

The Text::Amuse markup manual

The writer's guide

2012

Contents

The Muse markup	4
Paragraphs	6
Centered and right aligned paragraphs and quotations	6
Source	6
Literal paragraphs	7
Line breaks	7
Page breaks	8
Levels of headings	10
Forth level, a “subsection”	10
The example of levels	10
Directives at the beginning of a document	11
Bold, italicized and emphasized text	12
Making notes to be shown at the end	13
Indicating poetic stanzas	13
Lists	15
Nested lists	16
Breaking list items	17
Complete example	19
Generation of data tables	22
Floating tables	22
Hyperlinks with or without description (and images)	23
Images	23
Floating images and adjusting width	23
Examples	26
Inserting a horizontal line or anchor	28
Horizontal Rules	28
Lines to omit from published output	29
Plays and bibliographies	30
GNU Free Documentation License	32

Copyright (C) 2004, 2005, 2006, 2007, 2008, 2009, 2010 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled “GNU Free Documentation License.”

The Muse markup

A Muse document uses special, contextual markup rules to determine how to format the output result. For example, if a paragraph is indented, Muse assumes it should be quoted. Indentation is heavily used to determine if the paragraph is something different from “normal” text.

There are not too many markup rules, and all of them strive to be as simple as possible so that you can focus on document creation, rather than formatting.

This document describes Muse, which was written by John Wiegley, then maintained by Michael Olson and edited for this implementation by Marco Pessotto.

Paragraphs

Paragraphs in Muse must be separated by a blank line.

Centered and right aligned paragraphs and quotations

A line that begins with six or more columns of whitespace (but less than 20) indicates a centered paragraph. Alternatively, you can use the `<center>` tag to surround regions that are to be published as centered paragraphs.

Like this

But if the line begins with more than 20 spaces, you'll have a right aligned paragraph. This is handy for signatures.

Like this right-aligned one.

The same result is done with the `right` tag.
Using the tags:

Like this centered one

And this is right

This is a quotation:

But if a line begins with whitespace (at least 2 spaces), though less than six columns, it indicates a quoted paragraph. Alternatively, you can use the `<quote>` tag to surround regions that are to be published as quoted paragraphs.

Source

A line that begins with six or more columns of whitespace (but less than 20) indicates a centered paragraph.

Alternatively, you can use the `=<center>=` tag to surround regions that are to be published as centered paragraphs.

Like this

But if the line begins with more than 20 spaces, you'll have a right aligned paragraph. This is handy for signatures.

Like this right-aligned one.

The same result is done with the `=right=` tag.

Using the tags:

```
<center>
Like this centered one
</center>
```

```
<right>
And this is right
</right>
```

This is a quotation:

```
But if a line begins with whitespace (at least 2 spaces), though
less than six columns, it indicates a quoted paragraph.
Alternatively, you can use the =<quote>= tag to surround regions that
are to be published as quoted paragraphs.
```

Please keep in mind that indentation must be consistent if you prefer to keep the lines short and break them inserting a new line. Long lines (using the rule 1 line, 1 paragraph) are perfectly fine. The rule of paragraphs separated by blank lines still apply, though.

Also, <tags> which start and stop blocks, **must be placed on a line by themselves.**

Literal paragraphs

The <example> tag is used for examples, where whitespace should be preserved, the text rendered in monospace, and any characters special to the output style escaped.

Example:

```
<example>
The =<example>= tag is used for examples, where whitespace
should be preserved, the text rendered in monospace, and any
characters special to the output style escaped.
</example>
```

There is no <literal> tag as in the original Muse markup, because it's not a private tool and will be exposed to the internet.

Line breaks

If you need a line break, then use the br tag. Most of the time this tag is unnecessary, because Muse will automatically detect paragraphs by means of blank lines. If you want to preserve newlines in several lines of text, then use verse markup instead.

This line will break
 And continue

Yields:
This line will break
And continue.

If you want to add a blank, line, put the br tag on a line by itself:

Here we add a blank line

Here we go.

Here we add a blank line

Here we go.

Page breaks

If you put exactly five “*” separated by whitespace on a line by itself, indented by 6 or more spaces (like a centered paragraph), you’ll get a page break in the PDF.

