Game Dev with Unity3D

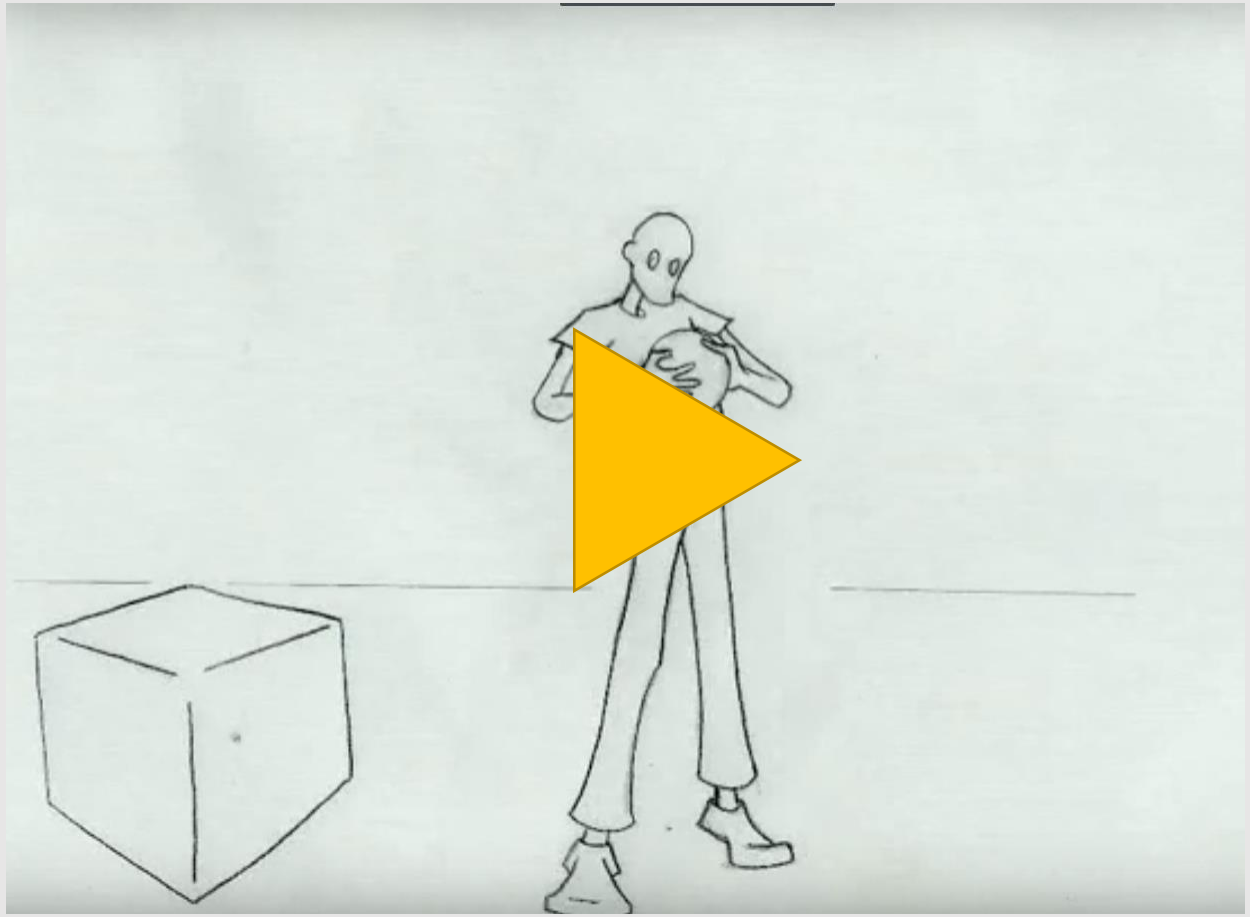
ANIMATIONS

Where Do We Use Animations?

- Animations are everywhere. They are a very basic way of giving life into static objects. Even when something is still – it still has idle movement.

