iPad Animation

Covering
4 Apps
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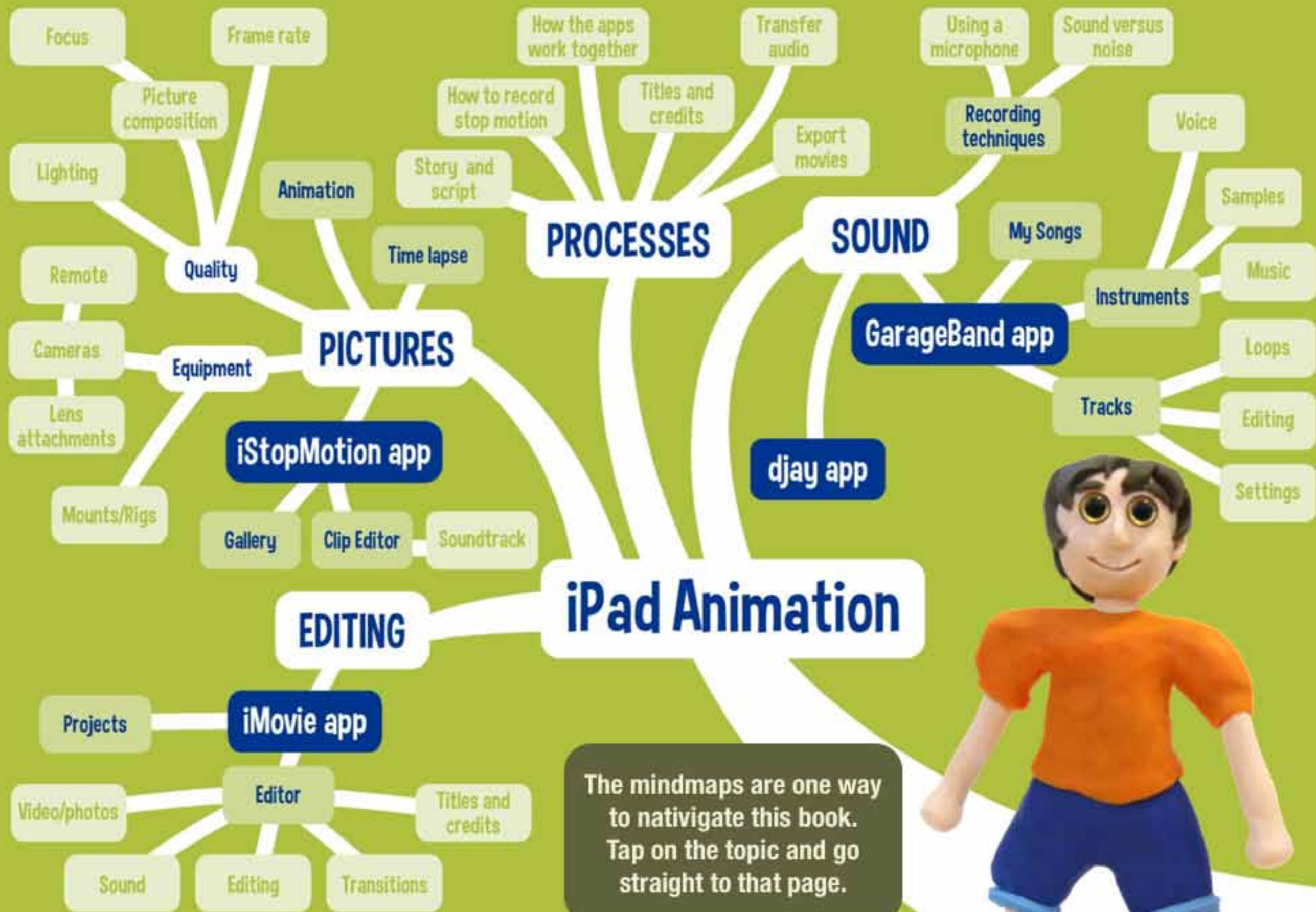
How to make
stop motion movies
on the iPad
with iStopMotion,
GarageBand
and iMovie

WITH
DOWNLOADABLE
BONUS
SOUNDTRACKS

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iPad Animation

PICTURES

- Focus
- Frame rate
- Picture composition
- Animation
- Lighting
- Quality
  - Time lapse
- Remote
- Cameras
- Equipment
- Lens attachments
- Mounts/Rigs

iStopMotion app
- Gallery
- Clip Editor
- Soundtrack

PROCESSES

- How the apps work together
- How to record stop motion
- Transfer audio
- Titles and credits
- Story and script
- Export movies