This code will break the page.

* * * * *

* * * * *

Anyway, using three of them is just a decorator and it's not treated specially.

* * *

It's just a centered paragraph with 3 "**".

Levels of headings

A heading becomes a chapter or section in printed output - depending on the style. To indicate a heading, start a new paragraph with one or more asterices, followed by a space and the heading title. Then begin another paragraph to enter the text for that section.

All levels of headings will be published. There is support for 5 levels.

The first level is a "part", and should be used only for larger texts. In this document is used for the License and for the main title.

The second level is a "chapter". It starts a new page on the PDF output.

The third level is undoubtedly the most used. It usually separate a section of an article. For example the "Literal paragraph" above.

The forth level goes down further.

Forth level, a "subsection"

The fifth level is very, very low. It's handy to create description lists, too. It's not dumped on the Table of Contents.

item 1

A description

item 2

Another description

The example of levels

* First level, aka part

** Second level, aka chapter

*** Third level, aka section

**** Fourth level, aka subsection

***** Fifth level, aka subsubsection

Directives at the beginning of a document

Directives are lines beginning with the ‘#’ character that come before any paragraphs or sections in the document.

Directives are of the form `#directive content of directive`.

You can use any combination of uppercase and lowercase letters for directives, even if the directive is not in the list below. The directives are completely arbitrary. You can put there whatever you want. It’s the template job to pick them up. In the templates shipped with this bundle there is support for the following directives:

The following is a list of directives that Muse uses.

- `#author`
The author of the text.
- `#title`
The title of the document
- `#Lang`
The language code of the document (2 or 3 letters). Defaults to en.
- `#LISTtitle`
This directive is used (defaulting to `#title`) to alphabetically sort the titles. It’s handy if you want, for example, sort “A title” under “T” and not under “A”.
In this case you may write `#LISTtitle Title`
- `#subtitle`
The subtitle (if any)
- `#SORTauthors`
If not provided, this default to `#author`. It’s a list separated by semicolons or commas with the various authors. While `#author` affects the display only, this one is used to index the document.
- `#SORTtopics`
As for authors, it’s a list (comma- or semicolon-separated) list of topics for the current text. Used to index the document.
- `#date`
The year of publishing of the document. More information should be provided in the `#notes` directive.
- `#notes`
This directive is used for additional information here (original title, translators, credits, etc).
- `#source`
This directive is used for the source or the text (url, scanned from original, original contribution, etc.). The preferred format is “Retrieved on March 8, 2012 from the url”

Bold, italicized and emphasized text

To emphasize text, surround it with certain specially recognized characters. The following example will produce:

```
emphasis strong emphasis very strong emphasis verbatim and monospace  
  
*emphasis*  
**strong emphasis**  
***very strong emphasis***  
=verbatim and monospace=
```

Each of these forms may span multiple lines, but not multiple paragraphs.

You can also use the `<code>` tag to indicate verbatim and monospace text. This is handy for regions that have an "=" in them.

If the "*" confuse you or the preview is screwed up, you can use inline tag `` and ``, which are guarantee to work in any case.

The above example rewritten with tags:

```
<em>emphasis</em>  
<strong>strong emphasis</strong>  
<strong><em>very strong emphasis</em></strong>  
<code>verbatim and monospace</code>
```

And produces the same thing.

```
emphasis strong emphasis very strong emphasis verbatim and monospace
```

Please note that there is no support for the underline. Underlining is an handwritten substitute for the italics. You simply don't need it.

Also, small caps are missing, mainly because on the HTML they look awful and a very few fonts have decent small caps.

