# Animations

1. Animation using the transformation. Scale, rotate and translate.
2. Color animation
3. Door animation

## Frames

You may see that this screen is 30 frames per second. This you can define which creating the animation.

Let’s start with the basic animation. Drag and drop a sphere into the scene and apply any material to it. You can choose any material.

Graphical user interface, application

Description automatically generated

Applying the materail

A screenshot of a computer

Description automatically generated with medium confidence

Click on the **cinematics** this will allow you to add the animation to the object.

Add level sequence, is used if you want to you the animation inside one level.

Add master sequence, is used if you want to use the animation inside multiple levels.

A screenshot of a computer

Description automatically generated with medium confidence

Ones you click on the add level sequence it will prompt where you want to store the animation.

Graphical user interface, text

Description automatically generated

Lets say you save the animation. Ones you save that it will prompt the below pop up.

A screenshot of a computer

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Drag and drop that into the below window and it will be shown something like below

Graphical user interface, application

Description automatically generated

You can increase you animation period by click and then drag it will be increase you animation period.

Timeline

Description automatically generated with medium confidence

If you can see the animation period is increased.

A screenshot of a computer

Description automatically generated with medium confidence

Click on the object on which you want to add the animation and then click on the Track and click on the actor to sequence and finally click the selected object.

Chart, treemap chart

Description automatically generated

Ones you click and then you see various properties attached to this particular object.

Graphical user interface, text

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You can see the New Level Sequence.

Now Let’s first add the location animation and then add the rotation animation to it.

Text

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Below are the properties where you can see different feature to the animation.

Graphical user interface

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Let’s click on the + symbol of the animation and you will see a dot inside the sequencer.

A picture containing graphical user interface

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One you click on the final then you can see a line and finally click on the play button inside the sequencer and you will see the animation of the object.

Graphical user interface, website

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Click on the **New level sequence**, you will see the associated options below if you want to play the animation when you click on the play button then you can do by pressing auto play and you have bunch of other options as well which you can explore.

Graphical user interface, application

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You have this graph which you can use for rotation and location points if your default rotation is not working.

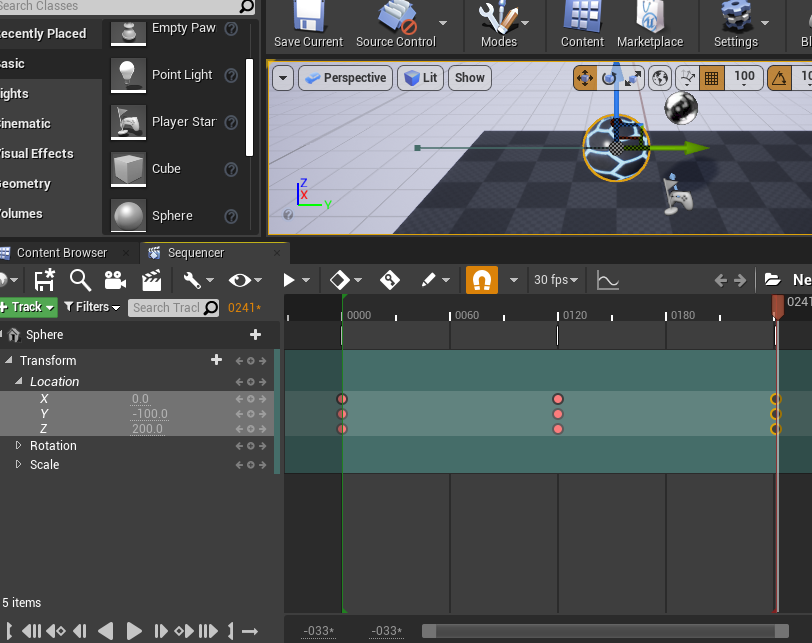
Graphical user interface, timeline

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Graphical user interface

Description automatically generated

Right click and then properties and you have bunch of other options to explore.



If you want to move the animation back and forth then you can add the key to its initial position and then you click on the middle one and finally you copy and paste the initial to its final and it will keep going from initial to find and you can create beautiful animation from the sequence.

## Second example

First create a material and save it. Let’s create a parameter for the material parameter collection.

A screenshot of a computer

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Graphical user interface, application

Description automatically generated

Create a new parameter by pressing plus and then gave a name to its parameter name and provide a value to it.

A screenshot of a computer

Description automatically generated with medium confidenceNow drag and drop into the material and there you see **Parameter Name** none changed it to the name which you created earlier. Now create a **hue shifter** **node** with the node with you created.

Graphical user interface

Description automatically generated

You material looks like something save this.

Now again create a new sequencer and then select the object and then add into the sequencer.

Graphical user interface, website

Description automatically generated

Then select that material which you created earlier.

Graphical user interface, application

Description automatically generated

Now you will see the parameter here.

A screenshot of a video game

Description automatically generated

You will see that your assign material value is shifted from the initial to other color now you can also add the other transformation to that material.

You can extend the material and then you can

Graphical user interface

Description automatically generated

Basically, you can create the material and then you can see what happen into the animation.

## Example Three

**Alt** and **middle mouse button** are used to change the pivot of the object.

Graphical user interface, application

Description automatically generated

You can set the pivot of the object.

Again create an animation for the door let’s go to cinematics and add to sequencer and then add that object to it and then add the key point for the rotation. Simple is that.

Now let’s add a trigger box which will result in opening of the door.

A screenshot of a cell phone

Description automatically generated with medium confidence

Graphical user interface

Description automatically generated

Click on the blueprint and then click on the open level blueprint.

Graphical user interface, website

Description automatically generated

Ones you click you will see something like this. Delete both and then select the trigger box from the scene and finally

A screenshot of a computer

Description automatically generated with medium confidence

Then, you can add the collision on which you want to trigger the event.

A screenshot of a video game

Description automatically generated with medium confidence

Created both begin and end events.

Create a reference to the animation, how it comes basically it comes when you select the animation which you created from the scene. And then select the play sequence player from the below blueprint.

A screenshot of a computer

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For reverse the animation, select the play reverse

A screenshot of a video game

Description automatically generated

Graphical user interface, application

Description automatically generated

Now let’s click on the play and see how it behaves.