

## iPad Music Workshop Presentation Notes

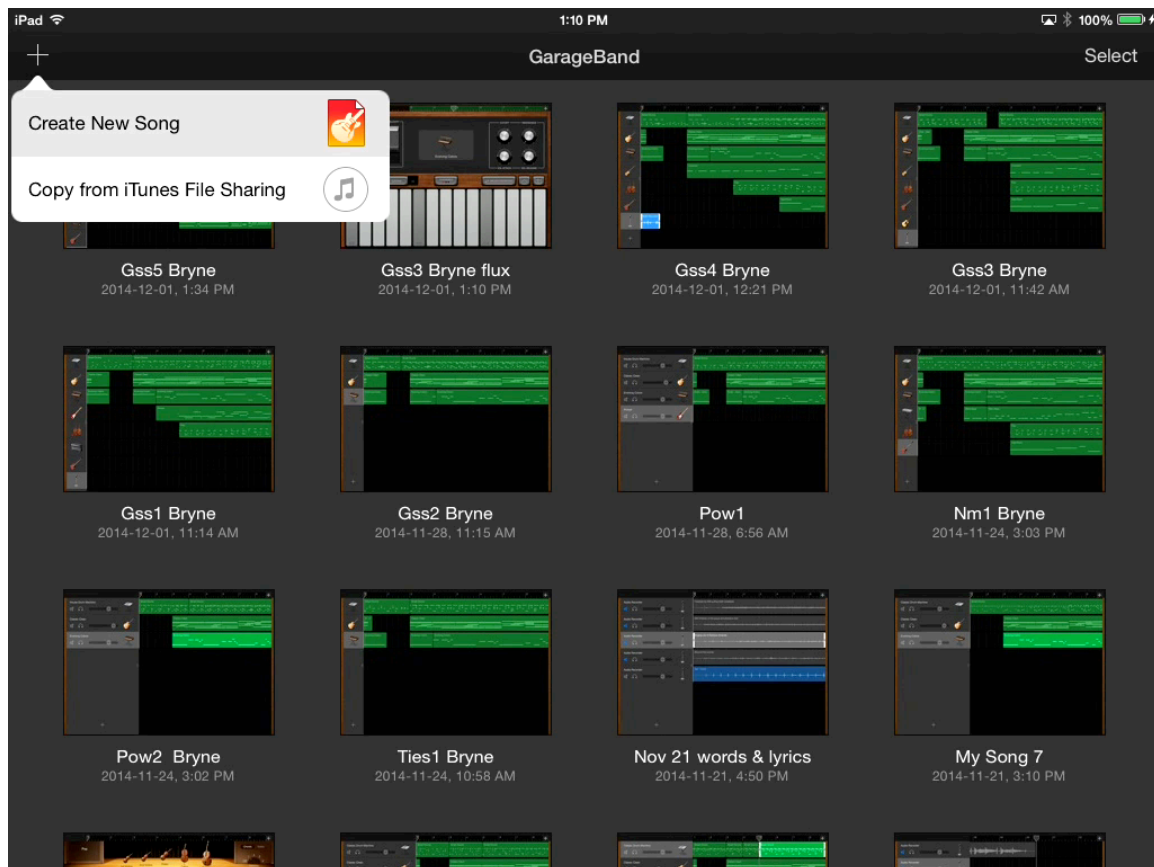
By Bryne Carruthers ©2014

Music can be said to consist of three basic elements: rhythm, harmony, and melody.

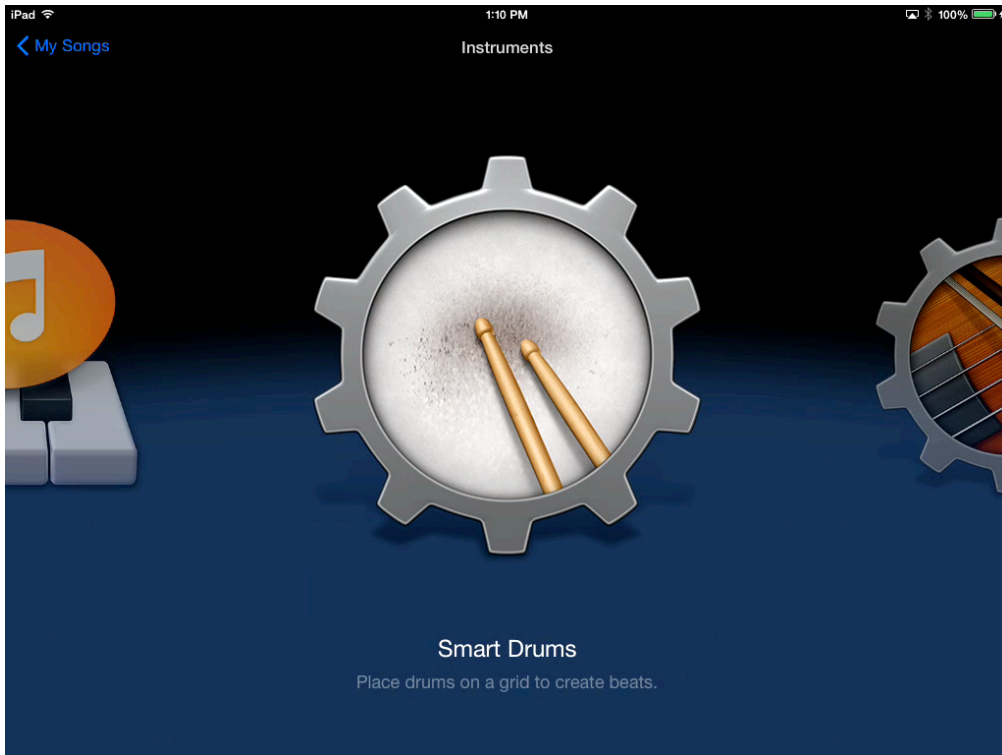
This presentation will guide you in using Garageband to create your own song using these three elements. This software will be used to allow you to interactively learn and explore how these different musical elements are created and constructed without any prior musical experience. You will then be able to explore adding other instruments and sounds to make your song sound unique.

This presentation will be divided into three parts corresponding to each of the above musical elements.

### Part 1: Rhythm



To begin, create a new song in Garageband by tapping the '+' sign in the top left corner of the 'My Songs' screen, and then tap 'create new song'.