Other tags are `<sub>` and `<sup>` for subscript and superscript. And there is also a `` tag for overstriking.

```
This is the <sup>superscript</sup> and this is a  
<sub>subscript</sub>, and this is <del>something deleted and  
overstriked</del>
```

This is the ^{superscript} and this is a _{subscript}, and this is ~~something deleted and overstriked~~

Making notes to be shown at the end

A footnote reference is simply a number in square brackets. To define the footnote, place this definition starting the line with a digit in square brackets.

```
This is the text, and we refer to a footnote [1]
```

```
Here the text continues.
```

```
[1] This footnote  
    spans more lines in the source
```

```
[2] But this is not, because of the initial whitespace.
```

```
[3] Footnotes which don't have a referrer will disappear on the PDF  
    output and preserved in the HTML. But will lead to incorrect  
    code, as it will point to a non-existent anchor
```

This is the result:

```
This is the text, and we refer to a footnote1  
Here the text continues.  
[2] But this is not, because of the initial whitespace.
```

You can break the footnotes lines (even if it's not recommended), but keep the indentation consistent, as shown above

Indicating poetic stanzas

Poetry requires that whitespace be preserved, but without resorting to monospace. To indicate this, use the following markup, reminiscent of email quotations, or use the `verse` tag.

```
> A line of Emacs verse;  
>  forgive its being so terse.
```

```
<verse>  
  A line of Emacs verse;  
  forgive its being so terse.  
</verse>
```

This yields:

```
  A line of Emacs verse;  
  forgive its being so terse.
```

¹This footnote spans more lines in the source

A line of Emacs verse;
forgive its being so terse.

Multiple stanzas may be included in one set of <verse> tags, as follows.

```
<verse>  
A line of Emacs verse;  
  forgive its being so terse.
```

```
In terms of terse verse,  
  you could do worse.
```

```
</verse>
```

Or this

```
> A line of Emacs verse;  
>   forgive its being so terse.  
>  
> In terms of terse verse,  
>   you could do worse.
```

A line of Emacs verse;
forgive its being so terse.

In terms of terse verse,
you could do worse.

Or this

A line of Emacs verse;
forgive its being so terse.

In terms of terse verse,
you could do worse.

Lists

Lists are given using special characters at the beginning of a line. Whitespace must occur before bullets or numbered items, to distinguish from the possibility of those characters occurring in a real sentence.

Normal text.

- bullet item one
- bullet item two

An enumerated list follows.

1. Enum item one
2. Enum item two

A list with roman numbering

- i. First
- ii. Second
- iii. Third

A list with upper roman numbering

- I. First
- II. Second
- III. Third

A list with upper letters

- A. first
- B. second
- C. third

A list with lower letters

- a. first
- b. second
- c. third

Please note the consistent indentation, **expecially** for roman numbering.

Normal text.

- bullet item one
- bullet item two

An enumerated list follows.

1. Enum item one
2. Enum item two

A list with roman numbering

- i. First
- ii. Second
- iii. Third

A list with upper roman numbering

- I. First
- II. Second
- III. Third

A list with upper letters

- A. first
- B. second
- C. third

A list with lower letters

- a. first
- b. second
- c. third

While the original Emacs Muse had the description lists, this implementation has not. You should use the fifth level of headings for those. The outcome is mostly the same (yes, you can't nest them in lists, but crazy nesting is beyond the scope of this markup).

Nested lists

It is possible to nest lists of the same or different kinds. The "level" of the list is determined by the amount of initial whitespace.

Normal text.

- Level 1, bullet item one
 1. Level 2, enum item one
 2. Level 2, enum item two
- Level 1, bullet item two
 1. Level 2, enum item one
 2. Level 2, enum item two

- i. Level 3, enum item i
 - ii. Level 3, enum item ii
- 3. Level 2, enum item three
- Back to Level 1, third bullet
 - a. Level 2, enum item "a"
 - b. Level 2, enum item "b"
 - I. Level 3, enum item "I"
- Back to the bullets

Normal text.

- Level 1, bullet item one
 - 1. Level 2, enum item one
 - 2. Level 2, enum item two
- Level 1, bullet item two
 - 1. Level 2, enum item one
 - 2. Level 2, enum item two
 - i. Level 3, enum item i
 - ii. Level 3, enum item ii
 - 3. Level 2, enum item three
- Back to Level 1, third bullet
 - a. Level 2, enum item "a"
 - b. Level 2, enum item "b"
 - I. Level 3, enum item "I"
- Back to the bullets

Breaking list items

If you want to break up a line within any list type, just put one blank line between the end of the previous line and the beginning of the next line, using the same amount of initial indentation.

Keep in mind that if you put random indentation you'll get random and probably unexpected results (but it should not crash – if it does, please contact me).

