

The `songproj` package*

Tanguy Ortolo
tanguy+latex@ortolo.eu

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1 Introduction

This package, together with the `beamer` class, is used to generate slideshows with song lyrics. This is typically used in religious services in churches equipped with a projector, for which this package has been written, but it can be useful for any type of singing assembly¹. It provides environments to describe a song in a natural way, and formatting it into slides with overlays.

2 Usage

2.1 The `song` environment

The main feature of this package is the `song`, that allows the user to describe an entire song that will be formatted into slides.

`song` The `song`{ $\langle stanzas per slide \rangle$ }[$\langle couplet list \rangle$] environment is used around an entire song. It takes a mandatory argument, $\langle stanzas per slide \rangle$, to specify whether the user wants to show one or two stanzas² on the slide. An optional argument, $\langle couplet list \rangle$ is a comma-separated list of couplet (or verse) indexes, that allows the user to indicate that they want to include only these couplets of a large song: without this, all couplets will be included.

Inside of the `song` environment, the user will use the `\longest` command and the `intro`, `refrain`, `couplet`³ and `final` environments.

Warning Inside a `song` environment, it is an error to write anything that is not an `intro`, `refrain`, `couplet`, `final` environment or a `\longest` command. Direct text would be typeset in a way that would disrupt the song formatting.

*This document corresponds to `songproj` v1.2.0, dated 2023/03/29.

¹Indeed, the song used here as an example is not really a religious one! It was chosen because it is in the public domain and the author likes it.

²including the refrain

³We chose to use the French words *refrain* and *couplet* for several reason: the author is French, these words are understandable in English and their English equivalents, *chorus* and *verse*, have multiple meanings that would make them very ambiguous in both usage and implementation of this package.

`\longest` `\longest{song line}`

Inside a `song` environment, the `\longest{song line}` command is used to declare the longest line of a song, that will be used to properly center the song stanzas, as allowed by the `verse` package. That line is only used to compute and record its length, and will not be typeset.

`\numbercouplets`

Inside a `song` environment, the `\numbercouplets` command can be used to enable couplet numbering. This can be useful when specific couplets have been selected but the lead singer has a score a lyrics sheet that includes all of them: indicating the couplet numbers in the projection will allow them to check which couplet to sing.

`intro` Inside a `song` environment, the optional `intro` environment declares a number of lines meant to be sung once, at the beginning of the song. In a psalm, this may be an antiphon.

`refrain` Inside a `song` environment, the optional `refrain` environment declares the song refrain (or chorus). A song may start with its refrain, or with a first couplet, followed by the refrain. It is not useful to declare the refrain several time, as the `song` environment will take care of repeating between the couplets.

`couplet` Inside a `song` environment, the `couplet` environment declares each couplet (or verse) of the song.

`final` Inside a `song` environment, the optional `final` environment declares a number of lines meant to be sung once, at the end of the song. In an hymn, that may be a doxology.

Example The following song is defined with three couplets and a refrain. Since its begins with a couplet, it will be formatted with the first couplet, the refrain, the second couplet, the refrain, and so on.

The `song` environment is given two arguments, `{2}[1,2]`. The first one tells it to show two stanzas, that is, both a couplet and the refrain, on the generated slide. The second argument tells it to include only the first two couplets in the output.

```
\begin{frame}
\begin{song}{2}[1,2]
\longest{Light she was, and like a fairy,}
\begin{couplet}
  In a cavern, in a canyon, \\\
  Excavating for a mine. \\\
  Dwelt a miner, forty-niner, \\\
  And his daughter, Clementine. \\\
\end{couplet}
\begin{refrain}
  Oh my darling, oh my darling, \\\
  Oh my darling Clementine, \\\
  You are lost and gone forever, \\\
  Dreadful sorry, Clementine. \\\
\end{refrain}
\end{song}
\end{frame}
```

```

\begin{couplet}
  Light she was, and like a fairy, \\
  And her shoes were number nine, \\
  Herring boxes, without topses, \\
  Sandals were for Clementine. \\
\end{couplet}
\begin{couplet}
[...]
\end{couplet}
\end{song}
\end{frame}

```

2.2 The `\inputsong` command

<code>\inputsong</code>	<code>\inputsong{<file>}{<stanzas per slide>}[<couplet list>]</code>
<code>\inputsong*</code>	<code>\inputsong*{<file>}{<stanzas per slide>}[<couplet list>]</code>

The `\inputsong` command environment is used as a shortcut for typesetting a song written in an external file. That file should contain the song content, including intro, refrain, couplet or final as needed, but *without* being wrapped in a `song` environment.

