

EsAC to Clay: EsAC Input Specification

Jacob Peck

CSC 490 – Cognitive Musicology

Professor Craig Graci

Spring 2010 Semester

EsAC Input Specification

The EsAC input files should have the following format:

```
<optional lines>
KEY[TUNENAME SHORTESTNOTE TONIC METER]
MEL[ BAR 1 BAR 2
    "" ""
    BAR N //]
<optional lines>
```

For the KEY line:

- TUNENAME is the name of the tune, and will be the name of the resulting Clay program
- SHORTESTNOTE and METER are ignored for the purposes of this program.
- TONIC is the key signature (fitting the regex [A-G]).

For the MEL section:

- Each line is a phrase made up of one or more BARs separated by two spaces.
- Each BAR is made up of digits fitting the regex [0-7], #, b, +(plus), -(minus), _(underscore), and .(dot).
- Each digit in a BAR represents a note in relation to the tonic, except for 0, which represents a rest.
- Each underscore following a digit means to double the duration of the note.
- Each dot following a digit means to multiply the duration of the note by 1.5.
- Each plus preceding a digit means to raise the note an octave.
- Each minus preceding a digit means to lower the note an octave.
- A # following a digit means to play the note sharp (raise a half-tone).
- A b following a digit means to play the note flat (lower a half-tone).
- The section is closed by the string “//”.

Other lines in the EsAC specification are ignored for the purposes of this program.