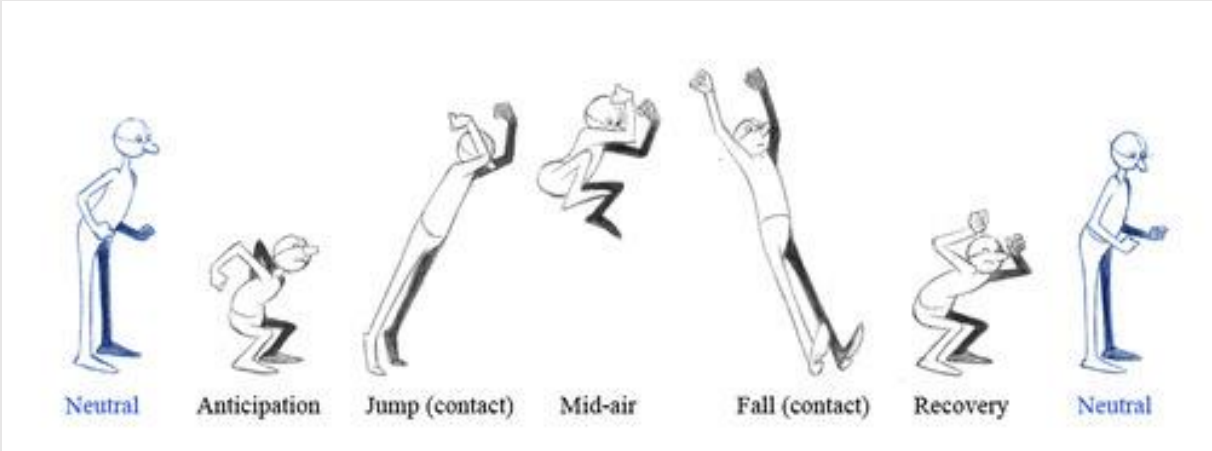
- Examples:
  - Pickup coins can rotate and float in the air until they are picked up (and disappear into the air)
  - Avatars and enemy characters move around in the scene
  - UI effects
  - Environment assets (wind on trees, water)

