

Amusewiki: a year of development

Marco Pessotto (melmothX)

August 24-26, 2016, Cluj-Napoca

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About me: Marco Pessotto

PAUSE id MELMOTHX

IRC melmothX on Freenode and `irc.perl.org`

E-mail `melmothx@gmail.com`

Homepage and documentation <https://amusewiki.org>

IRC channel `irc://chat.freenode.net/#amusewiki`

GitHub <https://github.com/melmothx>

Background Humanities (history and translations)

Appearance

The screenshot shows the AmuseWiki interface. At the top left is the logo "AmuseWiki". To its right is a navigation bar with icons for a menu, heart, plus, user, document, mobile, and refresh. A search bar with a magnifying glass icon is on the far right. Below the navigation bar is a grey box containing the following information:

- Title:** Creating slides
- Author:** Marco Pessotto
- Date:** 2016
- Publication date:** Jul 18, 2016
- Topic:** How-To

Below the text are several icons representing different output formats: PDF, A4 imposed, Letter imposed, Beamer presentation, ePUB, HTML, LaTeX, a document with a list, a folder, a document with a list, and a document with a list. There are also two plus signs in boxes below the icons. To the left and right of the grey box are red arrows pointing left and right respectively.

Below the grey box, the author's name "Marco Pessotto" is displayed in a larger font, followed by the title "Creating slides" in an even larger font. A horizontal line separates this from a second grey box containing the following text:

- Full example**
- Activate**
Explanation
- Syntax**
Explanation

At the bottom of the page, a paragraph of text reads: "Amusewiki, beside the usual output formats (HTML, EPUB, LaTeX, HTML), is able to create slides in PDF via the Beamer package with LaTeX."

Why would you want to use Amusewiki

- built around texts, which are fully decoupled from the web application
- support for typesetting whole books (off-line editing and expressive markup)
- high-quality output (PDF with LaTeX quality and EPUB)
- flat file storage with Git
- create collections and reformat the PDF files for printing
- OPDS server for mobile users to deliver the texts straight into the apps
- Localized for English, German, Spanish, Finnish, French, Croatian, Italian, Macedonian, Russian, Albanian, Swedish
- production ready and comes with an extensive test suite

Source file (Emacs Muse markup)

```
#title Amusewiki: a year of development
#author Marco Pessotto (melmothX)
#slides on
#lang en
#date August 24-26, 2016, Cluj-Napoca
#pubdate 2016-08-27
```

Here the *the text* **start**.

About me: Marco Pessotto

PAUSE id :: =MELMOTHX=

IRC :: =melmothX= on Freenode and =irc.perl.org=

Architecture

- Muse parser: `Text::Amuse`
- HTML import and cleanup: `Text::Amuse::Preprocessor` (with CLI)
- Compiler: `Text::Amuse::Compile` (with CLI)
- PDF cropmarks: `PDF::Cropmarks` (with CLI)
- PDF imposition: `PDF::Imposition` (with CLI)
- `DBIx::Class` and `Xapian` for archive indexing
- Background daemon for indexing and compilation
- Catalyst application on the frontend

Bookbuilder partial selection

Add the selected parts to the bookbuilder

Section	Select
Title, author, date...	<input checked="" type="checkbox"/>
Creating slides	<input type="checkbox"/>
Full example	<input type="checkbox"/>
Activate	<input type="checkbox"/>
Explanation	<input type="checkbox"/>
Syntax	<input type="checkbox"/>
Explanation	<input type="checkbox"/>

Prepare books for printing with the bookbuilder

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Amusewiki, beside the usual output formats (HTML, EPUB, LaTeX, HTML), is able to create slides in PDF via the Beamer package with LaTeX.

The slides feature is off by default, but you can easily activate it in the admin console with the checkbox under "Formats".

Now, given that you generally don't want slides for *all* your texts, you have to flag it accordingly. You can do so with the provided checkbox in the text creation page, or simply adding the header

```
#slides yes
```

in the editing screen (i.e., in the .muse file).

It's important to note that the slide material must be placed inside a section, no matter how deep.

Material at the beginning of the text, not belonging to any section, is just ignored.

You can exclude sections of the documents from the slides by placing a comment cookie in the excluded sections.

```
*** this section will be excluded
```

```
; no slides
```

Here goes the lengthy explanation...

This is useful if you want to create slides and handout from the same source (as you should).

Finally, when you have the document ready, you can change the theme, the colors and the fonts adding it to the bookbuilder (using the button in the text's infobox) and asking for slides.

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Slides and theme selections

PDF Slides EPUB

Please select the desired fonts

Keep in mind that some character may be missing in the required font. Missing character will be reported.

