Stop Motion Animation Workshop 4
Editing

There are so many different editing programs out in the wild that I couldn't really put together a guide for all of them.

So, what I will do is cover the basics that all decent video editing software packages can do.

Basically, a video editing program will allow you to:
• Put together video clips, be able to change and cut those clips.
• Add sounds, be able to cut and change the sounds.
• Add pictures and be able to cut and change the pictures.
• Add titles and credits.
• Export it all as a final edited video.

Some packages will be aimed at professionals and have all the bells and whistles, others may just have the basics, but they should all be able to do the above stuff.

Just some of the more popular video editing packages include:
• Adobe Premiere - Windows & Mac (Premiere Rush for iOS & Android)
• Final Cut Pro - Mac
• iMovie - Mac & iOS (FREE!)
• Cyberlink Power Director – Mac, Windows, iOS & Android
• Corel Video Studio - Windows
• Pinnacle Studio - Windows
• InShot Video Editor - iOS & Android
• Kinemaster - iOS & Android (Particularly good on Android)
• VivaVideo - iOS & Android (Great for short clips)
• VN - iOS & Android (FREE!)

There may well be free versions of the paid for packages but be aware they are taster versions and will have some restrictions on their use, they may produce watermarked videos or be time limited.

It pays to do a bit of research to find out which would be the best for you. There are 2 genuinely free video editors iMovie for Apple devices and VN which can be used on iOS and Android they are both very good but quite basic, VN allows you to do a little bit more than iMovie.

Some of these packages will also allow you to animate within them, setting keyframes for certain properties.

I'll be using Final Cut to show you the basics in editing and if you are following via the Animex Academy video I would encourage you to pause often, find where the equivalent tool or process is in your editor and experiment with it so that you know how to use it before carrying on with the video.

So, let's look at the basics.

Layout

Assets　　　　　　**Playback**　　　　　　　　　　**Properties**
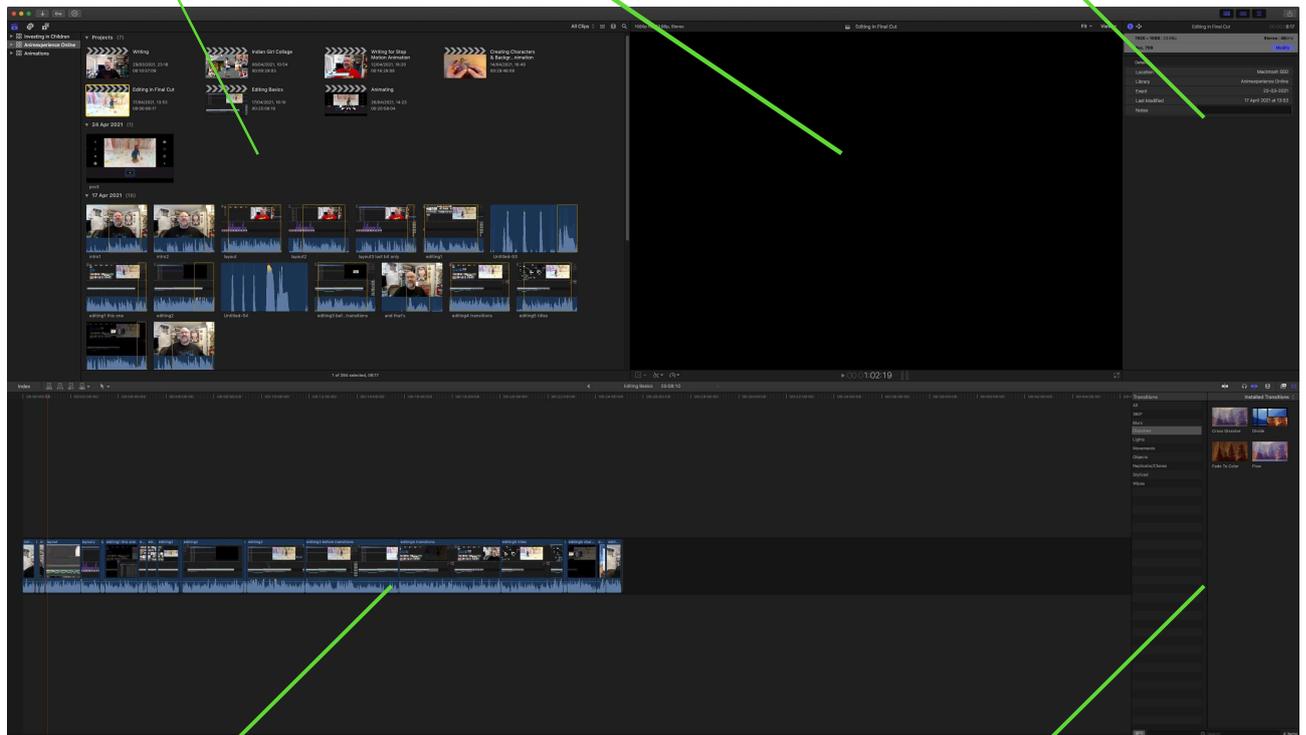
Timeline　　　　　　　　　　　　　　　　**Effects & Transitions**

