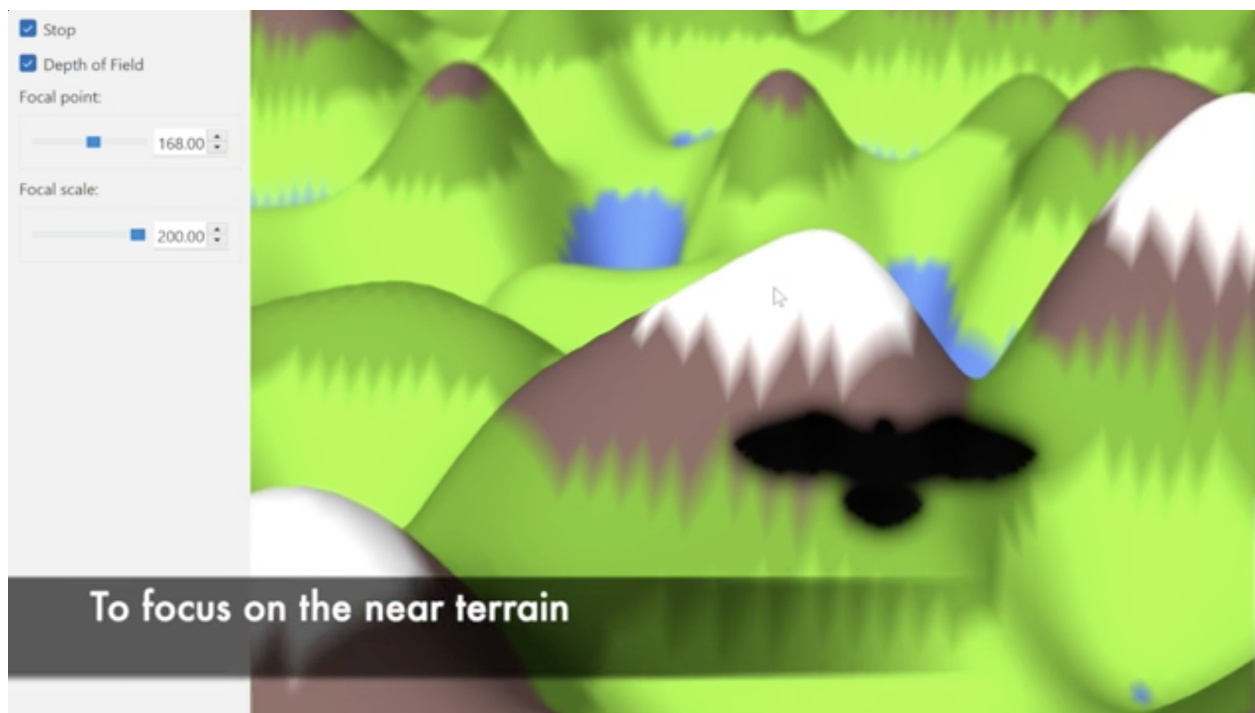


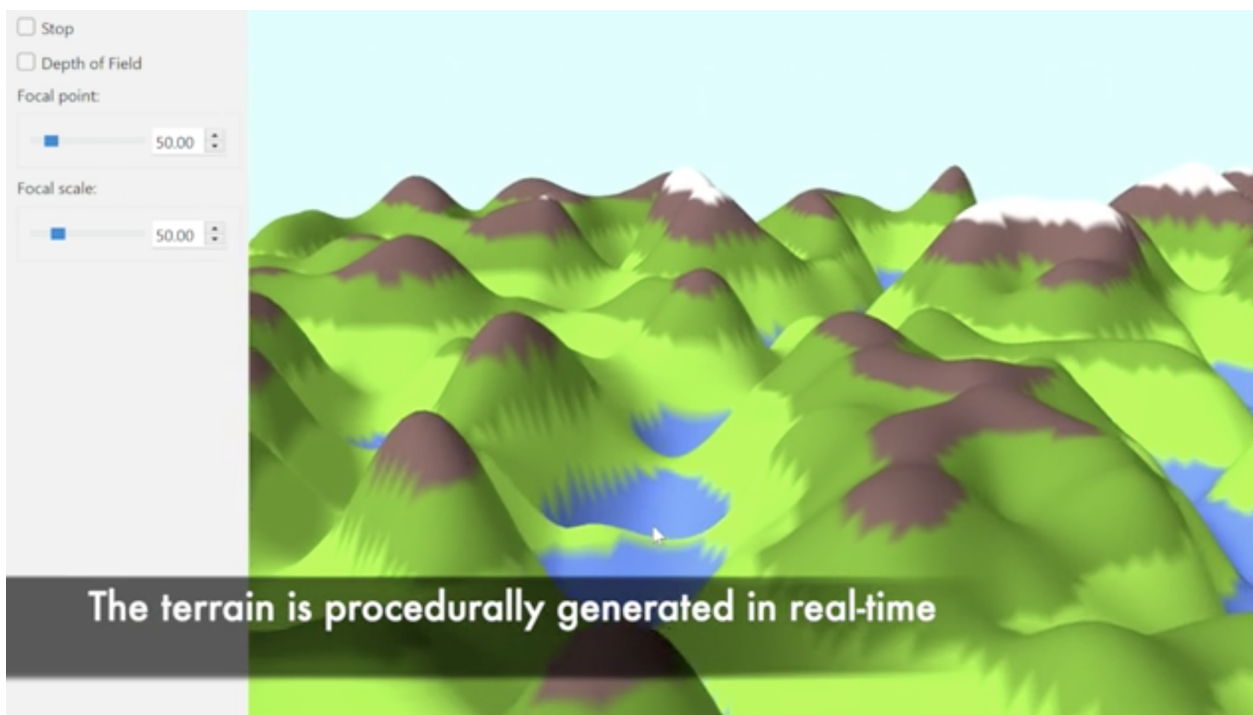
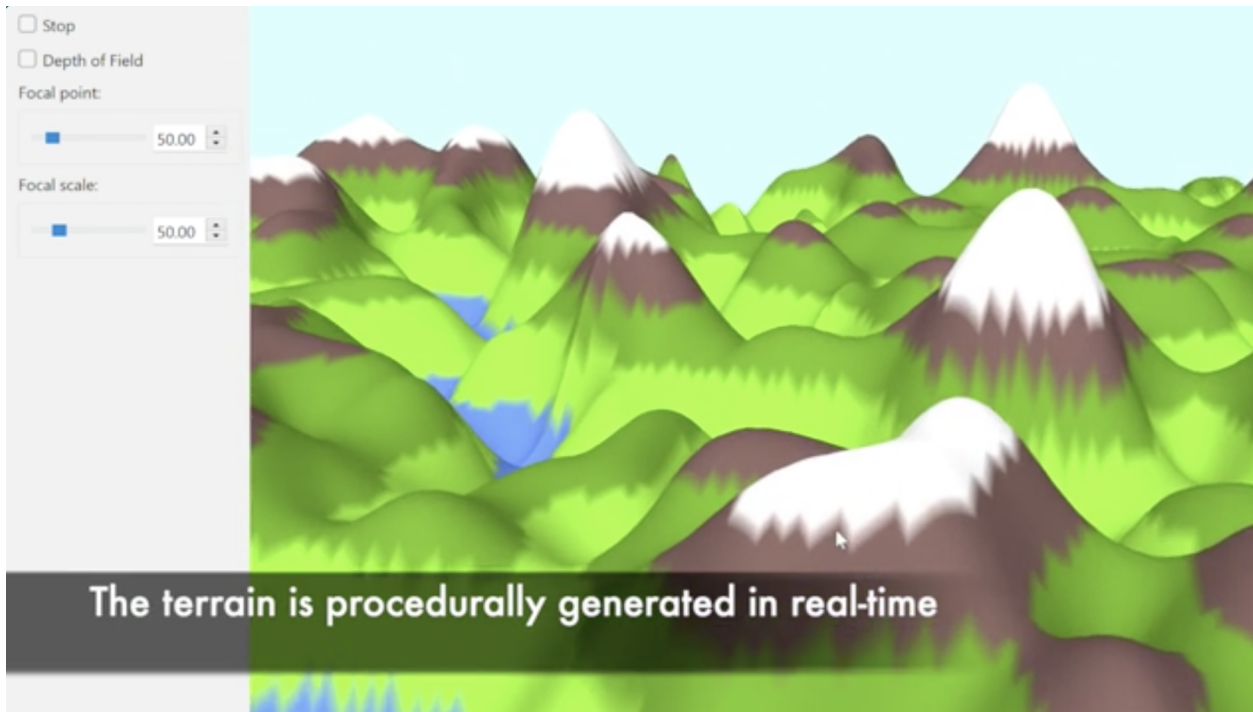
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My capstone project for computer graphics, BirdView, simulates the view of a bird flying over different backgrounds. In the first scene, we create a procedural terrain to serve as the background. The user can move the view angle to see the shadow of the bird on the surface (when viewing downward), or to see the landscape with a depth of field effect (when viewing forward). The project contains an .obj file parser which imports the bird model and renders it in the scene. The terrain is procedurally generated in real-time. There is also a real-time depth of field control that can manipulate both the focus point and the focus scale. It can focus on the near terrain, the far terrain, or the bird. In the second scene, we created a skybox to serve as the background. A skybox is a large cube that encompasses the entire scene and contains 6 images of a surrounding environment. We fold those 6 sides to get the completely textured cube that simulates a large landscape. We also have an environment mapping with a reflective cube. The cube is rotating in real-time and reflecting the environment. The second scene keeps the depth of field feature and allows the adjustment of focus point and focus scale.

## Scene 1:





## Scene 2:

