

Appendix - Song Listener

```
package src;

import java.io.File;
import java.io.FileNotFoundException;
import java.io.PrintStream;
import java.math.BigInteger;
import java.util.ArrayList;
import java.util.Random;
import java.util.Scanner;

public class SongListener {

    public String seed;

    public String seedIntString;

    public BigInteger seedtoint;

    public Dictator dictator = null;

    PrintStream out = null;

    private ArrayList<String> level;

    public SongListener(File songIncoming, Dictator dic) {
        // TODO Auto-generated constructor stub
        this.level = new ArrayList<String>();
        String levelIncomeing = "ASDFF";

        this.seed = levelIncomeing;

        this.dictator = dic;
        seedIntString = "133769101";

        for (int i = 0; i < levelIncomeing.length(); i++) {
            seedIntString += (int) levelIncomeing.charAt(i);
        }
        seedtoint = new BigInteger(seedIntString);
        seedtoint = seedtoint.multiply(seedtoint).multiply(seedtoint);
        dictator.rand = new Random(seedtoint.longValue());

        generate();
    }
}
```

```

    }

    // this comes into gen from a hash
    public void generate() {
        int levelLength = dictator.rand.nextInt(200) + 50;

        for (int spawnerLevelLength = 0; spawnerLevelLength < levelLength;
            spawnerLevelLength++) {

            String addString = "";

            int randspawncheck1 = dictator.rand.nextInt(2) - 1;
            int randspawncheck2 = dictator.rand.nextInt(2) - 1;
            int randspawncheck3 = dictator.rand.nextInt(2) - 1;
            if (randspawncheck1 * randspawncheck2 * randspawncheck3 != 0) {
                int AsteroidsToSpawn = dictator.rand.nextInt(3) + 1;
                addString += "AsteroidsToSpawn:"
                    + Integer.toString(AsteroidsToSpawn);

                for (int i = 0; i < AsteroidsToSpawn; i++) {
                    int AsteroidSize = dictator.rand.nextInt(30) + 10;
                    int Posx = dictator.rand.nextInt(dictator.SIZE_X);
                    int Posy = dictator.rand.nextInt(dictator.SIZE_Y);
                    int Movx = dictator.rand.nextInt(4);
                    int Movy = dictator.rand.nextInt(4);

                    addString += "AsteroidCall:" + (i + 1) + "AsteroidSize:"
                        + AsteroidSize + ";Position:" + Posx + ",P" +

Posy
                        + ";Movement:" + Movx + ",M" + Movy
                        + ";AsteroidCallEnd:" + (i + 1);

                    }
                }
                level.add(addString);
            }
        }

        // returns the level
        public ArrayList<String> getLevel() {
            return this.level;
        }

        public boolean endSong() {
            // TODO Auto-generated method stub
            return false;
        }
    }

```

```
    public int getRate(){  
        return 30;  
    }  
  
}
```