

Exercise #9: Level of Details

Modify the file you finished in **Exercise 6**, **Exercise 7**, **OR Exercise 8** to create a 'SwitchTest.java' file that has the following additional features:

1. The (shape) detail of the fireball changes according to its distance to the viewer.
 - Set the number of triangle divisions of the fireball to *5* for a distance that is bigger than *3* meters.
 - Double the number of divisions when the distance from the fireball to the viewer decreases to *3*, *1.5*, and *0.7* meters or less.
2. (Optional) Use `OrientedShape3D` to make the plane tracking the viewer by rotating about its origin.
3. (Optional) Use `Switch` to define a key 'i' that enables and disables the tracking of the plane to the viewer.