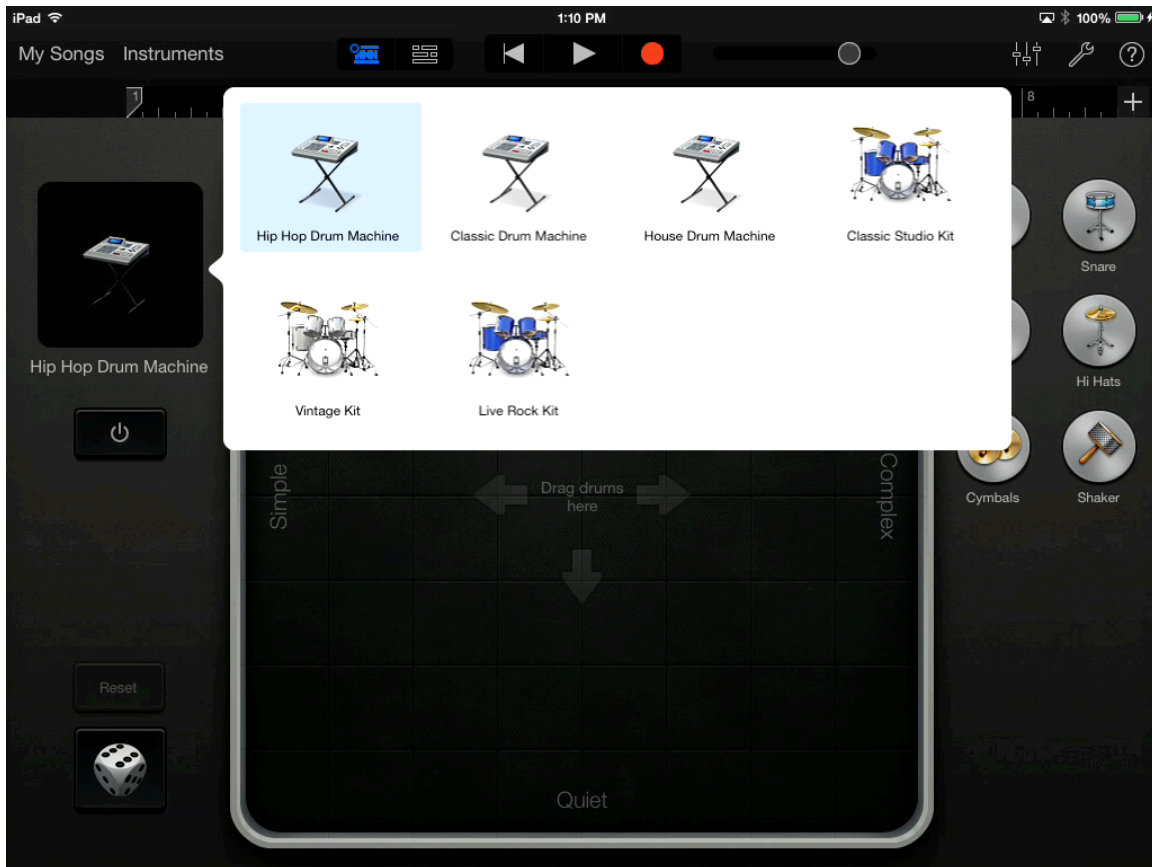
The first instrument you will add will be the Smart Drums. Select this from the instrument selection screen and then tap to create a Smart Drum part in your new song.



The sounds of the individual drums can be heard by tapping on their icons on the right side of the screen. To have the drummer start playing, simply drag and drop the drum icons onto the grid in the center of the screen.

Where the drums icons are placed within the grid changes the sound of the drums. The number and position of the drum icons on the grid creates what is called a *drum pattern* (i.e. the drum beat played by the Smart Drums).

The vertical (up/down) axis controls the volume of the drums (quiet at the bottom to loud at the top). The horizontal (left/right) axis controls the complexity of the drums (simple at the far left and complex at the far right). To have the drums stop playing, simply drag and drop the drum icons away from the grid.



To change the sound of the drums, tap the icon on the left side of the screen labeled 'Hip Hop Drum Machine'. You will then be able to choose from three different drum machines and three different drum sets. Tap the drum machine or drum set you wish to try. Note that whenever you change the drum sound, the current drum pattern will be erased.

A random drum pattern can be generated by tapping the dice icon in the bottom left hand corner of the screen. This is a quick way to hear the sounds of the different drum sets/machines.

Give yourself a few minutes to find a drum pattern and drum sound you like. Once you have a desired drum sound and pattern, tap the blue power button on the left hand side of the screen (immediately below the drum icon) to save your current pattern and stop the Smart Drums from playing.

When you have created a drum pattern for your song, then the drum track for your song is ready to be recorded.

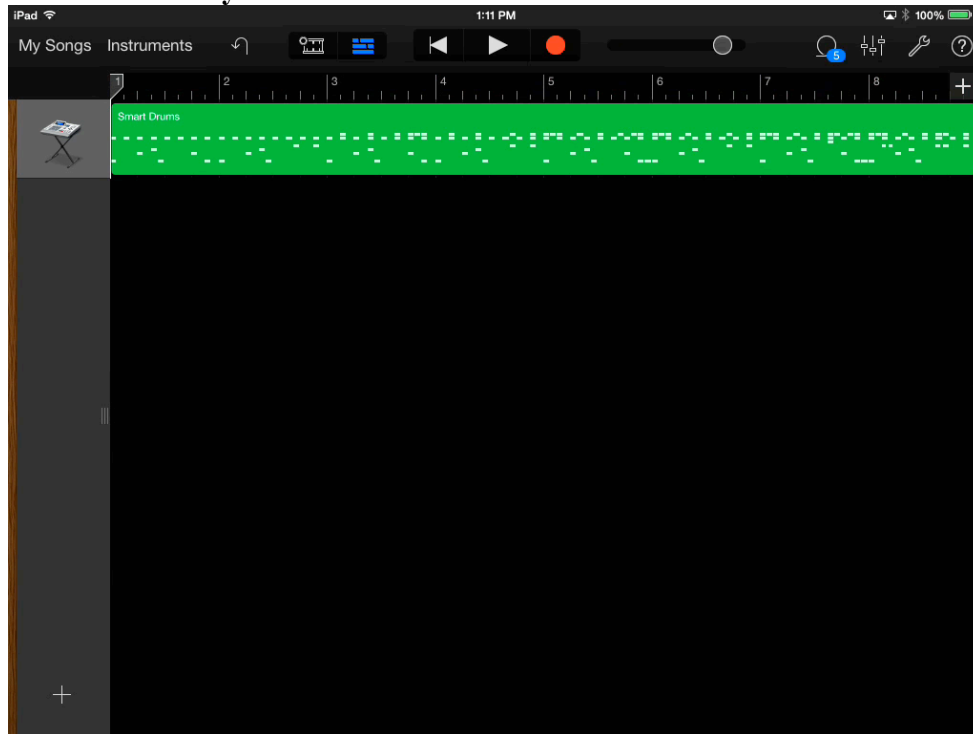
To record the drum track for your song, simply tap the record button (red circle at top of screen). You will hear four clicks (called the *count-in*) then the Smart Drums will start playing. While the drums are being recorded, the drum pattern may be changed by moving, adding and/or removing the drum icons. These changes will be reflected in real time by the recorded drums.



