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Lesson 5: Making music

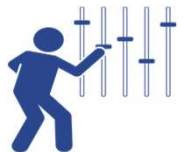## Create your own song structure

Learning objectives

Know the importance of specifying measures and tracks (channels) to interleave music

Combine function calls to create an intro, verse and chorus

Run and debug code to fine tune the music output
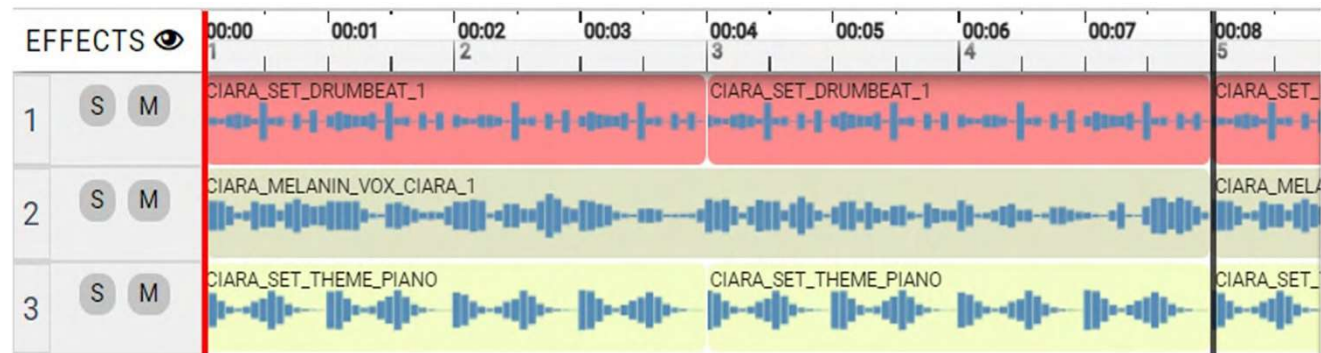
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Playing tracks in parallel - recap

- In EarSketch you can play three beats at the same time.
- In this example we have three channels

   - Channel 1 – drums

   - Channel 2 – vocals

   - Channel 3 - piano

Recap arguments

Track (often known as channel) ARGUMENT 2
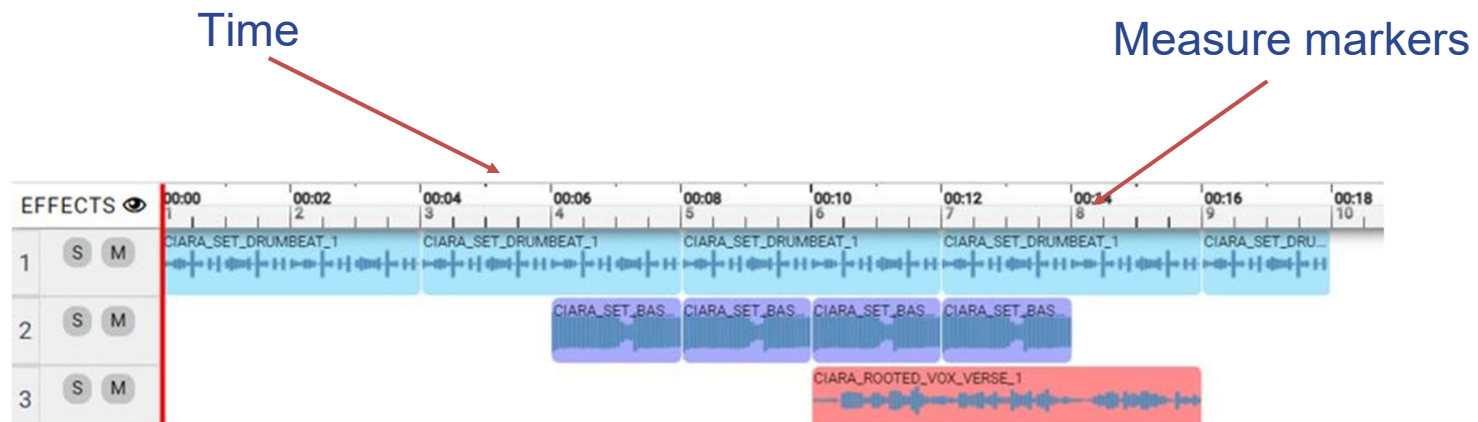
End measure ARGUMENT 4

fitMedia(bass, 1, 1, 9)

Variable name for sound clip ARGUMENT 1

Start measure ARGUMENT 3

The function fitMedia() needs four arguments. It needs all these arguments to do its job of playing the right sound for the amount of time you like.

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Looking at measures in the DAW

Time

Measure markers

Measure:

Measures in music are units of time that help musicians keep track of the rhythm and timing of the music they are playing or composing. They are organizing into "bars" and have a specific number of beats and notes allowed based on the time signature.

