

Proposal 2

ENG 4GA3

Nov. 1st, 2016

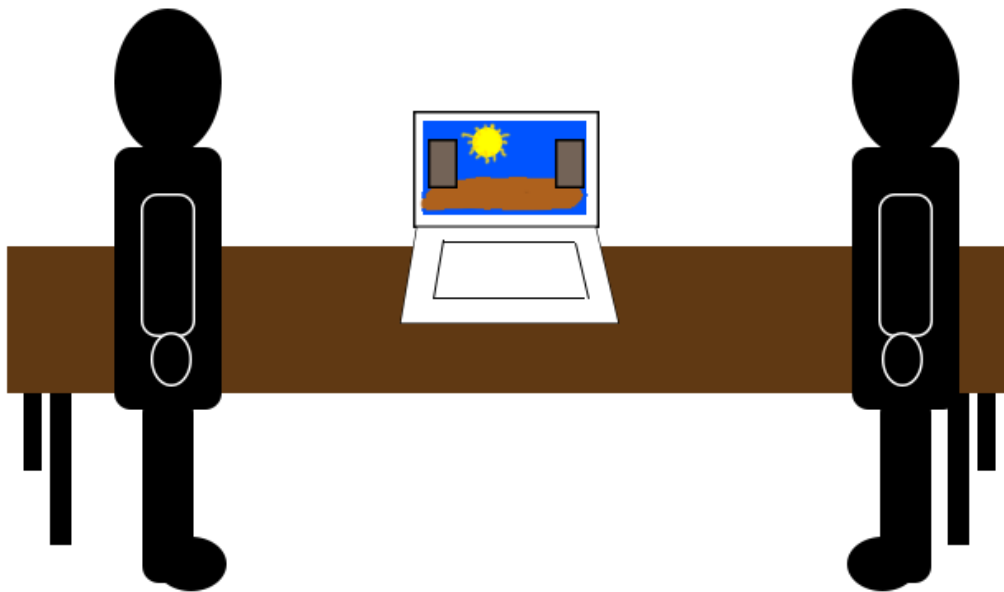
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Submission for Danny Papagiannis

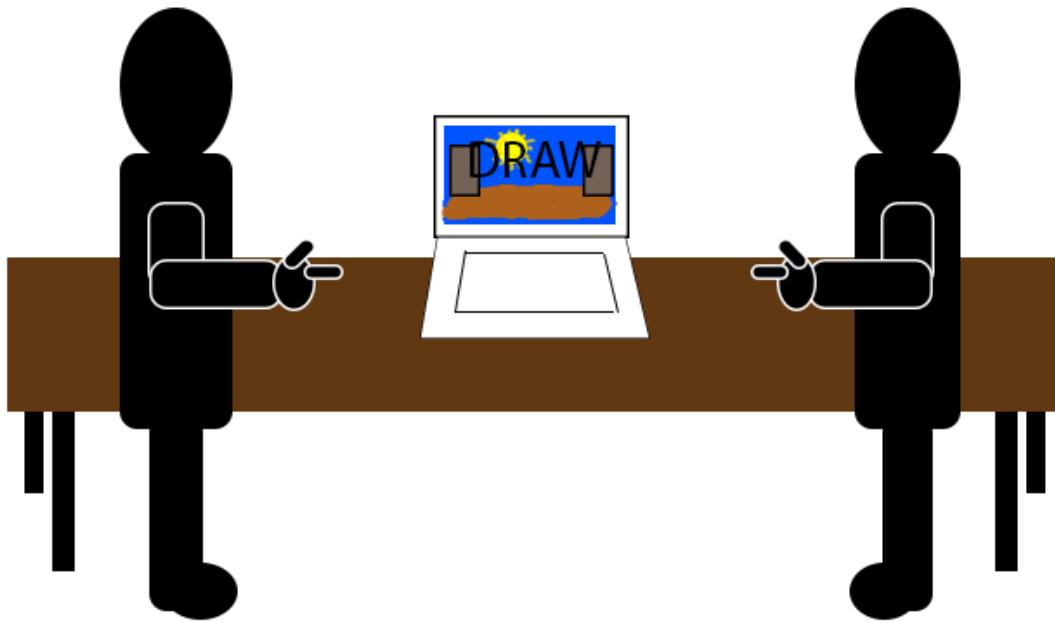
Motion controls has been around for a long time, but it wasn't until the late 2000's and early 2010's that it started to take off. The Kinect was released for the Xbox 360 in 2010 and garnered a lot of attention at the time. It offered ways to play without a controller and was released at a time when the video game industry was experimenting with and embracing motion controls. Although it didn't reach the predicted success in the video game industry, I believe that there is still a place for motionless controls in gaming.

For my second prototype I plan on implementing a game that allows two players to duel with guns. Much like in classic Westerns, the first person to draw their weapon and shoot is the winner. Players will use their hands and arms to raise and lower their gun.

Two players will stand across from each other with a small distance between them (about 2 metres) and with their hands at their side. The game screen and motion detector will be placed evenly between the two players. A "DRAW" sound or icon will appear on the screen, indicating to the players that they can draw their gun and fire. Once this has occurred, each player will raise their hand and forearm, such that their forearm is parallel to the floor. From here the player must put their hand in a "gun" configuration and press their thumb against their index finger; this will be considered a shot. The first player to draw their gun and shoot in the "DRAW" phase is declared the winner.



Players face each other with hands at side



Players raise hands at gun shape and point at each other

There is some variance allowed in the order of actions listed above. For example; the player may already have their hand in a gun configuration before raising their hand in the “DRAW” phase.

The game will feature a Western setting, and thus will have sounds and graphics suiting the theme.

The main reason I want to create this prototype is that it will further develop my knowledge in developing products that use vision control. Also I think this would be a fun and competitive multiplayer experience that will engage audiences.

The Unity3D game engine, the LeapMotion controller and subsequent software resources will be used to create this game. Some models, graphics and sounds will be borrowed from various internet resources, including the Unity Asset Store.

Developers are starting to use LeapMotion as a means for developing games and controlling characters without controllers. With the new Virtual Reality wave of products coming forth, this is relevant more than ever. PCMag discusses some of the popular games in this [article](#).

To extend this game to a full working version there would be several requirements. These include:

- Game menu
- Improved graphics and sound
- Timer that shows how fast each player took to shoot
- A leaderboard that tracks the fastest players

Also adding a single-player mode or co-operative mode that involved shooting clay plates or shooting enemies that pop-up could improve the overall experience and longevity of gameplay for the final project.

I believe that a fair evaluation could be conducted with evaluating closeness to the desired prototype along with project complexity. The following criteria could be considered:

- User-friendliness:
 - Entertaining graphics and sounds
 - Easy to setup with clear instructions
 - Players can intuitively shoot in draw phase
- Functionality:
 - Game accurately detects shots fired
 - Game accurately detects first player to raise gun and shoot
 - Game consistently detects users within reasonable range

References:

<http://www.pcmag.com/article2/0,2817,2422165,00.asp>