Team Good

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Penguin Soccer

Our Game is called Penguin Soccer! You control a penguin in third person view and your objective is to kill the ball into the goal. You have a time limit to score a certain number of goals. If you succeed before the timer runs out, you win. The Heads-Up Display in the top right corner contains all relevant information to the player.

Player Controls:

up/down - move player forward/backward

left-right - rotate player

z - boost space bar - jump p - pause

Features:

- User controls a Penguin
- Room with colored ends, indicating different teams (With animated textures)
- Ball that is subject to bullet physics engine
- Penguin and Ball collision

Debugging

These controls below are useful for developers to help with debugging. Pressing the 'q' will toggle the 3rd person camera controls on and off. When 3rd person camera is off, you can use the mouse and WASD to look around the Scene. This will obviously be taken off once game goes into production but will be helpful for anyone that may be grading/viewing our product.

Debug Controls:

q - toggle 3rd person camera on/off

wasd - camera (3rd person camera must be off)
mouse - camera (3rd person camera must be off)

o - toggle show logo

m - cycle point mode, wireframe mode, and solid mode

Implementation:

Here is a quick rundown of our code base. Our framework comprises the main components of our game which includes the physics module, sound module, controller module, camera

module, and HUD module. In our main loop in OgreDemo.cpp, we access the components of the framework appropriately.

Our World is comprised of 6 bounding planes. The ball is simply a sphere shape. The goal is made up of 4 rectangular prisms. The Penguin (which is the player) has a bounding collision sphere shape.

Up and Down direction keys move the Penuin forwards and backwards. Left and Right will rotate the penguin. Pressing 'z' activates boost mode which makes the penguin go crazy and move at a significantly higher speed. Space Bar activates jump which can be useful when used strategically.

The biggest oddity is that the penguin passes through the Goal. This is not a bug though. The penguin is actually a ghost penguin. No bugs here.