COMPENG 2SH4 Project – Statement of Contribution

Your Group Name	puts("Christina + Sonia")
Your Name	Christina Bridges
Your Team Member's Name	Sonia Parekh

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.

My personal contribution includes the following points:

- Applied to rule of six/minimum four for the member functions of the objPos class with my partner (**Iteration 0**)
- Implemented the player direction and setup proper declarations and initializations in the Player.cpp and Player.h file (**Iteration 1A**)
- Developed and validated member functions in the objPosArrayList.cpp file in the TestSuite before moving to the project copy of the objPosArrayList.cpp file (**Iteration 2A**)
- Developed the snake body movement using the array list and checked for snake food consumption and body growth with my partner (**Iteration 3 features 1 and 2**)
- Checked for snake death by developing additional member functions in Player.cpp and the game over message with my partner (**Iteration 3 feature 3**)
- Developed the randomly generating food items including two special items via a foodBucket variable of type objPosArrayList and discussed the logic with my partner. Other files were altered to accommodate the transition to an array such as in Player.cpp. (**Bonus feature**)
- The validity of the game and error-checking was done together using my partner's laptop, as my debugger did not work effectively for asynchronous programs.

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

    - Initialized and developed member functions for the GameMechs.cpp file such as input collection to match the logic found in PPA2 (**Iteration 1B)**
    - Created a random food generation mechanism similar to that in PPA3 but in OOD and created a Food class with a new .h and .cpp file for ease of use when later implementing the bonus. (**Iteration 2B)**
    - Checked for snake death by developing additional member functions in Player.cpp and the game over message with my partner (**Iteration 3 feature 3**)

- Developed the randomly generating food items including two special items via a foodBucket variable of type objPosArrayList and discussed the logic with my partner. Other files were altered to accommodate the transition to an array such as in Player.cpp. (**Bonus feature**)
- The validity of the game and error-checking was done together using my partner's laptop, as my debugger did not work effectively for asynchronous programs.

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.

   For the majority of the project, my partner and I met in-person and coded on one laptop to avoid overwriting each other's code and sorting through the logic of the program together. Eventually we implemented code separately and found difficulty in how to effectively merge our code, however we solved this using the terminal command git stash and the provided merger in VSCode. We set up internal deadlines on when each iteration should be completed, which helped keep the completion of code on track with concepts learnt in class necessary for the project. Personally, my debugger wasn't working as it claimed a segmentation fault, however my partner set up the same breakpoints with the same updated code and did not get this error. Thus, I had to use a lot of print statements to locate other issues in the code as my debugger was not compatible with asynchronous programs, as suggested by Dr. Athar. In result, my partner and I met up to complete iteration 3 using her debugger. I hope to discover what other debuggers or debugging options are available for students to use in asynchronous programming as this may be necessary in industry or personal projects.