COMPENG 2SH4 Project – Statement of Contribution

Your Group Name: Veronica and Hafsa

Your Name: Veronica Botros

Your Team Member's Name: Hafsa Najam

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.

I worked on the GameMechs class (iteration 1b), which involved setting the game board size, increment score function, getting and setting the game status and getting input from the user. I also worked on iteration 3, with the help of my partner for feature 1, which involved the implementation of the objPosArrayList to create the snake body. I also worked on the snake growth logic (it grows by one segment if it collides with food), and the exit feature.

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 group member worked on iteration 1a, which was creating the player class and creating the move player mechanism involving enumerations from the project preparation activities 2 and 3. My partner also worked on iteration 2 which was developing the food class and the random food generation. She also worked on the objPosArrayList class and making sure it tested all test cases before starting iteration 3.

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.

This project taught me the value of object-oriented design, particularly in collaborative software development. By following object-oriented design principles, we were able to organize and modularize our code, making it easier to understand and build upon. I also learned the importance of incremental engineering during this project. Breaking the project into iterations and testing each feature before moving on to the next helped us identify bugs and their root causes more precisely. The most challenging aspect of this project was Iteration 3, feature 1, where we encountered a significant bug.

After using debugging strategies, we discovered that the `objPosArrayList` class was missing two out of the “minimum four” functions, which led to unexpected program behaviour. This experience taught us how to apply debugging strategies effectively to identify root causes in our code. Overall, this project enhanced my understanding of game development through object-oriented design.