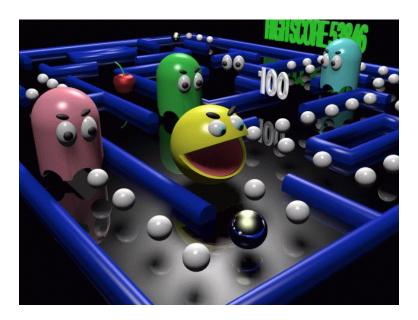**Assignment 2 – 3D PacMan**
CAP6938-02
Due: 2/25/08 11:59pm

"…Chomp Chomp Mega-Chomp…"

PacMan needs an overhaul and it is your job in this assignment is to give him one. You need to bring him into the 21st century and give new life to the franchise. The goals for this second assignment will be continue working with and learning about Microsoft XNA, the 3DUI XNA framework, stereoscopic viewing, working with the Wiimotes, and the Bullet physics engine.

Requirements

The requirements for this assignment are pretty loose. You are to build a PacMan game that takes place in a 3D virtual world (not a maze) and you can create any type of world you want. As part of the game, PacMan must move through the environment collecting food pellets to sustain his energy. Of course, there are creatures that will chase PacMan and try to eat him.

As part of the game, you will have to design a method for PacMan to move through the environment. PacMan must be able to jump and duck under objects, and can even fly for brief periods of time. The method you use for moving PacMan can be adapted from an existing travel technique discussed in class or from your own design and must use the Nintendo Wii controllers.

In your game, PacMan automatically chomps his way through the world. However, there may be occasions when he gets into trouble and will need to use his Mega-Chomp. Mega-Chomp is a special power where PacMan can open his mouth really wide and can

eat lots of stuff at once. This power can be useful for gobbling up enemies and super pellets that give him temporary invincibility. Keep in mind, when PacMan uses Mega-Chomp, his energy level decreases, slowing him down. You should utilize two Wii controllers to invoke the Mega-Chomp.

Pac Man has one more special power. He got his PhD in archeology under Indiana Jones and learned to use a whip. Thus, when enemies approach, he can take out his whip and stun them for brief periods of time. Thus, you will need to incorporate a whipping gesture as part of your PacMan interface.

The rest of the game is up to you. I am looking for creativity beyond the listed requirements. It should be fun to play. Extra credit points will be given for those students who go beyond these specifications.

Deliverables

You must submit a zip file containing your source and any relevant files needed to compile and run your application. Also include a README file describing what works and what does not in your application, any known bugs, and any problems you encountered. To submit, you can email me your zip file. Please note that both team members must submit an individual README describing what parts of the assignment you worked on and what parts your partner worked on.

Grading

Grading will be loosely based on the following:
70% correct functionality
20% documentation
10% creativity