Also, you can be lazy with numbered list. The parser actually doesn't care if you number them properly, or just do something like that.

- 1. first
- 1. second
- 1. third

or

- a. first
- a. second
- a. third

There results will always be:

1. first
2. second
3. third

or

- a. first
- b. second
- c. third

If you need to switch type while the list is running, put a br tag between them, or some invisible material like a non-breaking space.

This won't get you what you expect:

1. first
- a. first item

So you'll have to do:

1. first

- a. first item

Which yields:

This won't get you what you expect:

1. first
2. first item

So you'll have to do:

1. first

- a. first item
-

Complete example

Normal text.

- Level 1, bullet item one, this is the first paragraph. I can break the line, keeping the same amount of indentation

Here I have the same amount of indentation, and it continues the item above.

1. Level 2, enum item one. i can break the line, keeping the same amount of indentation

Here I have the same amount of indentation, and it continues the item above.

2. Level 2, enum item two which continues

Here I have the same amount of indentation, and it continues the item above.

- Level 1, bullet item two which continues

Here I have the same amount of indentation, and it continues the item above.

1. Level 2, enum item one which continues

Here I have the same amount of indentation, and it continues the item above.

2. Level 2, enum item two which continues

Here I have the same amount of indentation, and it continues the item above.

- i. Level 3, enum item i

Here I have the same amount of indentation, and it continues the item above.

- ii. Level 3, enum item ii

Here I have the same amount of indentation, and it continues the item above.

- 3. Level 2, enum item three
which continues

Here I have the same amount of indentation, and it continues the item above.

- Back to Level 1, third bullet

Here I have the same amount of indentation, and it continues the item above.

- a. Level 2, enum item "a"
which continues

Here I have the same amount of indentation, and it continues the item above.

- b. Level 2, enum item "b"
which continues

Here I have the same amount of indentation, and it continues the item above.

- I. Level 3, enum item "I"

Here I have the same amount of indentation, and it continues the item above.

- Back to the bullets

Here I have the same amount of indentation, and it continues the item above.

Normal text.

- Level 1, bullet item one, this is the first paragraph. I can break the line, keeping the same amount of indentation

Here I have the same amount of indentation, and it continues the item above.

- 1. Level 2, enum item one. i can break the line, keeping the same amount of indentation

Here I have the same amount of indentation, and it continues the item above.

- 2. Level 2, enum item two which continues

Here I have the same amount of indentation, and it continues the item above.

- Level 1, bullet item two which continues

Here I have the same amount of indentation, and it continues the item above.

1. Level 2, enum item one which continues
Here I have the same amount of indentation, and it continues the item above.
 2. Level 2, enum item two which continues
Here I have the same amount of indentation, and it continues the item above.
 - i. Level 3, enum item i
Here I have the same amount of indentation, and it continues the item above.
 - ii. Level 3, enum item ii
Here I have the same amount of indentation, and it continues the item above.
 3. Level 2, enum item three which continues
Here I have the same amount of indentation, and it continues the item above.
- Back to Level 1, third bullet
Here I have the same amount of indentation, and it continues the item above.
 - a. Level 2, enum item “a” which continues
Here I have the same amount of indentation, and it continues the item above.
 - b. Level 2, enum item “b” which continues
Here I have the same amount of indentation, and it continues the item above.
 - I. Level 3, enum item “I”
Here I have the same amount of indentation, and it continues the item above.
 - Back to the bullets
Here I have the same amount of indentation, and it continues the item above.

Generation of data tables

Only very simple tables are supported. The syntax is as follows (just keep the indentation consistent and separate each cell by one or more textbars.

```
Triple bars ||| Separate footer fields
Double bars  || Separate header fields
Single bars  | Separate body fields
Here are more | body fields
|+ This is the caption +|
```

Double bars	Separate header fields
Single bars Here are more	Separate body fields body fields
Triple bars	Separate footer fields

This is the caption

The ordering of the footer, header and table body blocks is irrelevant for the output (HTML requires you put first the header, then the footer, then the body). Ordering of the single rows is of course preserved. From this we come to the conclusion that you can't normally typeset the pipe symbol without triggering a list. In `<example>` you can type it freely. Inside the cells you can do pretty much what you want (beside headers and lists): mark them up freely.

