ENSE 400/477

University of Regina Software Systems Engineering Fall/Winter 2019/2020 Semesters

Experience Report

Capstone Project: Stride Champions Platform Fighting Game

> Developers: Jeremy Cross Taylen Jones

Advisors: Craig Gelowitz Tim Maciag For the ENSE 400/477 terms we were aiming to build a platform fighting game with interesting characters, stages and interactive combat between two players. With a backstory for the characters and world as well as music all within a presentable user interface. The purpose of this report is to outline successes and failures that we encountered throughout the development of our project. Our original goal was to work through the process of developing a game, while applying software engineering principles we have learned throughout our university careers. We were not striving to solve a specific problem with this project, but rather we wanted to expand our knowledge of game development, while also learning the different tools and technologies behind it all. By the end of the project, we feel like we only scratched the surface when it comes to learning the software behind every aspect of game development. We had many successes and things went our way throughout the entire project, which gave us a sense of accomplishment. But with those successes came many challenges and bugs that could be frustrating at times to try and solve.

With our experience with this project we encountered many challenges that were presented to us. Most of these challenges we were able to overcome and some we were not. We learned how difficult and challenging game design can be especially when there are so many different components to developing a game. It becomes clear looking at industry why companies developing games are so large. There are people that specialize in all different areas and help bring these games to life. We think that building a game provides a really different perspective on certain aspects that you may have not noticed. For ourselves it was really cool to see how once we added the sound effects, music and particle effects how much life was added to the game. It was fun to watch our game progress and grow over the semesters after each scrum meeting.

Going back to the challenges that we faced with this project. We will use the example of the attack collision that we implemented. This took us a significant chunk of time longer than we expected with how unpredictable the behaviour was. However once we were able to overcome this problem, it was extremely satisfying to see hard work pay off even if there were some bugs in the implementation. That was the moment when we could really see the game shaping into form. In all I think we are satisfied with how our end result turned out.

Thank you for the great year Tim and for everything you contributed with in our education over the last four years.