Exercies

From exercises1.pdf

1. Review your knowledge about vectors, points and matrices. What are vectors? What operations are allowed on vectors, what do they mean geometrically and what are their properties? How are points different from vectors? What operations are allowed on points? What are matrices and why are they useful for us?
2. Write a program that draws a white square. Use Vertex Buffer Objects and Vertex Array Objects to manage your geometry. You can start from the file ex2-1_white_square.cpp.template.

Exercies

From exercises2.pdf

1. Animate the white square from previous exercise set so that it rotates. By adding glutPostRedisplay in the idle function you trigger rendering events continuously. The number of degrees you rotate should depend on how long the program has been run- ning so that the speed of rotation is constant regardless of how often rendering events are triggered. Look at the timer class in the boost library. You can start from the file ex2-2_rotating_square.cpp.template.
2. Make a program that draws a Koch snowflake. Let '+' and '-' increase and decrease the number of iterations. Make sure the number of iterations is never below 0... You can start from the file ex2-3_koch.cpp.template.

Exercies

Extra

- For those who are finished with all the earlier exercises, try to complete the first obligatory exercises from last years class.
- In this exercise we will construct and display a approximation to a Sierpinski Gasket fractal. The main objectives of this exercise are setting up OpenGL environment, constructing the geometry of Sierpinski Gasket and displaying it.
- http://folk.uio.no/bartloms/teaching/INF3320/2012/obligs/oblig1.p