# PONG WITH TWISTS

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## 1. INTRODUCTION:

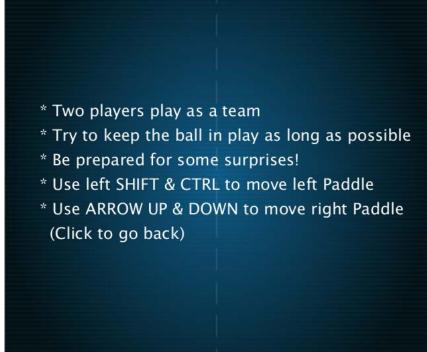
The purpose of this project is to develop an interactive version of the Pong game. This two players' team game allows users to control the in-game paddles on the right and the left sides of the screen by moving them vertically up and down to hit the ball back and forth. The goal for each team is to keep the ball within the screen as long as they can. A timer keeps track of the time each team takes to successfully keep the ball within the screen. The longer the time, the better the score would be for a team. This time will then be compared with the previous highest recorded time and will be shown on the screen once the game is over.

The speed of the ball changes randomly every time it hits the paddle to influence the judgment of players about the position it would hit on the next paddle. The length of each paddle decreases with the game time to a fixed minimum length to make it difficult to reach the ball. However, as a bonus, random star pops up with every ten units of time passed. Hitting the star increases the size of the ball to compensate for the decreasing size of paddles. The star then disappears.

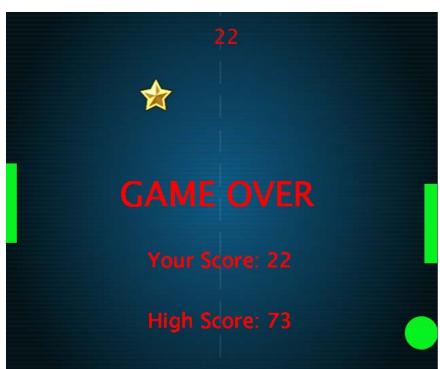
The main screen shows a menu with the 'Play Game' button and 'instructions' on how to play the game.

The following screenshots show the main screens of the game:









## 2. PROJECT DEVELOPMENT:

The game was developed using Processing 3.4 as the game development software and was coded in Python programming language.

We have utilized online images as the texture for the background.



For audio background, we incorporated the Pong – The Next Level sound tract to generate an atmosphere of mystery, unpredictability and uneasiness. The sound of ball hitting the paddle was kept same as in the original Pong game. The gameover and collision sounds were taken from the Mario game we developed in the Intro to CS course.

# 3. <u>User Guide:</u>

- Make sure all the game files should be in the same folder.
- ➤ In order to run the game, click on the file named, "Pong\_With\_Twists".
- > To play the game directly, click on the "Play Game" button.
- > To view the instructions on how to play the game, click on the "Instructions" button.
- Use left SHIFT and CTRL keys to move the right paddle vertically up and down respectively.
- ➤ Use ARROW UP and ARROW DOWN keys to move the left paddle vertically up and down respectively.
- > Use keyboard key "P" to pause the game.