INTRO TO MUSIC - WHAT IS IT?

Leila Hawana
Computers, Sound, and Music
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WHAT IF I TOLD YOU

IT'S JUST ANOTHER LANGUAGE
What is this?
What if I told you it’s equivalent to this?

#do some stuff

while (!(input == “Thank you, this is great.”)):
    #make up some subtle stuff based around other program

#do some more stuff
And this...
...IS JUST THE SAME AS THIS!

```c
int i;
for (i=0; i<2; i++) {
    // do first thing
}
for (i=0; i<2; i++) {
    // do second thing
}
```
What about this?
Well...

for (int i=0; i<2; i++) {
    // do some stuff

    if (i == 1) {
        break;
        break;
    }

    // do first thing

} // do second thing
While different than most you have learned, music is just another language.
Agenda for remainder of term

● Learn basics of music theory and notation
  ○ Pitch, Scales, and Key Signatures (Leila)
  ○ Temperament and Alternate Tunings (Brian)
  ○ Duration and Rhythm (Leila)
  ○ Harmony and Chords (Bart)

● Understand how it is analyzed by humans
  ○ Beat and Time Signature Identification (Leila/Bart)
  ○ Key Signature, Melody, and Chord Identification (Leila/Bart)

● Take that and try to understand how it can be understood by computers
  ○ Introduction to Music Generation (Leila)
A LITTLE ABOUT ME

- BM in Percussion Performance from University of Oregon (2015)
  - Most Outstanding Performer in Percussion
- Percussion/Music Educator for 12 years in Oregon and Washington
- I also have a BS in Mathematics from UO and a MS in Computer Science (specializing in AI/ML) from PSU
- Fun fact: I started playing percussion in high school, but began my musical endeavors around the age of three.
- Fun fact: I’m the drummer in Singing in the Rain at Lakewood Theater. :)

[Image: A woman playing percussion]
Supplemental Reading (Optional)

Deep Learning Techniques for Music Generation – A Survey