

COMPENG 2SH4 Project – Statement of Contribution

Your Group Number **Chen's Fan Club**

Your Name **Katarina Rakulj**

Your Team Member's Name **Preston McMann**

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.

During the COMPENG 2SH4 project, I contributed to various phases of the project and was involved in developing core functionalities:

- **Phase 0:**
My partner and I completed this phase together
- **Phase 1:**
I worked on implementing the player object by transplanting the FSM from PPA3 into our new project structure. This required adapting the FSM to fit the updated object-oriented design and ensuring the logic worked as expected. I also handled movement validation for single segments, making sure that player movements followed the rules and dealt with edge cases like boundaries.
- **Phase 2:**
My focus was on implementing the food object. I created the logic for random food position generation and made sure that the food appeared in valid positions on the game board, avoiding overlaps with the player or other obstacles.
- **Phases 2, 3, and 4:**
I helped develop and implement core functions such as **checkFoodConsumption**, **increasePlayerLength**, and **checkSelfCollision**. Integrating these into the **movePlayer()** function was essential for the game's functionality, ensuring that the player could interact with the food and detect collisions accurately.
- **Final Phase:**
I contributed to finalizing the project by writing documentation that explains how the code works and cleaning up the codebase to improve readability and maintainability.

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

During the COMPENG 2SH4 project, my project partner made important contributions throughout the different phases:

- **Phase 1:**
He took charge of setting up key game mechanisms, like the input system, game condition system, and score system. These systems were essential to getting the game up and running

smoothly, ensuring that the player interactions worked correctly and the game tracked progress as intended.

- **Phase 2:**

He was responsible for developing and validating the object position array list, making sure all game objects were placed correctly on the board. This was a crucial part of the project, as it ensured the game world was laid out properly and that everything functioned as expected.

- **Phases 2, 3, and 4:**

He played a major role in developing the logic for functions like **checkFoodConsumption**, **increasePlayerLength**, and **checkSelfCollision**, helping integrate them into the game's movement mechanics. His work made the gameplay smoother and more reliable.

- **Above and Beyond Features:**

He also took the initiative to work on additional features that weren't part of the original requirements, which significantly improved the overall functionality and player experience.

Overall, my partner's contributions were really important in getting the project done, and his work definitely helped make the game come together.

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.

What Worked Well:

- **Splitting Tasks:** Dividing the project into separate parts for each developer worked pretty well. It can be tough to code together all the time, especially when you have different coding styles. By splitting up the work, we could focus on our own parts while still making sure everything fit together. This way, we didn't get frustrated or get in each other's way.
- **Having a Work Order:** It really helped that we established a clear order for tasks. For example, Developer 1 would finish their part of Phase 1 before Developer 2 started. This kept things organised and helped avoid confusion about who needed to do what next.

What Didn't Work Well:

- **No Major Issues:** Honestly, my partner and I were pretty much on top of things the whole time, and we didn't run into any major conflicts. We were both pretty committed to getting the work done, so everything just flowed smoothly.

Good Strategies:

- **Constant Communication:** We made sure to stay in touch regularly, check in on each other's progress, and offer help when needed. It made a huge difference to keep the communication open, so we were both on the same page throughout.
- **Playing to Our Strengths:** If one of us was more comfortable with a particular task, the other person would let them take it on. This helped us work more efficiently and let us focus on what we were good at.
- **Taking Breaks and Helping Each Other Out:** If one of us got stuck on something, the other person would step in with a fresh perspective. Sometimes, just taking a break and coming back to the problem later helps a lot, so we made sure to take that approach when needed.