SOUND

- Using a microphone
- Sound versus noise
- Recording techniques
- Voice
- My Songs
- Samples
- Instruments
- Music
- **GarageBand app**
- Loops
- Tracks
- Editing
- Settings

djay app

EDITING

iMovie app
- Projects
- Video/photos
- Editor
- Titles and credits
- Sound
- Editing
- Transitions
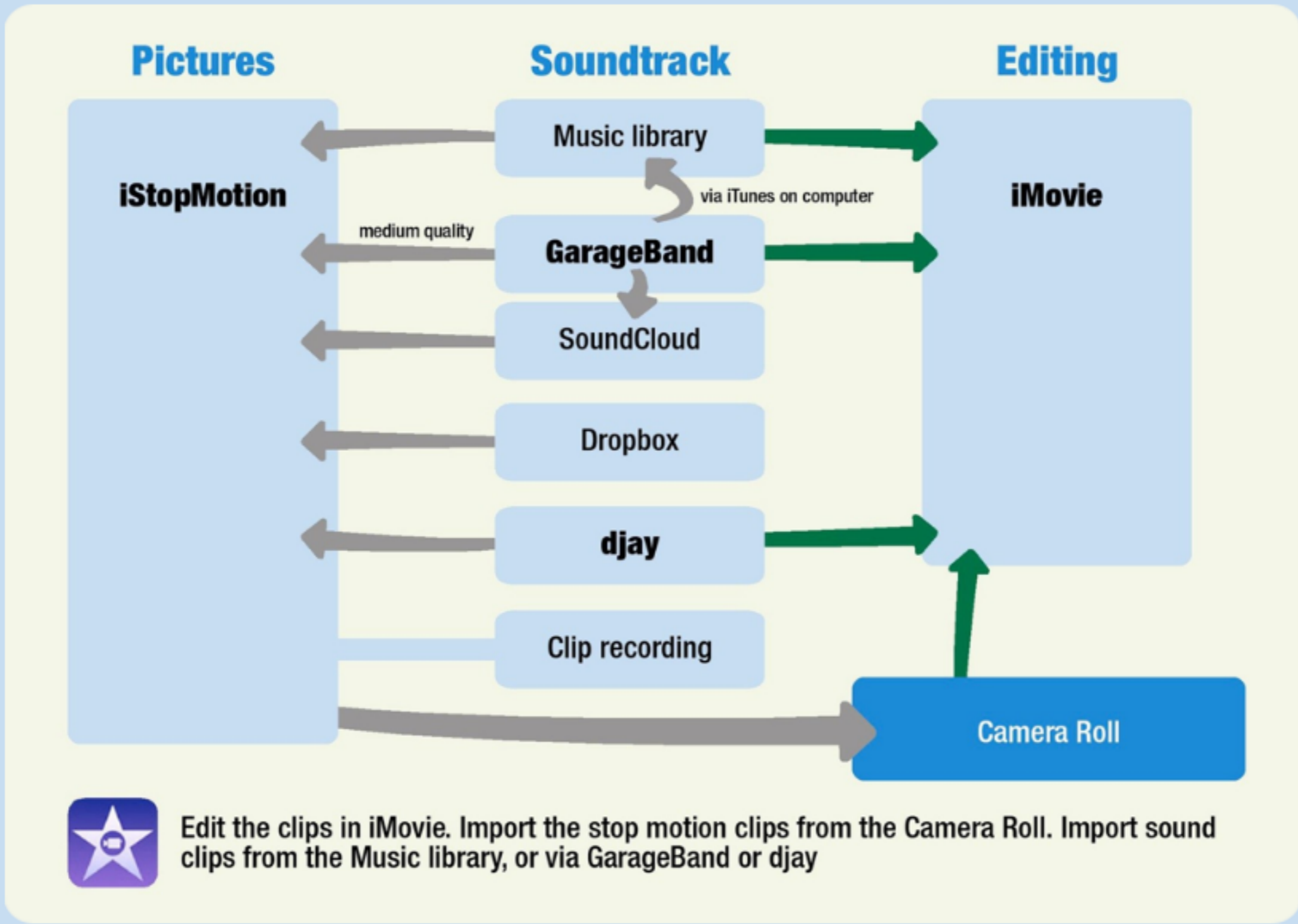
The mindmaps are one way to nativigate this book. Tap on the topic and go straight to that page.

