Requirement Specification

The purpose of this software project is to create a version of the classic computer game Pong. The project will be created using a GUI made with the Java Swing toolkit and other user defined methods to provide functionality. These methods will allow the user to start a 2-player game of Pong and at the end a message with the winner will be displayed.

**Start Game**

The game is started by clicking the start game button, a JButton which will display the moving components on the screen

**Play Game**

The game will be played by 2 users. Each player has a graphic called a paddle which they can use to move. Player 1 will use the up and down arrow keys to move their paddle, player 2 will use the ‘w’ and ‘s’ keys.

There will be a rectangle ‘ball’ which will move randomly around the screen. If the ball hits a paddle it will be sent back in the opposite direction. If the ball hits the side of the rectangle the player on the opposite side of the rectangle will receive a point.

**End Game**

A winner will be decided when one player reaches 10 points. The GUI hides the paddles and the ball. The player who wins will be displayed and there will be a JButton to restart the game. This will reset the score and the GUI components to their original position.