Please choose the sans font

Computer Modern Sans Serif

Please choose the mono font

Computer Modern Typewriter Text

Please choose the font size

10 pt

Please setup the Beamer layout

Here you can find a preview of the Beamer themes and color themes

Please choose the Beamer theme

Boadilla

Please choose the Beamer color theme

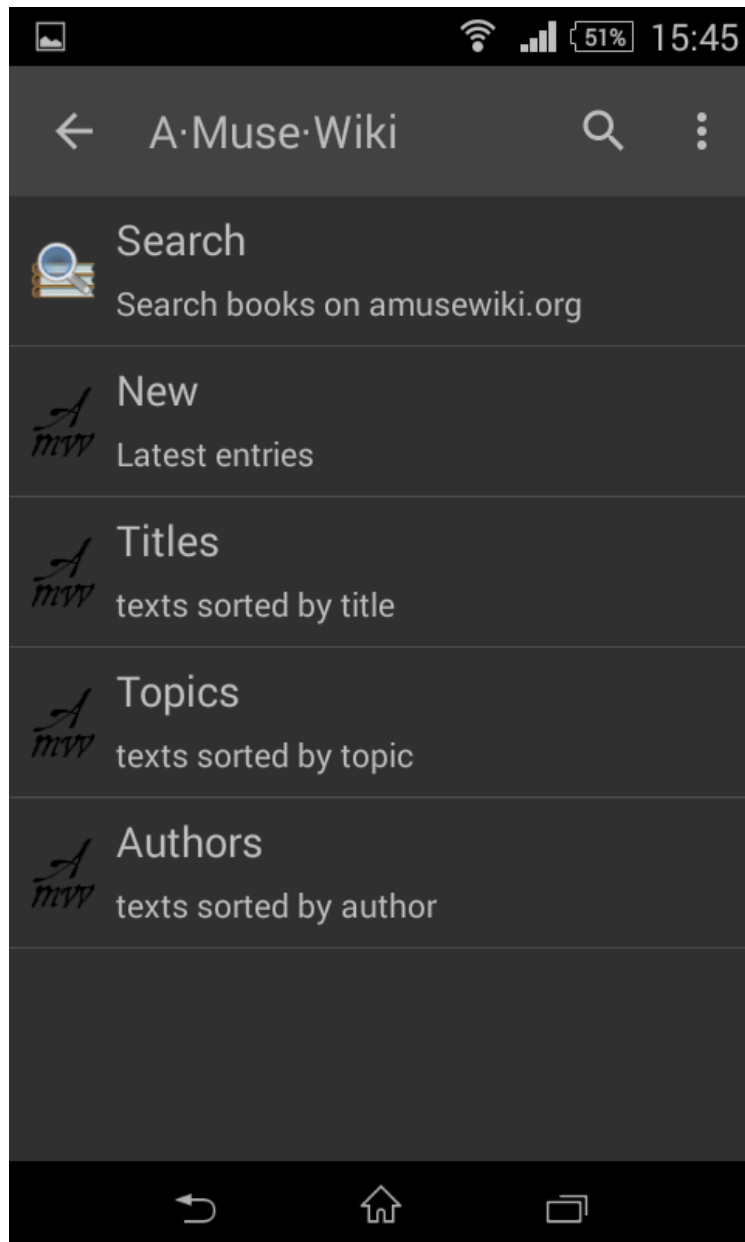
wolverine

Build it Update

OPDS

- Open Publication Distribution System <http://opds-spec.org/>
- Atom feed with navigation and acquisition entries
- Supported by most EPUB Android readers (FBReader, Aldiko, Moon+ reader)
- Deliver the texts straight into the applications
- Module XML: :OPDS
- Example and help: <https://amusewiki.org/help/opds>
- Transparent pagination to save bandwidth
- HTTP authorization supported for private sites
- Full text-search supported

OPDS example




Blog mode

- Optional feature which can be activated in the admin console
- time-based sorting
- teasers
- decorative images
- tag cloud (accessible via ajax)
- monthly archives (accessible via ajax)
- form free layout elements (gives a chance to the admin to fully customize the site, in addition to local JS and CSS)
- bootswatch theme selection <https://bootswatch.com/>

Blog example

Latest entries

Test — test autori [sq]	Jul 26, 2016
xx [hr]	Jul 24, 2016
<p>Prova [it]</p> <p>This is a teaser, you can put a short description of the text here</p>	
Jun 25, 2016	Read the whole text...

Archive by month / 2016

July 2016	2
June 2016	33
May 2016	26
April 2016	25
March 2016	16
February 2016	25
January 2016	33

(46) (14) publikacije (36)

(73) (10) Srbija (22) (19)

(18) (19)

Other notable improvements

- SSL made free and automatic with Let's Encrypt and Protocol::ACME
- Code highlight with highlight.js
- Automatic DB upgrades with DBIx::Class::DeploymentHandler
- Fine tune logging with Log::Log4perl and Log::Contextual
- Documentation on <https://amusewiki.org>

Debian packages

Instead of running the app from the git tree on a dedicated home, with a local : : lib tree or with a perl installed in the home, now you can visit <http://packages.amusewiki.org/> and follow the instructions there (import the key, add the repository, and install the package).

Minimum requirement: Debian Jessie and Ubuntu 16.04 LTS.

<https://github.com/melmothx/amusewiki-debian-packages>

Debian packages cons

- More burden on the developer
- Trivial changes require a package rebuild
- Needs to ship about 25 new packages (fonts and perl modules)
- Can't use fresh code from the module used (e.g., newer Catalyst) without being too invasive.
- Debian people usually don't like private repositories

Debian packages pros

- Installation is straightforward
- Maintenance for the administrator is integrated in the regular apt-get routine
- Much smaller installation footprint (mostly because the texlive installation is optimized and shared)
- Improved security
 - code is installed and owned by root, not by the user running the application
 - debian is taking care of the security updates of the dependencies (not only the perl dependencies, but also the libraries used by LaTeX, cgit and other utilities)
- 0 downtime upgrades out of the box
- Predictability of locations and module versions (so gets more live testing)

Questions?

Thanks!

A MuseWiki

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amusewiki.org