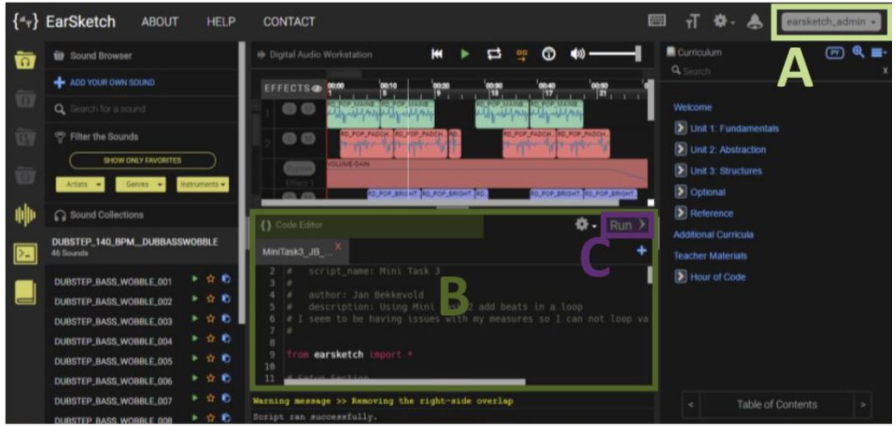
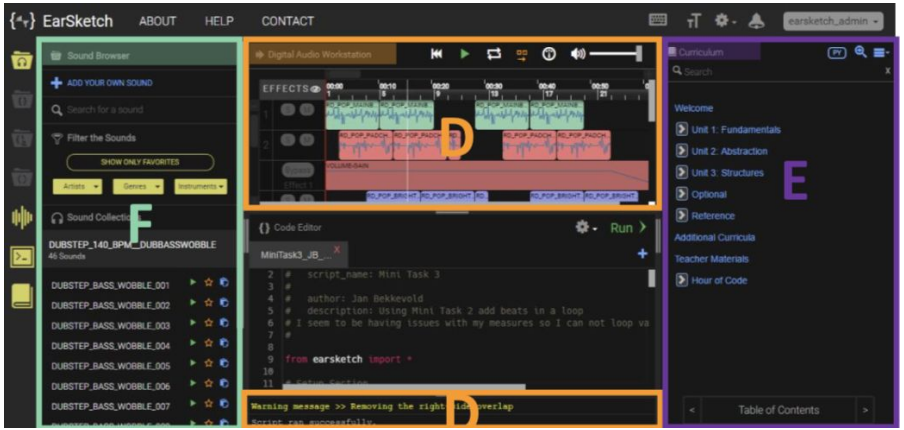
Earsketch Activity: Coding with Music!

1. **Go to earsketch.gatech.edu/earsketch2/**
2. **Get familiar with the environment!**
   a. Create a **user account** to save work regularly
   b. **Code Editor:** Write code here!
   c. **Run button:** When you're done, click run!

d. Shows errors and warnings in the **console**, and creates music in **Digital Audio Workstation**
e. **Curriculum**: If you want to explore more, you can read the chapters!
f. **Sound browser**: choose your sounds!





Icons on the left bar:

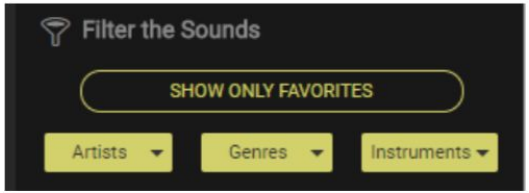
- Sound browser
- manage your scripts (one script = code for one song)
- API: type the function names to get information
- Hide/show the digital audio workstation
- Hide/show the console
- Hide/show the curriculum

3. Get Started!

a. Create a new Python script
b. Take a look at the gray lines with #. These are comments and don't affect code!
c. set(120) is the tempo of your song!
d. Use the fitMedia function to add a sound!
   i. **fitMedia(sound name, track number, start, end)**

- for sound names,

go to the sound browser, use the filters:



and you can play sounds as preview,

and copy their name by clicking here:

4. Add Effects

a. Use the set Effect function!

b. setEffect(track number, effect type, effect parameter, value)

   i. *Ex setEffect(1, VOLUME, GAIN, -20) will make track one be -30dB. This will make it quieter!*

c. OR **setEffect(track number, effect type, effect parameter, start value, start measure, end value, end measure)**

   i. *Ex setEffect(1, VOLUME, GAIN, -30, 1, 0, 2) will make track 1 be -30dB (quieter!) at the beginning and normal at measure 2!*

d. Other effects are REVERB, DELAY, and more! Explore curriculum and effects to find them!

5. Add some beats!

a. Select your beat sound!

   i. Sound Browser -> Artist Filter -> makeBeat

b. Create a beat string of 16 characters. There are 3 possible characters

   i. **'0' will play the sound**

   ii. **'+' continues sound**

   iii. **'-' silence**

   iv. Ex "0+--0+--0-0-0-0'

c. Use the makeBeat Function

   i. makeBeat(sound name, track number, start measure, beat string)