For instance, one could write a file named `clementine.tex` containing the *content* of the `song` environment shown in example page 2, and use it in a slideshow:

```
\frame{\inputsong{clementine.tex}{2}[1,2]}
```

The starred version `\inputsong*` enables couplet numbering, as described in 2.1.

2.3 The `refrain`, `couplet`, `intro` and `final` environments

These commands are also usable outside of a `song` environment. In that case, they simply format a refrain or couplet, which can be useful when you need more manual control.

refrain Outside of a `song` environment, this environment simply wraps its content inside a `structure` and a `verse` environment. It takes an optional *<verse width>* argument, that is used to properly center the refrain, as allowed by the `verse` package.

couplet Outside of a `song` environment, this environment simply wraps its content inside a `verse` environment. It takes an optional *<verse width>* argument, that is used to properly center the refrain, as allowed by the `verse` package.

intro Outside of a `song` environment, these environments simply wrap their content inside a `em` and a `verse` environment. They takes an optional *<verse width>* argument, that is used to properly center the refrain, as allowed by the `verse` package.

final

2.4 Usage tips

For regular offices, there are several suggestions that can ease the creation and usage of lyric slideshows.

2.4.1 Using dedicated song files

It is suggested to write song lyrics in dedicated files, each containing a single the *content* of a `song` environment, without the environment wrapping itself. They can then be used with the `\inputsong` command.

For instance, one could write a file named `clementine.tex` containing the *content* of the `song` environment shown in example page 2. It would then be used in a slideshow such as:

```
\documentclass{beamer}
\usepackage{songproj}

\begin{document}
  \begin{frame}
    \inputsong{clementine.tex}{2}[1,2,3]
  \end{frame}
\end{document}
```

2.4.2 Importing text lyrics

Song lyrics are often found in text format with basic markup:

```
1. In a cavern, in a canon,
Excavating for a mine.
Dwelt a miner, forty-niner,
And his daughter, Clementine.

C. Oh my darling, oh my darling,
Oh my darling Clementine
You are lost and gone forever,
Dreadful sorry Clementine.

2. Light she was, and like a fairy,
And her shoes were number nine,
Herring boxes, without topses,
Sandals were for Clementine.
```

[...]

To avoid the tedious task of manually removing text and adding \LaTeX markup, we provide the `song2tex.py` helper. Please refer to its embedded help for detailed instructions about its usage:

```
$ ./song2tex.py --help
$ ./song2tex.py clementine.txt clementine.tex
```

2.4.3 Projection layout advice

During a religious service, a song lyrics projection is only a support, and should not draw their attention away from the main feature, which is the common prayer.

I therefore suggest using a very simple Beamer theme, such as its default one with the `owl` color theme, and removing the navigation symbols. I also suggest not showing

song titles (or anything else that is not actually sung by the assembly) unless there is a good reason to do so, such as getting used to a song or set of songs you intend to reuse often.

```
\documentclass{beamer}
\usecolortheme{owl}
\setbeamertemplate{navigation symbols}{}
\usepackage{songproj}
\begin{document}
  [...]
\end{document}
```

2.4.4 Projection advice

For projecting song lyrics, you can take advantage of using a PDF presentation software able to show a presenter console on your laptop screen, and the current slide on the projector. Software like [pdfpc](#) or [Pympress](#) can also understand and adapt their display to the concept of Beamer overlay.

