**Computer Graphics Report.**

PAC-MAN 3D GAME

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Description:

The player controls Pac-Man through a maze eating pac-dots. When all dots are eaten you will win the level. Four enemies (Blinky, Pinky, Inky and Clyde) roam the maze, trying to catch Pac-Man. If an enemy touches Pac-Man the game is over. Near the corners of the maze are four larger, flashing dots known as power pellets that provide Pac-Man with the temporary ability to eat the enemies. The enemies turn white and usually move more slowly.

Controls:

Arrows (up, down, left, right) for movement.

For camera control :

* Zoom in/out : ‘ + ’ and ‘ - ’
* Traverse X + / - : Shift + ‘ x ’ and ‘ x ’
* Traverse Y + / - : Shift + ‘ y ’ and ‘ y ’
* Traverse Z + / - : Shift + ‘ z ’ and ‘ z ’

To Exit: ‘Esc’ button

Game History:

It all begun in 1979. A most talented young (27 years by that time) japanese student, Toru Iwatani got an idea. He was an employee of Masaya Nakamura, the president of Namco. So far the electronic games entertainment business was no goldmine. Games such as Asteroids, Space Invaders, Pong, Break-out, Tailgunner etc. had been around for a while, showing some interrest, but never really took off. The young man meant that it might be possible to develop far better games than these other ones. He could improve on graphics, sound, colors and playability, he just needed a good theme. It became old japanese tradition and life wisdom that formed the underlaying basis of the game.The young man worked hard, and in 1980 the game was finished and released. It soon became a fever all over the world. The Arcade gaming world was never to be the same again...

Methods Descriptions:

* void otherWall() : for drawing the wall that’s keep the ghosts inside.
* void wall() : for drawing the wall of the maze.
* void food() : for drawing the dots that Pac-man eats.
* void bigFood() : drawing flashing dots in the corner of the maze.
* void ghost(int n) : drawing the ghost.
* void pacMan() : drawing the Pac-Man.
* void drawWalls(): drawing all maze walls using otherWall() and Wall().
* void drawFood(): drawing all maze foods using food() and bigFood().
* void drawPacMan() : drawing the Pac-man using pacMan() and controls the animation (all the Pac-man movement) and eating the foods or the ghost(in case of eating the flashing dots).
* void drawGhosts() : drawing all the 4 ghosts using ghost(int n).
* void nextMoveGhost(int nn) : control all the animation of the ghosts and how they move.
* void timerFunction(int arg) : it keep traces of the time after eating the flashing dots .(almost 12 sec to eat the ghosts)
* void drawBG() : drawing the back ground of the game and the Texture.
* void displayScore(): drawing the game score .
* void keyb(unsigned char c, int a, int b) : camera controls.
* void processSpecialKeys(int key, int x, int y) : Pac-man control buttons.
* void read() : read txt file that have the level.
* void Display() : to draw all maze + mac-man + ghost + score ..
* void main(int argc,char\*\* argr) : calling read and diplay , play sound file.

Headers:

* Game.h : game header file.
* TextureBuilder.h : image loader file for Texture.