WYSIWYG and Markdown

2022-11-04 status:

- Documentation started: Tiki Flavored Markdown
- We are in the testing phase, and asking the community to report issues
- Front-end support (Toast UI Editor) has been added for WYSIWYG: https://ui.toast.com/tui-editor
- Back-end Markdown support has been added.
  - We use https://commonmark.org/
  - GitHub Flavored Markdown (GFM) is optional (default on)
  - We use league/commonmark, which has over 100 million installs
  - In essence, we have a Tiki-flavored Markdown (TFM). It is Markdown + things that Tiki does but that are not supported by Markdown. For example
    - Wiki Plugins continue to work, with same syntax (which is quite good)
    - Wiki Argument Variables
    - Smileys
    - User Mentions
    - Dynamic variables
    - and likely more as we test more.
  - It is all optional. If you don’t activate, everything stays in traditional Tiki syntax.
- We needed to refactor the toolbars: https://gitlab.com/tikiwiki/tiki/-/merge_requests/1769
- We added a converter from Tiki to Markdown (and the reverse), using https://github.com/thephpleague/html-to-markdown
  - Documentation: Converting from Tiki syntax to Markdown
- Pre-dogfood servers for Tiki 26 release process have been set up and we started testing on 2 (doc and dev) of the *.tiki.org servers. In particular, doc.tiki.org has over 2000 pages, and covers almost all the features, so it’s a great test platform.
- The release date of Tiki25 has been postponed to give us more time for the development of this critically important feature.

This is a massive endeavor and we required external funding to make it happen. Three sponsors have stepped up! Special thank you to Moba Group, EvoluData and the 3rd sponsoring organization (which wishes to remain anonymous).

Can you also help? Please reach out to me if you can contribute coding time or money to hire developers. The more resources we have, the faster we can go through all the wish list 😊

Native WYSIWYG and Markdown is coming to Tiki25!

Thanks!

This is a project to attain the following objectives. This is a massive project that will have to be done in phases.

1. A commonly used text syntax like Markdown supported natively in Tiki. Better than PluginMarkdown
   - The CommonMark spec is extensive: https://spec.commonmark.org/
   - We use Markdown for bold, bullets, etc. and we keep our current syntax for Tiki plugins
     {PLUGINNAME()} ... {PLUGINNAME}
   - We do what failed here: http://www.wikicreole.org/wiki/TikiWikiCMSGroupware WikiCreole was an attempt to get a common wiki syntax which is more or less what Markdown is.
   - To have a realistic transition, each text area will have a choice of various syntaxes, so each Tiki instance can move at their own pace. Each text area could have options such as
     - Tiki syntax
- Markdown + Tiki plugins
- HTML only
- HTML + Tiki syntax + Tiki plugins
- Whatever other mode existed in the past
  - Phased approach while we work on conversion tools
    - Optional, default off
    - Optional, default on
    - In 5-10 years, we can decide if we remove Tiki syntax or keep forever for read-only of legacy content
  - Conversion tools
    - Live (supervised by user) and via command line
    - Need a tool to compare HTML end result
2. A reliable WYSIWYG editor that handles markdown with Tiki plugin syntax and avoids [https://wysiwygproblems.com/](https://wysiwygproblems.com/)
   - Must have intuitive UI for adding images and files (previews). Ex.: copy-paste or crop or ...
   - [https://medium.com/maatwebsite/lets-see-wyg-with-these-editors-e5720e91a626](https://medium.com/maatwebsite/lets-see-wyg-with-these-editors-e5720e91a626)
   - [https://github.com/JefMari/awesome-wysiwyg](https://github.com/JefMari/awesome-wysiwyg)
   - Along with syntax highlighting for Markdown.
   - Need a way to import HTML (copy-paste), ideally, with some level of conversion to text syntax. Ex.: [https://github.com/thephpleague/html-to-markdown](https://github.com/thephpleague/html-to-markdown)
   - Need a way to deal with HTML that some Tiki instances may have used
     - PluginWYSIWYG and the WYSIWYG editor in wiki pages (one of the modes is to save as HTML)
   - A good time for item6191-Replace-Emoticons-with-Emoji
3. Wiki Parser Revamp, Plugin revamp and/or merge Tiki plugins and Tiki modules into Gadgets (or Widgets) that can live in a text area or elsewhere on a page, and move to Vue JS: [https://gitlab.com/jonnybradley/tiki/-/tree/project-fluffy-2](https://gitlab.com/jonnybradley/tiki/-/tree/project-fluffy-2)
   - Can be done in a second step but overall plan needs to make sure it will be a good solution
4. Realtime collaborative editing
   - Can be done in a second step but overall plan needs to make sure it will be a good solution
   - Could be done with TogetherJS or with another method
   - Matrix
     - [https://matrix.org/blog/2021/12/22/the-mega-matrix-holiday-special-2021#applications-beyond-chat](https://matrix.org/blog/2021/12/22/the-mega-matrix-holiday-special-2021#applications-beyond-chat)
     - [https://github.com/YousefED/Matrix-CRDT](https://github.com/YousefED/Matrix-CRDT)
     - [https://syncedstore.org/docs/vue](https://syncedstore.org/docs/vue)
5. Page Builder and Form Builder
   - Can be done in a second step but overall plan needs to make sure it will be a good solution
6. Interop with external systems so we could store some wiki pages in Git, as requested: [here](https://wysiwygproblems.com/)
   - Can be done in a second step but overall plan needs to make sure it will be a good solution
8. Review Typography features

