[OUTDATED]

1. Beginnings
   1. So this is audio analysis for n00bs. And who better to teach than a prior noob
   2. In this module I will teach you the foundations of audio so you can have the foundation needed to try projects of your own
   3. We will cover
      1. Analog vs Digital Audio
      2. Generating tones only your dog can hear
      3. Listening to tones
      4. Analyzing your music preferences
      5. Sources for music information
         1. Youtube
         2. Spotify
         3. Soundcloud
         4. Academic databases
      6. Spotify API
   4. Libraries
      1. Mingus and fluidsynth looks best on tabs and stuff
      2. Actually doing music ML seems like a green field
   5. Notes
      1. There’s a deep connection between language and music. Just look at this blak file format and things will spin

|  |
| --- |
| bpm: 120 |
|  |  |
|  | resolution: 12 |
|  |  |
|  | pattern: hihat\_base\_crash\_start |
|  | |C--h-hH--h--| |
|  |  |
|  | pattern: hihat\_4 |
|  | |h--h--h--h--| |
|  |  |
|  | pattern: hihat\_4\_with\_accent |
|  | |h--h-hH--h--| |
|  |  |
|  | pattern: basic\_beat\_half\_time |
|  | |b-----s-----| |
|  |  |
|  |  |
|  |  |
|  | combine: regular\_block |
|  | hihat\_4 |
|  | basic\_beat\_half\_time |
|  |  |
|  | combine: accented\_block |
|  | hihat\_4\_with\_accent |
|  | basic\_beat\_half\_time |
|  |  |
|  | combine: opening\_block |
|  | hihat\_base\_crash\_start |
|  | basic\_beat\_half\_time |
|  |  |
|  | sequence: beat |
|  | opening\_block |
|  | regular\_block |
|  | accented\_block |
|  | regular\_block |
|  |  |
|  | sequence: song |
|  | beat |
|  | beat |
|  | beat |
|  | beat |

* 1. Advanced:
     1. Chord recognition in python
     2. Track splitting
     3. Beyond spotify metrics
     4. … TBD