3 Implementation

3.1 Dependencies

This module is written using L^AT_EX3 programming interfaces and command definitions:

```
1 \RequirePackage{expl3}
2 \RequirePackage{xparse}
```

The implementation of the `song` environment and its friends is mainly based on the `verse` package:

```
3 \RequirePackage{verse}
```

3.2 Internal definitions

Almost all definitions use the `expl3` syntax:

```
4 \ExplSyntaxOn
```

3.2.1 Internal variables

We define a number of internal variables, that are used when reading and formatting a song. All of these variables are meant to be set globally: since there is no notion of a song within a song, we are certain that we will always be either outside of a song or inside a single song.

```
5 \bool_new:N \g__sp_song_bool           % are we in a song?
6 \bool_new:N \g__sp_song_start_bool    % are we at the start of a song?
7 \bool_new:N \g__sp_refrain_first_bool  % does current song start with the
8                                         % refrain?
9 \bool_new:N \g__sp_show_numbers_bool   % should we show the couplet numbers?
10 \int_new:N \g__sp_stanzas_per_slide_int % number of stanzas to show on each
11                                         % slide (1 or 2)
12 \dim_new:N \g__sp_linewidth_dim       % length of the longest line in current
```

```

13                                     % song
14 \tl_new:N \g__sp_intro_tl           % current song intro
15 \tl_new:N \g__sp_refrain_tl         % current song refrain
16 \seq_new:N \g__sp_couplets_seq     % current song couplets
17 \tl_new:N \g__sp_final_tl          % current song final
18 \seq_new:N \g__sp_couplet_indexes_seq % indexes of couplets to include

```

3.2.2 Internal environments

These are high-level internal environments, that are used in the implementation of user interface environments.

`__sp_refrain` This environment simply formats a song refrain. It is used in the user interface `refrain` environment.

```

19 \NewDocumentEnvironment {__sp_refrain} {}
20 % The environment opening may be followed by a [length], in fact part of its
21 % body, and will appear just after the opening of the verse environment and
22 % constitute its optional argument.
23 {
24   \begin{structureenv}
25   \begin{verse}
26 }
27 {
28   \end{verse}
29   \end{structureenv}
30 }

```

`__sp_couplet` This environment simply formats a song couplet. It is used in the user interface `couplet` environment.

```

31 \NewDocumentEnvironment {__sp_couplet} {}
32 % The environment opening may be followed by a [length], in fact part of its
33 % body, and will appear just after the opening of the verse environment and
34 % constitute its optional argument.
35 { \begin{verse} }
36 { \end{verse} }

```

`__sp_special` This environments simply formats a song intro of final. It is used in the user interface `intro` and `final` environments.

```

37 \NewDocumentEnvironment {__sp_special} {}
38 % The environment opening may be followed by a [length], in fact part of its
39 % body, and will appear just after the opening of the verse environment and
40 % constitute its optional argument.
41 {
42   \begin{em}
43   \begin{verse}
44 }
45 {
46   \end{verse}
47   \end{em}
48 }

```

3.2.3 Internal macros

These are macros that are used in the implementation of the `song` environment.

`__sp_song_refrain` This macro uses the `__sp_refrain` environment to format the current song refrain.

```

49 \tl_gset:Nn \__sp_song_refrain
50 {
51   % Do we know the width of the longest song line?
52   \dim_compare:nNnTF \g__sp_linewidth_dim {=} {0pt}
53     { \begin{__sp_refrain} }
54     { \begin{__sp_refrain} [\g__sp_linewidth_dim] }
55   \tl_use:N \g__sp_refrain_tl
56   \end{__sp_refrain}
57 }

```

(End definition for `__sp_song_refrain`.)

`__sp_song_couplet:n` This macro uses the `__sp_couplet` environment to format a specified couplet of the current song. It takes a single argument:

#1 : index of the couplet to format.

```

58 \cs_gset:Npn \__sp_song_couplet:n #1
59 {
60   % Do we know the width of the longest song line?
61   \dim_compare:nNnTF \g__sp_linewidth_dim {=} {0pt}
62     { \begin{__sp_couplet} }
63     { \begin{__sp_couplet} [\g__sp_linewidth_dim] }
64   \bool_if:NTF \g__sp_show_numbers_bool
65     { \flagverse{#1.} }
66     {}
67   \seq_item:Nn \g__sp_couplets_seq {#1}
68   \end{__sp_couplet}
69 }

```

(End definition for `__sp_song_couplet:n`.)

