

Topic Support Guide

Cambridge
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For examination from 2017

Topic 17 Animation

Task 4 – Tweens, opacity, coordinates and exporting

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Animation task – A space animation

Part 4. Adding the Shooting Star, changing opacity, exporting and understanding coordinates

Add a Shooting star using a motion tween

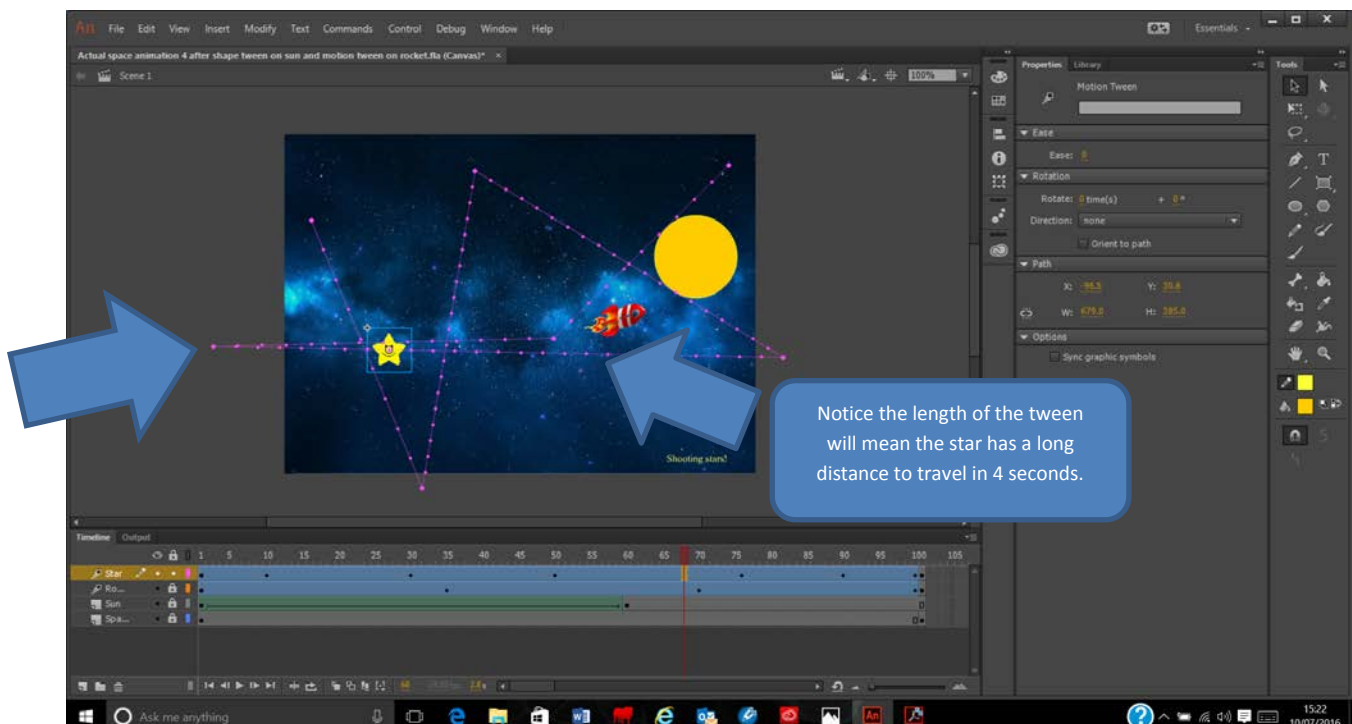
Adding the shooting star should now be possible as you can follow the same process you used when you added a **motion tween** to the rocket which is covered in *guide 3*.

To recap:

- Lock out the layers you do not wish to edit to prevent accidental editing. In this case the space background, rocket and sun should be **locked**.
- Insert a **key frame** at frame 100
- Right click on a **frame** in between 2 and 99 and select the **create motion tween** option from the menu
- Next you need to add some **positional** points for the star to follow. Don't forget each time you add a positional point you also need to actually move the star with the selection tool.

Tip: This time add 5 or 6 points. As the animation is very short the more points you have and the more distance between them will force the star to have to travel quickly. It is a shooting star after all!

- Once you have completed the stages above then your animation will likely something like this.



Tip: When looking at the layers there is a lot you can see without having to play them. Look for arrows and different colours on the timeline, as this can reveal a lot of information as you get more experienced.

