The 404s – Kyle, Munashe, Annette, Liso, and Keith

1. Game title: Pong Wars!
2. Background and Motivation: Pong is one of the first computer games ever created and was developed by Allan Alcorn and released in 1972 by Atari corporations (Britannica, 2023). It is a table tennis type game and consists of two paddles and a ball, the goal being to beat your opponent by reaching 10 points (Pong Game, 2023). The game can be played by two players, or one player against a computer-controlled paddle. Each paddle is located on each side of the screen, and the ball bounces back and forth across the screen to and from each paddle. A player earns points by hitting the ball beyond their opponent's paddle, i.e when the ball hits the boundary behind the opponent’s paddle. We decided to choose a ping pong game rather than a card game because we wanted a challenge and to learn new concepts along the way. Quite frankly, we collectively agreed that a card game would be too boring. Pong was the first commercially successful arcade game to be created, selling over 35000 machines and being in the Guinness Book of World Records (The Gamer, 2019).
3. Problem Statement: The aim of this game is to score the ball beyond the opponent's paddle and reach 10 points first. This game has medium complexity, but extra features will be added to increase its complexity and aesthetics for casual gameplay.
4. Approach: A while loop is used in order for the game to run. The use of if statements are used to check for various game aspects such as collision detection. Switch cases are used to decide an action to call when a certain button is pressed to move the paddles up and down. Major aspects of the game are broken down into multiple classes such as the game panel, the game frame which dictates the boundaries in which the ball freely moves in, and the paddles themselves. The complexity of the game will be increased by adding GUIs to enhance the look and feel of the game, and adding sound effects for when the ball hits the paddles and walls for extra immersion. The change and further development of this proposal will be included in the project document and GitHub code that will be used to offer this work for evaluation. The add-ons will have a visual guide that plays the game in motion (almost like a demo) and a tour of the SDLC processes our team took. 'Storyboards' are one way to do this, which at the very least depict the beginning, middle, and finish of the game and provide an explanation for each frame.
5. <https://infograph.venngage.com/ps/Z43GLGOv4rs/simple-green-blue-gantt-chart>

This link will direct you to the Pong Development Gantt chart which will show the estimates the time span that the game will take to be developed. Tasks have been labelled with their estimated time frames in a 4-week period.

Reference list

Britannica, 2023. *Pong*. [online] Available through: [Pong | Video Game, Arcade, Atari | Britannica](https://www.britannica.com/topic/Pong) [Accessed 31 August 2023].

Pong Game, 2023. *Pong Game*. [online] Available through: [Pong Game](http://www.ponggame.org/) [Accessed 31 August 2023].

The Gamer, 2019. *Pong: 10 Fascinating Facts About the World’s First Video Game*. [online] Available through: [Pong: 10 Fascinating Facts About the World’s First Video Game (thegamer.com)](https://www.thegamer.com/pong-fascinating-facts-first-video-game/#it-was-the-first-successful-arcade-game) [Accessed 31 August 2023].