

gizmo documentation

## gizmo

**gizmo** is a simple toolbox to create some simple melodies using python. The beauty about is, that you only need *a single motive* to create a little song.

*Note:* This program uses the music21 library.

## Dependencies

First of all you need python3 including the standard libraris. Now install the only needed additional module using pip:

```
pip install music21
```

## the ‘gizmo notation’

For a simple toolkit you need a simple notation that abides to the unix philspfoy. So we made a now one that consists simply of *lines in a plain text file*.

Every line contains the information about *one note*. Seperated by apostrophes there are different attributes specified for each note. Every attribute seperated like this is called a ‘**part**’:

- The first part is a four characters long float that contains the *length* of the note in quarters.
- The second part is two to three chars long. The fist character is the Note value (capitalized) and the second one the octave (as a integer). The third char is optional and just the key signature in the form of either “#” or “-”.

Here an example in the *gizmo notation*:

```
1.00,G4  
1.00,E4  
0.50,D4  
1.00,C#4
```

Now the same example in *sheet music*:



## Rendering

After you fully processed your music in the gizmo notation you can run it through the script called *final-converter* to export your work as a **.musicXML** file. This file can be viewed and further edited/processed in other free software like MuseScore.

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follow this project on github