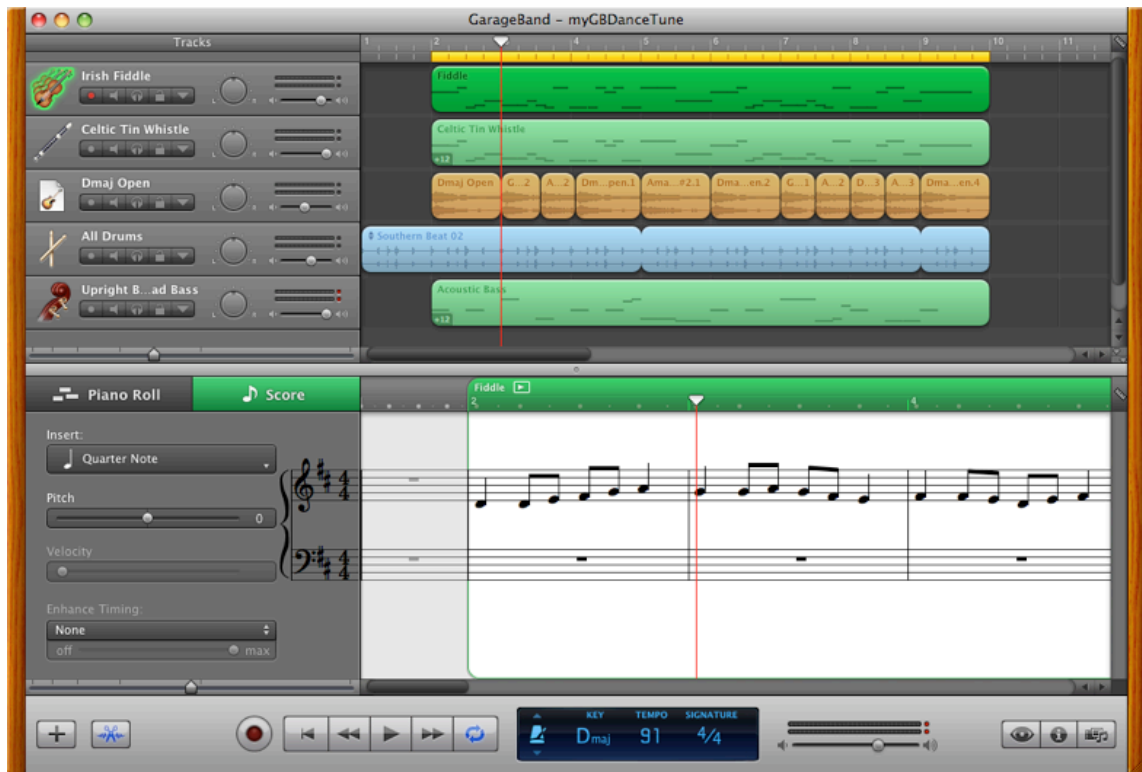


Hands-on Activity: GarageBand (Apple, Inc.)

David B. Williams, PhD (see www.tech4music.com for this and other hands-on activities)

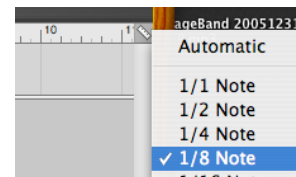
GarageBand (GB) is available with new Macs and with the Apple iLife software package. Activity updated for iLife 09. GB handles MIDI and audio loops and tracks, displays MIDI as piano roll or music notation; extensive library of loops and audio clips; extensive sound effects and options; MIDI and ACID loops can be directly imported and can create your own loops; and much more.


Goal: This tutorial is design to introduce you to the variety of ways music can be created within a looping sequencer like GarageBand (GB). The steps below are not meant to be inclusive; the documentation provides enough prompts so you can reconstruct the activity later.



Step A: Recording a MIDI Track

1. Select Create a New Project: Tempo to 60 bpm (we can speed it up later); Key D major; Time 4/4; Save As: "myGBDanceTune"
2. Ruler to 1/8 (Far right-hand corner see Ruler icon); Set Count In (Control > Count In)



3. Two Track Editor views: Piano Roll and Score.  Experiment with this option. Set it to Score for the next step.
4. Use the Grand Piano Track : Record the English Dance melody with MIDI keyboard. Hint, play as smoothly as possible holding notes for full duration.

5. Edit track to fix timing, velocity, durations. Double click the track to open the Track Editor and use either the Piano Roll or Score option for edits.