Your App or Package may have a slightly different layout or a different way of accessing these areas, but they should all have something similar.

The *Assets* window will hold all your video clips, sounds and images.

The *Playback* window is your main view of whatever video you have playing.

The *Properties* window will be a place where you can adjust scale, position or rotation or adjust any other effects applied to a clip you have selected.

The *Timeline* is where all your clips, sounds and images are joined together.

Effects are ways of changing assets in different and interesting ways like changing colours, keying out colours or adding lens filters.

Transitions are different ways of joining clips together, such as dissolving one clip into another or having clips blurring or rotating into the next clip rather than just simply cutting from one clip to another.

In Final Cut there are also some other useful features that may be in the package you are using, so it would be worthwhile finding out where they are:

Titles and Credits.
Sound Effects and Thematic Music.
An ability to record sounds directly onto the timeline.
An ability to layer clips on top of each other, this is especially useful when adding layers of sound to create depth or layering video in artistic and creative ways.

This line that shows progress along your timeline and is called a Playhead Marker or a Timeline Marker, in Final Cut you can grab this and drag it left and right along your timeline. This is known as Scrubbing.
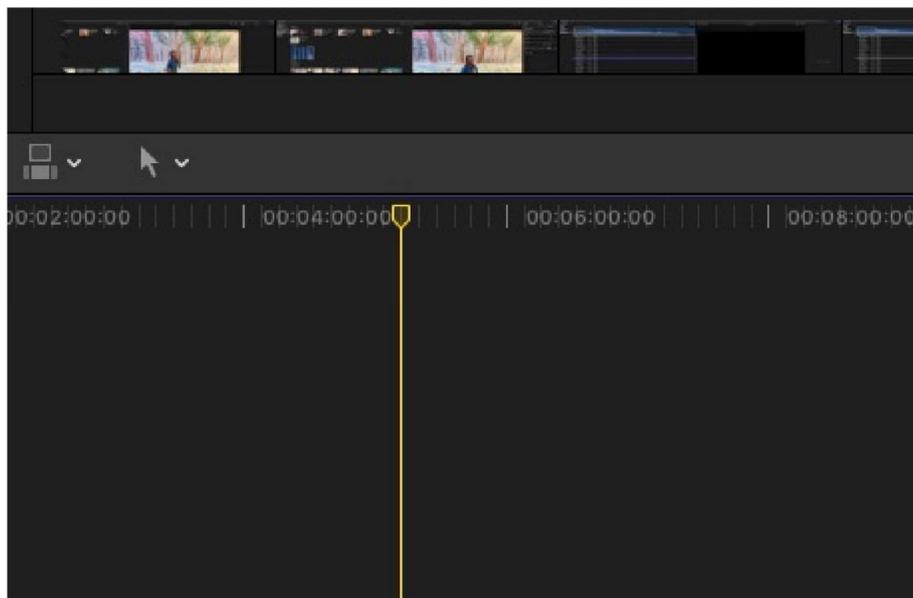
Editing

We start editing by importing our clips (scenes) into the app or software from wherever you have your clips stored and then placing them on the timeline, importing clips into the program should preserve your original videos, images or sounds.