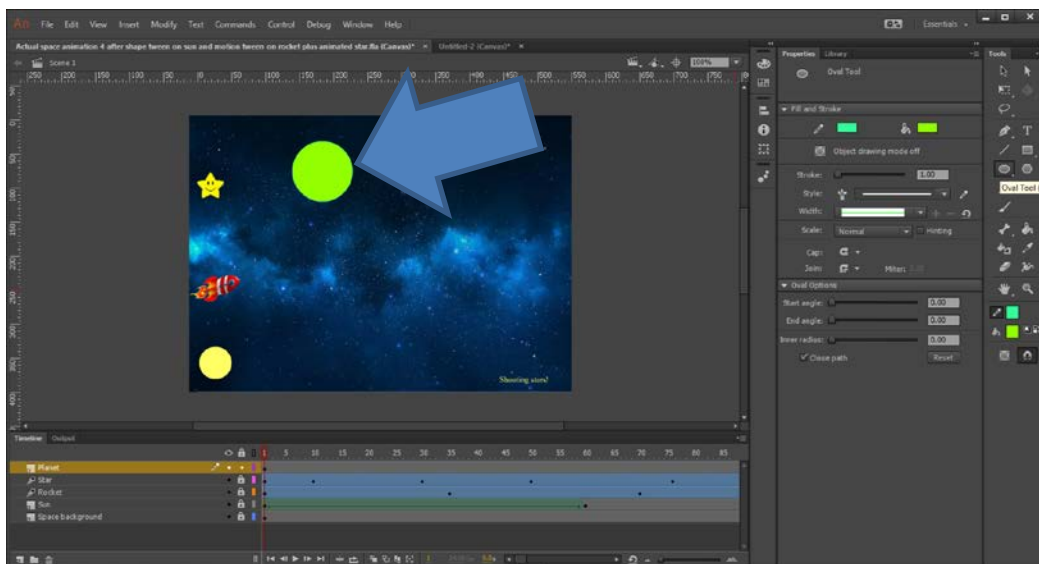
Tip: Notice in the picture above, that the star goes off the stage on the left hand side. This will mean that the star will appear to disappear when the animation is played. This can be a useful tool when creating certain effects.

Opacity

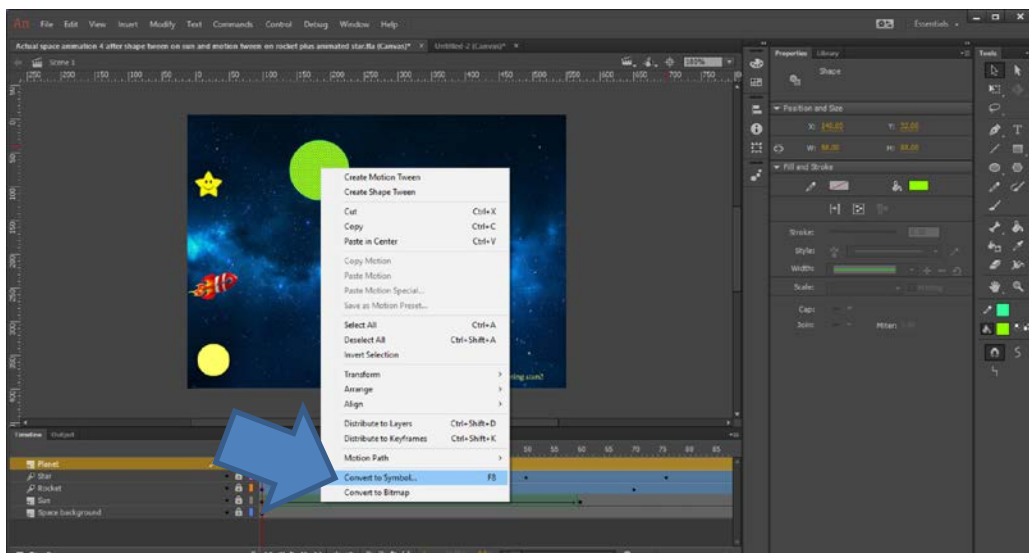
Opacity can be described as how **transparent** an object appears. This is very useful to animators, as opacity can be used to make an object fade in or fade out, or make an object appear or disappear on the stage. Virtually all animation software has this functionality included.