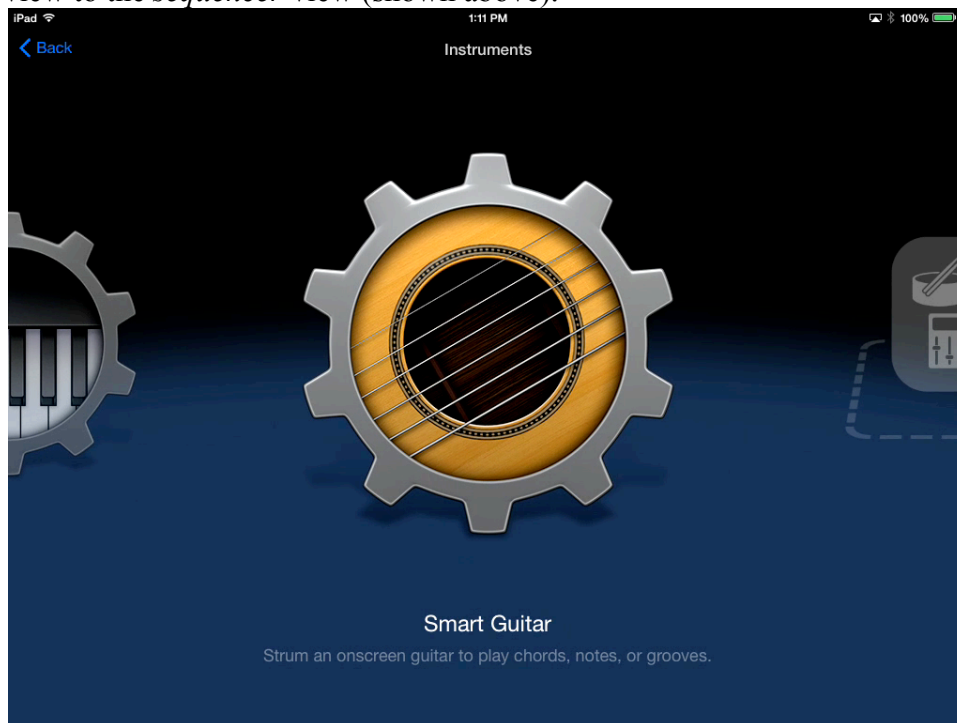
When the *playhead* (upside-down triangle shaped device that moves across near the top of the screen) has moved all the way to the right hand side of the screen, tap the 'stop' button (white square icon at top of the screen immediately left of the play button).

If you are not happy with the sound of the drums, the drums may be re-recorded simply by repeating the above process.

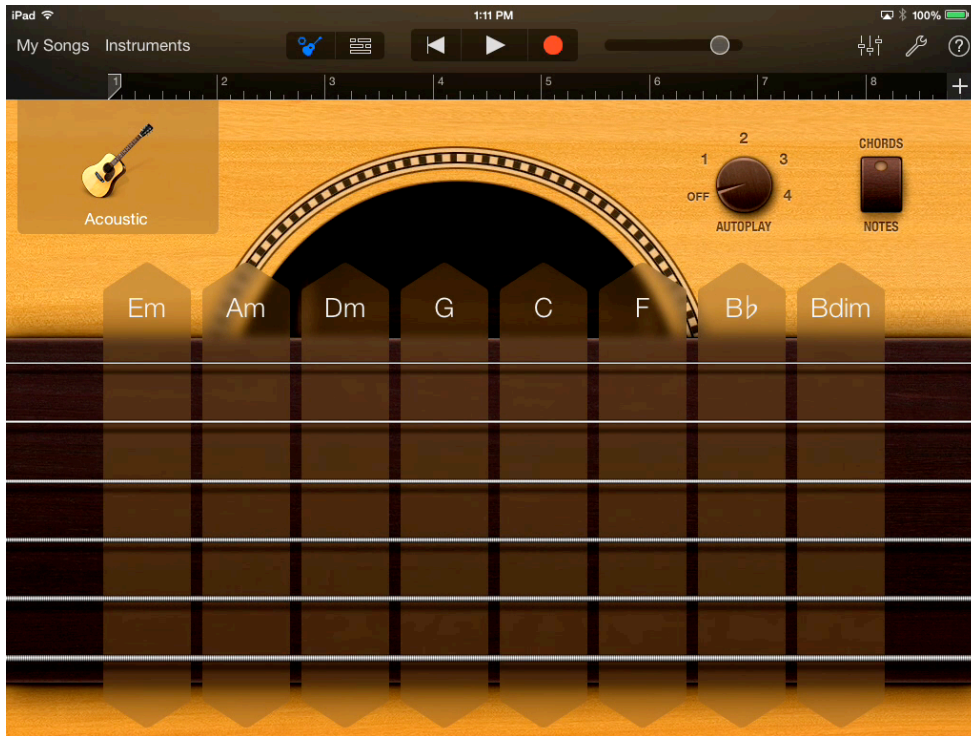
## Part 2: Harmony



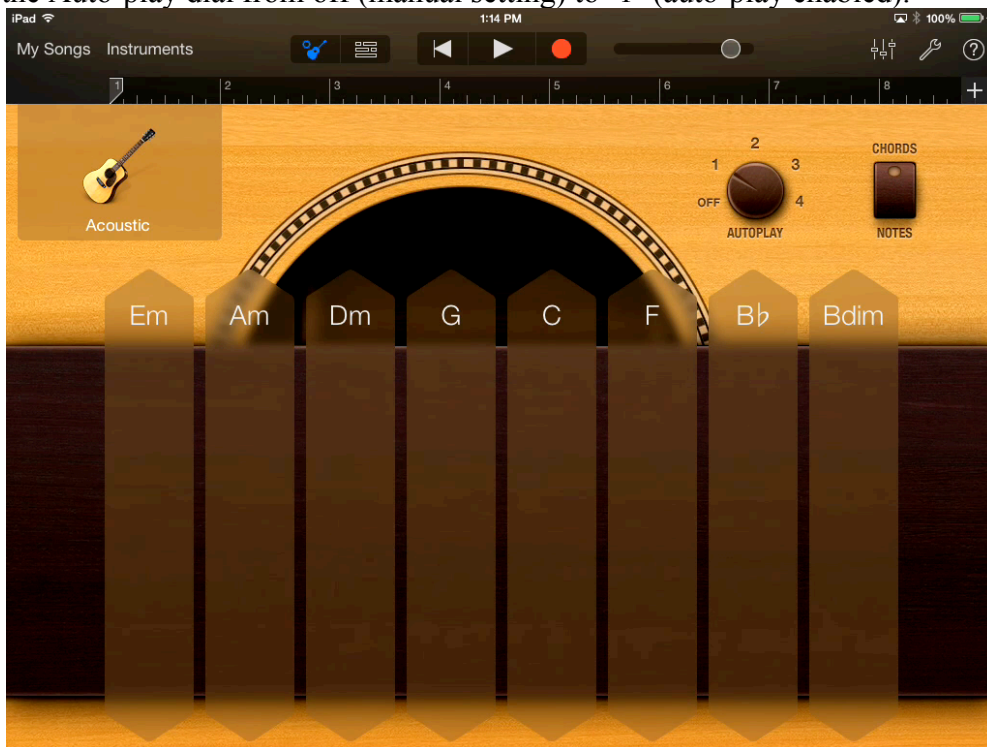
Once you have finished recording the drums for your song, tap the blue button at the top of the screen (to the left of the play and record buttons) to switch from the instrument view to the *sequencer* view (shown above).



You will now add a Smart Guitar instrument to the song. To create a new instrument, tap the plus sign in the bottom left corner of the screen, then scroll to the right until you find the Smart Guitar icon, and tap it.



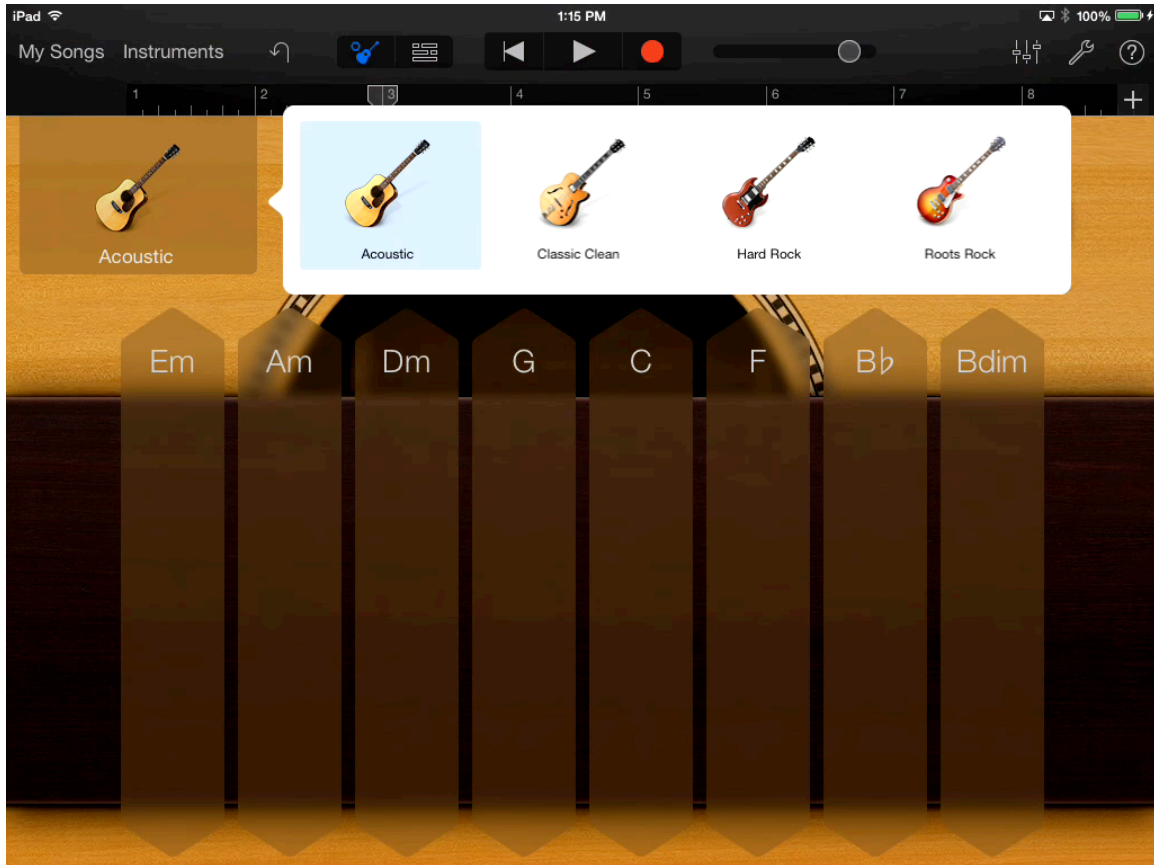
You will now see the Smart Guitar instrument on the screen. The first thing to change is the Auto-play dial from off (manual setting) to '1' (auto-play enabled).



This will change what you see at the bottom of the screen – instead of the guitar strings representing the different notes of the chords you can choose from, you will see buttons underneath the chord symbols (C, G, F, Am, etc.).

When you tap one of these buttons, the Smart Guitar will essentially play itself according to the guitar sound and accompaniment pattern to choose from. There are four guitar sounds and four accompaniment patterns (numbers '1' through '4' on the Auto-play dial) so therefore there are sixteen styles of guitar playing to choose from.

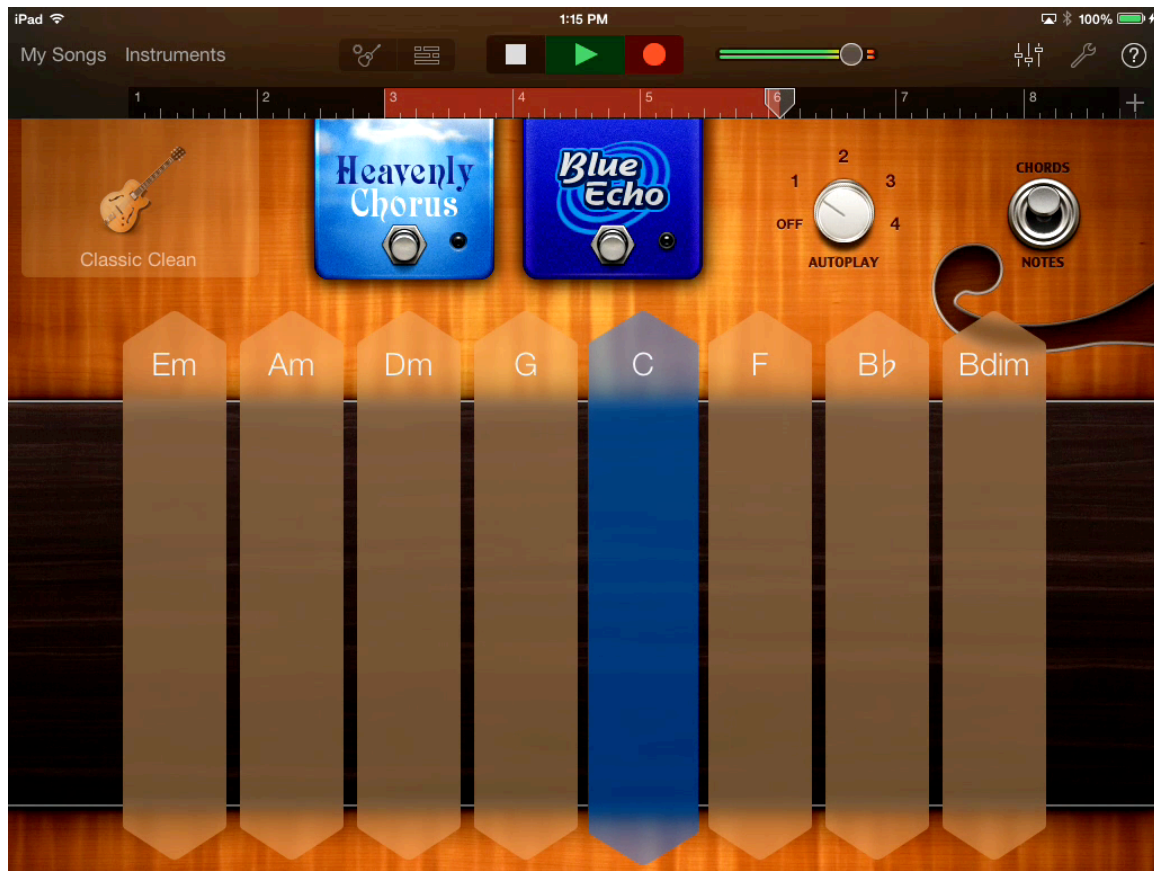
To change the sound of the guitar, tap the acoustic guitar icon on the left hand side of the screen:



You can now try playing each of the four different chord patterns listed on the handout, and/or creating your own chord patterns.