How the apps work together

Pictures   **Soundtrack**   **Editing**

iStopMotion

Music library

via iTunes on computer

medium quality

GarageBand

SoundCloud

Dropbox

djay

Clip recording

iMovie

Camera Roll

Edit the clips in iMovie. Import the stop motion clips from the Camera Roll. Import sound clips from the Music library, or via GarageBand or djay

The dots under a picture mean there are several layers. Swipe over the picture.
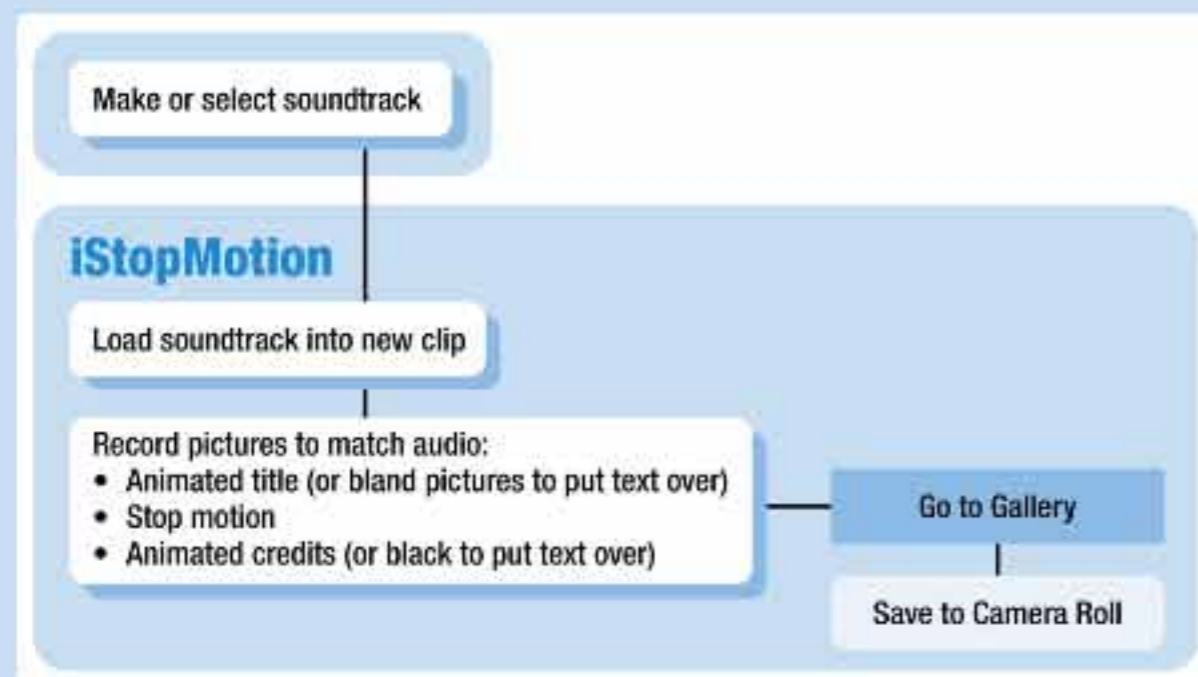
Process 1 – Start with the sound

Sound is an important part of movies – it adds emphasis and depth of meaning to the pictures. It is therefore very important the timing of the sounds match the actions in the pictures. It can be hard to watch dialogue that does not match the character movements (lip sync); or where the sound of an explosion is not coordinated with the pictures. **When you start with the soundtrack, it is easy to achieve perfect alignment between the sounds and the pictures.**

Sound

iStopMotion can have one audio file as a soundtrack for a clip (see Adding a soundtrack). You may need to assemble the

complete soundtrack of dialogue, sound effects and music first (see Creating a soundtrack using Garageband).

The waveform of the soundtrack helps you to 'see' the sound. This is the key to matching the pictures to the soundtrack.

Pictures

The waveform in the example below shows the start of a dramatic sound. The Timeline shows that three more pictures are required before this sound.

