COMPENG 2SH4 Project – Statement of Contribution

Your Group Number	super-awesome-team-name
Your Name	Ray Yu
Your Team Member's Name	Jethro Lin

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.

   In the COMPENG 2SH4 project, my main contributions were centred around iterations 2 and 3, as well as the implementation of bonus features, alongside enhancements made to iteration 1. In the second iteration, I focused on the development and validation of the objPosArrayList class, which is essential for effectively managing the positions of the snake's body and food. Additionally, I refined the food generation logic within GameMechs to prevent any overlaps with the snake and the game borders. In the third iteration, I enhanced the Player class to accommodate dynamic snake growth, implement self-collision detection, and facilitate seamless movement through wraparound logic while also integrating these features with revised scoring and food consumption systems in GameMechs. In the context of the bonus, I enhanced GameMechs to accommodate multiple food items, incorporating unique food effects such as speed boosts and augmented scores. Furthermore, I returned to the first iteration to enhance modularity and guarantee a consistent, strong object-oriented design throughout all components.

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

   Jethro's expertise played a crucial role in shaping the core of the COMPENG 2SH4 project. During the first iteration, he intricately combined the core elements of the game, designing the GameMechs and Player classes with precision, guaranteeing that movement was seamless, the board was impeccably organized, and boundaries were honoured with elegance. Additionally, he developed the objPos class, establishing the groundwork for the intricate interplay of positional data and the core of food elements. In the process of iteration 2B, he crafted the essence of food generation and management, intertwining gameplay mechanics with the subtle nuances of the system's integrity. In the third iteration, he intricately combined self-collision detection with board-wrap mechanics, significantly enriching the player's experience. Outside these boundaries, his skill in the multi-food bin and captivating food effects created a rich tapestry of innovation and artistry, elevating the project to unprecedented levels through a blend of technical expertise and creative gameplay features. Jethro's contributions intertwined academic rigour with artistic innovation, leaving a lasting impression on the fabric of the project.

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.

   Starting my initial collaborative software development project was an experience filled with both enthusiasm and disorder, a blend of aspiration and naivety. GitHub, our supposed companion, frequently resembled an enigmatic oracle, bestowing upon us insights into version control only after numerous sacrifices or experimentation. We recognized the irony in how a lack of understanding of contemporary tools complicates collaboration, as we faced the unusual difficulty of the inability for simultaneous work progression, akin to two architects attempting to construct a bridge from opposite ends, each with their own blueprint. Nevertheless, despite these challenges, our ability to convey ideas emerged as the foundation of our achievement. By exchanging suggestions, engaging in late-night discussions, and addressing challenges openly, we developed a collaboration that went beyond practical constraints. Ultimately, the result represented not just our technical advancement but also a stunningly flawed tapestry of collaboration, demonstrating that in the chaos of initial teamwork, unity can arise.