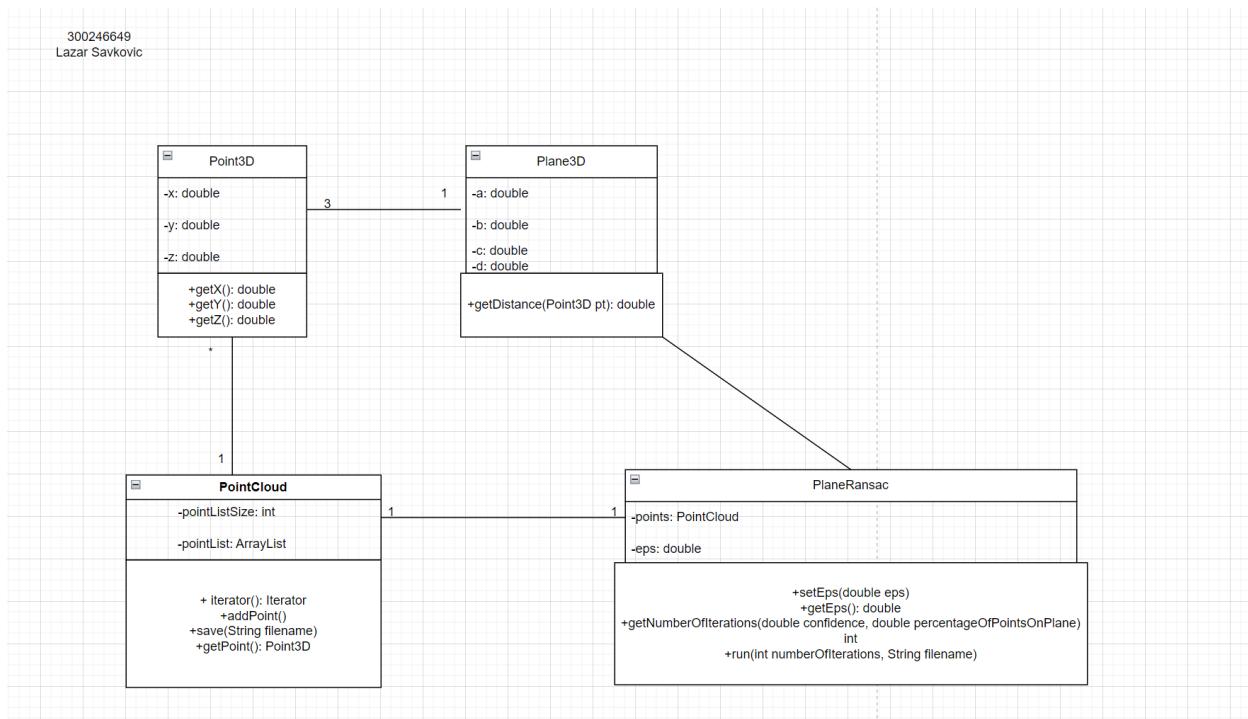


## Le Diagramme UML:



## Instructions:

```
public class Main {
    Run | Debug
    public static void main(String[] args){
        PointCloud cloud = new PointCloud(filename: "PointCloud1.xyz"); // change file to get new result
        PlaneRANSAC ransac = new PlaneRANSAC(cloud);
        ransac.setEps(eps: 0.5);
        // gets three dominant planes for pointCloud1
        ransac.run(ransac.getNumberOfIterations(confidence: 0.99, percentageOfPointsOnPlane: 0.90), filename: "PointCloud1_p");

        PointCloud cloudTwo = new PointCloud(filename: "PointCloud2.xyz"); // change file to get new result
        PlaneRANSAC ransacTwo = new PlaneRANSAC(cloudTwo);
        // gets three dominant planes for pointCloud2
        ransacTwo.run(ransacTwo.getNumberOfIterations(confidence: 0.99, percentageOfPointsOnPlane: 0.90), filename: "PointCloud2_p");

        PointCloud cloudThree = new PointCloud(filename: "PointCloud3.xyz"); // change file to get new result
        PlaneRANSAC ransacThree = new PlaneRANSAC(cloudThree);
        // gets three dominant planes for pointCloud3
        ransacThree.run(ransacThree.getNumberOfIterations(confidence: 0.99, percentageOfPointsOnPlane: 0.90), filename: "PointCloud3_p");
    }
}
```

Pour augmenter le nombre de iteration vous devez reduire le nombre de percentageOfPoints on the plane. Par exemple si tu veut plus de iteration tu peux le reduire a 0.80. Mais si tu veut moin de iteration tu peut l'augmenter a 0.95 ou meme 0.99. ne toucher pas confidence car c'est donner. Ne toucher pas a filename.

(Je vous suggere a l'augmenter si vous voulez)