

ASSIGNMENT 2

INTRO, PURPOSE AND GOAL

1. To learn to use other people's assets
2. To demonstrate how quickly one can prototype
3. To get acquainted with various control schemes
4. To learn basic memory optimization

HAND-IN

Hand in before next week's Wednesday lecture, by pasting the URL to your github project next to your name in this sheet:

RESSOURCES

1. General Unity ressources: <https://unity3d.com/learn>
2. Import this: <https://assetstore.unity.com/packages/essentials/asset-packs/standard-assets-32351>
3. Detect if plane/bullet hit something via colliders or triggers: <https://unity3d.com/learn/tutorials/s/physics>
4. Destroying objects: <https://unity3d.com/learn/tutorials/topics/scripting/destroy>
5. Use Unitys Canvas system to make user interface and buttons: <https://unity3d.com/learn/tutorials/s/userinterface-ui>
6. Shooting/bullet info further down in this article : <https://docs.unity3d.com/ScriptReference/Object.Instantiate.html>
7. Object pooling: <https://unity3d.com/learn/tutorials/topics/scripting/object-pooling>
8. When doing the explosions, it can be helpful to disable the enemy and enable explosion upon collision: <https://unity3d.com/learn/tutorials/topics/scripting/activating-gameobjects>

ASSIGNMENT

GREEN (MINIMUM REQUIREMENTS)

1. Use Unity Standard Assets library to make the following games:
2. A flight simulator, where the player must pick up powerups in the air, a sound is played when that happens. A counter in the UI shows how many powerups has been picked up. Make sure the camera follows the plane. Hint: There is an "AircraftJet" prefab in Standard assets -> Vehicles -> Aircraft folder.
3. Make a car stunt game. Again you can find a prefab in the standard assets. Make a nice track or sandbox where the player can drive around – there must be ramps to fly into the air. There must be a reset button in case the player car ends upside down
4. Make a third person shooter, use standard asset prefabs. The player must be able to walk around and shoot at enemies. Enemies doesn't have to move around or be intelligent or shoot back at the player, but enemies must explode when they die. There is an explosion prefab in Standard assets in the Particle system folder.
5. In order to save memory, make sure the bullets disappear after some time, for example by calling Destroy or by using a pool of bullets
6. Prep your project for GIT and upload to Github. paste URL here:

YELLOW (GO FOR IT)

1. Make your own controllers for one of the games, instead of using the standard asset prefabs.

RED (CHALLENGE YOURSELF)

1. Make your own controllers for all of the games, instead of using the standard asset prefabs.
2. Make some very nice and thought out level designs, make multiple levels