Steps

1. Scope high level plan done
2. Compare implementation options as per How to pick a software library (ongoing)
3. Gather community agreement done (there is consensus this is desirable)
4. Gather more resources
   - As of 2022-03-31, we have sufficient resources for steps #1 and #2 above. We'll solicit more sponsorship to be able to do more (#3, #4, etc.)
5. Assemble team (around Jonny and Victor) and do it! Team is reserved.
Questions

- How do we deal with just HTML content? (which CKEditor is good at)
  - Discussion from the SummerNote project explaining why it's difficult for an HTML WYSIWYG editor to support Markdown
- Do we keep current PHP lib? or go with another? https://packagist.org/?query=markdown (we need flexibility to add some syntax like wiki plugins and to interact with the WYSIWYG)
- How should we go about converting from Tiki syntax to CommonMark?
  - One option is https://pandoc.org/try/
  - We could envisage a tool to compare Tiki Syntax -> HTML vs Tiki Syntax -> Commonmark -> HTML

Options

1.1. WYSIWYG editors

1.1.1. ProseMirror with Markdown

https://prosemirror.net/examples/markdown/
https://github.com/ProseMirror/prosemirror-markdown

1.1.2. TOAST UI Editor

- "The main characteristic of TOAST UI Editor is that it is a markdown based editor that support WYSIWYG editor simultaneously."
- Test here: https://nhn.github.io/tui.editor/latest/tutorial-example03-editor-with-wysiwyg-mode
- About major changes in latest version: https://github.com/nhn/tui.editor/releases/tag/v3.0.0
  - Important part: "In order to deal with this issue, we used the Prosemirror, a development tool used to build a WYSIWYG editor, for TOAST UI Editor 3.0, and we were able to unify the internal dependencies of the editors into one. The unified dependency allowed us to follow a single, internal structure, and we were able to remove the past dependencies including CodeMirror, squire, and to-mark."

