import javax.swing.JFrame;

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;

class ThirdGLEventListener implements GLEventListener {

/\*\*

\* Interface to the GLU library.

\*/

private GLU glu;

/\*\*

\* Take care of initialization here.

\*/

public void init(GLAutoDrawable gld) {

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

glu = new GLU();

gl.glClearColor(0.0f, 0.0f, 0.0f, 1.0f);

gl.glViewport(-250, -150, 250, 150);

gl.glMatrixMode(GL2.GL\_PROJECTION);

gl.glLoadIdentity();

glu.gluOrtho2D(-250.0, 250.0, -150.0, 150.0);

}

/\*\*

\* Take care of drawing here.

\*/

public void display(GLAutoDrawable drawable) {

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

gl.glClear(GL2.GL\_COLOR\_BUFFER\_BIT);

/\*

\* put your code here

\*/

// roof - triangle

gl.glBegin(GL2.GL\_TRIANGLES);

gl.glVertex2f(-75,0);

gl.glVertex2f(75,0);

gl.glVertex2f(0,100);

gl.glEnd();

// left wall

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-75,0);

gl.glVertex2f(-75,-125);

gl.glEnd();

// right wall

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(75,0);

gl.glVertex2f(75,-125);

gl.glEnd();

// bottom floor

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-75,-125);

gl.glVertex2f(75,-125);

gl.glEnd();

// door

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-20,-125);

gl.glVertex2f(-20,-75);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(20,-125);

gl.glVertex2f(20,-75);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(20,-75);

gl.glVertex2f(-20,-75);

gl.glEnd();

// lock on the door

gl.glBegin(GL2.GL\_POINTS);

gl.glVertex2f(15,-100);

gl.glEnd();

// left window

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-65,-15);

gl.glVertex2f(-25,-15);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-25,-15);

gl.glVertex2f(-25,-45);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-25,-45);

gl.glVertex2f(-65,-45);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(-65,-45);

gl.glVertex2f(-65,-15);

gl.glEnd();

// right window

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(65,-15);

gl.glVertex2f(25,-15);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(25,-15);

gl.glVertex2f(25,-45);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(25,-45);

gl.glVertex2f(65,-45);

gl.glEnd();

gl.glBegin(GL2.GL\_LINES);

gl.glVertex2f(65,-45);

gl.glVertex2f(65,-15);

gl.glEnd();

}

public void reshape(GLAutoDrawable drawable, int x, int y, int width, int height) {

}

public void displayChanged(GLAutoDrawable drawable, boolean modeChanged, boolean deviceChanged) {

}

public void dispose(GLAutoDrawable arg0) {

}

}

public class 19301186\_Fahim {

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);

ThirdGLEventListener b = new ThirdGLEventListener();

glcanvas.addGLEventListener(b);

glcanvas.setSize(400, 400);

//creating frame

final JFrame frame = new JFrame("task2");

//adding canvas to frame

frame.add(glcanvas);

frame.setSize(640, 480);

frame.setVisible(true);

}

}