

## Spring 2024 - CSC329 Game Programming - Assignment 7



**Due date: Thursday, March 28, 2024, 11:59 pm, 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.