Adding a planet which fades by changing the opacity

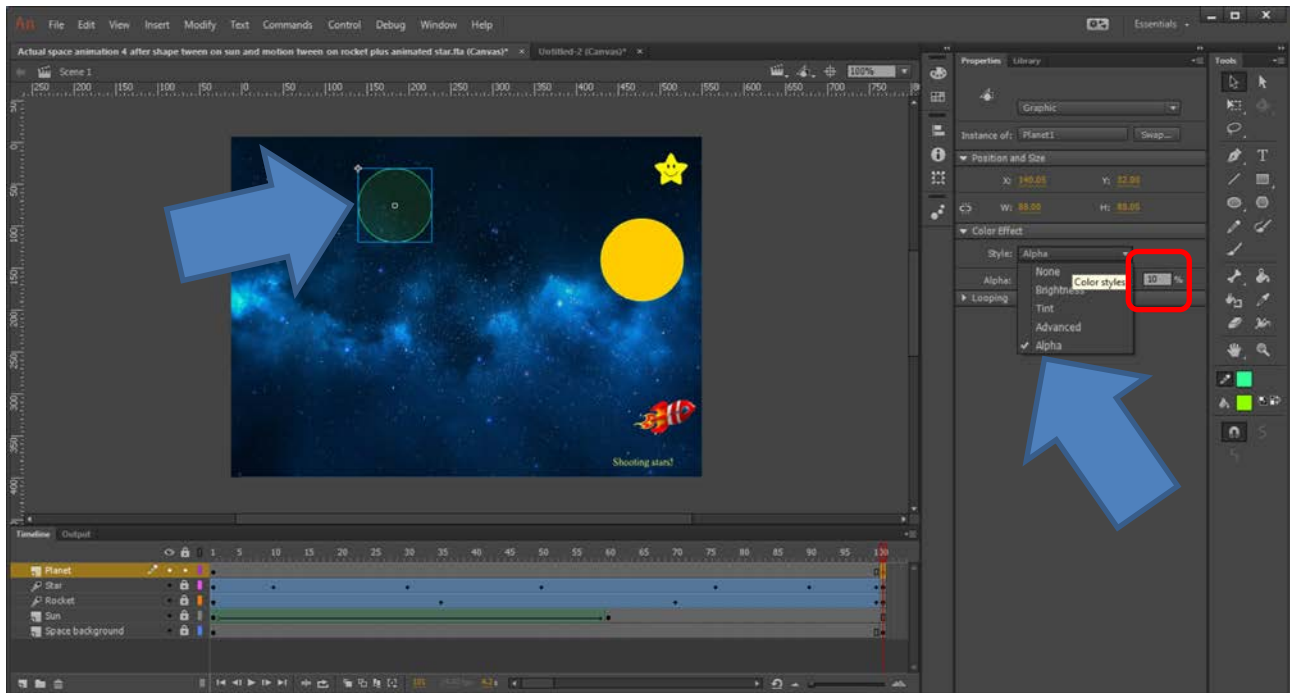
Add an extra layer to your animation called 'Planet'. Then insert a coloured circle to represent a planet. It should look something like this.



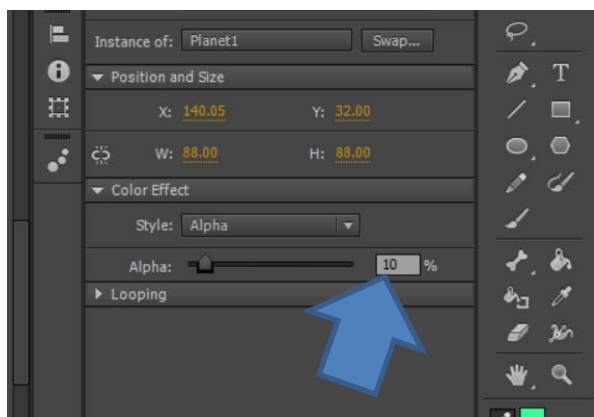
Use the selection tool to select your planet and then right mouse click and **convert it to a symbol**. Give the symbol a suitable name. e.g. 'Planet'.



