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Course Title : PLH-418
Date 30/6/2013

BLOXORZ GAME

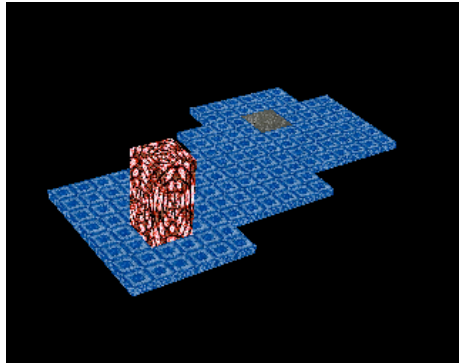


Table of Contents

- I The Game
- 2 Game Controls
- 3 Game Level
- 4 Building the Game
- 5 Extra Futures
- 6 ScreenShots

I, The Game

The purpose of the game is to move the brick into the end pile in standing position in order to continue to the next level. The best practice is to finish every level with least moves possible in order to archive higher score.

2. Game Controls

The Brick can move on the surface of the level using the arrow keys in the keyboard (Up, Down, Left and Right). The player can also control the camera view using keys (W, A, S, D, Q, E, Z, X). The W-S

keys move the whole level up and down in the Y axis, A-D keys move the whole level left and right in X axis and Q-E move the whole level in and out in the Z axis. Z-X rotate the view of the game in Z axis also in order to have a better view of the level in the user desires it. In any occasion the player can reset the camera and position to the defaults values by pressing the 'R' key.

3. Game Level

Each level of the game is a 2 dimensional array, the length of every level can vary in size and it consists of the letters s: start pile this is the place the brick is initially located when the level loads, letter e: this is the end of the level which the user has to get there having the brick in a standing position. Letter x: is void if the user moves the brick to a position marked as x the game round is lost. Finally letter p: is the space in the level where user can move freely around. An example of the first level of the game is this.

4. Building the Game

The basic geometry in game is made with by drawing a cube in different positions and different scale. The basic cube has 1x1x1 dimensions in 3d space. In order to make the pile for the level the basic cube was scaled to 1x1x0.2 of the original cube. Placing a lot of piles in rows makes a level for the game. Also the brick the moves around is made by scaling the basic cube in factor 1x1x2. In order to move around the brick we use rotations by 0, 90, 180, -90, -180 degrees according to the previous state of the brick and the currently pressed key and displacements in the x,y axis depending on the currently pressed keys. The brick itself has a variable representing its position if it is in a standing position or laying on the level floor and also variables to calculate its current position in the level by keeping track of its relative coordinates.

5. Extra Futures

When the game starts the player has 3 life's, if the player moves the brick into empty space a life is removed and the level is restarted, when 3 life's are lost the game ends. If the player advances to the next level and has fewer than 3 life's an extra life is added in order to have more chance to finish the next levels. Also the game keeps a total of moves the player have done in order to finish the game and calculates a score every time a level is finished. The formula calculating the score is below

Moves Number	Score
moves < 10	moves * lifes * 100
10 <= moves < 20	moves * lifes * 50
moves > 20	moves * lifes

While playing the game the user can listen to music by clicking on the music option in the header portion of the site and selecting a track from the drop-down list. Also the player can customize the appearance of the game by loading different texture from the Theme selection by default there are 2 textures themes one dark-black and one more psychedelic red-blue. In addition to these the player can change the background picture by clicking on the Change Background, backgrounds change in a

random way , click until the image satisfy your needs. Finally the player can manually select a level of the game and play by clicking on the Level and selecting the level he wants to play.

6. Screenshots

