

Doremi

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Abstract

Doremi is a simple music-representation designed especially for simple multi-part works in a vocal style, e.g. hymn tunes and part songs. It is based on movable-*do* solfge, and is intended to require as little understanding of traditional musical notation as possible.

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1 A simple example

Here is the common hymn tune *Old Hundred* written in Doremi:

```
1 title: "Old Hundred"
2 composer: "Louis Bourgeois"
3 key: A major
4 time: 4/2
5 partial: 2
6 voices: [{name: soprano
7           octave: 1
8           content: [2 do do - ti la sol + do re fermata mi
9                     mi mi mi re do fa mi fermata re
10                    do re mi re do - la ti + fermata do
11                    sol mi do re fa mi re fermata do]}
12           {name: alto
```

```

13      octave: 0
14      content: [2 sol sol sol mi mi mi sol sol
15                sol sol + do - ti + do do do - ti
16                + do - ti + do - sol sol la sol sol
17                + do - sol la ti 4 slur la ti + 2 do - ti + do]]
18      {name: tenor
19      octave: 0
20      content: [2 mi mi re do - ti la ti + do
21                do mi sol sol mi la sol sol
22                mi sol sol fa sol 4 slur fa mi 2 re mi
23                mi do mi sol la sol fa mi]]
24      {name: bass
25      octave: 0
26      content: [2 do do - sol la mi la sol do
27                + do do do - sol la fa do sol
28                la sol + do - sol mi fa sol do
29                + do do - la sol re 4 slur mi fa 2 sol do]]

```

2 The header

The heading (lines 1-5) is standard, and all its lines are required except for line 5, beginning **partial**. The title and composer (lines 1 and 2) are mostly self-explanatory; note that they *must* be enclosed in double quotation marks.

The key signature (line 3) is the name of the key note (sharp is indicated by #, flat by b) followed by its quality, either major or minor, e.g. **Ab major**, **F# minor**.

The time signature (line 4) must be written as a fraction (abbreviations such as **C** will not work). There is no provision for mixed meter signatures.

Line 5, beginning **partial:**, is optional; it specifies the length of the first measure if it is a partial (as opposed to complete) measure; the possible values are those of note durations (see **Note modifiers**, below).

3 Voices

A tune also has voices, which are indicated by the tag **voices:**. It can have as many or as few voices as are specified by the template for which it is intended. The list of voices is enclosed in square brackets ([]), and each voice is enclosed in curly braces ({}).

Each voice has the same structure, similar to that of a tune. It has a name (as in line 6); a beginning octave specification (line 7), and a list of notes (lines 8-11).

3.1 Name

The name is mostly self-explanatory, except that it is not a string and cannot contain spaces. It must begin with an alphabetic character, and

can only contain letters, numbers, and hyphens. It is used in conjunction with templates to place the voices correctly.

3.2 Octave

The octave is specified by a positive or negative integer. 0 is the octave nearest the center, roughly speaking, of the average female voice (determined so as to overlap as much as possible the octave ascending from middle C); each higher octave adds 1, each lower octave subtracts. (The octave can be modified by an overall octave offset specified at the command line, but the relation between voices remains constant.)

3.3 Content

The content of a voice consists of a list of notes and their modifiers.

3.4 Notes

The notes are specified by solfge syllables and a subset of their chromatic alterations:

Syllable	Pitch
do	do
di	do \sharp
ra	re \flat
re	re
ri	re \sharp
me	mi \flat
mi	mi
fa	fa
fi	fa \sharp
se	sol \flat
sol	sol
si	sol \sharp
le	la \flat
la	la
li	la \sharp
te	ti \flat
ti	ti

3.5 Note modifiers

Each note may be preceded by a number of modifiers, which may be a number specifying a new note duration, a time signature, or one of the following:

Modifier	Meaning
fermata	Add a fermata to the next note
slur	Start (or continue) a slur at the next note
tie	Tie the next note to the one after
-	Lower the octave of the next note
+	Raise the octave of the next note

Durations

Note durations are specified by a number indicating the denominator of the duration's fraction of a whole note:

Duration	Note type
1	whole
2	half
4	quarter
8	eighth
16	sixteenth

A duration may be followed by a single dot if the intended note value is dotted.

Time signature

Time signatures are specified exactly as in the tune header, and need only be specified in one voice; the other voices will receive the time signature change implicitly and be barred accordingly.

4 Lyrics

Lyrics are stored in separate files from the tunes to which they are applied, to facilitate the common practice of singing any number of hymns to a single hymn tune. Here is a simple example of a lyric file:

```

1 title: "Prayer Comes First"
2 author: "Larry and Belinda Pearl"
3 meter: "12.12.12.12"
4 verses: [{Things in life don't hap- pen just like we've al- ways planned.
5           Ways to solve our prob- lems aren't gi- ven to a man.
6           Ma- ny times we try hard, but fail to make them right,
7           For man works in dark- ness, but "God --" He works in light.}
8 {Our vain ef- forts gi- ven, we're left so deep in woe.
9           Man's hands could- n't help us, so to our knees we go.
10          Fi- nal- ly, we get there, when things are at their "worst.
11          In" prayer we talk with God, but we should have gone there first.}
12 {Fer- vent prayer should ne- ver be just a last re- sort.
13          Pray first to the Fa- ther, and bask in His sup- port.
14          Let your heart turn up- ward and praise the lov- ing Lord.
15          Take those prob- lems to "Him --" sal- va- tion's in God's Word!}]

```