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Interleaving tracks

○ Using the last two arguments in the fitMedia() function, we can step / interleave the tracks

○ This is useful for an intro where we might want to drum and bass before the arrival of vocals:

ciara_drum = CIARA_SET_DRUMBEAT_1

ciara_bass = CIARA_SET_BASSLINE_1

ciara_vox = CIARA_ROOTED_VOX_VERSE_1

ciara_perc = CIARA_SET_PERC_CLAP_1

ciara_kick = CIARA_SET_KICK_1

ciara = [ciara_drum, ciara_bass, ciara_vox, ciara_perc, ciara_kick]

fitMedia(ciara[0], 1, 1, 10)
fitMedia(ciara[1], 2, 4, 8)
fitMedia(ciara[2], 3, 6, 9)

Interleaving tracks

```
ciara_drum = CIARA_SET_DRUMBEAT_1
ciara_bass = CIARA_SET_BASSLINE_1
ciara_vox = CIARA_ROOTED_VOX_VERSE_1
ciara_perc = CIARA_SET_PERC_CLAP_1
ciara_kick = CIARA_SET_KICK_1

ciara = [ciara_drum, ciara_bass, ciara_vox, ciara_perc, ciara_kick]

fitMedia(ciara[0], 1, 1, 10)
fitMedia(ciara[1], 2, 4, 8)
fitMedia(ciara[2], 3, 6, 9)
```

Activity

Run the code and listen to the music from the example program.

Adjust the start and end measures to improve it.

Can you interleave some additional instruments to improve the music further?

http://tiny.cc/yvip_l5_activity

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Simple song structure

- A simple song structure consists of verses and choruses

- A verse is a group of lines that tell part of the story or message or song. It usually comes before the chorus and is repeated   throughout the song   with different lyrics each time

- A chorus of a song is a section that is repeated several times and usually contains some lyrics and a melody. It is the most memorable and recognisable part of a song and conveys the   main theme of the song

VERSE	CHORUS	VERSE	CHORUS
A	B	A	B

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Create an intro, verse and chorus

- Mix it up!

- You don't need to select all the beats from the same artist, why not try combining different artist instruments and vocals together?

- When selecting your sounds, don't forget to think about the message you want to share in your music.

Activity (pairs)

Now you've mastered start and end measures and parallel beats, it's time to create:

An intro (up to measure 4)

A verse (from measure 4 to 12)

A chorus (from measure 12 to 20)

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Example solution

description: from earsketch import * ciara_drum
= CIARA_SET_DRUMBEAT_1 ciara_bass =
CIARA_SET_BASSLINE_1

ciara_vox = CIARA_ROOTED_VOX_VERSE_1

ciara_perc = CIARA_SET_PERC_CLAP_1

ciara_kick = CIARA_SET_KICK_1

ciara_vox2 = CIARA_ROOTED_VOX_CHORUS

ciara_vox3 = CIARA_ROOTED_VOX_PRECHORUS_1

ciara = [ciara_drum, ciara_bass, ciara_vox, ciara_ perc,
ciara_kick, ciara_vox2, ciara_vox3]

#intro
fitMedia(ciara[0], 1, 1, 4)
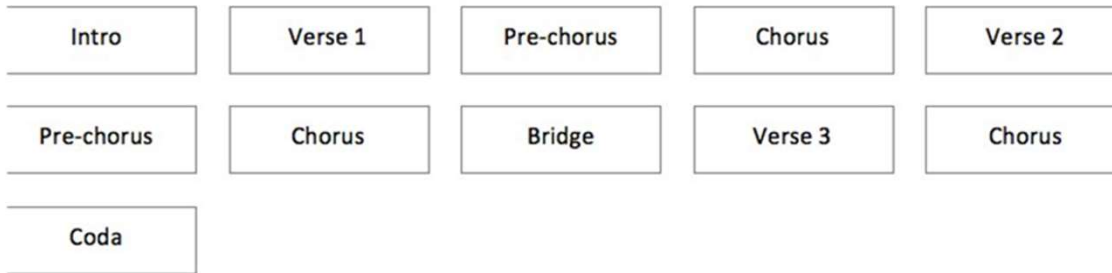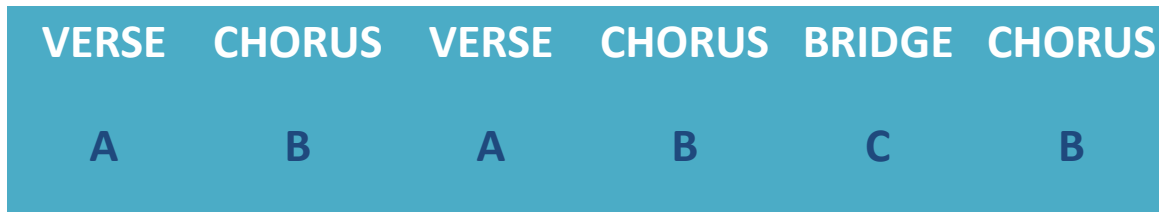fitMedia(ciara[1], 2, 2, 4)
fitMedia(ciara[3], 3, 2, 4)

#verse
fitMedia(ciara[0], 1, 4, 12)
fitMedia(ciara[1], 2, 4, 12)
fitMedia(ciara[2], 3, 4, 8)
fitMedia(ciara[6], 3, 8, 12)
fitMedia(ciara[4], 4, 4, 12)

#chorus
fitMedia(ciara[0], 1, 12, 20)
fitMedia(ciara[1], 2, 12, 18) fitMedia(ciara[4], 3, 12, 20) fitMedia(ciara[5], 4, 12, 16)

http://tiny.cc/yvip_l5_sol

Step it up

VERSE	CHORUS	VERSE	CHORUS	BRIDGE	CHORUS
A	B	A	B	C	B

Intro	Verse 1	Pre-chorus	Chorus	Verse 2
Pre-chorus	Chorus	Bridge	Verse 3	Chorus
Coda				

Activity (pairs)

Discuss with a partner which of the following tools and techniques you could use to develop your song structure.

Consider type of instrument, measures, using loops and lists etc.

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