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Project 1: Random Scene with Explosion

This project generates a random terrain using Perlin noises and afterward, randomly spawn 162 creatures using 3 different methods:

* 9 leading dragons using linear interpolation, with Gaussian for its y scale
* 108 animals, including cow, chicken, duck, pig and sheep, with Gaussian distribution
* 45 random creatures, with totally random positions

It also has 6 cameras angles:

* One focusing on the dragons
* One focusing on the animals
* One looking on top of the animal horde
* One looking at the overall terrain
* One looking at the terrain on one side
* One for first person mode

Creatures are detonable. Press “C” 5 times to enter first person mode, and start launch them to the sky!

**Features**:

* Press “C” to switch between camera to observe each group of creatures
* Use mouse movement to look around in FPS mode
* In the FPS mode, move toward a creature to launch it into the sky. This will also detonate it, and it will explode shortly. Points are earned for every explosion.

**Above and beyond**:

* Improve Camera Controller script to work with a GameObject instead of a Camera, this allows for complex camera system to be used with the Camera Controller. Also used mod operator to cycle back to the first camera.
* Spawn random creatures with random rotation
* Launching object to the sky upon contact
* Spawn explosion particle after objects are launched to the sky
* Score tracking
* Spawning a list of creatures per spawning pool.
* Clean up things after they are exploded.

**References**

* Small Red Dragon
  + Author: StoneSnail
  + Type: 3D model
  + URL: <http://u3d.as/neW>
* Sail Character Pack
  + Author: Zak Reynolds
  + Type: 3D models and Textures
  + URL: <http://u3d.as/88o>
* Farm Animals Set
  + Author: Vertex Cat
  + Type: 3D models
  + URL: <http://u3d.as/VvG>
* Farland Skies – Cloudy Crown
  + Author: Borodar
  + Type: Textures
  + URL: <http://u3d.as/rdx>
* Standard Assets
  + Author: Unity Technology
  + Type: Particle System, Scripts
  + URL: <http://u3d.as/cg6>