team #: Section 2, Group 8

Q5. What were the main technical or methodological knowledge, skills and/or abilities (KSAs) that were required to complete this team deliverable? What prior courses or experiences (e.g. coop, group project, etc.) from your Software Engineering degree did you draw on for these KSAs? (bulleted list is preferred):

## Main technical/methodological KSAs

- Documentation outlining the work performed during the sprint.
- Attentional to detail while finalizing wiki documentation
- Collaboration of working on code
- Decision-making on the project
- Group communication
- Backlog creation on GitLab in terms of creating issues (user or tech) to reflect what is to be expected of us in terms of our explanation and proposal of future features
- Understanding and creating code to produce desired outcomes

The previous courses I used to draw on for these KSAs were:

- CIS\*3260 (Software Design 4)
- CIS\*3750 (System Analysis and Design in Applications)
- CIS\*3760 (Software Engineering)

These courses are centralized with group communication and coding to produce proper wiki documentation and working code. Using my previous skills allowed me to properly outline the purpose of each issue and document the stage of the problem while it was being worked on. My main technical and methodological KSAs are the same as Sprint 1 and 2 due to the same content covered by both. Sprints 1, 2 and 3 dealt with creating and breaking down GitLab issues, communicating with group members and updating new code to implement the new features created from the problem.

Q6. What was your existing level of experience with these topics/skills before your team began working on this deliverable? (1-2 sentences):

My level of experience with these topics/skills before my team began working on this deliverable was high. These are the same skills I have used throughout my program and the

previous submittal, so I am very comfortable using my coding skills and feel comfortable with the new language used in our project.

Q7. Comment on your individual KSAs learning during this deliverable, and what additional learning may be needed to understand or be more competent with these topics/tasks in the future?

- Attention to detail: I reviewed and edited the wiki before finalization and submission.
- Analytical thinking: Reviewed what was required for the sprint and compared the documents to the provided rubric.
- Time management: Used the whole time provided to ensure the issues were completed to align the acceptance criteria and definition of done.
- Collaboration: Discussed with the group members how to split up the work and which members were to work on what.
- Decision-making/Problem-solving: Determined where in the codebase our proposals need to be implemented to ensure our code was working as intended.
- Communication: Communicated with team members to ensure we were all on the same track for the sprint and project to be worked on.

As with my previous IARs for the past deliverables, most of my KSAs are the same due to the nature of both documentation and code creation. This IAR was slightly different, but the same as my last IAR, with working on the code base and completing stories/issues, but most KSAs still aligned with dealing with wiki documentation and ensuring everything aligns properly. I still feel that I am already comfortable with these topics/tasks especially using my previous skill with a coding language I'm not too familiar with. I can further my knowledge of these skills by looking more in-depth at our code base, understanding the language better, and providing a plan on how to tackle each of our issues in a timely matter. It also doesn't hurt to generate more research by searching on the same topics that we are proposing to apply to see if other developers had struggles with implementation or testing. I can always learn to practice more on my documentation and analytical thinking skills to provide more creativity, formal speaking, and documentation formatting (code commenting, detailed wiki documentation on issues) to provide more sound documents for submission.

Q8. What specific contributions did you make to this team deliverable? This should include technical or project management contributions.

For this team deliverable, I contributed to:

- The creation of GitLab issues with proper acceptance criteria and definition of done
- Working on code standardization to ensure the code base adheres to the same rules throughout the program
- Brainstorming on what issues to do next sprint
- Finalization of wiki documentation before sprint freeze
- Sprint retrospective

Q9. With whom did you collaborate for any of the above contributions (be specific – saying "all team members" is not sufficient. State which parts you worked on with whom)?

For the creation of GitLab issues and brainstorming on what issues to do next sprint, I worked with all members as this was a group effort to ensure we were all on the same page as to how each issue should be broken down and what issues we should work on for the next sprint. This was to ensure that every member was not kept in the dark or unsure of what they should be doing for either sprint. This also ensured that we were properly communicating and confirming as a group as to how the issues should be broken up. We used the user story description (as a <user>...) for each user story and provided an overview description of each tech story to ensure that each issue was properly described, and discussed how each issue should be weighed.

For the code standardization, I didn't work with anyone directly, but I worked with Andrew in terms of making sure the new code they implemented for the AI chat passed the linter running through the program. After I updated the GitLab YAML file to run the linter inside the CI pipeline along with fixing any previous errors and warnings, I pushed the new code to the sprint 3 branch. Due to me pushing my code before Andrew had a chance to push the AI chat code, we needed to deal with new fixes on the new code before we could consider our code as passing code and merge it into the main branch. Once his code was pushed into the sprint 3 branch, I manually ran the linter and made the appropriate changes to the code so it could pass the CI linter and be allowed to merge in the main branch.

Before the sprint freeze, I worked with Rashi to finalize the sprint wiki to ensure that the issues and sprint were documented correctly. I confirmed this by referring to the rubric to ensure what we had everything needed. This also entailed the sprint retrospective after our demo to the professor and TA on Thursday. The day before the sprint freeze, we made sure that everything was detailed properly and had the correct links for the tasks and merge requests. We also provided images to provide a quick demo of the task working correctly so a user would not need to run the program to see that it has been implemented. For the sprint retrospective, we used the same template and flow as we did with the previous sprint as we found it could best describe how well our sprint went during the two weeks.

Q10. Comment on how well you managed your time over the time period allocated in the Course timetable to this team deliverable (i.e. the time between the prior team deliverable to this team deliverable).

I managed my time well over the allocated time we had for this deliverable. I didn't rush to finalize my duties for this deliverable at the last minute as I worked on it throughout the time provided to me. I spent most of my time researching the linter we are using (ESLint) and defining the linter already in place from the previous developers we cloned the project from. This took most of my time as I had to understand how the linter works and manually run tests to fix any errors or warnings the linter provided to show that our current code was failing to pass. We

ensured all the issues were completed before the 2-week sprint freeze so we could present what we completed during that time. This deliverable was less chaotic than past sprints but proved just as difficult with researching and understanding linters and how to implement them in the GitLab CI pipeline. After our sprint 2 demo, we confirmed what we are doing for sprint 4 early on and filled out the issue board so the burndown chart looks more fluid.