Hints: Experiment with dragging notes up and down for pitch or the duration indicator for length. Hold Command Key down to get note edit tool. Do a Select All, then use the Enhance Timing to adjust notes to a duration ("quantize notes"). To change velocity (loudness), in Piano Roll look at the color of the bars and use the velocity slider on the left.

English Dance W. Bay



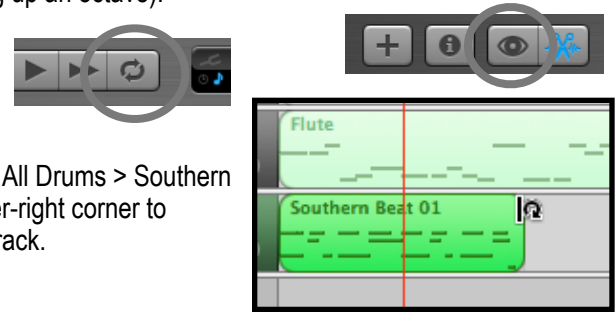
6. Change track instrument to Irish or Country Fiddle. Select the Track and then the "I" icon or Command+I to access Software Instrument options. Navigate down through Strings to Irish Fiddle.



- Duplicate the Irish Fiddle (Track > Duplicate Track); Set the Software Instrument to Woodwinds > Tin Whistle or Flute. Now raise the melody an octave (hint: do a Select All, then click and drag up an octave).

Step B: Adding Loops

- Set looping on and adjust the yellow loop bar for 8 bars.
- Open the Loop library with the “eye” icon button. Find a drum loop (e.g., All Drums > Southern Beat 02); Drag into place; stretch looping to fill out measures (drag upper-right corner to expand loop); Note: dragging in a loop will automatically create a new track.



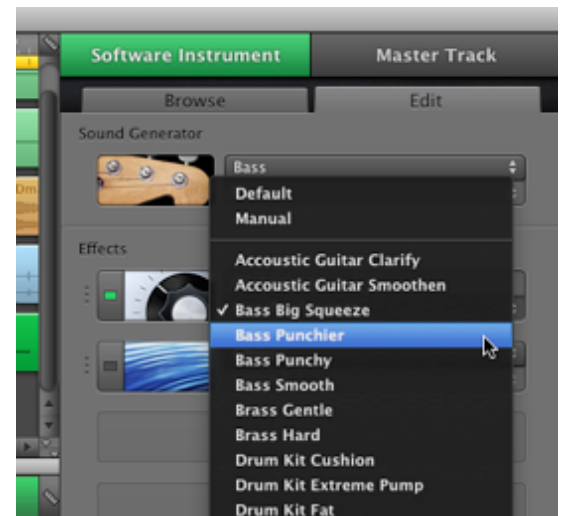
Step C: Write Your Own Bass Line

- Create a New Track for a Bass line: Set instrument to Bass > Upright Jazz or Ballad Bass; Enter notes manually in Score editor using the edit tool (hold down the Command key) in the Track Editor editor. Just pick the root of the chords for starters.

Caution: GB won't let you start from an empty score to enter notes with the note edit tool; either drag a snippet of music from another track to start or just record one note with a MIDI keyboard. Strange, I know!

Step D: Using Effects

- There are many effects tools buried in GB. Select Acoustic Bass for example, click on the (I) button, the Software Instrument tab, and Edit (see image on the right). Here I've picked “Bass Punchier” setting from the Compressor effect.



Step E: Adding Chords and Making Final Mix

- A folder of recorded guitar chords is provided. Drag in a D Major chord to automatically create a new track. Drag lower right corner to size a beat or measure of a clip; make sure Snap to Grid is turned on to help line up to beat. Continue to drag in chord files until your pattern looks like the one below.



- Play with balance and mixing; Click on the headphone icon and speaker icon to solo or mute any track; adjust panning L and R; adjust volume until you've got a good mix!

Other Features to Try

- Print out parts from the notation window
- Explore the SHARE menu options.
- Explore the Magic Band and Music Lessons project options
- Find a MIDI file of any music; drag it into GB and then re-score (re-assign) the instruments
- Use GB to edit digital audio files; drag the digital audio file into a Track and use the Editor to crop or change the audio, add effects like some reverb, and so on.
- Record live music directly into GB. With a USB microphone your Mac can serve as a digital recorder.
- Have some ACID loops on the PC side you like; just drag them into GB