You can move clips around on the timeline and change their order as well as placing them in layers, altering the order of your clips can lead to some interesting changes to your story and is definitely worth trying.
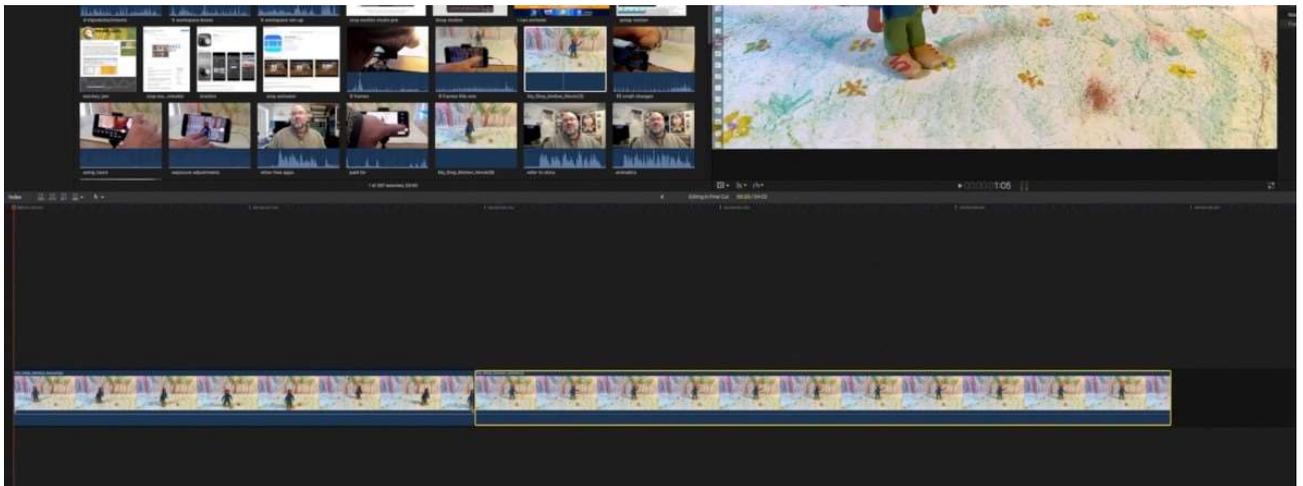
Once clips are placed on the timeline you can trim the ends to remove any parts of the clip you don't need, in Final Cut that is done by moving the mouse to the end of the clip and then clicking and dragging to adjust where the clip either starts or ends.

Because our clips are animated then we possibly don't need to edit them to remove anything we don't want, that's because when you generally make animation you don't animate parts that you are later going to get rid of, that would just mean a lot of your precious animating time would have been wasted!

What that also means is you can't extend the clips beyond their end, what you would have to do to make it longer is stretch the animation in other words make it run slower. That can be done in Final Cut and you might need to do it to exactly match up sounds with animation. This stretching is also known as re-timing, so you can either make your clip run faster or slower. This can also be done to sound clips where speeding up would make speech sound like a chipmunk or slowing down would make speech very deep and slow.
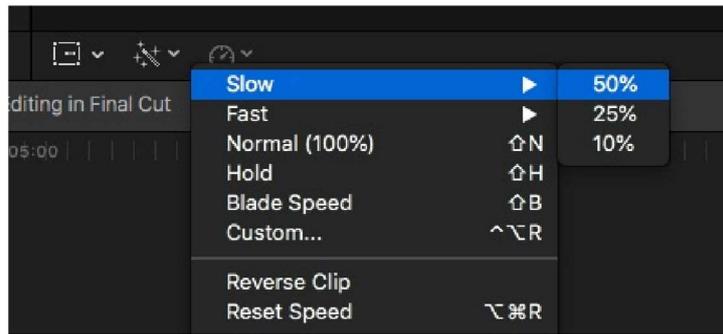
Sound clips can be also edited in the same way as video clips - you can see this sound clip shows the audio waveform and it has a silent bit at the start that we want to remove or trim off. Moving the mouse to the beginning of the clip and then clicking and dragging we can remove this silent part.
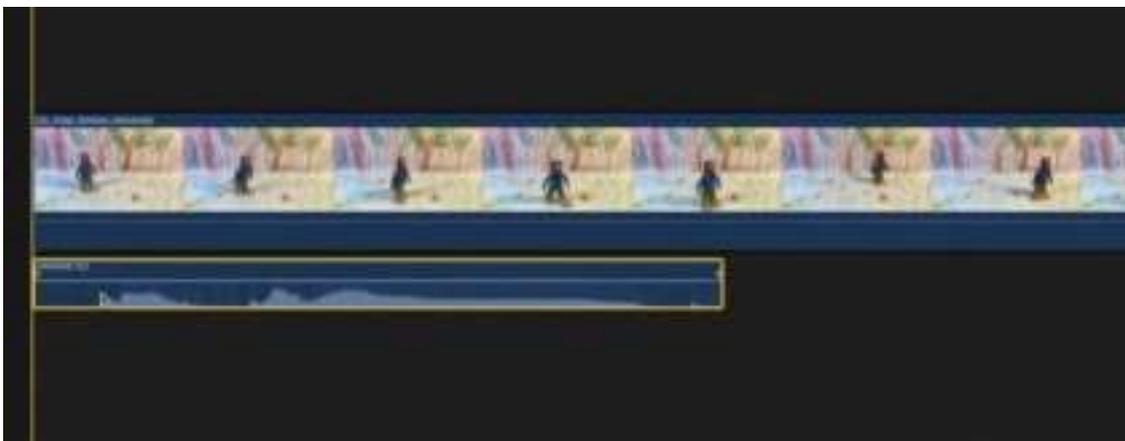
Once the clip is trimmed, we can move it to start at the same time as the video clip above matching the sound to the action in the animated clip.

Using a Blade tool clips can also be split into separate clips to be used as any other clip would.
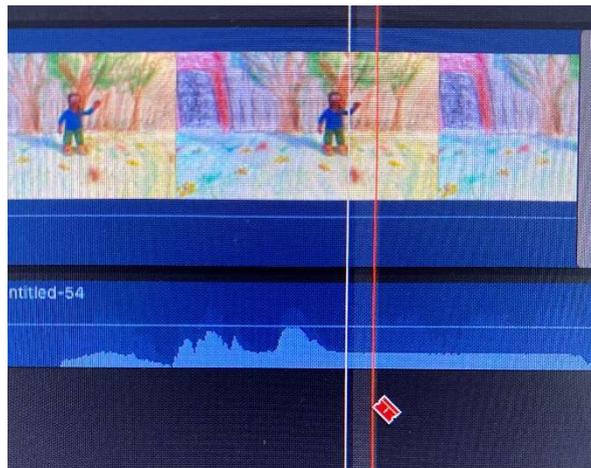
Final cut also allows sound to be recorded directly to the timeline as long as you have a microphone - this is done by opening up a Voiceover recorder window.
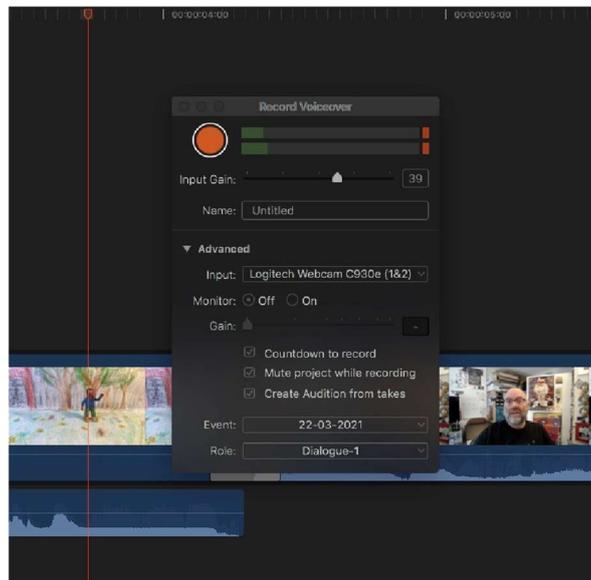
Sound is recorded after pressing the red button and the sound clip produced is then placed on the timeline where the timeline marker is positioned. The green bars show how loud the sound being recorded is, if they go red then the sound is too loud and will be distorted likewise you don't want to make it too quiet.

Effects can be added to any clip and Final Cut has a wide selection of different effects that can be used and they are split into 2 main groups Video and Audio. Once a clip is selected in Final Cut you can preview how Effects look in the main playback window and double clicking on the Effect applies it to the clip.

Audio effects are applied in exactly the same way, highlight the clip, preview the effect and when you find the one you want double click it and it's applied to the clip.
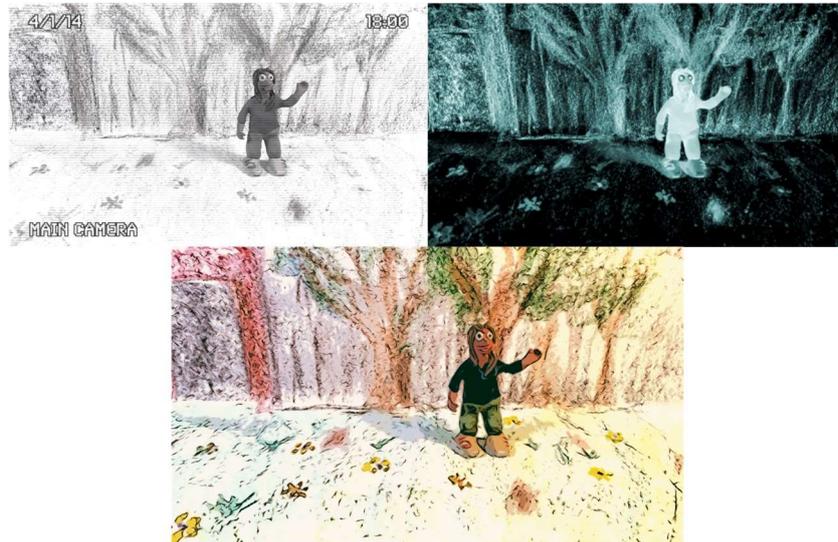
Also 3rd party Effects can sometimes be bought separately that will simply plug in to your editor.

All Editing programs should have some effects already though and that is particularly so when it comes to colour correcting, where you can adjust the exposure (brightness and contrast) or the colour grading of your clips and be able to match them with other clips or each other if clips were filmed in different lights.

Clips can also be changed by adjusting their properties -
Scale - this could be used to zoom into a clip.
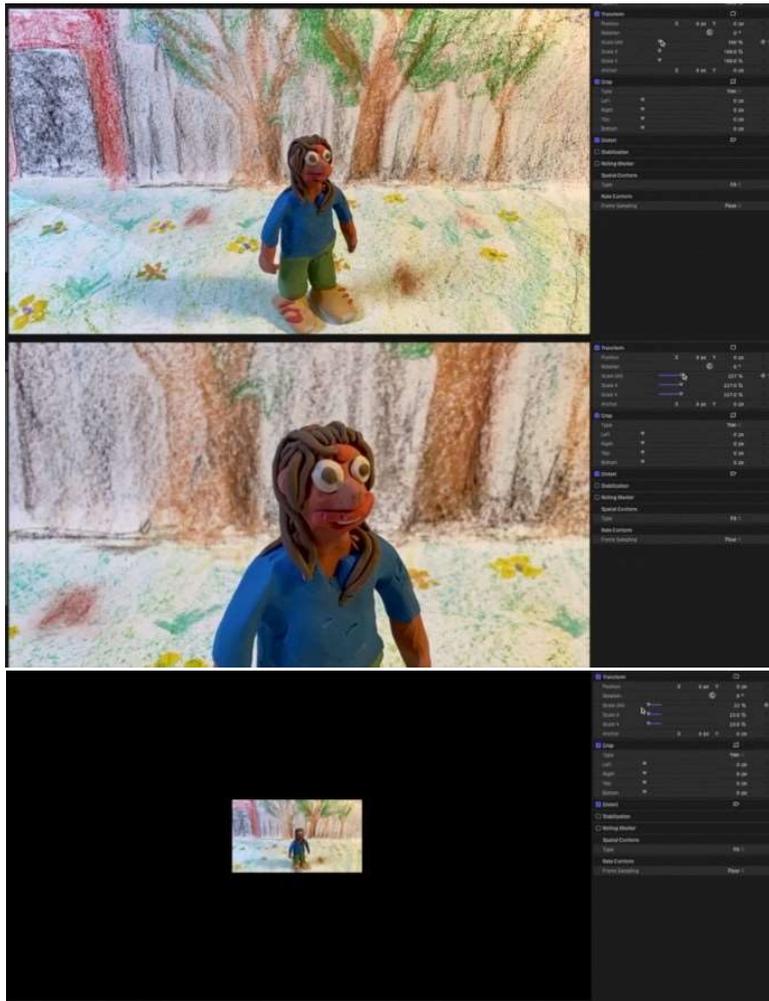
Scaling below 100% will reveal whatever layer is underneath the clip, here we don't have anything in the layer below so it just reveals black. Scaling clips smaller can be used to achieve a Picture Within a Picture effect, the smaller clip can be positioned anywhere around the screen.

The rotation of a clip can also be adjusted.

Very often in the editor you can animate these properties so they change over time by setting a keyframe with the property at one point on the timeline then moving further along change the property and set another keyframe, what you then get is a changing property over time so if it was a change in the rotation property you would see your clip going round in a circle. Great for creating a spinning headline effect!

Transitions

Final Cut has many different types of Transitions that include Dissolves, Wipes, Blurs and Motions.
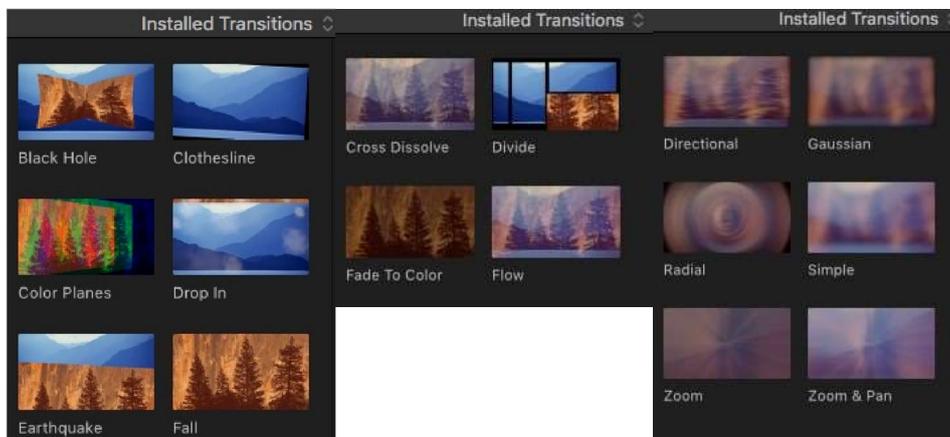
Above is just a small selection of the Transitions available in Final Cut
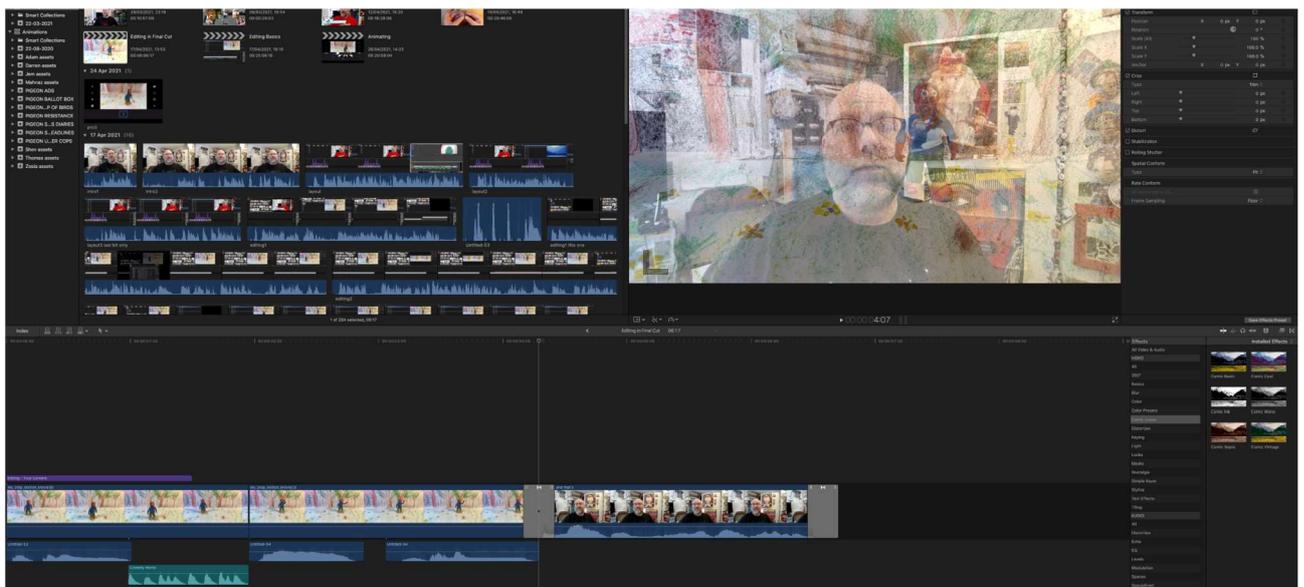
As mentioned earlier a Transition is simply a way of joining clips together in interesting and creative ways that is different to just having clips cut from one to another. Above is an example where one clip is dissolving into another. These transitions are usually dropped in-between 2 clips and the program works out how to join them together. Transitions should also be editable in that you can make them shorter or longer.

Audio Transitions are sometimes known as Crossfading.

Adding Titles & Credits

Final Cut has many pre-made titles & credits that you just add your own text to and can adjust the properties of.
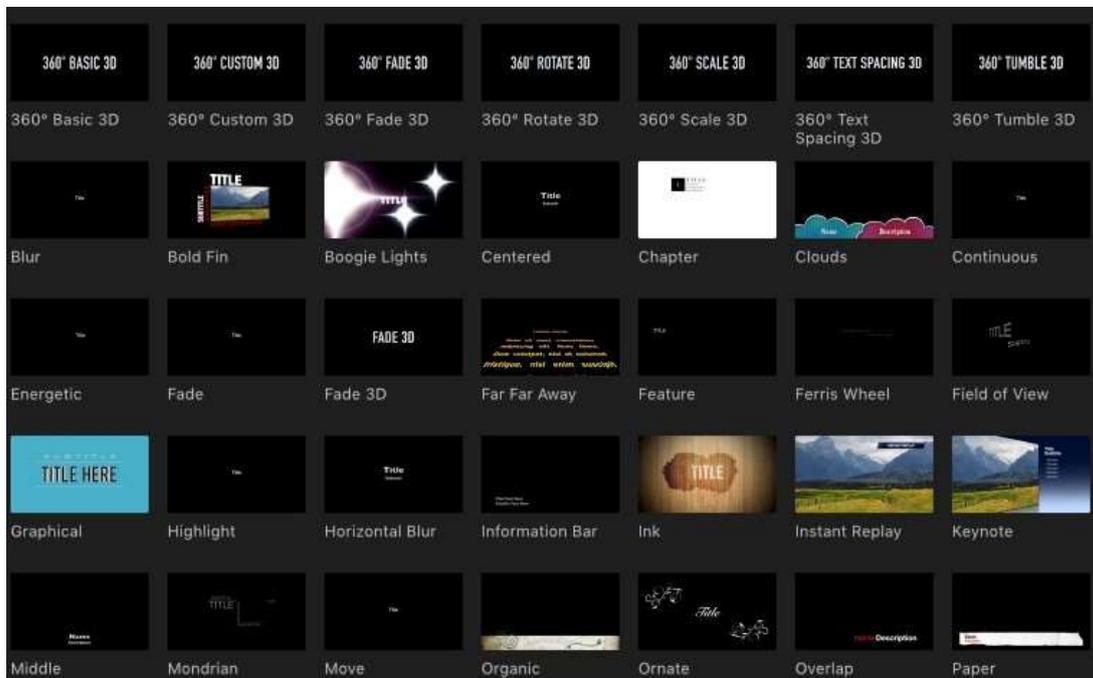
Once you have chosen the style, you want you drag it onto the timeline. Trim its length to adjust how long you see it for and move it around as you would any other clip.

In Final Cut the text can be added in the Playback window where you highlight the text as you would in any writing program and type in the words you want.

You can also change the font or colour used as well.

