

```

1 package ch.hevs.gdx2d.lunar.physics;
2
3 /**
4  * Some useful physics constant that are used by the {@link PhysicsSimulator} class
5  * and others.
6  * @author P.-A. Mudry
7  */
8 public final class Constants {
9     /**
10      * Graphics related constants
11      */
12     public static final int WIN_WIDTH = 800;
13     public static final int WIN_HEIGHT = 800;
14     public static final int FPS = 100;
15
16     /**
17      * Physics environment
18      */
19     public static final float GRAVITY = -1.62f;
20     public static final float DELTA_TIME = 0.1f;
21     public static final float AIR_FRICTION = 0.0f;
22     public static final float DAMPING_FACTOR = 0.9f;
23
24     /**
25      * Maximal impact speed triggering a crash
26      */
27     public static final double CRASH_SPEED = 10;
28
29     /**
30      * Spaceship related
31      */
32     public static final float MAX_THRUST = 1500f;
33     public static final double MAX_FUEL = 300;
34     public static final int BASE_MASS = 300;
35
36     public static final int GEGNER_MASS = 100;
37
38     /**
39      * Game related constants
40      */
41     // Maximal impact energy triggering a object destruction
42     public static final int DESTRUCTION_ENERGY = (int)
43     (BASE_MASS*CRASH_SPEED*CRASH_SPEED/2);
44     public static final int CLOUD_DENSITY = 5;
45     public static final int GROUND_ALTITUDE = 100;
46     public static final boolean DRAW_BOUNDINGBOXES = false;
47
48     /**
49      * Ground parameters
50      */
51     public static final float MAX_INCLINE = 100.0f;
52     public static final int MIN_ALTITUDE = 200;
53     public static final int SCALE = 10;
54     public static final int FLAT_ZONE = 7;
55
56     /**
57      * Landing Zone
58      */
59     public static final int Z_WIDTH = 100;
60     public static final int Z_HEIGHT = 30;
61 }

```