`__sp_song_couplets:n` This macro inserts an containing all couplets of the current song in an `overprint` environment, in groups separated with `\onslide` commands. It takes a single argument:

#1 : number of couplets to show together on each slide.

```

70 \cs_gset:Npn \__sp_song_couplets:n #1
71 {
72   \begin{overprint}
73   % Loop on all specified couplets
74   \int_step_inline:nn
75     { \seq_count:N \g__sp_couplet_indexes_seq }
76     {
77     % Before every #1 lines, i.e. when ((##1 - 1) mod #1 == 0),
78     % insert an \onslide
79     \int_compare:nNnTF
80       { \int_mod:nn { \int_eval:n{##1 - 1} } {#1} } { = } { 0 }
81       { \onslide<+> }
82       { \vskip \stanzaskip }
83     \__sp_song_couplet:n { \seq_item:Nn \g__sp_couplet_indexes_seq {##1} }
84     }
85   \end{overprint}
86 }

```

(End definition for `_sp_song_couplets:n`.)

`_sp_song_intro` This macro uses the `_sp_special` environment to format the current song intro.

```
87 \tl_gset:Nn \_sp_song_intro
88 {
89   % Do we know the width of the longest song line?
90   \dim_compare:nNnTF \g__sp_linewidth_dim {=} {Opt}
91     { \begin{\_sp_special} }
92     { \begin{\_sp_special} [\g__sp_linewidth_dim] }
93   \tl_use:N \g__sp_intro_tl
94   \end{\_sp_special}
95 }
```

(End definition for `_sp_song_intro`.)

`_sp_song_final` This macro uses the `_sp_refrain` environment to format the current song final.

```
96 \tl_gset:Nn \_sp_song_final
97 {
98   % Do we know the width of the longest song line?
99   \dim_compare:nNnTF \g__sp_linewidth_dim {=} {Opt}
100     { \begin{\_sp_special} }
101     { \begin{\_sp_special} [\g__sp_linewidth_dim] }
102   \tl_use:N \g__sp_final_tl
103   \end{\_sp_special}
104 }
```

(End definition for `_sp_song_final`.)

`_sp_song` This macro inserts the entire song, alternating refrain and couplets in an `overprint` environment.

```
105 \tl_gset:Nn \_sp_song
106 {
107   % Is there a song intro?
108   \tl_if_empty:NnTF \g__sp_intro_tl
109     {}
110     {
111       \visible<1> {\_sp_song_intro}
112       % The combination of overprint with verse that comes next somehow adds
113       % extra vertical space that needs to be removed.
114       \vskip -\stanzaskip
115     }
116
117   \begin{overprint}
118
119   % Does the song begin with the refrain?
120   \bool_if:NnTF \g__sp_refrain_first_bool
121     {
122       % If so, print an initial refrain
123       \onslide<+>
124       \_sp_song_refrain
125     }
126     {}
127
128   % Is there a refrain?
```



```

129 \tl_if_empty:NTF \g__sp_refrain_tl
130 {
131   % No refrain, loop on all specified couplets and insert them
132   \seq_map_inline:Nn
133     \g__sp_couplet_indexes_seq
134     {
135       \onslide<+>
136       \__sp_song_couplet:n {#1}
137     }
138 }
139 {
140   % There is a refrain, loop on all specified couplets and, each time,
141   % insert both a couplet and the refrain
142   \seq_map_inline:Nn
143     \g__sp_couplet_indexes_seq
144     {
145       \onslide<+>
146       \__sp_song_couplet:n {#1}
147       \onslide<+>
148       \__sp_song_refrain
149     }
150 }
151 \end{overprint}
152
153 % Is there a song final?
154 \tl_if_empty:NTF \g__sp_final_tl
155 {}
156 {
157   % Add extra spacing
158   \vskip \stanzaskip
159   \visible<.> {\__sp_song_final}
160 }
161 }

```

(End definition for `__sp_song`.)

