COMPENG 2SH4 Project – Statement of Contribution

Your Group Name	**skibidi gyatt "did you pray today" rizz**
Your Name	Shaun Plassery
Your Team Member's Name	Tae Yeon Ha

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 made the base code for four of the cpp files and their associated header files. This being project.cpp, GameMechs.cpp, Player.cpp and Food.cpp acting as primarily dev 1.

GameMechs Class

Developed methods to handle board dimensions, exit flags, and input storage, providing a central interface for other classes (Ported from FSM in PPA).

Player Class

Designed the player's class to manage movement, self-collision detection, and score calculation.

Food Class

Created the Food class for managing food generation, ensuring no overlap with the player's position. Made multiple food options that change body length and score differently.

Implemented logic for different food types and their effects on gameplay. Also made sure the MAKE file compiled the Food Class as it was originally not included.

Pointers to these classes were used in the Project.cpp class and in the DrawScreen() the GUI was made.

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

Tae Yeon worked on ObjPos and ObjPosArrayList and their associated header files, as well as integrating my code with his code, editing and contributing on all the files, acting as dev 2.

Class: objPos

This class represents an object with a position (x, y) and a symbol (symbol). It manages its own memory and ensures proper handling of its resources by implementing the "Rule of Six"

He Creates a deep copy of objPos instance by allocating new memory for pos and copying the values. His other objects give information on different characteristics of the Object Position.

Class: objPosArrayList

This class represents a dynamic array of objPos objects and mimics a list-like structure being the snake and its body. It allows adding, removing, and accessing objects at specific positions. Depending on if its self colliding, eating food etc.

Some of his methods from his objects include

- **getSize**: Returns the number of elements in the list.
- **insertHead**: Inserts an objPos object at the beginning of the list and shifts the existing elements right.
- **insertTail**: Appends an objPos object to the end of the list.

Finally, he also worked on integration. He went on debugger to understand semantic errors when we were uploaded both of our codes together and we were able to get a working snake game and bonus functionality at the end.

2. **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.**

What I didn't like was the git functionality. I have used git in many of my previous hackathons, but I never understand why its so complex and finnicky at times. Often our commits merged into each other, and it took a long time to debug it and to accept incoming or not accept incoming changes. We also got into errors with git pull not working and it destroying our code so we often put our original code into google docs so we don't keep running into the issue.

One good thing about working with a team is we get two people working together to fix a debugging problem instead of one and often the process of debugging is much faster and simpler. Much of the workload is alleviated as there is double the manpower which was nice as well. Overall I found this project enjoyable and would do it again in the future.