Once you have found a chord pattern you like (a single chord will work if you want to keep the song simple) in addition to a guitar sound and accompaniment pattern, you are almost ready to record your guitar part.

It is important at this point to write down the chord pattern you are using for your guitar part (write down the names of the chords and how many beats or measures to hold each chord). If you want to add other chordal instruments to your song (like Smart Strings, Smart Keyboards, Smart Bass, or another Smart Guitar part) it is important that they are playing the same chords that the guitar is playing, or else the song won't sound very harmonious.



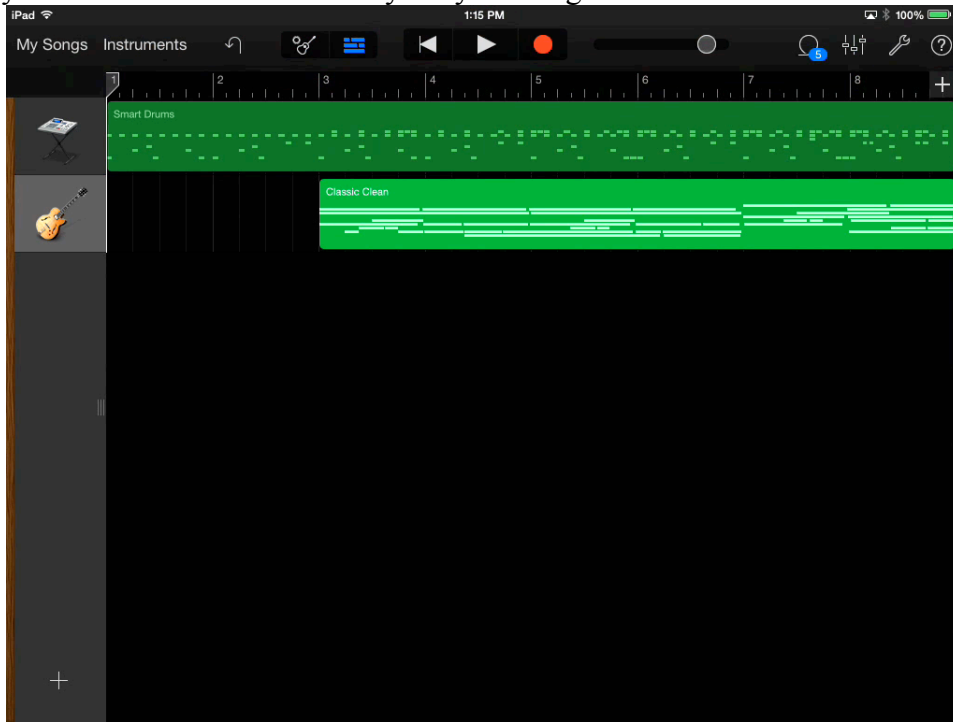
Once you've written down the chord pattern your guitar will be playing, move the play head to the bar number you wish your guitar part to start. Then tap the record button, and after you hear the count-in (four clicks of the metronome before Garageband starts recording) begin playing the chords of your guitar part by tapping the buttons underneath the chord symbols.

Once you've finished recording your guitar part, tap the Stop button. You can listen to your guitar part by tapping the return button (immediately left of the play button) and pressing play. If you are happy with your guitar part you can tap the blue button at the top of the screen to return to the sequencer view of the song. If you want to record your guitar part over again, simply move the play head to where you want the guitar part to start and tap record again to repeat the above process.

