CS340 Project Idea – John McElroy

Summary

This product will be a game that utilizes the Microsoft Kinect platform along with a projector. In the game, different kinds of targets will appear on the projected screen that the player must hit with a foam ball. The Kinect sensor, facing the same wall as the projector, will identify the ball after it is thrown, track its trajectory relative to screen, and transmit this data to a connected computer, which will determine whether the target was hit or not and react appropriately.

Problems Being Solved

This game will be fun for players. It also could be used by people to improve their throwing accuracy and hand-eye coordination.

Major Features

- Game will have different types of targets on the screen, some moving in different directions, providing more points when hit, subtracting points when hit, etc.
- The game will keep track of a player's score and will have a high score list.
- Difficulty selection will determine scoring, speed of moving targets, time to hit targets, and other factors
- **Stretch goal:** a second Kinect facing the players will use facial recognition to enable a 2-player competitive mode, where the player who threw the ball gets the points

Toolsets

This game will be developed in Microsoft Visual C++, using the Visual Studio editor, the Kinect SDK for Kinect testing, Direct 2D for graphics and interface, and Microsoft-supplied libraries for communication with the Kinect sensor

Target Audience

This game is intended for anyone who thinks it would be fun! It could also be used as a throwing accuracy training tool.