  MIT License
  Based on ProseMirror
  Has an image editor
  Available here: https://asset-packagist.org/package/bower-asset/tui-editor
  This model is the most reliable way to have both a text syntax and WYSIWYG, but for legacy HTML content, we'd have to continue with CKEditor

1.1.3. MeditorJS

- Docs: https://gitlab.com/cobalt-os-team/MeditorJS
- Based on Editor.md
- MIT License
- Last commit: On Dec 11, 2021

1.1.4. Stacks-Editor

- Github: https://github.com/StackExchange/Stacks-Editor
- Docs: https://stackedit.io/
- Based on ProseMirror
- MIT License
- Last commit: On May 17, 2022
1.1.5. Milkdown
- Overview: https://milkdown.dev/
- Github: https://github.com/Saul-Mirone/milkdown
- Based on ProseMirror
- MIT License
- Last commit: On May 19, 2022

1.1.6. TipTap
- Github: https://github.com/ueberdosis/tiptap
- Based on ProseMirror
- MIT License
- Last commit: On May 17, 2022

1.1.7. Wax
- Based on ProseMirror
- Does it handle Markdown?
- From Coko foundation: https://coko.foundation/articles/single-source-publishing.html
- Interesting features: https://waxjs.net/features/
- GitLab: https://gitlab.coko.foundation/wax/wax
- MIT License
- Last commit: On Aug 8, 2020
- Archived project! Repository and other project resources are read-only

1.1.8. Woofmark
- Github: https://github.com/bevacqua/woofmark
- Docs: https://bevacqua.github.io/woofmark/
- MIT license
- Last commit: On Feb 12, 2019

1.1.9. CodeMirror
- Github: https://github.com/codemirror/codemirror.next/
- Community: https://discuss.codemirror.net/
- Docs: https://codemirror.net/6/
- MIT license
- Last commit: On "Apr 20, 2022"

1.1.10. HyperMD
- Github: https://github.com/laobubu/HyperMD
- MIT license
- Last commit: On "Jan 15, 2019"

1.1.11. Ckeditor-5
- Docs: https://ckeditor.com/ckeditor-5/
- Features: https://ckeditor.com/ckeditor-5/features/#collaboration
- Github: https://github.com/ckeditor/ckeditor5
• https://onlinemarkdowneditor.dev/
• GNU General Public License Version 2 or later
• Last commit: On "May 19, 2022"

1.1.12. Editor.js
• Overview: https://editorjs.io/
• Docs: https://editorjs.io/base-concepts
• Github: https://github.com/codex-team/editor.js
• Apache-2.0 license
• Last commit: On May 14, 2022

1.1.13. TinyMCE
• Docs: https://www.tiny.cloud/docs/quick-start/
• Github: https://github.com/tinymce/tinymce
• MIT license
• Last commit: On May 17, 2022
• (https://www.tiny.cloud/docs/plugins/opensource/textpattern/)

1.1.14. Bubble
• Features: https://bubble.io/features

1.1.15. Quill
• Overview: https://quilljs.com/guides/why-quill/
• Github: https://github.com/quilljs/quill/
• BSD-3-Clause license
• Last commit: On Mar 22, 2022

1.1.16. Summernote
• Docs: https://summernote.org/getting-started/
• Github: https://github.com/summernote/summernote
• MIT license
• Last commit: On May 12, 2022

1.1.17. ContentTools
• Overview: https://getcontenttools.com/getting-started
• Github: https://github.com/GetmeUK/ContentTools
• MIT license
• Last commit: On Jul 11, 2021

1.1.18. Textbox.io
• Overview: https://www.textbox.io/
• Docs: https://www.textbox.io/docs/
• Github: https://github.com/tinymce/tinymce
1.1.19. WYMeditor
- Overview: http://www.wymeditor.org/
- Features: http://www.wymeditor.org/features/
- Github: https://github.com/wymeditor/wymeditor/
  - **This repository has been archived by the owner.** It is now read-only.