Make or select soundtrack

iStopMotion

Load soundtrack into new clip

Record pictures to match audio:
- Animated title (or bland pictures to put text over)
- Stop motion
- Animated credits (or black to put text over)

Go to Gallery

Save to Camera Roll

Rain

There are many ways to simulate rain. This is one way:

- Cut a clear plastic bag into 3mm strips
- Tape one end of each strip to the edge of a ruler
- Hold the strips close to the camera, so they are not in focus
- Constantly shake the ruler so the strips appear blurry.

Lighting effects

We've already discussed general lighting for stop motion. In addition, lighting can be used to create effects.

To create the effect of lightning, shine a bright light to wash out the set for one picture, then cover the set to shield it from room light. Repeat several times with reducing extremes and you'll create realistic lightning.

- Tap the Record button (red dot)

- Wait for the four beat count-in

- Tap the screen to 'play' the guitar. To follow our example:

tap a note every 2 bars (8 beats)

1	3	5	7	9	11	13	15	17	19
C	A	C	A	E	F	C	A	C	A

tap these notes every bar (4 beats)

21	22	23	24
E	F	C	C (to stop)

Tap on the image for full screen

- Tap the Stop button to end recording.

If you make a mistake, make sure the Playhead is at the start and record again. This will erase the first one and record a replacement.

Auto correction

GarageBand has an option to auto correct notes to the timing of the song:

- Tap Mixer

- Tap Quantisation

- Tap 1/16 Note. This is the best option for this track because the Autoplay fill-in has lots of very short notes in every beat.

< Back   **Quantisation**

Quantisation corrects the timing of notes in your recordings. Straight gives notes a more precise rhythm, while Triplet and Swing give notes a looser feel.

None

Straight	Triplet	Swing

1/4 Note

1/8 Note

1/16 Note   ✓

1/32 Note

1/64 Note

Transferring music from a computer to the iPad

If the soundtrack for your stop motion is on a computer, there are two ways to transfer it to the iPad:
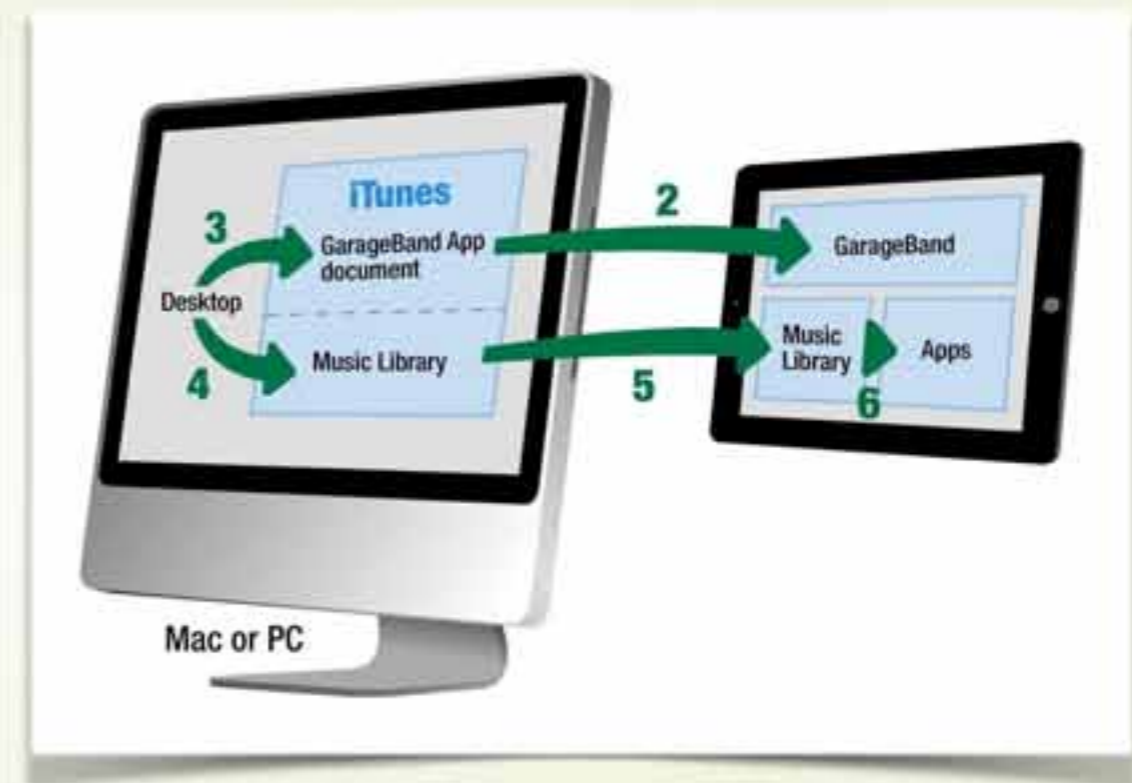
Using the computer the iPad syncs to

