

Annexe- Le code du JavaApplet

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import java.awt.*;
import java.applet.Applet;
import java.util.*;
import javax.media.j3d.*;
import javax.vecmath.*;
import com.sun.j3d.utils.applet.MainFrame;
import com.sun.j3d.utils.universe.*;
import com.sun.j3d.loaders.vrml97.VrmlLoader;
import com.sun.j3d.loaders.Scene;

public class VView extends Applet
{
    SimpleUniverse universe; // the universe
    Scene scene = null; // the VRML scene that we load

    // public VView(String avatar)
    public void init()
    {
        initGUI();
        //setLayout(new BorderLayout());
        Canvas3D canvas = new Canvas3D(null);
        add("Center", canvas);
        universe = new SimpleUniverse(canvas);
        ViewingPlatform viewingPlatform =
            universe.getViewingPlatform();
        TransformGroup vpTransGroup =
            viewingPlatform.getViewPlatformTransform();
        View view = (universe.getViewer()).getView();
        VrmlLoader loader = new VrmlLoader();
        String naam_file = "cyl";
        try
        {
            scene = loader.load(naam_file + ".wrl");
        }
        catch (Exception e)
        {
            System.out.println("Exception loading file! from
            path:" + naam_file + ".wrl");
            System.exit(1);
        }

        // get the scene group from the loaded VRML scene
        BranchGroup sceneGroup = scene.getSceneGroup();
        sceneGroup.setCapability(BranchGroup.ALLOW_DETACH);
        sceneGroup.setCapability(BranchGroup.ALLOW_BOUNDS_READ);

        // make the VRML scene live
        universe.addBranchGraph(sceneGroup);

        // find the radius and center of the scene's
        // bounding sphere
        BoundingSphere sceneBounds =
            (BoundingSphere)sceneGroup.getBounds();
        double radius = sceneBounds.getRadius();
        Point3d center = new Point3d();
        sceneBounds.getCenter(center);
    }
}
```

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        // now move the viewpoint back so we
        // can see the whole scene
        Vector3d temp = new Vector3d(center);
        temp.z += 1.4 * radius / Math.tan(view.getFieldOfView() / 2.0);

        // and finally, set that viewpoint into the
        // viewing transform
        Transform3D viewTransform = new Transform3D();
        viewTransform.set(temp);
        vpTransGroup.setTransform(viewTransform);
    }

    //public static void main(String[] args)
    // {
    //     new MainFrame(new VView(args[0]), 320, 400);
    //     new VView();
    // }

    public void start()
    {}

    public void stop()
    {}

    public void desptroy()
    {}

    private void initGUI()
    {
        setLayout(new java.awt.BorderLayout());
    }
}

```