

## COMPENG 2SH4 Project – Statement of Contribution

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Your Team Member's Name      Varun Gande (gande1 – 400509912)

**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.

Between my partner and I, we split up the work into the given iterations in the manual. While he worked on the code implementation for iteration 2, I was tasked to complete iteration 1A, 1B and parts of 3.

Within iteration 1, I worked on the setting up the Player and GameMechs classes. This involved refactoring previous code from the PPA's.

Within iteration 3, included working on implementing the 3 main features listed in the manual. I specifically added the food consumption feature that allows the snake body to grow when it encounters generated food. Every time the snake ate a piece of food, the score must also be updated through the use of a counter. Thus, I implemented the score within the GameMechs class specifically using `getScore()` and `incrementScore()`.

We helped each other and worked together when needed between iterations. Once done implementing all of the iterations to reach the final product, we went back in to debug, edit, and add comments wherever needed.

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

As mentioned, my partner worked on iterations 2, and parts of 3. Within iteration 2, he was working on the `objPosArrayList` class and implementing the random food generation feature.

Once completed, we were able to work on iteration 3 together, in which he expanded on the Player class, implementing the snake body movement and the "Game Over" feature in which causes the game to end if the snake runs into itself. In the manual, these are referred to as features 1 & 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.

My experience in my first collaborative software development within this course through this project went extremely well as my partner and I were well coordinated, and knowledgeable on the course content. Things were able to move smoothly from iteration to iteration since we divided the work evenly. Furthermore, my partner and I are roommates which made it much easier to communicate and work together. We did not have to set up specific times on where to meet up and could easily give each other feedback in person.

If I was a one-man team, this project would be more difficult in the sense of debugging. If I made small mistakes by myself, I would struggle to find them more. On the other hand, when in a team other members can look through your code and can see errors more easily as they were not written by them. Furthermore, having a team member also helped to complete the gaps in knowledge, as I was able to gain clarification when needed rather than struggling to find answers myself. This can be referred to as collaborative problem solving, which led to more efficiency in terms of completing the project.