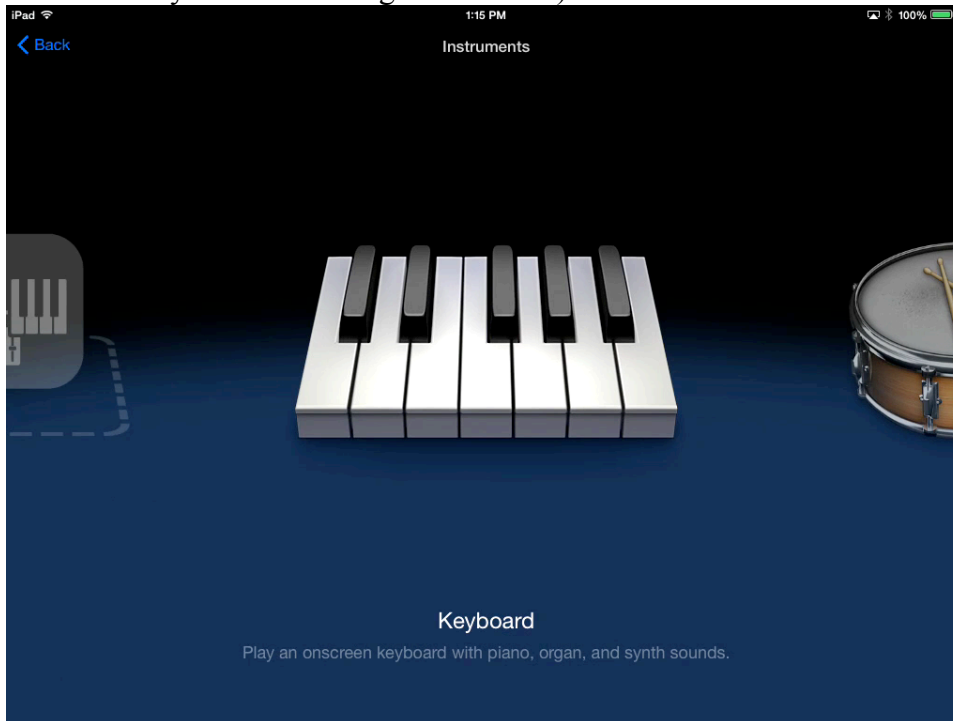


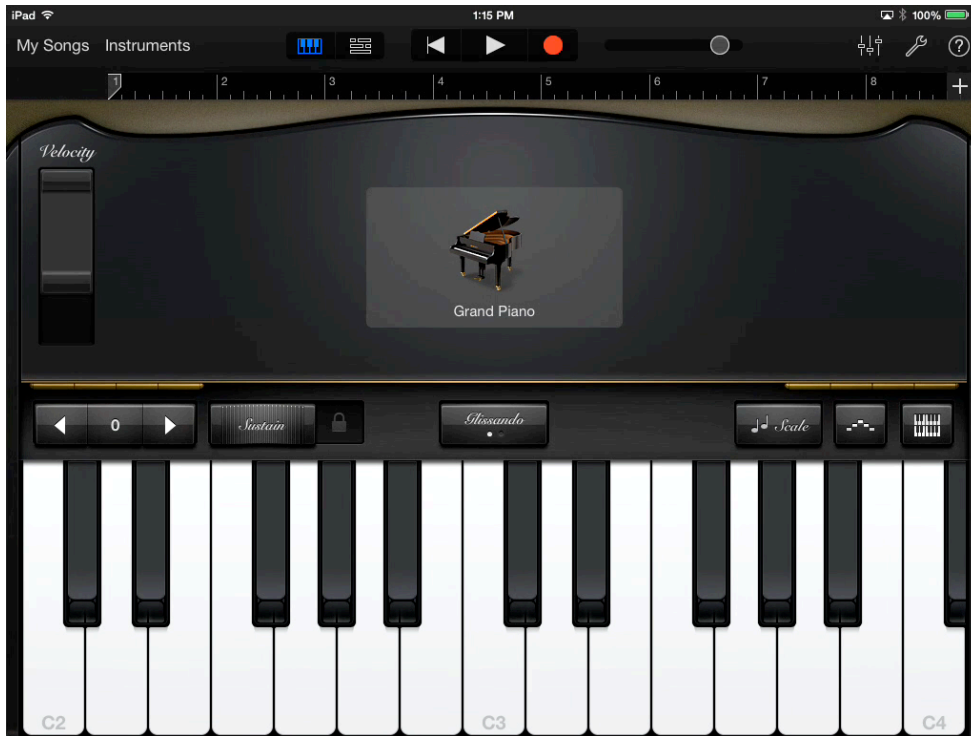
### Part 3: Melody

Once your guitar part has been recorded, you will create a Keyboard instrument, which you will use to create a melody for your song.

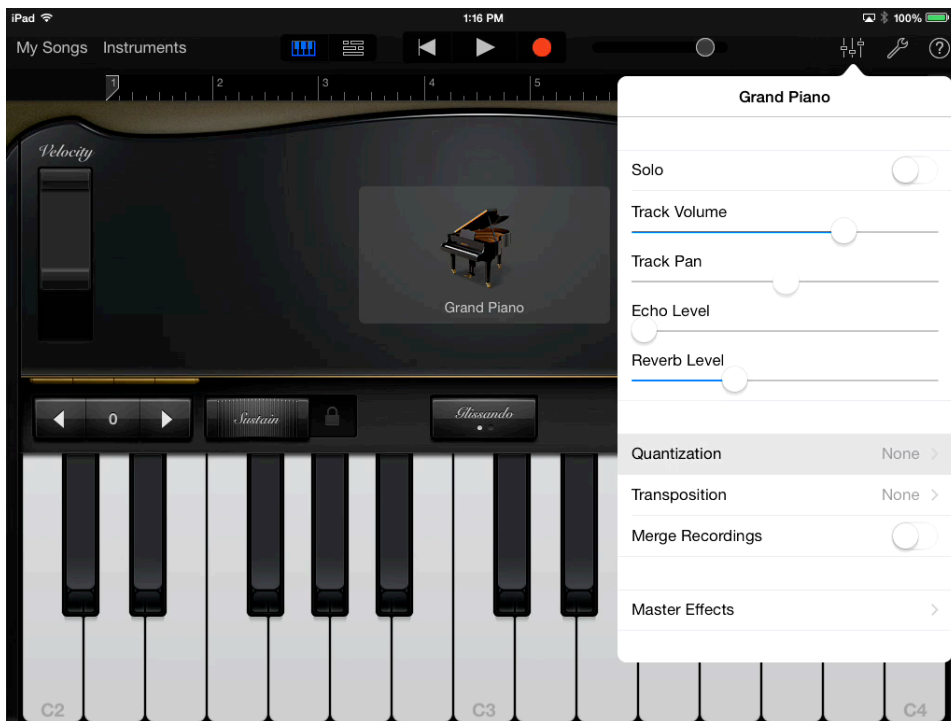


Assuming you are already in the sequencer view, tap the plus sign at the bottom left hand corner of the screen to create a new instrument, and choose a Keyboard instrument (not the Smart Keyboard with the gear around it).

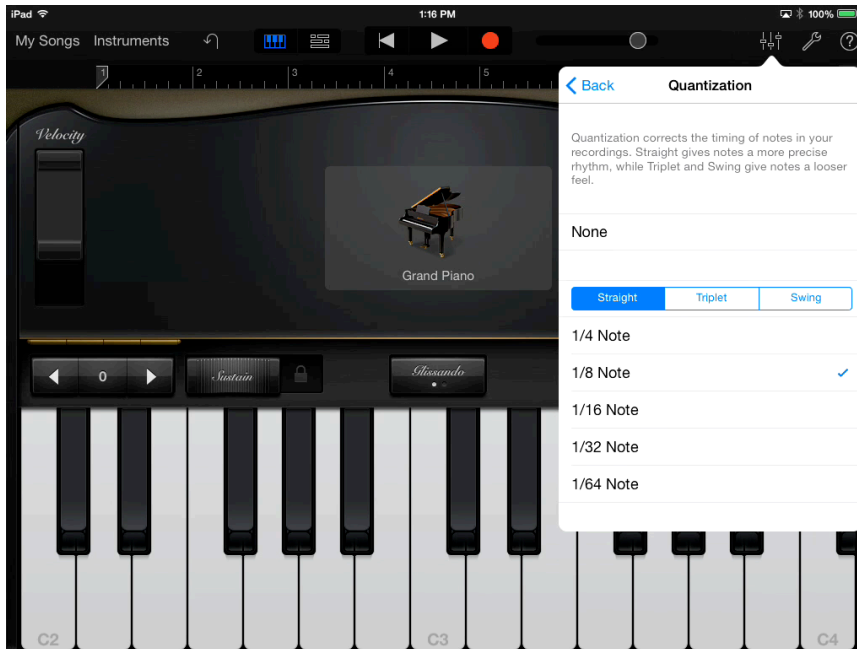




Once you are viewing the keyboard instrument on the screen, you will make two changes to make it easier to create a melody for your song.



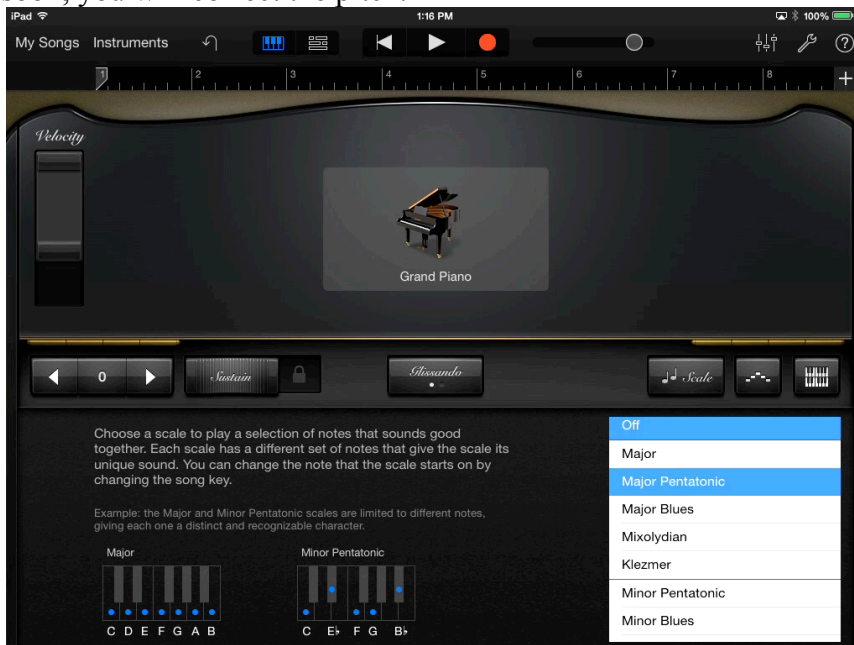
First tap the track settings icon (icon of a mixer immediately to the left of the wrench icon) in the top right hand corner of the screen. Then tap Quantization (about halfway down the screen).