3.3 User interface

These environments constitute our user interface. They allow the user to define songs, refrains and couplets.

refrain This environment handles a refrain :

- outside of a song, it uses the `__sp_refrain` environment to directly format it ;
- inside a song, it stores it into `\g__sp_retrain_tl`, so it can be formatted by the end of the `song` environment.

```

162 \NewDocumentEnvironment {refrain} { +b }
163 % The environment opening may be followed by a [length], in fact part of its
164 % body, and will appear just after the opening of the \__sp_refrain
165 % environment and constitute its optional argument.
166 {
167   % Are we in a song?
168   \bool_if:NTF \g__sp_song_bool

```

```

169     {
170     % We are in a song, are we at its start?
171     \bool_if:NTF \g__sp_song_start_bool
172     {
173     % Indicate that we are no longer at the start of the song
174     \bool_gset_false:N\g__sp_song_start_bool
175     % and that the refrain comes first
176     \bool_gset_true:N\g__sp_refrain_first_bool
177     }
178     {}
179     % Anyway, store the refrain
180     \tl_gset:Nn \g__sp_refrain_tl {#1}
181     }
182     {
183     % We are not in a song, use __sp_refrain to format the refrain
184     \begin{__sp_refrain}
185     #1
186     \end{__sp_refrain}
187     }
188     }
189     {}

```

couplet This environment handles a couplet, in a similar way:

- outside of a song, it uses the `__sp_couplet` environment to directly format it ;
- inside a song, it stores it by appending it to `\g__sp_couplets_seq`, so it can be formatted by the end of the `song` environment.

```

190 \NewDocumentEnvironment {couplet} { +b }
191 % The environment opening may be followed by a [length], in fact part of its
192 % body, and will appear just after the opening of the __sp_couplet
193 % environment and constitute its optional argument.
194 {
195     % Are we in a song?
196     \bool_if:NTF \g__sp_song_bool
197     {
198     % Are we at in a song, are we at its start?
199     \bool_if:NTF \g__sp_song_start_bool
200     {
201     % Indicate that we are no longer at the start of the song
202     \bool_gset_false:N \g__sp_song_start_bool
203     % and that the refrain does not come first
204     \bool_gset_false:N \g__sp_refrain_first_bool
205     }
206     {}
207     % Anyway, store this couplet
208     \seq_gput_right:Nn \g__sp_couplets_seq { {#1} }
209     }
210     {
211     % We are not in a song, use __sp_couplet to format this couplet
212     \begin{__sp_couplet}
213     #1
214     \end{__sp_couplet}
215     }

```

```

216 }
217 {}

```

intro This environment handles a song intro, in a similar way:

- outside of a song, it uses the `__sp_special` environment to directly format it;
- inside a song, it stores it into `\g__sp_intro_tl` so it can be formatted by the end of the `song` environment.

```

218 \NewDocumentEnvironment {intro} { +b }
219 % The environment opening may be followed by a [length], in fact part of its
220 % body, and will appear just after the opening of the __sp_special
221 % environment and constitute its optional argument.
222 {
223   % Are we in a song?
224   \bool_if:NTF \g__sp_song_bool
225   {
226     % We are in a song, store its intro
227     \tl_gset:Nn \g__sp_intro_tl {#1}
228   }
229   {
230     % We are not in a song, use __sp_special to format the intro
231     \begin{__sp_special}
232       #1
233     \end{__sp_special}
234   }
235 }
236 {}

```

final This environment handles a song final, in a similar way:

- outside of a song, it uses the `__sp_special` environment to directly format it;
- inside a song, it stores it into `\g__sp_final_tl` so it can be formatted by the end of the `song` environment.

```

237 \NewDocumentEnvironment {final} { +b }
238 % The environment opening may be followed by a [length], in fact part of its
239 % body, and will appear just after the opening of the __sp_special
240 % environment and constitute its optional argument.
241 {
242   % Are we in a song?
243   \bool_if:NTF \g__sp_song_bool
244   {
245     % We are in a song, store its intro
246     \tl_gset:Nn \g__sp_final_tl {#1}
247   }
248   {
249     % We are not in a song, use __sp_special to format the intro
250     \begin{__sp_special}
251       #1
252     \end{__sp_special}
253   }
254 }
255 {}

```

\longest This macro measures the length of a song line and stores it, so it can be used by the `song` environment to properly center refrain and couplets. It takes a single argument:
#1 : a song line to measure.

```
256 \NewDocumentCommand {\longest} { m } { \settowidth {\g__sp_linewidth_dim} {#1} }
```

(End definition for `\longest`. This function is documented on page 2.)