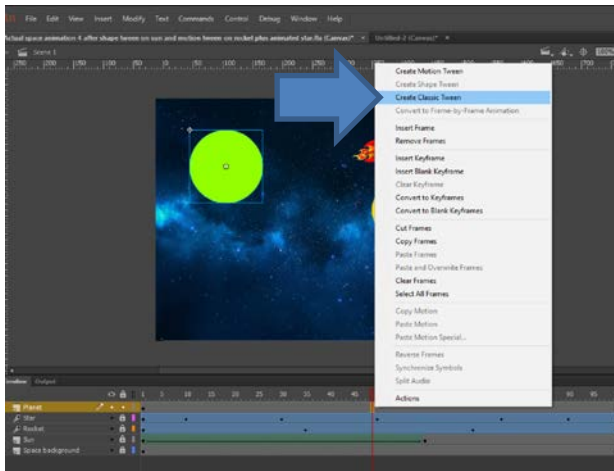
Next click on frame 100 in the planet layer and insert a **key frame**, then use the **selection tool** to select the planet. On the right hand side of the screen you will be able to see the **properties** of the planet. On the **colour effect section** click on the drop down box on **style** and select **alpha**. Alpha may be described as **transparency** in other animation software.



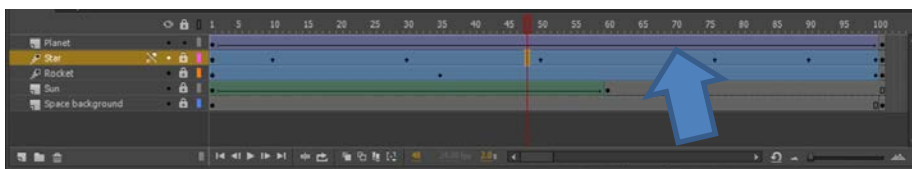
Then reduce the number in the box to **10%**, or use the slider below it. The result is a planet object in frame one with an alpha value of **100%** (as we didn't adjust it) and in frame 100 it has been reduced to **10%**. This will have the effect of making the planet look as though it is fading away.



The next stage is then to get the animation software to create all the frames in between, gradually fading the planet over the 100 frames. In order to do this, simply select one of the frames between two and 99 (in this example frame 50 has been selected) and right mouse click. Then from the menu select **classic tween**.



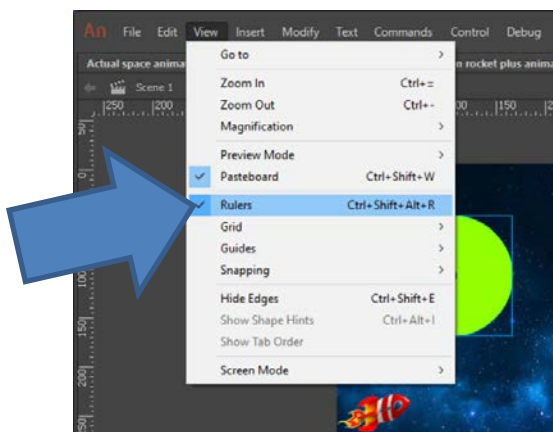
Once you have added the **classic tween** the layer should have a long arrow from frame one to 100 indicating that the classic tween has worked.



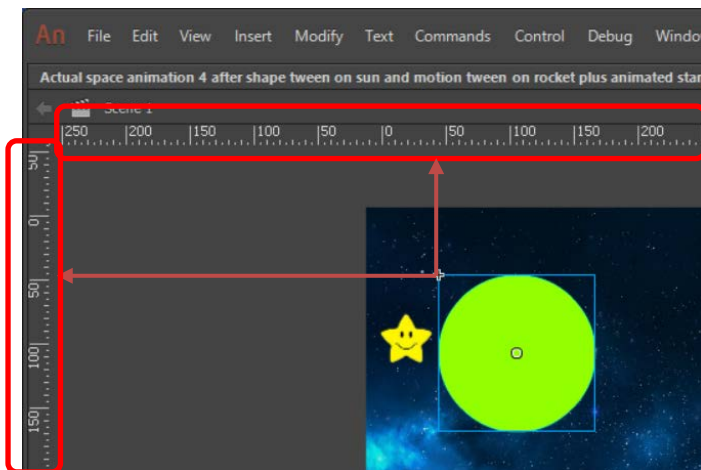
Coordinates

On some occasions it is useful to be able to know or give the coordinates of an object within your animation. Perhaps you are discussing an animation and want to tell someone where an object should be placed more precisely? You can do this through expressing the position as a set of coordinates. When using **coordinates** it is useful to add the **ruler** to the screen as this will help you if you wish to place an object at a particular coordinate.

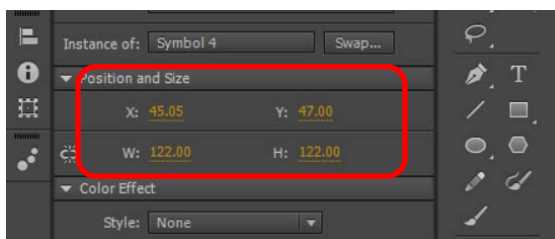
To do this, click on the **view tab** and then select **ruler** from the menu as seen in the picture below. This will then add a ruler to the top and the left side of the screen.