Floating tables

When composing tables, please keep in mind the following:

- tables are never splat over pages. If they don't fit a page, they will run off the page. So keep them short or split them yourself.
- tables *without* a caption are inserted at the point they are in the source. Table *with* a caption are converted into a float, so they are in no way guaranteed they will appear in the same exact point of the source. Anyway, the result is way better, and you have a caption, so you can refer to them in the text.

Hyperlinks with or without description (and images)

A hyperlink can reference a URL or a place on the same document. In addition, descriptive text can be specified, which should be displayed rather than the link text in output styles that supports link descriptions. The syntax is as follows.

```
[[link target][link description]]  
[[link target without description]]
```

So, the home of this project is
[[http://theanarchistlibrary.org][The Anarchist Library]],
which can be found at [[http://theanarchistlibrary.org]]
Bare links will not get the hyperlinking.
So http://thisisspam.org won't get the hyperlinking.

So, the home of this project is The Anarchist Library, which can be found at http://theanarchistlibrary.org
Bare links will not get the hyperlinking. So http://thisisspam.org won't get the hyperlinking.

Images

Images are special case of this kind of linking.

```
[[logo.png]]
```

We assume that we have the “logo.png” file on the same directory of the file, and the result is:
Now, let's add a caption.

```
[[logo.png][This is *our* logo]]
```

Remote urls are not permitted. Also, the path checking is rather strict, so please use just alphanumeric file-names for your images.

Floating images and adjusting width

By default, image width in the HTML output is kept to the original one, whatever it is, but limited via CSS, while in the PDF expands to fill the page width. This creates problems.

Starting with version 0.07, it's possible to set the width of the image, **in percent**, just appending it to the file name after a whitespace.

It's also possible to make it a right or left float, adding the character `l` or `r`, or to mark it as a “fullpage” with `f`.

This one will have a width to 80% of the page width:





This is *our* logo

[[logo.png 80]]

This one will have a width to 80% of the page width and will be a left float.

[[logo.png 80 l]]

This one will have a width to 80% of the page width and will be a right float.

[[logo.png 80 r]]

The Following will be marked as a fullpage.

[[logo.png f]]

Floating without a width doesn't make sense, as in the PDF will be no room for wrapping text around it.

Examples

The next figures use these codes:

[[logo.png 10r][right float]]

[[logo.png 10l][left float]]

[[logo.png 50f][full page]]

Suggestions that I write my memoirs came to me when I had barely begun to live, and continued all through the years. But I never paid heed to the proposal. I was living my life intensely — what need to write about it? Another reason for my reluctance was the conviction I entertained that one should write about one's life only when one had ceased to stand in the very torrent of it. "When one has reached a good philosophic age," I used to tell my friends, "capable of viewing the tragedies and comedies of life impersonally and detachedly — particularly one's own life — one is likely to create an autobiography worth while." Still feeling adolescently young in spite of advancing years, I did not consider myself competent to undertake such a task. Moreover, I always lacked the necessary leisure for concentrated writing.

My enforced European inactivity left me enough time to read a great deal, including biographies and autobiographies. I discovered, much to my discomfiture, that old age, far from ripening wisdom and

mellowness, is too often fraught with senility, narrowness, and petty rancour. I would not risk such a calamity, and I began to think seriously about writing my life.

The great difficulty that faced me was lack of historical data for my work. Almost everything in the way of books, correspondence, and similar material that I had accumulated during the thirty-five years

of my life in the United States had been confiscated by the Department of Justice raiders and never returned. I lacked even my personal set of the Mother Earth magazine, which I had published for twelve years.

It was a problem I could see no solution for. Sceptic that I am, I had overlooked the magic power of friendship, which had so often in my life made mountains move. My staunch friends Leonard D. Abbott, Agnes Inglis, W. S. Van Valkenburgh, and others soon put my doubts to shame.



left float



right float

Agnes, the founder of the Labadie Library in Detroit, containing the richest collection of radical and revolutionary material in America, came to my aid with her usual readiness. Leonard did his share, and Van spent all his free time in research work for me.