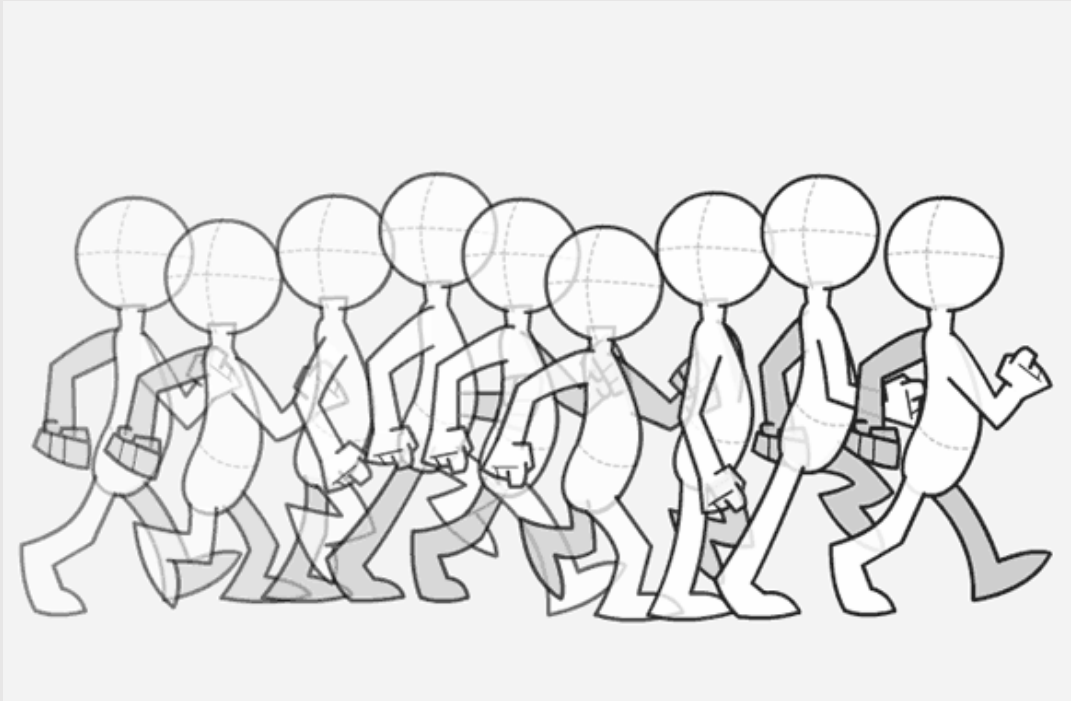
Traditional Keyframe Animations



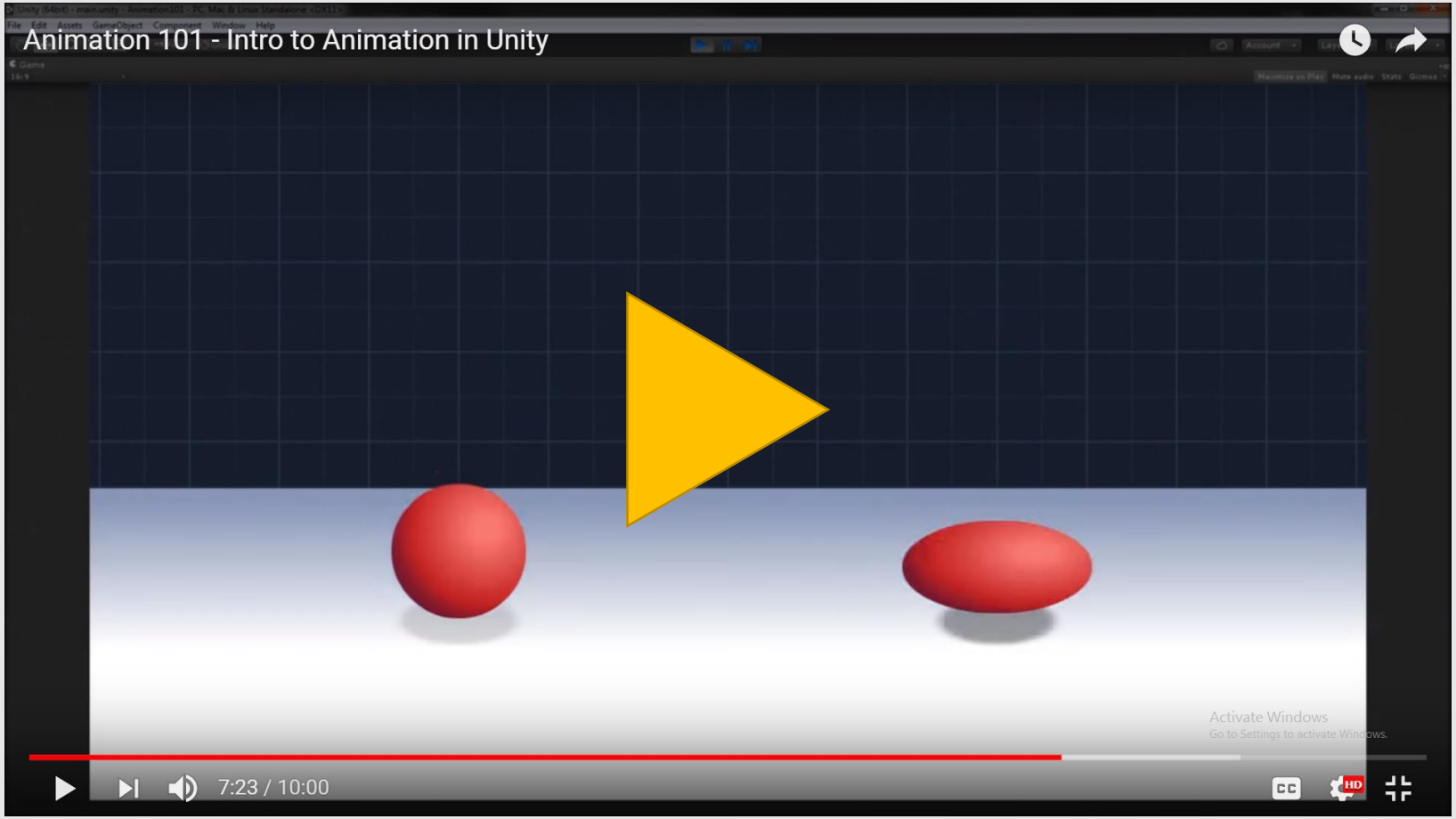
Traditional Keyframe Animations

- Keyframe based animation means you set a situation, and the software would make the required transition in order for the animation to go nicely