\numbercouplets This macro can be used within a song to indicate that its couplets should be numbered.

```
257 \NewDocumentCommand {\numbercouplets}{}
258 { \bool_gset_true:N \g__sp_show_numbers_bool }
```

(End definition for `\numbercouplets`. This function is documented on page 2.)

song This environment is used as a container for entire songs. On opening, it does several things:

1. it stores its arguments into variables with a descriptive name;
2. it clears out any previously stored refrain, couplet, intro, final and longest song line;
3. it sets the `\g__sp_song_bool` variable to indicate that we are inside a song, which will alter the behaviour of the `refrain` and `couplet` environments so they record their content rather than directly formatting it into the document;
4. it sets the `\g__sp_song_start_bool` variable to indicate that we are at the start of the song, which will allow the next `refrain` or `couplet` to tell if the song starts with the refrain or with a couplet;
5. it sets the `\g__sp_show_numbers_bool` variable to false, to indicate that the couplets should not be numbered by default (the user will be able to override this with the `\numbercouplets` command).

This environment takes two arguments:

#1 : number of stanzas (counting couplets and refrain, when there is one) per slide;
#2 : list of couplets to include (defaults to all), for instance 1,3,4.

```
259 \NewDocumentEnvironment {song} { m o }
260 % {number of stanzas per slide (1 or 2)}
261 % [list of couplets to include (defaults to all)]
262 {
263   % Put arguments into variables with understandable names
264   \int_gset_eq:NN {\g__sp_stanzas_per_slide_int} {#1}
265   \IfNoValueTF {#2}
266     { \seq_gclear:N \g__sp_couplet_indexes_seq }
267     { \seq_gset_from_clist:Nn \g__sp_couplet_indexes_seq {#2} }
268
269   % Clear out intro, refrain, couplet, final and longest song line
270   \tl_gclear:N \g__sp_intro_tl
271   \tl_gclear:N \g__sp_refrain_tl
272   \seq_gclear:N \g__sp_couplets_seq
273   \tl_gclear:N \g__sp_final_tl
274   \dim_zero:N {\g__sp_linewidth_dim}
275
276   % Indicate that we are in a song, and at its start
```

```

277 \bool_gset_true:N \g__sp_song_bool
278 \bool_gset_true:N \g__sp_song_start_bool
279
280 % Couplets should not be numbered by default
281 \bool_gset_false:N \g__sp_show_numbers_bool
282 }

```

And on closing:

- if no list of couplet indexes to use have been given, it generates one covering all couplets in order;
- it uses internal functions to insert the intro, refrain, couplets and final into the document, in the right order according to the song structure (refrain or couplet first) and to the formatting instructions (one or two stanzas per slide).

```

283 {
284 % Have we been given indexes of specific couplets to use?
285 \seq_if_empty:NTF \g__sp_couplet_indexes_seq
286 {
287 % If not, generate it from the list of couplets
288 \int_step_inline:nn
289 { \seq_count:N \g__sp_couplets_seq }
290 { \seq_gput_right:Nn \g__sp_couplet_indexes_seq {##1} }
291 }
292 {}
293
294 % Now we actually start inserting things into the document.
295 % How many stanzas per side did the user request?
296 \int_compare:nNnTF \g__sp_stanzas_per_slide_int {>} {1}
297 {
298 % More than one stanza per slide
299 %
300 % Is there an intro?
301 \tl_if_empty:NTF \g__sp_intro_tl
302 {}
303 {
304 \visible<1> {\_sp_song_intro}
305 % Adjust vertical spacing depending on whether the refrain or the
306 % couplets follow.
307 \bool_if:NTF\g__sp_refrain_first_bool
308 {
309 % Refrain comes next, add extra space
310 \vskip \parsep
311 }
312 {
313 % Couplets come next, the combination of their overprint and
314 % verse environment somehow adds extra vertical space that
315 % needs to be removed.
316 \vskip -\stanzaskip
317 }
318 }
319
320 % Is there a refrain?
321 \tl_if_empty:NTF \g__sp_refrain_tl

