COMPENG 2SH4 Project – Statement of Contribution

Your Group Name   #define TEAMSIZE 2

Your Name   Shajijan Narendran

Your Team Member's Name   Alex Melnbardis

You must complete this statement of contribution without discussing it with your project partner, i.e., individually. Your statement should be concise (at most one-and-a-half page). It has three parts:

1. Tell us about your own contribution to the development of your COMPENG 2SH4 project. For example, you can tell us about which project iterations (as mentioned in the project manual) and C++ project classes that you worked on and completed. You can provide a concise answer either in paragraph form or through bullet points.

The first part I coded was iteration 0, implementing the minimum four functions for the objPos class and importing the draw routine from PPA2/PPA3. Then, I was designated part B of iterations 1 and 2. In 1B, I wrote code for all the functions in the GameMechs class, and then implemented the class into the main project .cpp file. For 2B, I designed the food generation function where I randomly generated a location for the food object and stored that location within the GameMechs class. Also, I wrote additional functions within objPosArrayList (specifically a copy constructor and copy assignment operator) to manage memory leaks that would occur in the main project code. After that, I implemented the snake body movement using objPosArrayList (feature 1 of Part 3), and part of the snake death condition. Lastly, I worked on the bonus where I created an objPosArrayList pointer within the GameMechs to store the location of five different food objects. This process involved modifying many of the functions created in 2B and redefining the draw routine to account for the new objects. It also involved modifying the food consumption function to account for the special food objects and choosing to randomly generate 1 or 2 special food items.

2. Repeat Part 1 above but this time tell us about your project partner's contribution to the development of your COMPENG 2SH4 project.

My partner was assigned to part A of iterations 1 and 2. In 1A, he wrote code for all the functions in the Player class. This involved the initial finite state machine to keep track of player movement. In 2A, he wrote code for the objPosArrayList. In part 3, he wrote all the code for the snake consumption algorithm. This includes the functions that increase the snake's length and check if the snake's head object is in the same location as a food object. He revised my code for the snake death condition to make it much more efficient. Overall, he made the final project more efficient and concise.

3. Tell us about your experience in your first collaborated software development through this project – what was working and what wasn't. If you are a one-person team, tell us what you think may work better if you had a second collaborator working with you.

A place where our collaboration exceled was in setting deadlines for ourselves. Mapping out the project iterations and features over the course of a week and a half helped in managing the workload. For the most part, we were very diligent in meeting deadlines. We finished the entire project ahead of the December 2nd due date and had plenty of time for to work on the bonus which we finished as well. We tried collaborating in a number of different methods, including a voice call where we worked on the code simultaneously. This method proved to be ineffective because when it comes to coding, it is hard to vocalize certain ideas. Many times, the coding sessions boiled down to writing out our ideas and running the program to illustrate the idea. It was more effective when we each worked on one section at time independently.