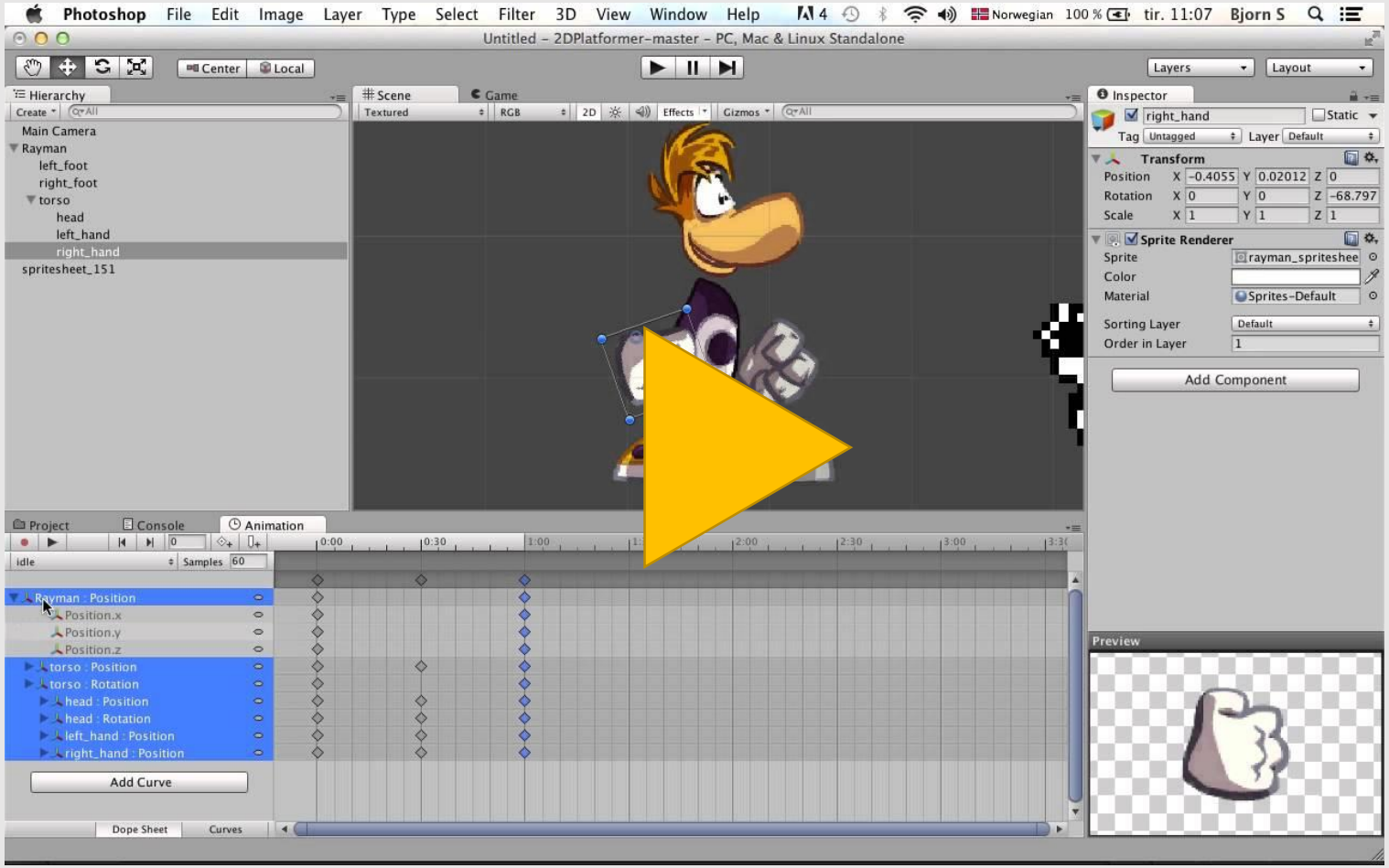




Animations Tutorial

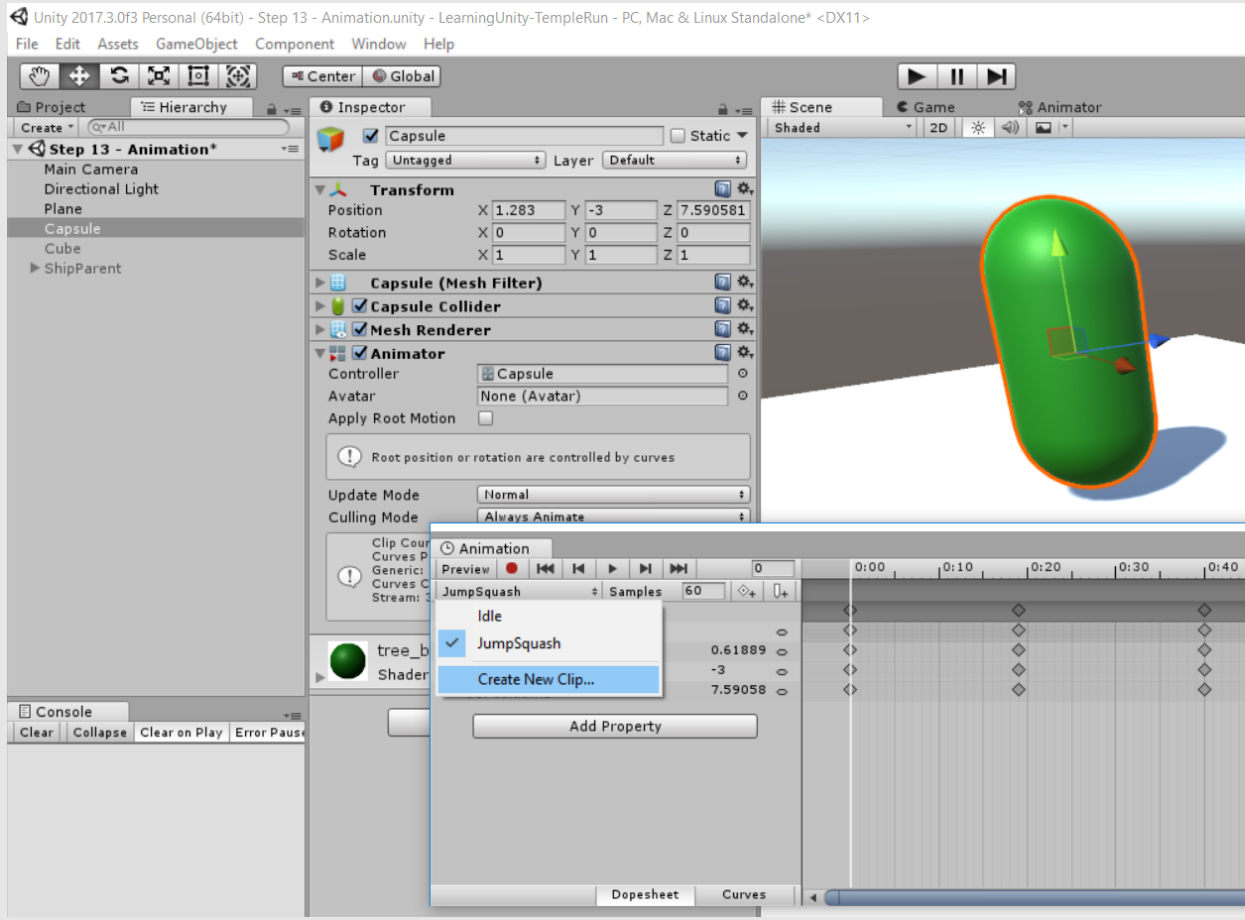


Keyframe Animation



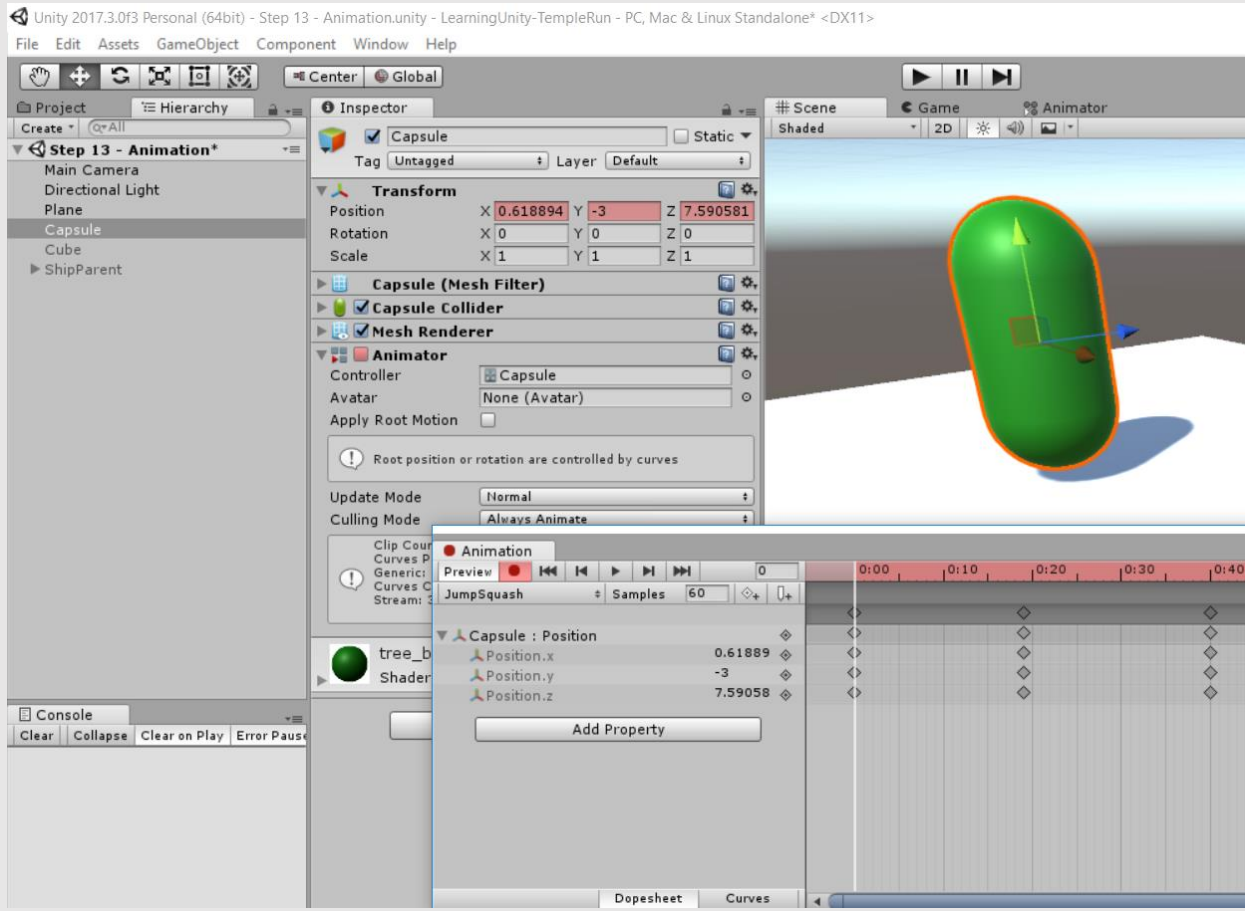
Animating in Unity

1. Click on a GameObject (in the hierarchy) you wish to animate
2. Open the Animation Window (Cntr+6 or from Windows menu)
3. Create a new Clip
4. Select the Property you wish to animate (position / scale / rotation / material / etc)
5. Go to a new keyframe position and set the values you wish to change



Animating Tips

- You can set values by:
  - changing the numbers directly
  - By using the Record button, and then change all the properties you wish to change. Unity will remember it for you



Things to Know

- Animations rely on the actual name of the GameObject they refer to and its place in the hierarchy. If you change either – the animation will break.

Best Practices for Animations

- For most cases, start and end all animations on the same element with the same values.
- Make sure you are confident with the hierarchy of your object before animating.

Questions and Exercises

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

- Make a Jumping animation for a cube
- Make the cube squash when it hits the floor

More Resources