```

```

322     {
323     % If there is no refrain, we use \_sp_song_couplets:n to write the
324     % couplets, \g_sp_stanzas_per_slide_int at a time.
325     \_sp_song_couplets:n { \int_use:N \g_sp_stanzas_per_slide_int }
326     }
327     {
328     % If there is a refrain, we use \_sp_song_refrain to write the
329     % refrain and \_sp_song_couplets:n to write overprint with all
330     % couplets.
331
332     % Does the song begin with the refrain?
333     \bool_if:NTF\g_sp_refrain_first_bool
334     {
335         \_sp_song_refrain
336         \vskip -\stanzaskip
337         \_sp_song_couplets:n 1
338     }
339     {
340         \_sp_song_couplets:n 1
341         \vskip \stanzaskip
342         \_sp_song_refrain
343     }
344     }
345
346     % Is there a final?
347     \tl_if_empty:NTF \g_sp_final_tl
348     {}
349     {
350     % Adjust vertical spacing depending on whether we follow the
351     % refrain or the couplets.
352     \tl_if_empty:NTF \g_sp_refrain_tl
353     {
354         % No refrain, we follow the couplets, add extra space
355         \vskip \stanzaskip
356     }
357     {
358     % There was a refrain, did it come first?
359     \bool_if:NTF \g_sp_refrain_first_bool
360     {
361         % Refrain came first, we follow the couplets, add extra space
362         \vskip \stanzaskip
363     }
364     {
365         % Refrain came last, we follow it, add extra space
366         \vskip \parsep
367     }
368     }
369     \visible<.> {\_sp_song_final}
370     }
371 }
372 {
373 % If the user requested one stanza per slide, we use \_sp_song to
374 % write the entire song in a single overprint environment.
375 \_sp_song

```

```

376     }
377     % Indicate that we are no longer in a song
378     \bool_gset_false:N\g__sp_song_bool
379 }

```

\inputsong This macro starts a `song` environment and `\inputs` the song content from an external file.

```

380 \NewDocumentCommand {\inputsong} { s m m o }
381 {
382   \IfNoValueTF {#4}
383     { \begin{song} {#3} }
384     { \begin{song} {#3} [#4] }
385   \IfBooleanT {#1}
386     { \numbercouplets }
387   \input{#2}
388   \end{song}
389 }

```

(End definition for `\inputsong`. This function is documented on page 3.)

3.4 Wrapping up

Now that we have defined everything we need, we can leave the `expl3` syntax and return to normal `TeX` syntax:

```

390 \ExplSyntaxOff

```

Change History

v0.1.0	environment to format current song final	8
General: Initial version		1
v0.2.0	<code>__sp_song_intro</code> : Add an environment to format current song intro	8
General: Use <code>sp</code> prefix for functions and variables		5
v0.3.0	v1.0.0	
General: Define aux functions at top-level	General: Add projection advice	5
Use <code>expl3</code> naming conventions	Add projection layout advice	4
	Document the <code>\inputsong</code> command	3
v0.4.0	First public release	1
<code>__sp_special</code> : Add an environment to format intro and final	<code>\inputsong</code> : Add an <code>\inputsong</code> command	15
General: Document <code>intro</code> and <code>final</code> environments		2, 3
<code>final</code> : Add a <code>final</code> environment	v1.0.1	11
<code>intro</code> : Add an <code>intro</code> environment	General: Add the generated extension file to Git	1
<code>song</code> : Include intro and final in formatted song	v1.1.0	
<code>__sp_song</code> : Include intro and final in complete song	General: Add the <code>\g__sp_show_numbers_bool</code> variable to number or not couplets	5
<code>__sp_song_final</code> : Add an	Allow couplet numbering with	

<code>\numbercouplets</code>	1	<code>__sp_song_couplet:n</code> : Print the couplet number when requested . . .	7
Derivate output file name from input file name if not specified . . .	4	v1.2.0	
Document the <code>\numbercouplets</code> command	2	General: Allow couplet numbering with <code>\inputsong*</code>	1
<code>\numbercouplets</code> : New command to enable couplet numbering	12	Document the <code>\inputsong*</code> command	3
<code>song</code> : Do not number couplets by default	12	<code>\inputsong</code> : Add an <code>\inputsong*</code> command	15

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<code>__sp_special</code> (environment)	<u>37</u>	<code>\parsep</code>	310, 366
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