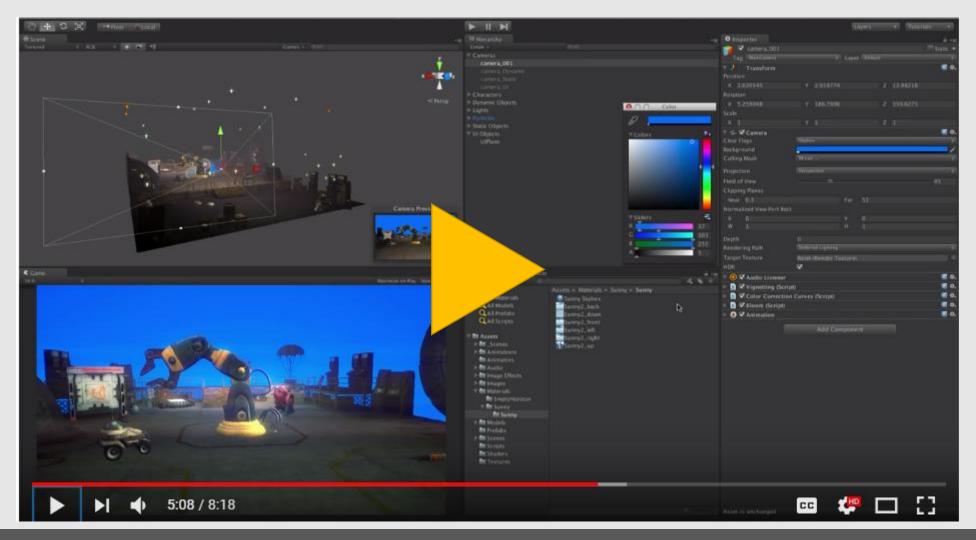
## Game Dev with Unity3D

# GAME CAMERA



#### Camera Tutorial



#### Point of View with Game Camera

• Camera is the "eyes" of the end player. This is what the GAME window sees.



# Camera Styles



First person.

TEAM FORTRESS



Third person.

NEED FOR SPEED



2D like in side scroller (horizontal or vertical).

MARIO

#### Point of View with Game Camera



- Change the point of view in the game you work on.
- Just use the transform and the hierarchy.

#### Camera Features

- Range of the camera view:
  - Define a minimum distance and maximum distance from the camera to show only the game elements that exist inside that range. It is like you place a curtain in a certain distance.

#### Future Camera Features

- Ul is viewed in a different camera
- Visual filter effects (like in Instagram)
- Several cameras are possible (not recommended as a start)

- AR/VR SDKs usually take over the game camera.
  - So you should understand how they do it and work with it.

#### Questions and Exercises

(if you can answer this without testing, good job. otherwise, test it)

- Try to make the Survival Shooter into a 2D game with a static camera. If needed, move things around.
- Try to make the Survival Shooter into a first person view.

# Separate UI camera from the world camera

https://answers.unit y.com/questions/87 8667/world-spacecanvas-on-top-ofeverything.html

- If you have a lot of UI elements visually attached to game elements then you are going to want to use world space. But if you want your UI to look like an overlay. You're going to want to render your game and the UI separately and then composite them together.
- Put your UI on a Layer called UI (if it isn't already).
- Duplicate your Main Camera and call it UI Camera.
- Parent your UI Camera to the Main Camera.
- Remove scripts like camera control, post effects and audio listeners from the UI Camera.
- In the Main Camera Culling Mask turn off UI
- In the UI Camera turn everything off but UI.
- In the UI Camera change Clear Flags to Depth only
- In the UI Camera change the Depth to something higher than the value on your Main Camera.
- Then in your Canvas set the Event Camera to the UI Camera.

### Full 2D app don't require a camera

 https://answers.unity.com/questions/1191614/canvas-withoutcamera.html