Priya Kudva 1/16/19 CIS 507 Career/Internship

Project Proposal – DVD Screensaver Animation

Recently, there has been a lot of buzz in the internet community about the nostalgic DVD screensaver. Though nothing truly special about the DVD logo itself, millions of people have blown up over the "rare" event when the DVD logo rebounds off of the exact corner of the screen. Like with everything on the internet, this meme did not last much longer than a week. However, because I am partaking in a computer graphics class this term and because I have never programmed an animation before, this is a project that I would like to pursue and test my ability in unexplored realms of programming.

Seemingly simple, an animated screensaver has quite a few components that must work in order for the entire thing to work. First, the logo bounding box must be established as well as the option for the color change for every rebound. Then the animation of the logo across the screen should be implemented with a steady framerate and speed. Once the bounding box touches the border, the proper rebound should be implemented on the logo. Overall, this should implementation should be able to go on forever, or until a mouse movement or button press is detected.

For this project, I will be working alone, so there is no division of work. I will be using C++ as the primary language for this project, using OpenGL for the graphics. Since this seems too simple, I can also implement my graphics onto a webpage, using WebAssembly, which I am also learning this term and is a faster and more secure substitute for JavaScript as a compiling language in a browser.

From this project, I hope to get experience integrating techniques, languages, and features from different classes and areas of computer science. Before the midterm milestone, I hope to have the animation of the logo and interaction with the border established. By the end of the term, I hope to have the animation fully functioning on a webpage using WebAssembly.