Assignment 1 - Introduction to Computer Graphics (8%)

Due: 11:59pm, Sunday, 18 September 2016

Q1(2%): Complete Exercise 1.3 in the textbook pages 26-27.

Q2(6%): Write a program to draw the interface of the Game of Tetris, as shown in the following figure. The game involves playing with different shapes, each composed of 4 squares. The main area (large rectangle) should be sized as 10 x 20 squares (i.e. 10 square wide and 20 squares high). The small rectangle on the right shows the "next shape" that will soon appear in the main area (a red "L" shape in the example). If you have not played Tetris before, you may find useful information on the Web (e.g. http://en.wikipedia.org/wiki/Tetris). Your tasks include:

- Draw everything shown in this figure (the position of each component, e.g. rectangle, does not have to be exactly the same as in the figure).
- If the mouse cursor moves inside the main area, "PAUSE" (in a large font) will be displayed; and if the cursor moves out of the area, "PAUSE" will disappear.
- Change of the window dimension will not change the position and aspect ratio of any component.
- If the button "QUIT" is pressed, the program terminates and quits (this should not be the quit from the window's standard pull-down menu).

Put the 2 Java source programs for Q1 and Q2 in a ZIP file. Submit your ZIP file on eLearning before the due time. Late submissions should be submitted to the TA through email rather than through eLearning, and will be penalized with a 2% deduction for every 1-24 hour delay.