- Add the audio files (AIFF, WAV, CAF, Apple Loops, AAC, MP3, M4A or band format) into iTunes on your computer (step four)

- Creating a playlist will make it easier to locate the music files

- Add the playlist to the iPad

- Click Sync and eject the iPad (step five).

The music is stored in the iPad's music library.

Accessing the music on the iPad

If the audio file (music, soundtrack or sound effect) is the **complete soundtrack** import it into iMovie or iStopMotion.

If the audio is just **part of the soundtrack**, combine it with the other audio in djay or GarageBand, or add it to the stop motion in iMovie.

Mac or PC

Import music in iStopMotion

- Tap the Audio button

🎵

See Adding a soundtrack.

Import music in GarageBand

- Tap the Loops button.

- The music, soundtrack or sound effect appears as a music file. See Adding music.

Record the soundtrack 'live' as you select the different audio files and adjust the settings.

Here are three scenarios for using djay to create a soundtrack:

Audio enhancement

In its simplest form, use djay to enhance an existing audio file. As it plays, record a modified version with changes to volume or equaliser (EQ) effects to suit your requirements.
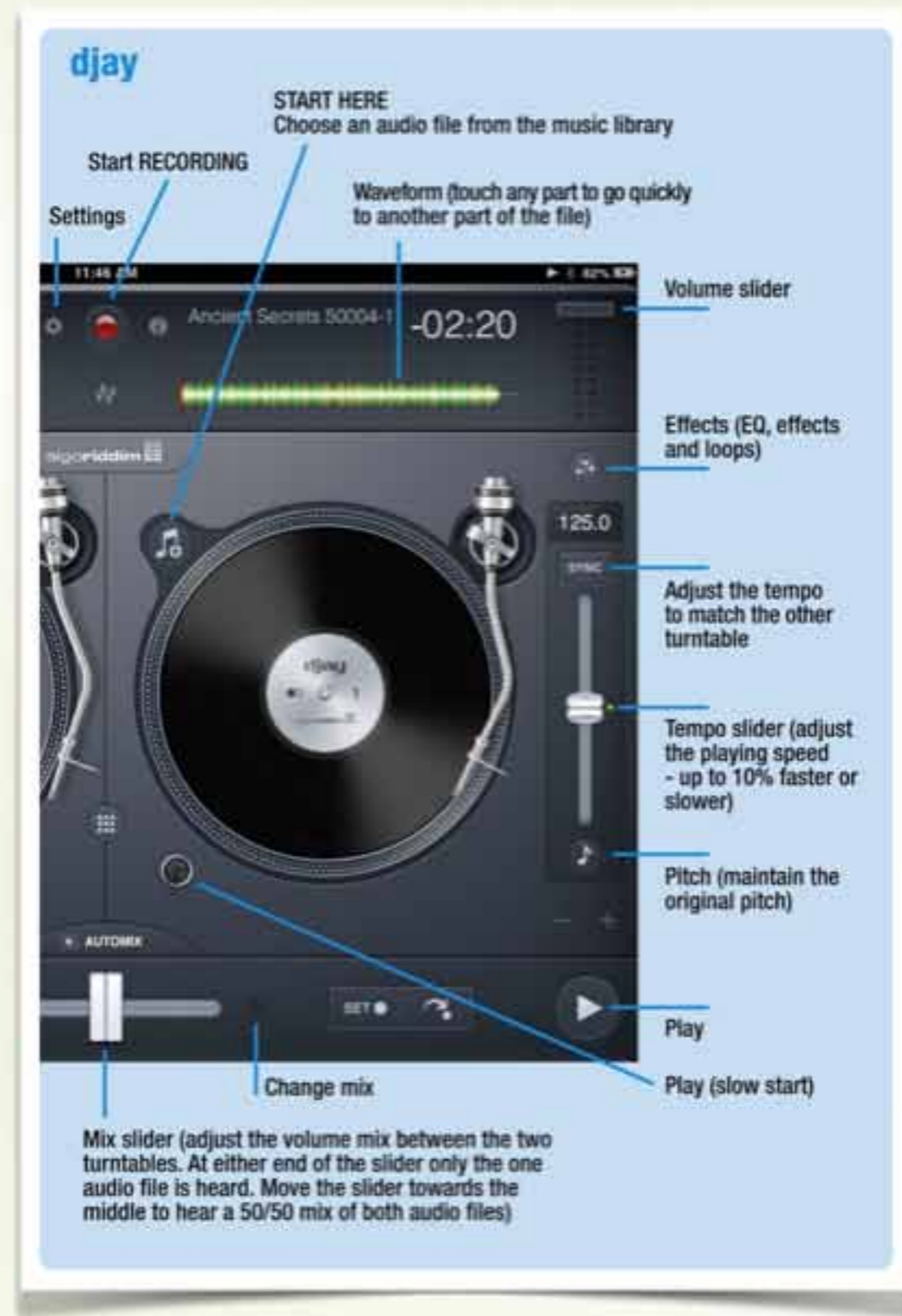
You could also use djay to change the length and/or pitch of the audio file by adjusting the speed (beats per minute or BPM) (see Tempo and pitch).