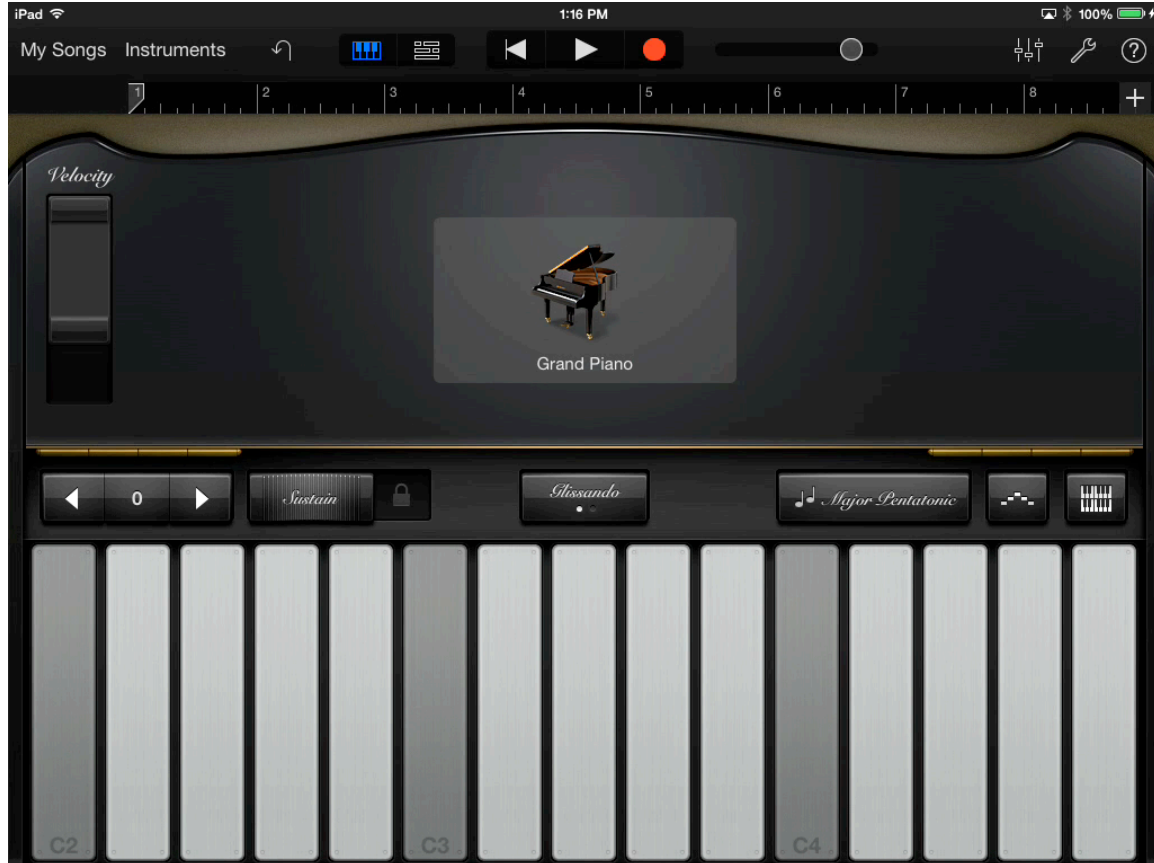
Then tap “1/8 note, and then tap away on the left hand side of the screen.

Quantization corrects the timing of the notes you will record for your keyboard part, so that every note that you play that would otherwise be ‘out of time’ will line up with an 1/8<sup>th</sup> note grid (which occurs twice every beat).

Now that you’ve corrected the timing for the keyboard melody you will be recording soon, you will correct the pitch.



To do this you will enable the scale function in the keyboard instrument. Tap the ‘scale’ button on the right hand side of the screen. Then tap ‘Major Pentatonic’, then tap away on the left side of the screen.



This will change what we see at the bottom of the screen from a piano keyboard to a series of white and grey blocks.

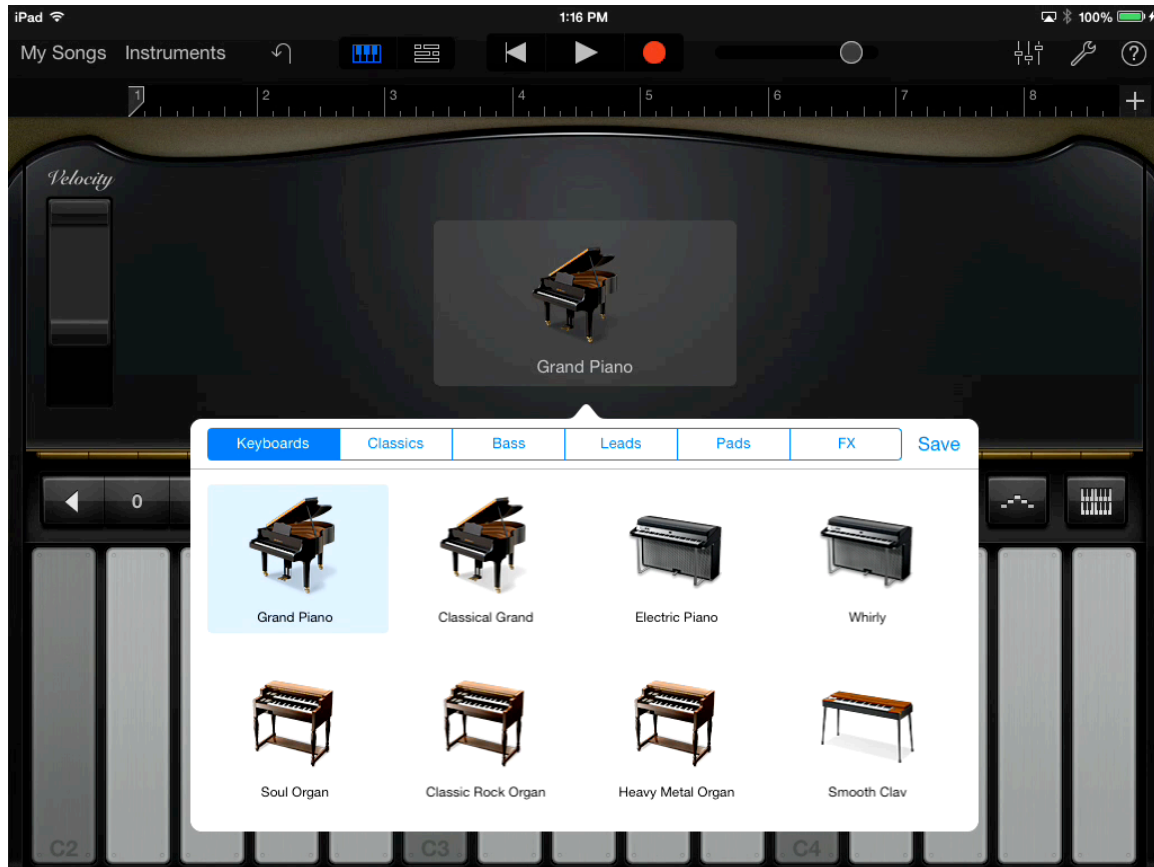
What the Scale function in Garageband does is make it virtually impossible to play a wrong note, provided you choose the right scale for the chords you are using in your song.

