**COMPENG 2SH4 Project – Peer Evaluation**

Your Team Members \_\_\_\_Yuan Ding\_\_\_\_ \_\_Warun Gumarawell\_\_\_\_\_

Team Members Evaluated \_\_Arabella Paet\_\_\_\_ \_\_Raymond Pham\_\_\_\_

Provide your genuine and engineeringly verifiable feedback. Ungrounded claims will lead to deductions.

**Part I: OOD Quality**

1. **[5 marks]** OOD is about sensible code modularization. Looking at the header files of each object, can you easily interpret the possible behaviours of the objects involved in the program, and how they would interact with each other in the program? Comment on what you have observed, both positive and negative features.
2. **[5 marks]** Examine the main logic in the main program loop. Can you easily interpret how the objects interact with each other in the program logic through the code? Comment on what you have observed, both positive and negative features.
3. **[3 marks]** Quickly summarize in point form the pros and cons of the C++ OOD approach in the project versus the C procedural design approach in PPA3.

**Part II: Code Quality**

1. **[4 marks]** Does the code offer sufficient comments, or deploys sufficient self-documenting coding style, to help you understand the code functionality more efficiently? If any shortcoming is observed, discuss how you would improve it.
2. **[3 marks]** Does the code follow good indentation, add sensible white spaces, and deploys newline formatting for better readability? If any shortcoming is observed, discuss how you would improve it.

**Part III: Quick Functional Evaluation**

1. **[6 marks]** Does the Snake Game offer smooth, bug-free playing experience? Document any buggy features and use your COMPENG 2SH4 programming knowledge to propose the possible root cause and the potential debugging approaches you’d recommend the other team to deploy. (NOT a debugging report, just a technical user feedback)

A screenshot of a computer program

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The entire snake game has no bugs, offering a smooth, bug-free playing experience. After exchanging ideas with many other groups, I found that in many groups' games, there is often frequent flashing. However, compared to most snake games I've seen, the flashing and delay in this group's game are relatively good. They have even designed a very unique gameplay by introducing "super food" (@), making the entire game seem more special.

1. **[4 marks]** Does the Snake Game cause memory leak? If yes, provide a digest of the memory profiling report and identify the possible root cause of the memory leakage.

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The answer is NO. The snake game developed by this team does not result in any memory leaks. They initialized an instance of their game mechanics Class and an instance of their play class on the heap, and both were appropriately deleted during the clean-up routine, ensuring no memory leaks occurred.

**Part IV: Your Own Collaboration Experience (Ungraded)**

* + - 1. 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.

The entire project involved a significant amount of coding work, and personally, it was a very challenging project for me. Our team's code did not meet the requirements of 2SH4 because we encountered some issues in the final part that we couldn't resolve. Even though our overall code was logically sound, certain bugs, which we couldn't pinpoint, prevented our project from meeting expectations. If given another chance, I would aim for more communication with another team member to detect issues promptly and reach out to the TA or even the professor immediately. This would allow us more time to address these bugs. Therefore, I believe this software development effort was not ideal overall, but next time, I will pay more attention to communication among team members and seek timely advice from the TA.