**Project 4: C#, Gold Button Animated**

**EE 365: Small Computer Software**

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**Overview of the project:**

Made a WPF application using visual studio C#. The application is a slightly more complicated version of the simple children's game called gold button. This game is played on a line of squares each of which may contain a blue button or a gold button (or nothing). The object of the game is move the gold button to the far left end so that it can be taken. The winner is the player who takes the gold button. Instead of a line path, I made a circular path for the buttons.

To accomplish this, I first drew the path on the canvas. It consisted of 2 circles (4 made to look like 2) that are split using lines. I made one line and duplicated it and rotates these lines to get all the spits I needed with the correct angles. Then I used an array of ellipses and did some geometry to determine the location of every button (took a while). The radius of the circle representing the starting points of all the buttons is the average of the two circles that I created earlier. This is where I spent most of the time on this project.

For the animation part, whenever I need to move a button to another location, I moved it square by square until it got to the right location, and animated each of these movements using a storyboard.

Extras:

1. Included an About box that gives the author, date, etc.
2. Provided a list of instructions and help information
3. Changed the square line path to a circular path
4. Allowed user to pick color
5. Chosen buttons change color to distinguish from other buttons.
6. The last square has an exit to indicate that it’s the last square
7. Made user input grayed out until the end of the game