3D Maze

Description

It's a place consists of set of paths connecting two points. You start moving from one point (entrance) and try to find out the correct path to the other point (destination). See Figure 1 and Figure 2.

Figure 1 Example 1

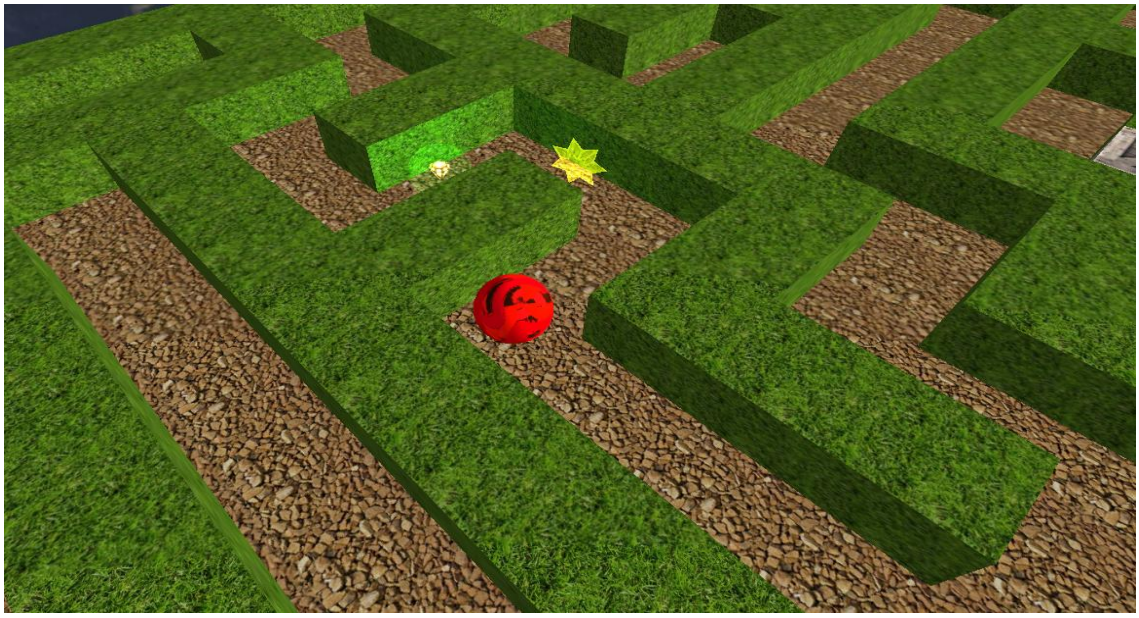

Figure 2 Example 2

Features

1 Main objects & Textures:-

1. A textured skybox for Maze environment.
2. A special texture for maze obstacles (see **figure 1 and figure 2** for examples**).**
3. Game hero: a 3D object may be cube/pyramid.
4. Enemy:- another 3D object which is different in shape from the hero.

2 Animations and movements:-

1. The hero should move in xz-plane with keyboard (forward ↑, backward ↓, left ← and right →).
2. The enemy should repeat some movement during the entire game (see **figure 3).**

3 Basic collision detection:-

1. You should detect the collision between the hero and maze obstacles.
2. You should detect the collision between the hero and the enemy, and then take an action like ending the game or decreasing hero's health (if you want to give him more than one chance).
3. You should detect if the hero reached the target/destination and then game ends.

4 Camera:-

You should be able to switch between 2 camera modes with keyboard:

1. Fixed position:- camera is centered above the scene and looks at it.
2. First Person Camera:- camera moves as the hero.

5 Scene lighting:-

There should be at least one light source within the scene (you may add it attached to the hero "like a torch" above the scene "like a lamp" or in any other way).

Note

Design your maze as much simple as possible. **Figure 3 contains** examples for simple design.

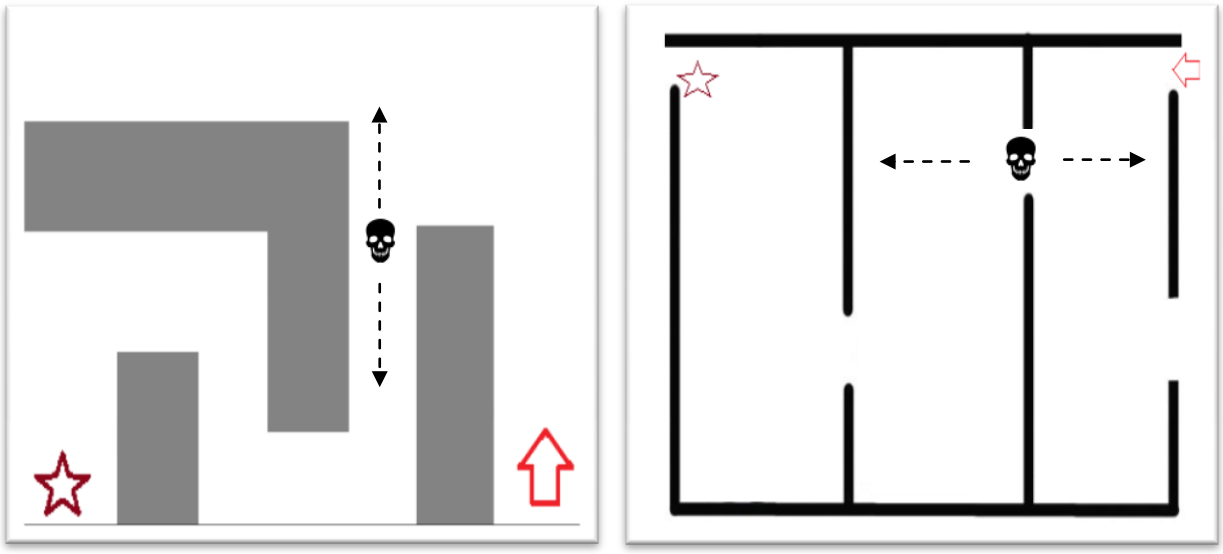

Figure 3: Red arrows (entrance), Dark-red stars (Destination), skull with dark arrows (the enemy and its movement).