The great difficulty that faced me was lack of historical data for my work. Almost everything in the way of books, correspondence, and similar material that I had accumulated during the thirty-five years of my life in the United States had been confiscated by the Department of Justice raiders and never returned. I lacked even my personal set of the Mother Earth magazine, which I had published for twelve years.

It was a problem I could see no solution for. Sceptic that I am, I had overlooked the magic power of friendship, which had so often in my life made mountains move. My staunch friends Leonard D. Abbott, Agnes Inglis, W. S. Van Valkenburgh, and others soon put my doubts to shame.

Agnes, the founder of the Labadie Library in Detroit, containing the richest collection of radical and revolutionary material in America, came to my aid with her usual readiness. Leonard did his share, and Van spent all his free time in research work for me.



full page

Inserting a horizontal line or anchor

Horizontal Rules

Four or more dashes indicate a horizontal rule. Be sure to put blank lines around it, or it will be considered part of the preceding or following paragraph, like this: ----.

Example

Results:

Lines to omit from published output

```
; Comment text goes here.
```

That is, only a semi-colon at the beginning of a line, followed by a literal space, will cause that line to be treated as a comment and **totally removed from the output**.

You can alternatively surround the region with the `<comment>` tag. In this case the HTML output will be wrapped in a `<div>` with the `display:none` property, so it can be turned visible changing the CSS.

```
<comment>  
This won't be published, but in the HTML is there, only hidden  
</comment>
```

Plays and bibliographies

Unlike the original Muse, this implementation doesn't support external sources for citations, but provides an environment which can be used to compose the list of cited works without resorting to lists, wrapping all in a `<biblio>` tag.

```
<biblio>
The author, *Title*, published on
[[http://theanarchistlibrary.org][The Anarchist Library]], with a
very, very, very, very, very, very, very, very, very, very,
very, long description

Another author, *Another title*, published in the real world. with a
very, very, very, very, very, very, very, very, very, very,
very, long description
</biblio>
```

The author, *Title*, published on The Anarchist Library, with a very, long description
Another author, *Another title*, published in the real world. with a very, long description

The list is wrapped in a `<div>` with class set to `biblio`, while the TeX source gets wrapped in `\startawikibiblio` and `\stopawikibiblio`. You are free to change class and definition. A reversed indentation is suggested.

The same goes with the `<play>` environment, which is supposed to wrap theatrical plays, when you want a reverse indentation and more spacing between the paragraph (without resorting to `<verse>` and hardcoding the spaces.

```
<play>
**Pol.** Ophelia, walke you heere. Gracious so please ye <br>
We will bestow our selues: Reade on this booke, <br>
That shew of such an exercise may colour <br>
Your lonelinesse. We are oft too blame in this, <br>
'Tis too much prou'd, that with Deuotions visage, <br>
And pious Action, we do surge o're <br>
The diuell himselfe
```

```
**King.** Oh 'tis true: <br>
How smart a lash that speech doth giue my Conscience? <br>
The Harlots Cheeke beautied with plaist'ring Art <br>
Is not more vgly to the thing that helps it, <br>
Then is my deede, to my most painted word. <br>
Oh heaueie burthen!
```

</play>

Pol. Ophelia, walke you heere. Gracious so please ye
We will bestow our selues: Reade on this booke,
That shew of such an exercise may colour
Your lonelinesse. We are oft too blame in this,
'Tis too much prou'd, that with Deuotions visage,
And pious Action, we do surge o're
The diuell himselfe

King. Oh 'tis true:
How smart a lash that speech doth giue my Conscience?
The Harlots Cheeke beautied with plaist'ring Art
Is not more vgly to the thing that helps it,
Then is my deede, to my most painted word.
Oh heauie burthen!

GNU Free Documentation License

GNU Free Documentation License
Version 1.3, 3 November 2008

Copyright (C) 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc.
<<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of

the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in

formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve

the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications

adjacent to the other copyright notices.

- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
- N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.
- O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of

Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that

document.

7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, receipt of a copy of some or all of the same material does not give you any rights to use it.

10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

11. RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site

means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

Copyright (c) YEAR YOUR NAME.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the "with...Texts." line with this:

with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST.

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

The Text::Amuse markup manual
The writer's guide
2012