import com.jogamp.opengl.GL2;

import com.jogamp.opengl.GLAutoDrawable;

import com.jogamp.opengl.GLCapabilities;

import com.jogamp.opengl.GLEventListener;

import com.jogamp.opengl.GLProfile;

import com.jogamp.opengl.awt.GLCanvas;

import com.jogamp.opengl.glu.GLU;

import java.util.Random;

import javax.swing.JFrame;

public class MidPointLines implements GLEventListener{

private GLU glu;

@Override

public void display(GLAutoDrawable drawable) {

final GL2 gl = drawable.getGL().getGL2();

/\*

\* put your code here

\*/

}

@Override

public void dispose(GLAutoDrawable arg0) {

//do nothing

}

@Override

public void init(GLAutoDrawable gld) {

GL2 gl = gld.getGL().getGL2();

glu = new GLU();

gl.glClearColor(0.0f, 0.0f, 0.0f, 0.0f);

gl.glViewport(-100, -50, -50, 100);

gl.glMatrixMode(GL2.GL\_PROJECTION);

gl.glLoadIdentity();

glu.gluOrtho2D(-100.0, 100.0, -100.0, 100.0);

}

@Override

public void reshape(GLAutoDrawable arg0, int arg1, int arg2, int arg3, int arg4) {

// do nothing

}

public void Midpoint(GL2 gl, int x1, int y1, int x2, int y2,int zone) {

//write your own code

}

public void originalZone(GL2 gl,int x,int y,int zone){

int a=0;

int b=0;

//conditions to convert back to original zone

gl.glBegin (GL2.GL\_POINTS);

gl.glVertex3f(a,b,1);

gl.glEnd();

}

public int findZone(int x1, int y1, int x2, int y2){

//find dx and dy

int zone = 8;

//write conditions to check zone

return zone;

}

public void convertToZone0(GL2 gl,int x1, int y1, int x2, int y2,int zone){

int a=0;

int b=0;

int c=0;

int d=0;

//Write conditions to convert zones to zone 0

//Call method Midpoint(gl ,a,b,c,d,zone)

}

public static void main(String[] args) {

//getting the capabilities object of GL2 profile

final GLProfile profile = GLProfile.get(GLProfile.GL2);

GLCapabilities capabilities = new GLCapabilities(profile);

// The canvas

final GLCanvas glcanvas = new GLCanvas(capabilities);

MidPointLines l = new MidPointLines();

glcanvas.addGLEventListener(l);

glcanvas.setSize(400, 400);

//creating frame

final JFrame frame = new JFrame ("straight Line");

//adding canvas to frame

frame.getContentPane().add(glcanvas);

frame.setSize(frame.getContentPane().getPreferredSize());

frame.setVisible(true);

}//end of main

}//end of classimport javax.media.opengl.GL2;