Model::Main

Transform

+m: Mat4x4
+i: Mat4x4

+Transform()
-Transform(m: Mat4x4, i: Mat4x4)
-translation(point: Point3): Transform
+rescale(x: Double, y: Double, z: Double): Transform
+rotationOnX(phi: Double): Transform
+rotationOnY(phi: Double): Transform
+rotationOnZ(phi: Double): Transform
+multiplicate(ray: Ray): Ray
+multiplicate(normal: Normal3): Normal3

Geometry

+material: Material

+Geometry(material: Material)
+Hit(ray: Ray): Hit

Node

+transformationObject: Transform
+geometryList: List<Geometry>

+Node(transformationObject: Transform, geometryList: List<Geometry>)
+Hit(ray: Ray): Hit

Mat4x4

+m11: double
+m12: double
+m13: double
+m14: double
+m21: double
+m22: double
+m23: double
+m24: double
+m31: double
+m32: double
+m33: double
+m34: double
+m41: double
+m42: double
+m43: double
+m44: double
+det: double

+Mat4x4(m11: double, m12: double, m13: double, m14: double, m21: double, m22: double, m23: double, m24: double, m31: double, m32: double, m33: double, m34: double, m41: double, m42: double, m43: double, m44: double)
+mul(m: Mat4x4): Mat4x4
+transpose(): Mat4x4
+mul(v: Vector3): Vector3
+mul(p: Point3): Point3