The major pentatonic scale is a five-note variation of the seven-note major scale. Most of the notes in the major pentatonic scale will work over the chord patterns described in the handout. This scale is also easy for most people to sing, which is one of the main goals of your melody.

The Scale function in Garageband also makes it easy to follow the six guidelines for creating a good melody listed on the handout.

For example, with respect to the first point (keeping the range of the melody within an octave or less) an octave is the distance from one grey key to the next (i.e. middle C to a high C or low C) or the equivalent distance from one white key an octave above or below. This makes it easy to visualize what the note range of a melody should be.

The Scale function is also a useful tool in helping turn words or lyrics into a song (the sixth point on the handout) by translating the natural changes of pitch of the spoken word into a musical scale. The changing pitches of speech can be thought of as a form of gesture or significant movement, which conveys just as much semantic and syntactic meaning as the written words themselves.

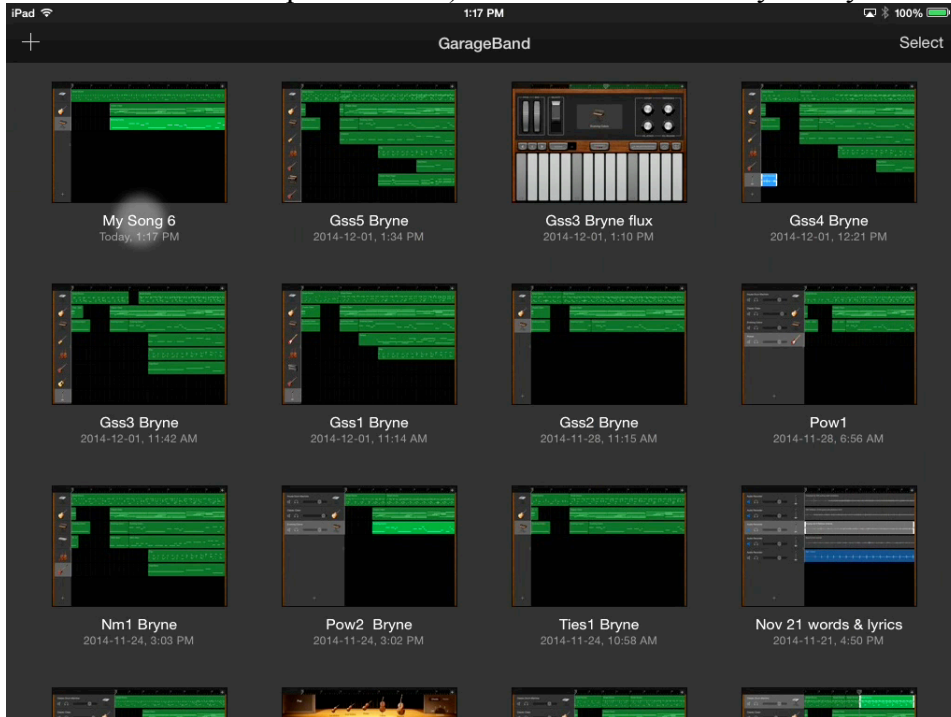


Similar to the Smart Drums and Smart Guitar, the Keyboard sound can be changed by tapping on the piano icon in the center of the screen.

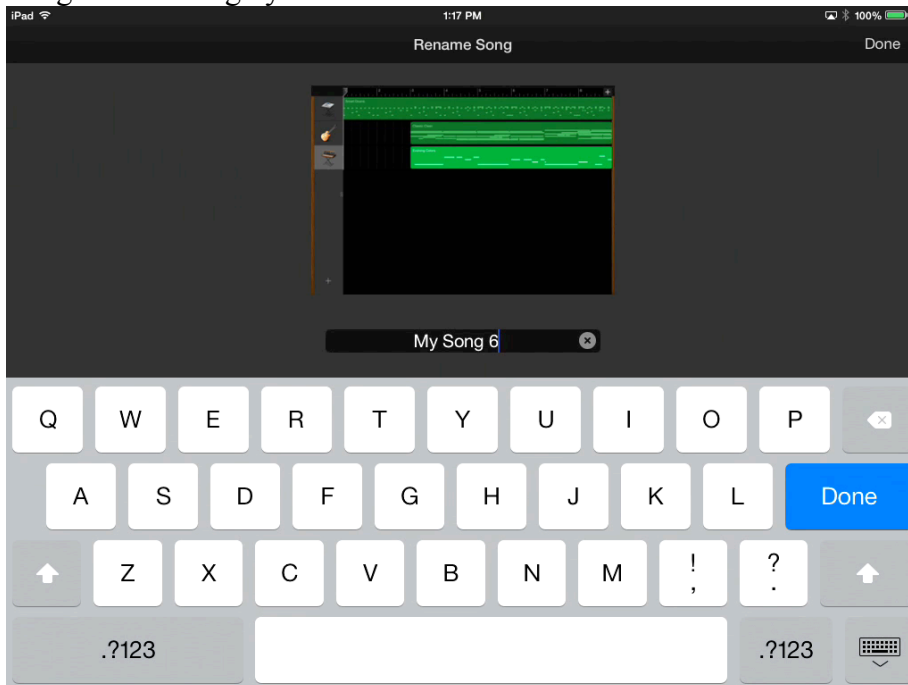
Once you have found a Keyboard sound you like, you can attempt to record your melody by moving the play head to where you want your melody to begin, tapping the record button and then after the count-in occurs, playing the notes on the Keyboard.

Once you have recorded the melody for your song, you can add other chordal instruments (I recommend using the Auto-play setting and playing the same chord pattern as the Smart Guitar is playing; if you wish to use the manual setting for any chordal instruments I recommend enabling Quantization under the track settings) and/or melodic instruments (in the Smart Guitar, Smart Strings, and Smart Strings, you can enable the single notes feature by tapping the switch on the right hand side of the screen and changing from chords to notes). I recommend enabling the Quantize function and the Scale function when recording melodic instruments.

Once you are finished recording your song, you should save it and name it. To save the song, tap the 'My Songs' button in the top right hand corner of the screen (in either the instrument view or sequencer view). This will automatically save your song.



Then tap directly on the title of the song to give it a name that you will immediately recognize the song by.



For more information on editing regions in the sequencer view, changing the song settings, or using the other Smart Instruments, please refer to the Garageband help file (listed on the Teacher's Resource Page of [bryneccarruthers.com](http://bryneccarruthers.com)).