Assignment 1

GAM1514

Description:

-For this assignment, using the source code provided to you on Github (make a fork of the code), you need to complete the Breakout game that has already been started.

-There are currently no 'Bricks' in game, you will need to create and implement the Brick class and handle collision with the ball. When a brick is hit, it must disappear.

-There must be a minimum of 3 rows of bricks in each level.

-You must implement a 'level system', once the user clears all the bricks from a level, the balls speed increases on the next level. There needs to be at least 5 levels.

-You must add a 'life system', so that there the user can lose three (3) balls before it is game over. If the user completes a level, they receive an extra ball.

-There must be some kind of visual representation on screen indicating how many balls the user has left.

-When there are no lives left, it is game over, add some kind of graphic to indicate that it is game over the user must press the 'R' key to reset the game back to level 1.

-The visual look and feel of the game needs to improved, currently the ball and paddle are drawn using primitives, instead draw all the GameObjects using an OpenGLTexture and add a background texture as well.

-You may develop this assignment on either *windows* or *mac*, however it must compile for BOTH platforms.

Due date:

010: September 30th (Beginning of class)

040: October 2nd (Beginning of class)

Submission:

Make a tag of your assignment on GitHub, I will download the tag. (We will go over how to make a tag)

Grading:

Multi-platform: The game compiles on both Windows and OSX and doesn't crash	/ 5
Logic: The 'Brick' class has been implement and collision is handled appropriately with the ball	/ 10
Logic: There are at least 3 rows of bricks for each level	/ 5
Logic: The 'level system' has been implemented, and the ball's speed increases each level. There is at least 5 levels	/ 15
Logic: The 'life system' has been implemented, the user can lose 3 balls before it is game over, and receives an extra ball when they complete a level	/ 15
Logic: There is a visual representation of how many balls the user has left	/ 10
UI: There is a game over state, and there is a graphic indicating that it is game over, pressing the 'R' key resets the game back to level 1.	/ 10
UI: The visual look and feel has been improved using non-animated OpenGLTextures	/ 10
Memory Management: Memory is properly allocated and released	/ 10
Coding style: The student followed the programming style guide outlined on Blackboard	/ 10
Total	**/ 100**

Weighting:

This assignment is worth 10% of your final mark

Comments: