

# Assignment 04: Basic Editing in Final Cut Pro X

Due **May 11th** at the beginning of class.

*Note: as with Assignment 03, you will submit your Final Cut Pro X **Library** file, containing all media, events and projects related to this assignment. For this assignment, you will also hand in an exported **video file** of your finished product.*

*You should be creating the Library for this assignment on **your own external hard drive** and working from there. If, as a last result, you are forced to work on the internal drive of the computer you are still responsible for copying your Library to **your own external hard drive** for storage and safekeeping. If you take this route, please remove the local copy of your library after you have confirmed the updated version has been saved on your **own external hard drive**.*

## Introduction

In this assignment we will simulate a basic single-camera edit like you might assemble for an audition tape or recital video.

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### 1. Create a new Library

- Open Final Cut Pro X
  - If you are greeted with a startup screen offering you to create a new library, choose that option
  - If the application opens to someone else's library (or libraries), close them. You should be left with a completely blank environment.
  - To close an open Library, right click on it in the Browser and choose "Close Library *Library Name*"
- From the **File** menu, choose '**New > Library...**'
  - Use the class convention for your library name **(/1)**
    - Example: 646-007\_A\_Assignment04\_Ardagh\_Mike
  - Save the library in an appropriate location on **your own external hard drive**. If you can't work from your own drive, work on the local hard drive but be sure to copy your library to you own drive afterwards and the delete the local copy from the lab computer.
- Final Cut will create your Library, and within your Library it will create an event. The event will automatically be assigned today's date. All of this is visible in the Libraries column of the Browser (at the top left of the Final Cut environment).
- You can rename your event by clicking on it in the Browser and pressing Return on the keyboard. Rename your event to '**Assignment 04 - Basic Edit**'. **(/1)**

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### 2. Import Media

- Click on the **Import Media** icon in the browser, or on the Import icon on the far left of the main toolbar. This will open the Media Import window.

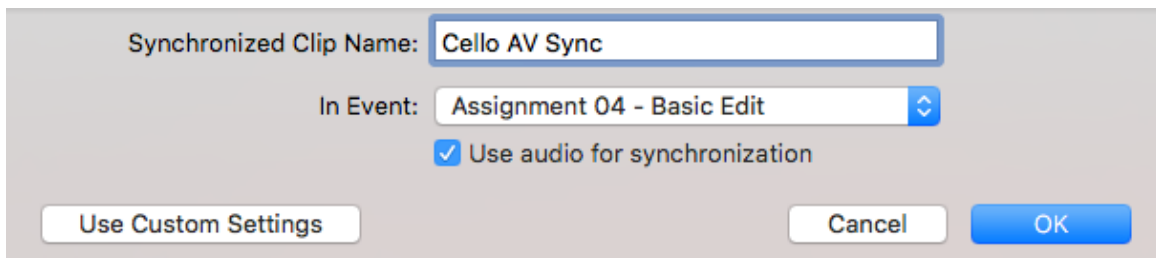
- Using the **Devices** area on the left side of the window, and the file browser in the bottom of the window, navigate to wherever you downloaded your Assignment 04 files to.
- Double click on the '646-007\_Assignment04\_Media' folder
- Click **Import All...**
- A window will pop up offering you some import options - Final Cut has some useful features available to us here:
  - At the top of this area you can choose which Event to import your media into. It should default to your '**Assignment 04 - Basic Edit**' event but if not, choose this event from the dropdown menu. (/1)
  - Below this, choose **Copy to library** (/1)
    - This step is critical, and ensures that your files will stay with your library as you move it around between drives and eventually hand it in
  - Under **Audio**, select **Separate mono and group stereo audio**
  - Deselect all other options
- Press **Import**

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### 3. Synchronize Clips

Final Cut Pro X has a very handy feature for synchronizing audio and video clips. In this assignment, we have an **audio** clip which is the 'Final Mix' for this performance. It been cleaned up in Pro Tools, and made a little louder. We also have a video clip of the performance. The key feature here is that the **video** clip still has the original built-in camera audio attached to it. Final Cut can compare the *Final Mix* audio file and the *built-in* audio from the video file and use this information to automatically sync the two clips.

- In the browser, select both the Cello video file and the Cello - FinalMix clips
- Right click, and choose **Synchronize Clips...** (*option + command + G*) (/1)
- The following dialogue will appear



- Call the clip "**Cello AV Sync**" (/1)
- Make sure that the clip will be created within your **Assignment 04 - Basic Edit** Event
- Make sure that '**use audio for synchronization**' is selected
- press **OK**

We have now created a new video clip which contains both the original audio AND the Final Mix audio. That is a great start, but we don't actually want the original, built in audio to play back.

#### To disable the built in audio:

- Select the newly created, 'Cello AV Sync' clip in the browser
- Open the inspector (2nd icon from the right on the main toolbar or *command + 4*)

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- The inspector shows us important info about our clips in Final Cut
- Navigate to the 'Audio' tab at the top of the inspector
- Expand the **Channel Configuration** menu by hovering over it and clicking 'show'
  - *Note that 'show' only appears while your cursor is overtop of the menu bar itself*
- Your inspector should now look like figure 1 below

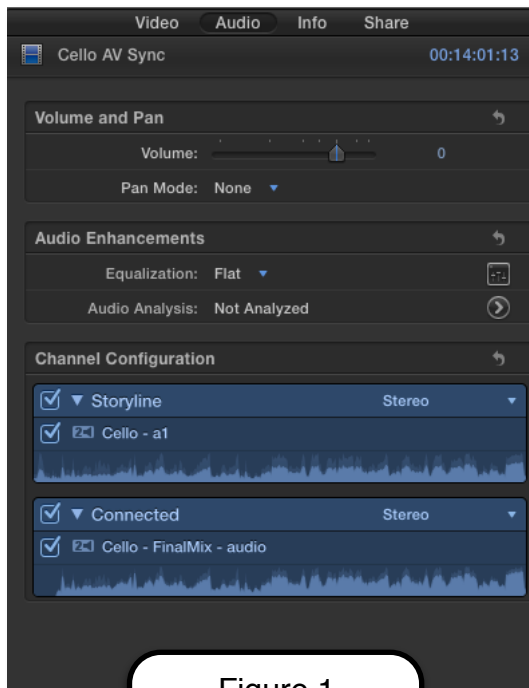


Figure 1

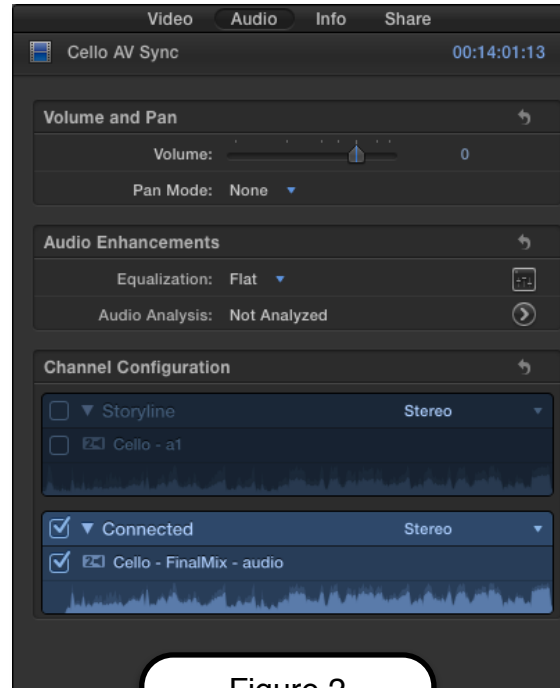


Figure 2

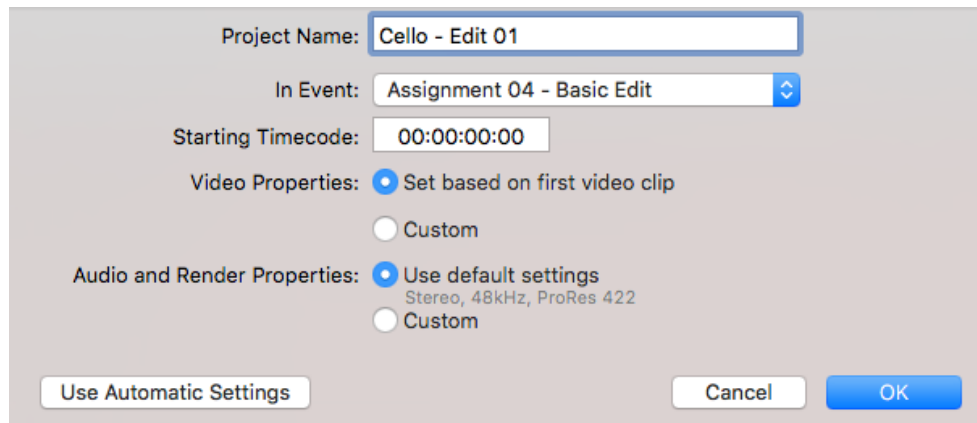
- Note the two independent blue waveforms. The first, entitled 'Cello - a1' represents the built in audio from our original video clip. The second, entitled 'Cello - FinalMix - audio' represents the audio that we want to play back when we watch this clip.
- To turn off the built in audio, deselect it by clicking the checkbox beside its name
- Your inspector should now look like figure 2 above (/1)

## 4. Create a Project

As previously mentioned, a **Project** is like our 'Final Edit' from previous Pro Tools assignments. We are going to create a project for this clip so that we can edit it and add transitions and titles.

- In the timeline area (the bottom of the Final Cut environment), click **New Project**
- Name your Project '**Cello - Edit 01**' (/1)
- Choose **Use Custom Settings**, and match your settings to those in the following screenshot

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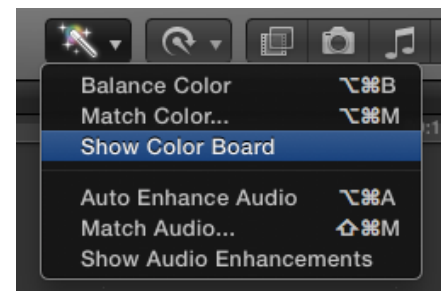
- Add the 'Cello AV Sync' video clip to your Project by selecting it in the Browser and pressing **E**, or by dragging it into the Timeline. (/1)
- Press play and make sure your audio and video are in sync!

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### 5. Colour Correction

Final Cut allows you to edit the look of the video just like you might edit images in iPhoto or Photoshop. This video is shot in Mazzoleni Hall, and the warm lighting makes it look just a little over-saturated. Let's see if we can help this out with some colour correction.

- Select your clip in the timeline
- Under the **Enhancements Menu** (the magic wand icon in the main toolbar), choose **Show Color Board**
- The color board should appear in the inspector area
- At the top of the color board, choose '**Saturation**' to reveal the controls for that aspect of the image
- In the lower area, select **Global**
- Using the large puck/slider to left of the colour graph, reduce the global saturation until you think the image looks more natural (I found a value of -10% pretty reasonable - a little goes a long way here) (/2)



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### 6. Reposition the Clip

Now that our clip sounds good and looks good it is time to compile our edit. You'll notice that when media is added to the project timeline in Final Cut, it automatically 'snaps' to the beginning. This is because the FCP X timeline behaves somewhat like shuffle mode in Pro Tools. It won't let you create space before/after/between clips unless you explicitly tell it to. Even when you do create space before/after/between clips in Final Cut, this space is essentially filled by an object. This object is called a 'gap'. A gap isn't the absence of a clip, but rather a clip with no visual content in it. It will rendered as a pure black image when left on its own.

Gaps can be very useful, particularly when creating title screens which is what we are going to do next.

- Switch to the position tool by pressing **P**
- Select your clip in the timeline
- Drag your clip to the right to create a gap before it
  - As you drag the clip, you will see a little counter which displays how far you have dragged your clip, **example: +01:22:09**
    - The '+' sign means you are moving a clip *later* in the timeline
    - The first 2-4 numbers represent minutes/seconds (depending on how far you drag)
    - The last two numbers count frames
- Add a gap to the beginning of your edit that is exactly 03:00 seconds long (**/1**)

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### 7. Add a Title

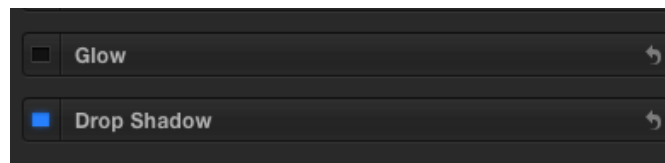
Since this gap is kind of like a clip, we can connect things to it (much like you connected your audio to your video in Assignment 03). We are going to connect a **Title** to it, which will display text over top of the black video of the gap.

- In the main toolbar, click the **Titles Browser** icon (the big letter T)
  - This will open up a list of different, pre-styled titles for you to choose from
- Choose '**Basic Lower Third**' by clicking on it in the browser and dragging it on to the beginning of the timeline, above your gap (**/1**)
  - As a side-note: I recommend the more *subtle* title styles in Final Cut. They not only look classy, but they won't eat up your computer's resources as much as the 3D titles.
- As you drag the Title over the clips in your timeline you should see an anchor point extending from the bottom of this Title
- Make sure that this anchor point attaches to your **gap**, not to your clip (**/1**)



#### Edit the Title

- To edit the text of your title, select it in the timeline and move the playhead to a point during the Title so that you see the words 'Name' and 'Description' in the main viewer
- Make sure the inspector is open
  - Click the 'Text' tab in the inspector if it doesn't automatically open to this tab
- From this point, you can click on '**Name**' or '**Description**' in the **main viewer window** to bring up a text editor in the inspector relative to that text field (each field is edited independently)
- Edit the Name and Description text to meet the following criteria:
  - Change 'Name' to **your name** (**/1**)
  - Change 'Description' to '**Assignment 04**' (**/1**)
  - Turn on Drop Shadow for both fields by selecting the field, and clicking on the box next to the words **Drop Shadow** in the bottom of inspector. it will glow blue when active. (**/1**)



## Trim the Title

The title will most likely default to a length of 10 seconds. Let's shorten this to 6 seconds.

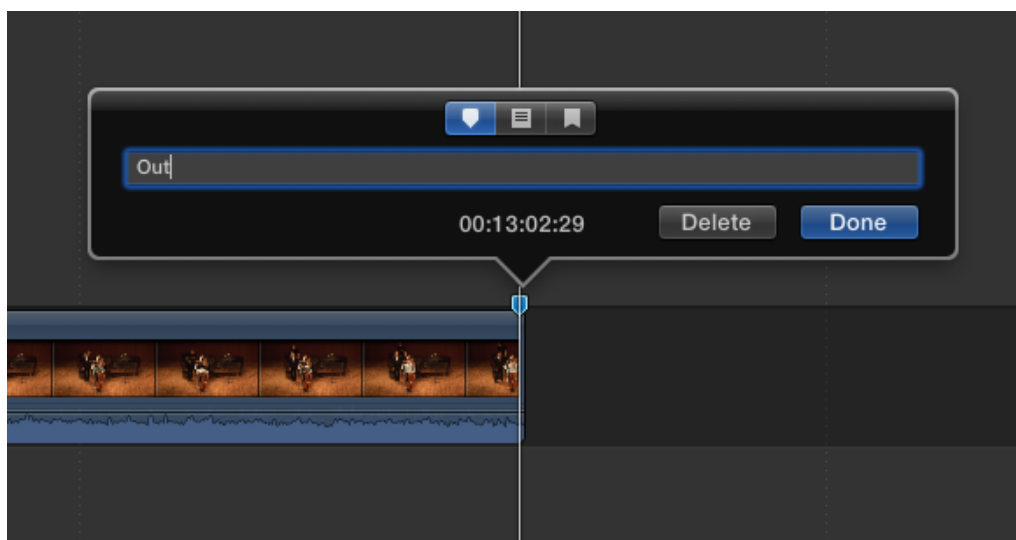
- Hovering the cursor over the right end of the title in the timeline will change the cursor to the Trim tool (just like in Pro Tools)
- You can click and drag with this tool to make the title longer or shorter
- Click and drag towards to left to make the title exactly 6 seconds long (/1)

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## 8. Edit the Video

So far so good, but there is a lot of dead air at the beginning and end of our video. Let's top and tail it so that we keep the performance and lose the extra stuff.

- Switch to the **Trim Tool (T)**
- Hover over the left boundary of the 'Cello AV Sync' clip in the timeline
- You'll notice as you sweep left and right across this boundary (without clicking) the cursor will turn into different versions of the trim tool, one for the outgoing clip (the gap), one for the incoming clip (Cello AV Sync), and one that will control both
  - We want the rightmost version as we want to trim the *incoming* clip
- With this tool showing, click and drag to the right. You should see the whole timeline, along with the gap and titles trimming along as you go
  - Trim the video so that the first note of the piece occurs just after your title ends (/1)
- Now navigate to the end of the clip. We will shorten the clip so that the ending has 7 seconds of applause
  - To achieve this precisely, switch to the **Range Selection Tool (R)** and select from where the applause starts to 7 seconds later (as the musicians start to turn away and leave)
  - Place the playhead at the end of this selection and drop a marker there (*option + m*)
    - Call this marker "Out" (/1)
  - Switch back to the **Select Tool (A)**
  - Trim the end of the clip up to your marker (/1)
    - **Make sure not to trim past your marker - If I can't see that you made one I can't give you a mark for it!**



## 9. Adding Transitions

Now that the video edit has been assembled, its time for some finishing touches. In Final Cut Pro X you can fade both audio and video at once using a **Transition**. There are many different transitions to choose from but the most common is the simple, yet effective **cross-dissolve**. A cross-dissolve works just like a cross-fade in Pro Tools. You set the length of it, and over that period of time Final Cut will gradually fade from one shot to the next. Let's apply some cross-dissolves to our edit.

- Open the Transitions Browser by clicking on its icon in the main toolbar
- To add a transition, click and drag it from the browser to the timeline
  - By default, the transition should be 1 second long, but this can be adjusted using the trim tool (just like a video clip)
- Drag and drop to add a cross-dissolve transition between the gap and the start of the 'Cello AV Sync' clip
  - Leave this transition as **1 second long (/1)**
- Create another cross-dissolve transition at the end of your clip
  - Trim this transition so that it is **2 seconds long**, without altering your end point (/1)
  - You should still see your old 'Out' marker at the end of the transition



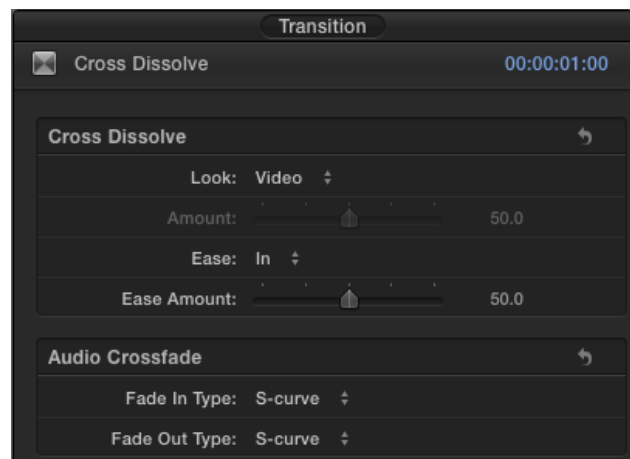
Another way to add transitions is by selecting a clip, and pressing **command + t**. To finish off our edit, let's add transitions to the Title so that the text fades in and out smoothly.

- Select your title by clicking on it in the timeline
- Press **command + t**
  - This should add a 1 second transition to both the beginning and the end of your title (/1)

### Easing

The default cross-dissolve in FCP X tends to look a little abrupt on titles. This can be attributed to the **Ease** settings. Easing allows us to adjust the shape or curve of a given transition. In FCP X, the ease setting defaults to 'In & Out' and the amount of easing defaults to 0. You can view these settings in the inspector when you select a transition in the timeline. Let's tweak these settings...

- Click the first transition in your project (the one at the *beginning* of your title)
- In the inspector, change the **Ease** setting to 'In' (/5)
  - This will start the transition slowly, and have it speed up as it goes, kind of like an s-curve fade in audio
- Set the Ease amount to '50' (/5)
- Now click the transition at the *end* of your title
- In the inspector, change the **Ease** setting to 'Out' (/5)



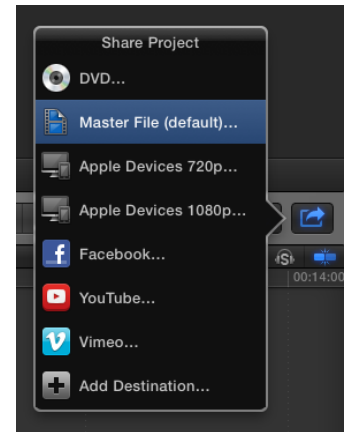


- This will start the transition quickly, and have it slow down as it goes, kind of like an s-curve fade in audio
- Set the Ease amount for this transition to '50' as well (/5)

### 10. Exporting your Edit

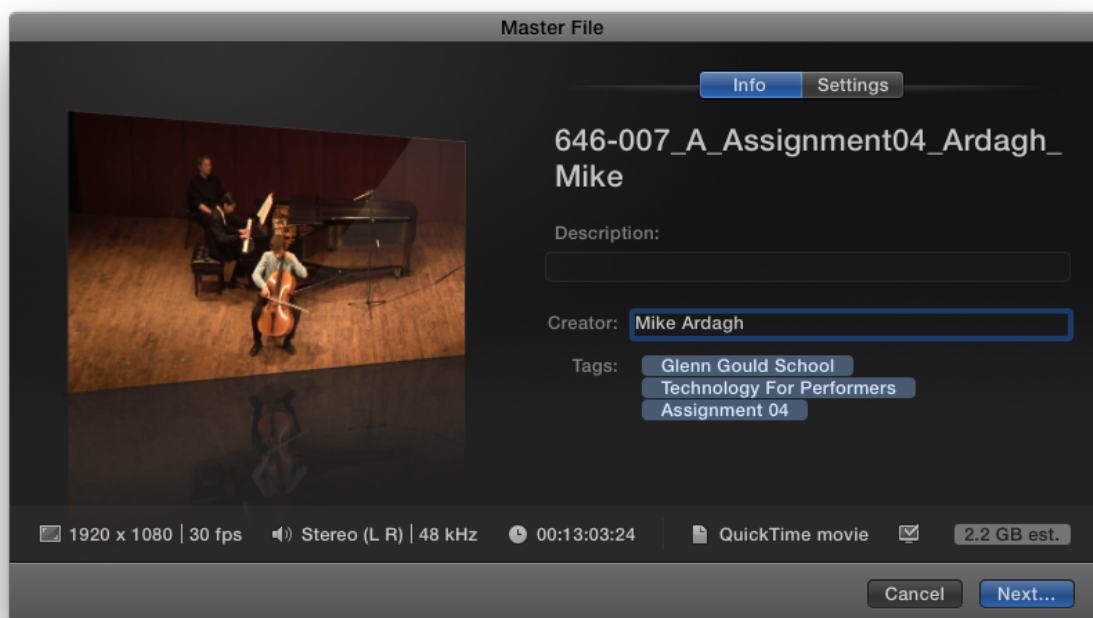
In FCP X, to export is to '**Share**'. This is akin to bouncing a mix in Pro Tools. You can Share your project in different versions as you need to without altering the source material. It is also worth exporting a high quality version as master file for archiving. In this case will export a compressed (lower quality) version like you might upload to the web.

