Team Profile

Our team name for this project is 'the pongers'. The team consists of Rachel Davy, Rosalea Anderson, Michael Pineiro, and Bryson Smith. For this project, we are coding our own version of a classic game, pong. In this game, we would have the basic features of a ball that bounces back and forth between two sides of the game, with a user that controls a paddle on one end for the ball to bounce off of.

Game Interaction Requirements

For this project, the user starts on a menu screen, where they can decide a few key features. First, we have the game style and color, which determines what the game looks like. Second, we have the difficulty, which decides how hard the game is to play. Third, we have the game type of classic, block break, and multiplayer. Finally, we have the movement settings of WASD, arrow keys, or following the cursor.

For the game's user input, we would use the arrow keys, WASD, or the cursor to implement the main functionality of moving the paddle, depending on the user's inputted movement settings. In the arrow keys/WASD option, users would push up/W to move the paddle in an upward direction and the down/s button to move the paddle in a downward direction. In the cursor option, we would have the paddle follow the y position of the cursor.

In this game, the goal would be to last as long as possible before the ball hits the wall on your side. In the block blast option, our goal would be to break all the blocks before the ball hits the wall. In the multiplayer option, the goal would be to score points by causing the ball to hit their wall.

Game Complexity

Overall, we believe the hardest aspects to code will be moving the ball, calculating collisions, and moving the paddle. Making movement look fluid and making collisions look realistic is difficult, especially when you have to find a balance between the arrow keys moving the paddle fast enough to be usable without being too fast to keep up with. Making this balance work will require a lot of testing to ensure the movement and collisions looks as fluid as possible, so the game is not only playable but enjoyable.

To communicate, we use a group message chat to keep in touch as much as possible. Along with that, we hope to meet regularly using a when2meet to ensure we know when we are available with our ever-changing busy schedules. To divy up our work, we intend to divide our code into tasks to ensure we all know what tasks we have

to do. For this, Rachel will be responsible for the game's style and sound effects, Micheal will be responsible for the classic pong and base game mechanics, Rosalea will be responsible for the main menu and scoring, and Bryson will be responsible for the alternate play styles of block break, multiplayer, and enhanced difficulty.