

# The Pong game project report

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September 18th, 2017

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Time required to finish the core requirements:

About 10 hours

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Time spend on bonus features:

About 5 hours

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External libraries:

None

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Core features that do not work correctly:

Keyboard controls only works in Debug mode, not working in Release mode.

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Implemented bonus features:

The game will pause if window lost focus. Game will enter PAUSED state.

Window can be resized at any time during the game. After resizing, the paddle on the right side will be replaced to near the right edge. Game will enter PAUSED state when window is resized.

A gray pause screen will appear in PAUSED state. Player has to press Enter (Return) key to resume the game.

Sound will be played when hitting a ball, pad, or when the ball is leaving the screen.

A blue background title screen will show up when the game is opened or restarted. Player can choose from three difficulty levels. Objects will move faster in harder games.

If the computer wins, the message background is white. If the player wins, the background will be red.

The reflection vector of the ball will be multiplied by a random number between 0.9 and 1.1 to create uncertainty.

Real time movement information of the ball, including position and speed vector, is shown on the screen for debugging purposes. This functionality is commented out in submission.

Commit history can be found at <https://github.com/hyy369/Pong>