Sharing

When you've finished editing you'll want to export or share the final video. In Final Cut we choose File>Share>Master File from the menu bar and that opens a pop-up window where we can alter some settings for the exported video.
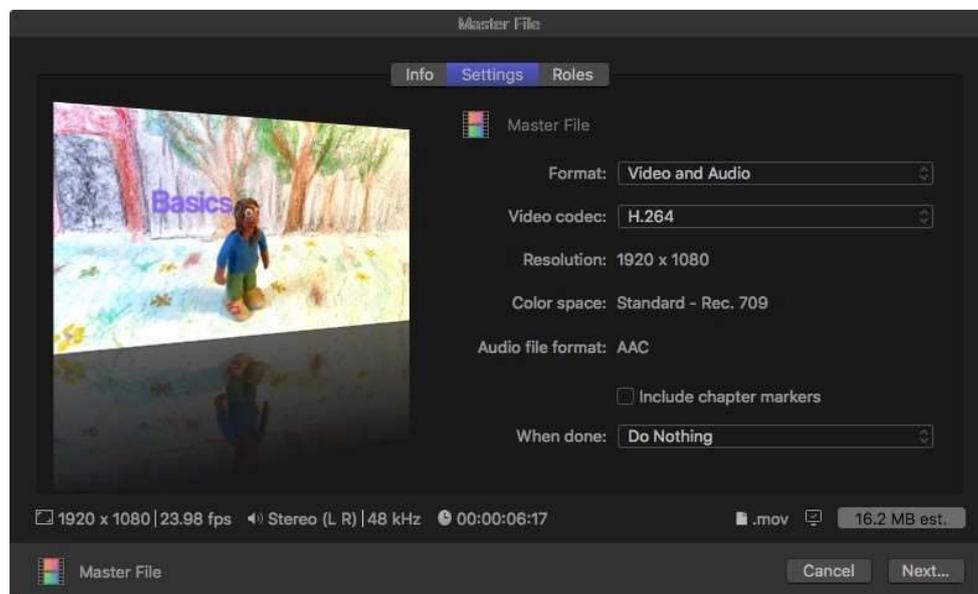
We can choose to export the video with or without sound or export just the sound. When you export the video it will be encoded (using a Codec) to be played in most video players like Quicktime or VLC Player and you can change

what coding is used in that video file, this also affects the quality of the final video and will also alter the file size of the exported video. If you export the

video using professional standard Codecs like Apple ProRes then the final file size will be very big.
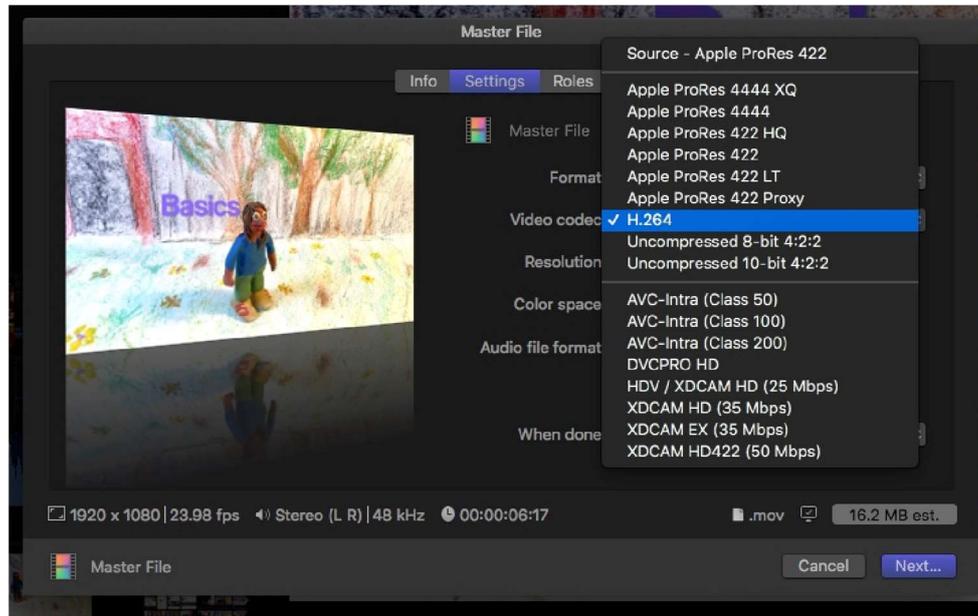
I'm selecting H264 which is a video standard and is used very widely because it has fairly good quality HD video image and the file size will be relatively small.

Very often if you are sharing from a mobile device or a tablet the final video will be encoded in a way that it can play back on that device so it may not give you a choice at all.
Some devices will also allow you to export in a format ready for social media.

So that pretty much covers the basics of editing, where you can put together your animated scenes or clips, bring in sounds and images, transition between clips, trim them, add effects and change colours, change sounds, add titles and credits and share the final finished animation.

That's the last of the Animex Academy Workshops for now and I hope you've found both the videos and the worksheets helpful in creating your marvellous animated masterpieces!

Thanks!

Written and prepared for Animex Academy by Robin Webb © 2021 Teesside University