Using coordinates in the software is no different to the way places are located on a map using a grid reference, or how you would plot results on a graph. So the ruler allows you to see both the horizontal and vertical position of an object on the stage.



Let's look at our planet for example. Use the **select tool** to click on the planet to view its properties. You can see the coordinates of the planet are displayed in the properties area on the right. In this case the X value is 45.05 and the Y value is 47.00. This represents the horizontal and vertical coordinates respectively of the top left hand corner of the symbol.



Notice that the properties information also gives the width and the height of the object, which can be useful for the animator to know.

If you need to indicate where you would like to place an object on the stage to a third party, using coordinates ensures that they can do this easily and accurately.

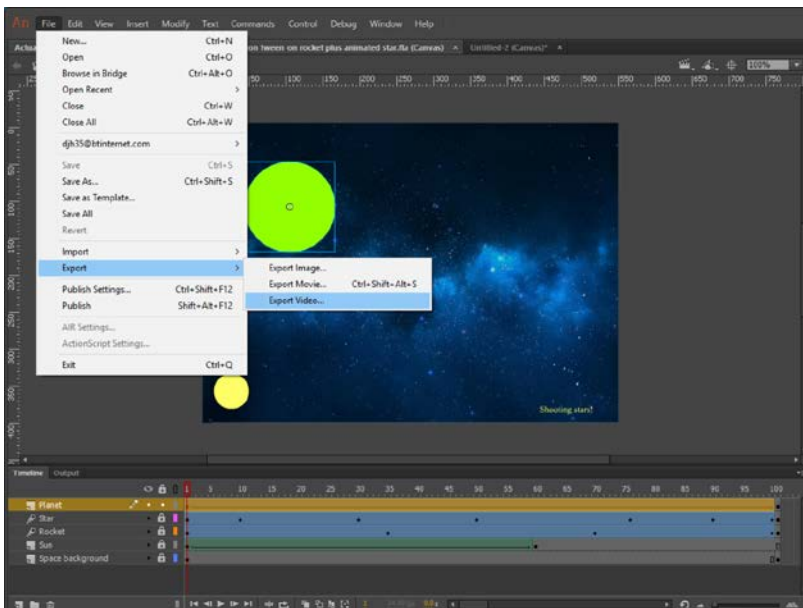
File types and exporting

Animation software comes in many guises, and in most cases animation software produces its own proprietary **file type** and **extension** when a project is saved. For example, Adobe Animate CC files have the extension of .fla, Serif Draw Plus have the extension of .dpa and Synfig .sif.

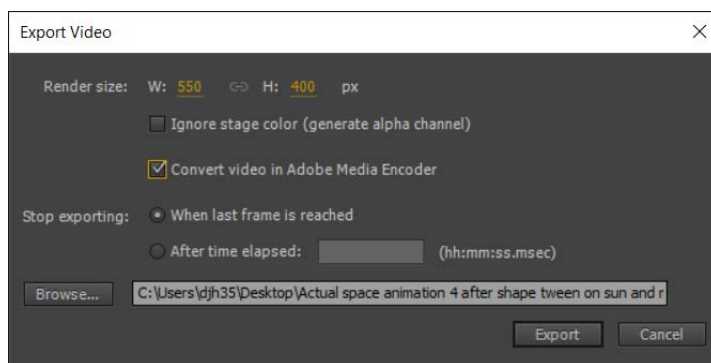
However, animations can be exported in various formats to allow them to be viewed independently of its proprietary software. **Exporting** is therefore a vital part of the animation production process, as it allows the animation to be viewed on a web site, or on a mobile phone, tablet, smart television or a computer for example. The exact settings for export are therefore dictated by the end use and device it will be viewed on.

Animations viewed through web browsers may also need to have **plug ins** to allow them to be viewed. An example of this would be Flash animations, which used to be a very popular format until mobile browsers no longer supported the plugin. Many animations are exported as video file formats, which are more widely playable on modern browsers without additional plugins and software being needed.

In Adobe Animate CC to **export** the animation, click on **file** and then **export** as can be seen on the screenshot below.



Once export has been selected it will launch a new window where the settings can be adjusted dependant on what exactly is required for its end use.



You have now completed the task. Remember to save you work.