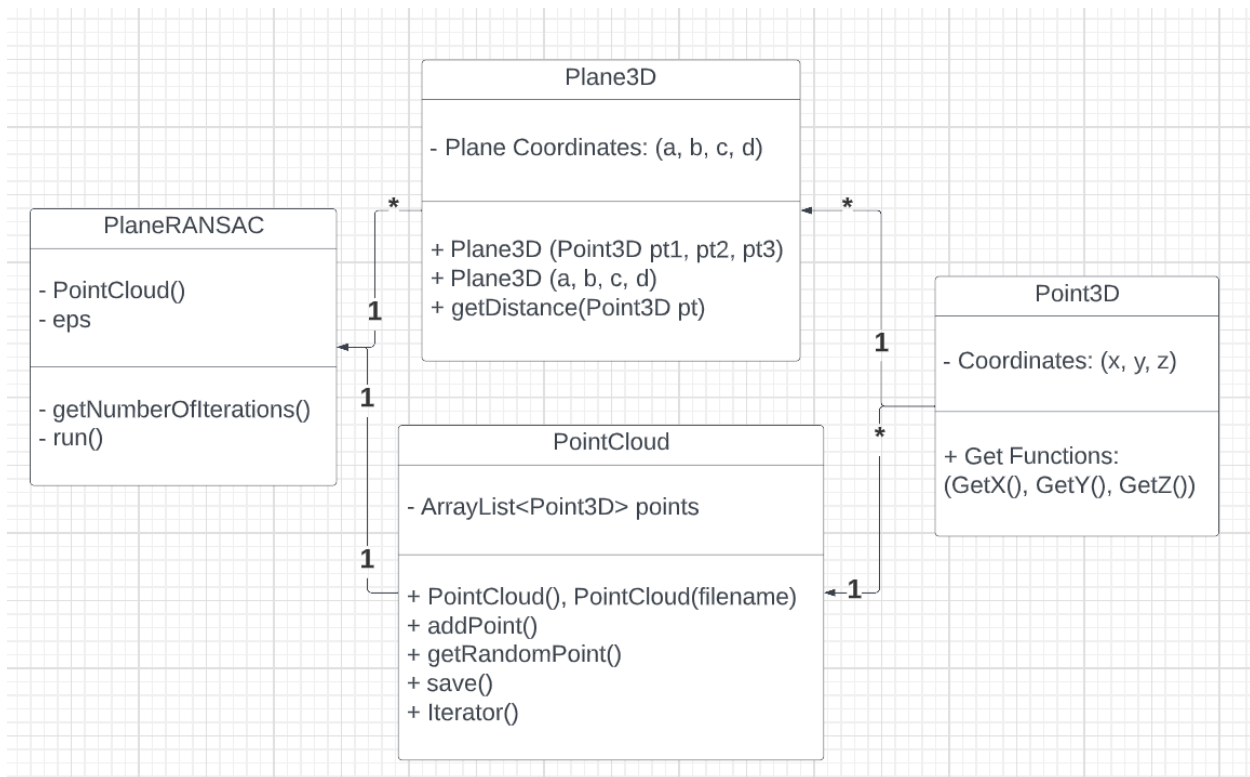


UML Diagram:



Relationships:

- PointCloud and Point3D: 1 to many
- Plane and Point3D: many to 1
- RANSAC and PointCloud: 1 to 1
- RANSAC and Plane: 1 to many

Resources:

Point3D:

<https://www.geeksforgeeks.org/javafx-point3d-class/>

<https://docs.oracle.com/javase/8/javafx/api/javafx/geometry/Point3D.html#distance-double-double-double->

Plane3D:

- Getting the plane equation from 3 points, formulas taken from here:

<https://www.geeksforgeeks.org/program-to-find-equation-of-a-plane-passing-through-3-points/>

<https://www.youtube.com/watch?v=rL9UXzZYYo4>

- Getting the distance between a point and the plane equation

<https://www.cuemath.com/geometry/distance-between-point-and-plane/>

PointCloud:

- Converting .xyz file to arraylist

<https://stackoverflow.com/questions/52431907/java-read-x-y-z-coordinates-from-a-file>

- ArrayList Iterator

<https://www.geeksforgeeks.org/arraylist-iterator-method-in-java-with-examples/>

RANSAC algorithm:

- <http://summergeometry.org/sgi2022/plane-and-edge-detection-by-the-random-sample-consensus-ransac-algorithm/>