**Group Challenges.**

Mostly our group has worked well together. The primary difficulty many of us faced was learning a new Java library that we would use to program our game in. LWJGL has a steep learning curve, especially for beginners to programming. We have spent many hours researching it and are now satisfactorily skilled in its used to achieve our goals.

One of our members uses a Mac, and OpenAL (Open Audio Library) was deprecated on Mac systems a few years ago. This has been unfortunate, with no real solution as there is no longer support for it unless using an old version which is difficult to get now.

Outside of technical issues, our personal lives have gotten in the way at times, with me moving to a new house and changing jobs towards the end of the course, and Connor’s house flooding reasonably close to the beginning.

**How Challenges Were Addressed.**

We have worked together to overcome these challenges and been understanding of the difficulty each other must face at times. It has been important for us to reconsider each member’s workload, and to reshuffle tasks accordingly. Open communication creates a sense of confidence in knowing at least where people need help, prioritising tasks based on where they are in their life, and the nature of their interaction with the tools and technology used.

**Learning from Challenges.**

These challenges provided us, not only with a greater sense of the tools used in our project, but also with a better understanding of how to accommodate one another’s personal experience into our planning. We are only as strong as our weakest member, so at times others must pick up the slack to maintain productivity. Our understanding of LWJGL, and programming skills has increased exponentially, and we all come out of this course as more sound Java programmers.

**Changes.**

We decided to forego some of the original viable features we set out to achieve, specifically the “Scrap adds additional effects” feature, as it was getting much too close to the end of the course for us to include such a complex level of functionality. We also moved some of the graphics requirements from Connor on to Hamilton as he had experience and put his hand up to help.

**Project Plan Refinements.**

If we had been aware of the challenges, we would have faced, we may have decided to accomplish a less complex form of game, one that was based on a premade engine. We also would have spent more time planning the specifics, rather than allowing for team members to make their own calls disparate of the rest of the team.

**Timeline Refinements.**

We would have spent more time in the beginning working on the fundamentals, rather than expecting to quickly move from one part to another. We could have focussed more closely on important features that needed a lot of work, rather than being forced to move on to the next feature.

**Risks and Unexpected Events.**

Mostly the risks and unexpected events portrayed in Assessment 1 went unrealized. We worked together, and mostly had a clear understanding of what was required of us. The only risk mentioned that came real was, at times, communication was lacking from some members leading to them being confused as to their expectation, though the information was readily available to them.