TECH MANUAL

KNOWN ISSUES

Collision Detection

Currently, the game is not using callbacks for collisions. Instead, the game is checking the x & z positions of the goal and the pucks, to see if a puck has scored. If we had more time we would have liked to add have spent more time learning bullet. Originally, we were implementing collision detection, but we were not able to find a proper solution in time. In order to make our game function in time, we had to handle the issue in a not so friendly way, and apply this method of checking "collision".

Memory Leaks

The game is full of them. We spent most of our time designing and building our project, while trying to add new features. Thus, we did not have enough time within our time constraints to deallocate our data types. If we could go back, we should have updated our destructor whenever we created a new dynamic object. Then, we would not have a large memory leak problem. Thankfully, we have not had any blue screen problems as of yet.

Mouse Tracing

The game was originally designed to use mouse tracing for the mouse controls. However, due to time constraints, we were not able to allocate the time to perfect them. Instead, the mouse controls are determined by the mouse's current x, y positions on the screen. We map the screen into sixteen regions that determine which direction the paddle will move in. For instance, if the map is in the upper right hand corner of the screen, the paddle will move toward that point relative to the camera angle. If we had known that the ray tracing was so difficult we could have saved time doing our plan B first. This would have allowed us to add more features that would have added to our gameplay and overall quality of a game.

Powerup Debugging

We wanted to take our game to the next level by adding dynamic power ups that can change your puck, score, table, and paddle properties. However, again, since having strict time constraints we could not finish perfecting these powerups. Currently, we have problems with the animation of when a new powerup is added. Also, we have a known issue of spawning multiple power effects off of the same powerup spawner.

Artificial Intelligence

We have implemented a very basic AI, almost brain dead. If we had the time we would have liked to make it a bit more competent, with the possibility of strategy. Currently our AI only moves toward the puck.