Spring 2025 - CSC329 Game Programming - Assignment 7



Due date: Thursday, March 27, 2025, 11:00 am, add and commit a folder assignment7/ to our class SVN repository.

Exercise 7 [10 points]

This assignment reflects some of this week's topics: *Parallax Scrolling, Collision Detection, Spawning.* This is a programming exercise. You may want to make use of your application from former assignments. We expect you to build your project as a Unity game and commit both the **sources** and the **binary** to the class SVN-Repository. The sources should be placed in the folder assignment7/src whereas the binary should be placed in assignment7/bin.

Find and install appropriate collision detection components for the characters/sprites/props of your game. This could be either based on a bounding box, a sphere, multiple spheres, or any other option that suits your game best.

More specifically, we would like you to do the following:

- 1. Add parallax scrolling to your game if appropriate (e.g. it won't make sense for a board game).
- 2. Create some appropriate game elements for your game that disturb the character/hero on its way to the goal. This can be enemies/bad guys or disturbing artifacts (e.g. like the bombs that fall from the sky in our classroom project). Add randomness to surprise the user of the game.
- 3. Create colliders for your game elements where appropriate. You want to make sure that the number of vertices for each collision element is minimal.
- 4. Handle a collision in order to make smart choices of what you want to do if a collision takes place. This means that there might be different ways of handling collisions according to the given context (e.g. object-object collision, object-world collision, game states, etc.).
- 5. Spawn the enemy multiple times in order to create a "busy" game feeling. Try to balance the "workload" of the user so that the game can be won.