

CIS 3760 – Software Engineering Individual Accountability Report (IAR)

Q1. Student Name: Shawn Kaplan

Q2. Student ID: 0966499

Q3. Associated Team Deliverable: Sprint 4

Q4. Section#, Team #: Section 1, Team 1

Q5. What were the main technical or methodological concepts and/or skills that were required to complete this team deliverable? (bulleted list is preferred):

- Android (Kotlin)
- Agile + Scrum
- Networking (HTTP requests)
- Firebase Messaging
- GitLab

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

Plenty of Kotlin, networking, and GitLab experience from school, work, and personal projects. Only a little Android experience from work and this class, and this was my first time using Firebase Messaging.

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

All of my learning in this deliverable was related to the use of Firebase Messaging, which was a very involved process. I had to gain an understanding of its use from three perspectives: the client, the server, and Firebase itself. Learning more about Firebase Messaging would entail using it in broader aspects than just sending notifications from a server to a series of Android clients (ie. Using it in non-Android clients or with a Firebase back end instead of a Flask one).

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

As Scrum Master, I coordinated the team by creating and directing meetings. As an Android developer, I implemented a notification system that informs users of low stock when an item's quantity on hand value reaches a specified threshold. I also made the keyboard disappear from the screen when tapping somewhere off the keyboard, making the user experience smoother for those without "back" buttons. Furthermore, I added a verification step in the barcode

scanning process which rejects invalid barcodes from being scanned. This prevents rapid barcode scanning from detecting faulty barcodes and opening the “New Item” page. Instead, the barcode scanner tries again until a valid barcode is detected, and the correct page is opened. This allows for aggressive barcode scanning without worry.

Q9. With whom did you collaborate for any of the above contributions (be specific)?

I collaborated with Nicholas Rosati for the implementation of the notification on low stock system. He and I learned about Firebase Messaging together and he set up the back-end functionality while I set up the front-end functionality.

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 very well. All of the deliverable tasks were completed with some time to spare.