TAGE
Simple example game
"Hello Dolphin"

```
package myGame;

import tage.*;
import tage.shapes.*;

import java.lang.Math;
import java.awt.*;
import java.awt.event.*;
import java.io.*;
import javax.swing.*;
import org.joml.*;

public class MyGame extends VariableFrameRateGame
{  private static Engine engine;
   public static Engine getEngine() { return engine; }

   private Boolean paused=false;
   private int counter=0;
   private double lastFrameTime, currFrameTime, elapsTime;

   private GameObject dol;
   private ObjShape dolS;
   private TextureImage doltx;
   private Light light1;
-------------------------------------------------------------
   public MyGame() { super(); }
-------------------------------------------------------------
   public static void main(String[] args)
   {  MyGame game = new MyGame();
      engine = new Engine(game);
      game.initializeSystem();
      game.game_loop();
   }
-------------------------------------------------------------
   @Override
   public void loadShapes()
   {  dolS = new ImportedModel("dolphinHighPoly.obj");
   }

   @Override
   public void loadTextures()
   {  doltx = new TextureImage("Dolphin_HighPolyUV.png");
   }

   @Override
   public void buildObjects()
   {  Matrix4f initialTranslation, initialScale;

      // build dolphin in the center of the window
      dol = new GameObject(GameObject.root(), dolS, doltx);
      initialTranslation = (new Matrix4f()).translation(0,0,0);
      initialScale = (new Matrix4f()).scaling(3.0f);
      dol.setLocalTranslation(initialTranslation);
      dol.setLocalScale(initialScale);
   }
-------------------------------------------------------------
   @Override
   public void initializeLights()
   {  Light.setGlobalAmbient(0.5f, 0.5f, 0.5f);
      light1 = new Light();
      light1.setLocation(new Vector3f(5.0f, 4.0f, 2.0f));
      (engine.getSceneGraph()).addLight(light1);
   }
-------------------------------------------------------------
   @Override
   public void initializeGame()
   {  lastFrameTime = System.currentTimeMillis();
      currFrameTime = System.currentTimeMillis();
      elapsTime = 0.0;

      (engine.getRenderSystem()).setWindowDimensions(1900,1000);

      // ------------ positioning the camera ------------
      (engine.getRenderSystem().getViewport("MAIN")
                  .getCamera()).setLocation(new Vector3f(0,0,5));
   }
-------------------------------------------------------------
   @Override
   public void update()
   {  // rotate dolphin if not paused
      lastFrameTime = currFrameTime;
      currFrameTime = System.currentTimeMillis();
      if (!paused) elapsTime += (currFrameTime - lastFrameTime) / 1000.0;
      dol.setLocalRotation((
                        new Matrix4f()).rotation((float)elapsTime, 0, 1, 0));

      // build and set HUD
      int elapsTimeSec = Math.round((float)(elapsTime);
      String elapsTimeStr = Integer.toString(elapsTimeSec);
      String counterStr = Integer.toString(counter);
      String dispStr1 = "Time = " + elapsTimeStr;
      String dispStr2 = "Keyboard hits = " + counterStr;
      Vector3f hud1Color = new Vector3f(1,0,0);
      Vector3f hud2Color = new Vector3f(0,0,1);
      (engine.getHUDmanager()).setHUD1(dispStr1, hud1Color, 15, 15);
      (engine.getHUDmanager()).setHUD2(dispStr2, hud2Color, 500, 15);
   }
-------------------------------------------------------------
   @Override
   public void keyPressed(KeyEvent e)
   {  switch (e.getKeyCode())
      {  case KeyEvent.VK_C:
            counter++;
            break;
         case KeyEvent.VK_1:
            paused = !paused;
            break;
         case KeyEvent.VK_2:
            dol.getRenderStates().setWireframe(true);
            break;
         case KeyEvent.VK_3:
            dol.getRenderStates().setWireframe(false);
            break;
         case KeyEvent.VK_4:
            (engine.getRenderSystem().getViewport("MAIN")
                        .getCamera()).setLocation(new Vector3f(0,0,0))
            break;
      }
      super.keyPressed(e);
   }
}
```