1.1.20. ALOHA EDITOR
- Use: https://www.alohaeditor.org/guides/using_aloha.html
- Github: https://github.com/alohaeditor/Aloha-Editor
  - Last commit: On Oct 07, 2019

1.1.21. Simple MDE
- Github: https://github.com/sparksuite/simplemde-markdown-editor
  - MIT license
  - Last commit: On Jun 14, 2016

1.1.22. Editor.md
- Based on CodeMirror & jQuery & Marked.
- Github: https://github.com/pandao/editor.md
  - MIT license
  - Last commit: On May 09, 2019

1.1.23. Easy-markdown-editor
- Github: https://github.com/Ionaru/easy-markdown-editor
  - Last commit: On Mar 12, 2022

1.1.24. Froala
- Github: https://github.com/froala/design-blocks
  - Version: https://froala.com/blog/general/introducing-froala-v4-0-6-the-most-powerful-wysiwyg-html-editor/
  - Doc: https://froala.com/wysiwyg-editor/docs/overview/
  - Supporter: https://wysiwyg-editor.froala.help/hc/en-us
  - Last commit: On Jan 15, 2019

1.1.25. Trumbowyg
- Docs: https://alex-d.github.io/Trumbowyg/documentation/
- Github: https://github.com/Alex-D/Trumbowyg
- Demo: https://alex-d.github.io/Trumbowyg/demos/
  - MIT license
  - Last commit: On Dec 15, 2021

1.1.26. CoffeeCup HTML Editor
- Overview: https://www.coffeecup.com/html-editor/
- Github: https://github.com/gradus/coffeecup
  - Last commit: On Jun 19, 2013
1.1.27. Medium-editor-insert-plugin
- Github: https://github.com/linkesch/medium-editor-insert-plugin
- This repository has been archived by the owner. It is now read-only.

1.1.28. Brickyeditor
- Github: https://github.com/samclarke/SCEditor
- Details: https://openbase.com/js/brickymeditor
- Options: https://www.sceditor.com/documentation/options/
- Last commit: On Mar 10, 2022

1.1.29. SCEditor
- Integration: https://www.sceditor.com/documentation/getting-started/
- Github: https://github.com/samclarke/SCEditor
- MIT license
- Last commit: On Mar 10, 2020

1.1.30. AlloyEditor
- https://alloyeditor.com/
- https://github.com/liferay/alloy-editor/issues/760
- https://github.com/liferay/alloy-editor/issues/1494
- https://ckeditor.com/cke4/addon/markdown

1.1.31. Markdownify
- Docs: https://markdownify.js.org/
- Last commit: On "May 22, 2022"

1.1.32. Showdown
- Docs: https://showdownjs.com/docs/
- Github: https://github.com/showdownjs/showdown
- Last commit: On "May 26, 2022"

1.1.33. Bootstrap Markdown Editor
- Github: https://github.com/inacho/bootstrap-markdown-editor
- Last commit: On "Dec 1, 2016"

1.1.34. Markdown-it
- Github: https://github.com/markdown-it/markdown-it
- Demo: https://markdown-it.github.io/
- Last commit: On "May 25, 2022"

1.2. Markdown tools that are not WYSIWYG editors
Here are all the Markdown Editors that are not WYSIWYG

1.2.1. Hackmdio
- https://github.com/hackmdio/codimd
Ideas

- Idea from Jonny: use attributes so each object can have a different setting. So old comments could be Tiki syntax, and new comments could be Markdown.

Other tools

- [https://www.lyx.org/Download](https://www.lyx.org/Download)

Related links

- [https://discuss.prosemirror.net/t/ offline-peer-to-peer-collaborative-editing-using-yjs/2488](https://discuss.prosemirror.net/t/offline-peer-to-peer-collaborative-editing-using-yjs/2488)
- [https://blog.kevinjahns.de/are-crdts-suitable-for-shared-editing/](https://blog.kevinjahns.de/are-crdts-suitable-for-shared-editing/)
- [https://www.tiny.cloud/blog/real-time-collaboration-ot-vs-crdt/](https://www.tiny.cloud/blog/real-time-collaboration-ot-vs-crdt/)
- People want Markdown: [https://forum.virtualmin.com/t/links-to-documentation-are-broke/111602](https://forum.virtualmin.com/t/links-to-documentation-are-broke/111602)
- Markdown support for the Squire is an HTML5 rich text editor: "I think this request is really outside the scope of Squire. A good Markdown editor would be an entirely different product, and probably require quite a different code base."

To be evaluated

- [https://markdown-it.github.io](https://markdown-it.github.io)