- Click on the **Share Project** icon at the far right of the main toolbar
  - This will open a list full of presets, designed to export your video using specific settings, and give you the option to upload directly to services such as YouTube, Facebook, etc.
- Select the '**Master File**' option
- You can also skip this menu and go directly to this option at any time by pressing *command + E*



#### Master File Settings

Once you choose to share a Master File, you have an opportunity to define some settings and metadata. The following window will pop up showing you some basic info about the video. The **Info** tab is where you have a chance to add some metadata to this file so that it will be easily searchable later. Final cut will auto-populate this window with information from your project, so this is also a chance to get rid of any unwanted metadata before it is written to the file. Edit the metadata in this window to meet the following criteria:





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- For the **title**, use “646-007\_*SectionLetter\_Assignment04\_LastName\_FirstName*”, replacing the portions in italics with your own information ( /1)
- Leave the **Description** blank
- Make the **Creator** you (first and last name) ( /5)
- Delete any **Tags** that FCP X creates and instead create these three tags: ( /5)
  - ‘Glenn Gould School’
  - ‘Technology For Performers’
  - ‘Assignment 04’

Your window should look like the above screenshot, with your appropriate section letter and your name everywhere that my name appears.

If we click on the **Settings** tab in this window we can set the video and audio setting for this export. Changing these settings can dramatically alter the size and quality of the resulting file.

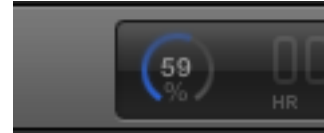
For the purposes of this assignment, set them as follows:

- Set the **Format** to ‘Video and Audio’ ( /1)
- Set the **Video Codec** to ‘H.264’ ( /1)
- Set **When done** to ‘Do Nothing’
- Set the **Roles as** ‘Quicktime Movie’

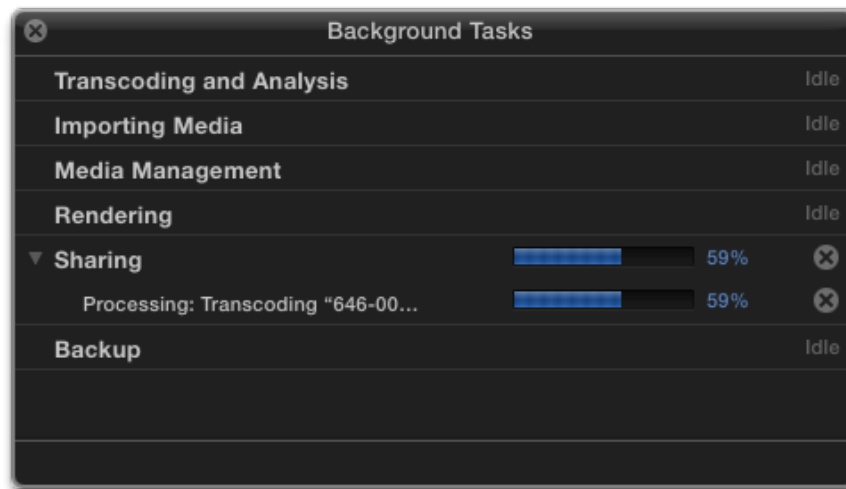
Your settings should now look like the following screenshot:



Choose 'Next...' and save the file somewhere appropriate on your own hard drive (I suggest in the same place as your Library file). Final Cut will take some time to render this new file, so be patient. You can view the progress as a percentage shown in the left side of transport window (this is the progress indicator).



If you click on this progress indicator, you will see a more detailed list of any tasks running in the background.



When the sharing process is complete, close your Final Cut Library and Quit the application entirely. Make sure to take your Final Cut Library file with you and delete any local copies of your library from the lab computer.

## Assignment Submission

You will hand this exported file in along with the Final Cut Library file that you used for this assignment. Have both of those files ready on **your own hard drive** on May 11th at the beginning of class.

**(Total /30)**