

README

Description

Scatch is a single-player arcade game developed in OpenGL /C++ using the Code::Blocks IDE. This game has a truck which is shooting out triangles and balls at random projectile directories and the triangles are to be caught by the container and the balls are to be shot by the mouse. The total miss allowed are 30 and the player will get a score of +10 if he catches the triangle and score of +20 if he shoots the ball.

All 2D/3D transformations were implemented (3D in teapot animation). Input-output methods involving mouse and keyboard were also incorporated. The objective of this project was to learn and get acquainted with OpenGL functions used for transformations and familiarize ourselves with modelview, projection matrices and how they work in OpenGL.

Functionalities

- There is a start screen where the player can press the spacebar to start playing.
- On the playing screen, there is a count of score and number of misses. The scores are calculated as described in the description.

Playing controls:

'a': move container left

'd': move container right

left mouse click: shoots the ball.

'Esc': escape the game

'y': quit it

'n': resume if pressed esc

'p' : pauses the game as well as resumes it, depending on the game state.

- Options to exit the game, pause the game and resume the game are provided.

Instructions to run

- A Code::Blocks IDE with version 13.xx or higher is a must.
- Install OpenGL with the Code::Blocks IDE (link for assistance http://wiki.codeblocks.org/index.php?title=Using_FreeGlut_with_Code::Blocks) for windows and for Linux use the command : `sudo apt-get install freeglut3 freeglut3-dev mesa-utils`
- Open the main.cpp file and compile it with : `g++ main.cpp -lGLU -lGL -lglut -lm -lstdc++` in Linux and for Code::Blocks, just run the project!