Combining audio files

iStopMotion soundtracks need to be a single audio file. So if you have several audio files, eg one for the title, a background tune and a sound effect to use at the climax, use djay to combine these into one audio file. Blend the different files together and adjust the volume or EQ effects to suit your requirements.

Full DJ mix

Go to www.algoriddim.com for tutorials on making the most of the features of djay.

djay

START HERE
Choose an audio file from the music library

Start RECORDING

Settings

Waveform (touch any part to go quickly to another part of the file)

Volume slider

Effects (EQ, effects and loops)

Adjust the tempo to match the other turntable

Tempo slider (adjust the playing speed - up to 10% faster or slower)

Pitch (maintain the original pitch)

Play

Play (slow start)

Change mix

Mix slider (adjust the volume mix between the two turntables. At either end of the slider only the one audio file is heard. Move the slider towards the middle to hear a 50/50 mix of both audio files)
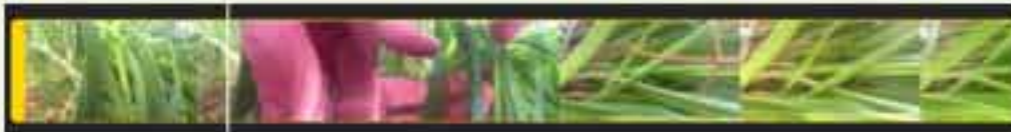
'pinch' gesture). To reduce the scale, pinch two fingers together

- Position the Timeline so the Playhead is where you want to split the clip. The images in the Timeline don't show every image in the clip, so watch the Viewer as you choose the position

- Tap the clip – it will highlight in yellow

- Swipe your finger quickly downward over the Playhead to perform the split

Alternatively, swipe your finger quickly upward to split the clip and add a still image of that frame (freeze frame effect).

Trimming a clip

- Tap the clip – it will highlight in yellow

- Drag the yellow bar from either end to shorten the clip.

Precise editing

For more precise editing:

- Tap the transition icon between the clips

- Tap the yellow double arrows under the transition icon – the two clips appear in multi-track mode

The images in the Timeline don't show every image in the clip, so watch the Viewer as you make these edits to choose the best edit point

- Drag the top yellow bar to the required end point for the first clip

Write your own story: develop characters, add a crisis… what will happen?

My Story

The best way to feature characters in stop motion is to engage them in a story. Write the story first and record it as a soundtrack so you have a reference for recording the pictures.

The stages of the project are:

- Developing the story

- Recording the dialogue (GarageBand)

- Creating a soundtrack (GarageBand)

- Building the set

- Making the characters

- Recording the pictures to match the soundtrack (iStopMotion).

WATERCYCLE

Up, down, up, down.
The wonders of the water cycle.

Non-fiction topics

Stop motion is an excellent medium to communicate information – facts and details. Whether it is a documentary, research, investigation or explanation of a process, follow the same recording process as for a dramatic story.

The stages of the project are:

- Writing the script

- Recording the dialogue (GarageBand)

- Creating the soundtrack (GarageBand)

- Building the set

- Recording the pictures (iStopMotion)

- Editing the movie (iMovie).