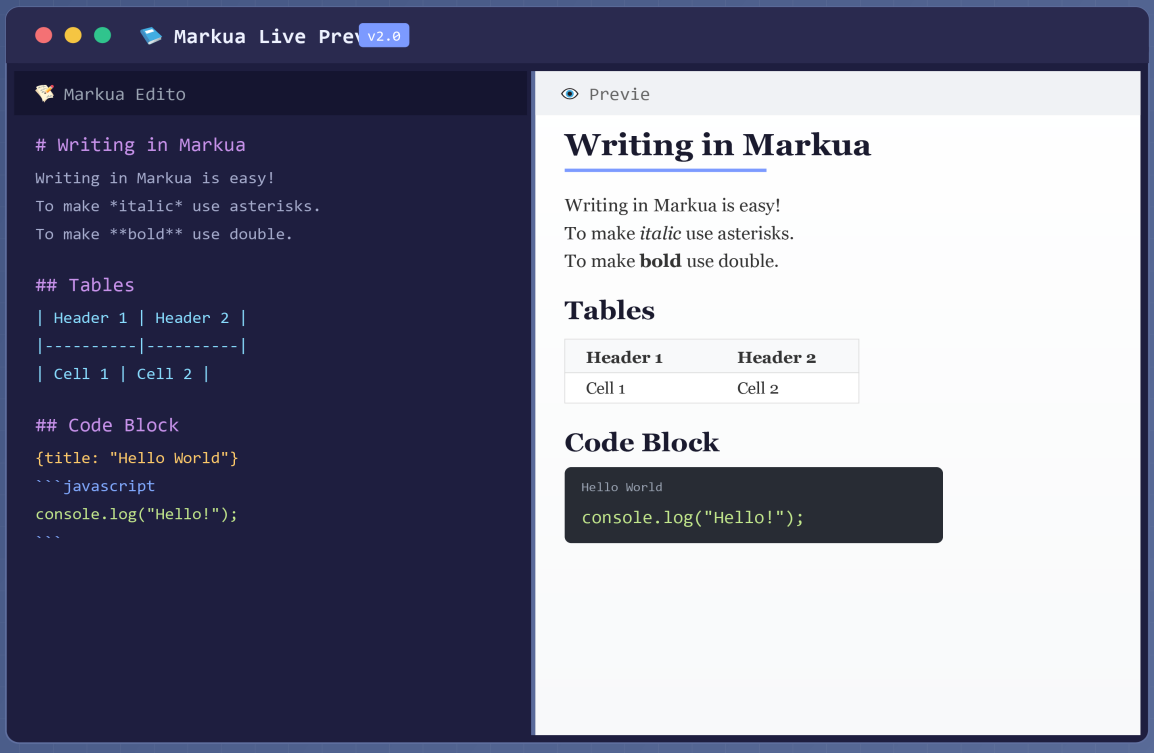
LEANPUB BOOK

How to Create and Use the Markua Live Editing & Preview System

One File, Zero Setup, Instant Editing and Preview

☒ Live Preview ☒ Word Import ☒ Single HTML ☒ Zero Setup



Written by

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Compatible with Leanpub

How to Create and Use the Markua Live Editing and Preview System

One File, Zero Setup, Instant Editing and Preview

J. Paul Liu

This book is available at
https://leanpub.com/howtocreatealocalmarkualivepreviewapp

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This is a Leanpub book. Leanpub empowers authors and publishers with the Lean Publishing process. Lean Publishing is the act of publishing an in-progress ebook using lightweight tools and many iterations to get reader feedback, pivot until you have the right book and build traction once you do.

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How to Create and Use the Markua Live Editing and Preview System

Version 3.0 – Now with Markua 0.30 Support

Developed by Prof. J. Paul Liu | © 2026 All Rights Reserved | Compatible with Leanpub

* * *

Introduction

Markua Live Preview is a powerful, browser-based editor for real-time writing and previewing documents in Markua format. Markua is a Markdown-like dialect created by Peter Armstrong for Leanpub. For the complete Markua specification, visit the Markua Spec or the Markua Manual. Markua is a modern, simplified version of Markdown specifically designed for writing books and courses, and is the native format used by Leanpub for publishing.

This application provides:

- Real-time preview of your Markua content
- **NEW: Full Markua 0.30 support** including footnotes, crosslinks, and index entries
- **NEW: Automatic character substitution** (em-dashes, en-dashes, ellipses)
- Word document import with smart heading detection
- Multiple export options (Markdown, Word)
- LaTeX math equation support
- Syntax highlighting for code blocks
- A clean, distraction-free writing environment

Tip: Markua Live Preview works entirely in your browser—**no installation required**, and your content stays private on your device.

* * *

What's New in Version 3.0

Version 3.0 brings full support for Markua 0.30, the latest specification used by Leanpub. Here's what's new:

Footnotes

Add footnotes anywhere in your text using the `[^id]` syntax:

```
This statement needs a citation[^1].

[^1]: Source: The Markua Manual, Peter Armstrong.
```

Footnotes are automatically collected and displayed in a "Footnotes" section at the end of your document, with clickable references and backlinks.

Crosslinks and IDs

Create internal links to any section in your document:

```
{id: important-section}
## Important Section

Later, you can reference [Important Section](#important-section).
```

This is essential for technical books and documentation where readers need to navigate between sections.

Index Entries

Build a professional book index automatically:

```
When discussing Markua{i: "Markua"} syntax, you'll find it similar
to Markdown{i: "Markdown"} but with extensions for books{i: "books, writing"}.
```

Index entries are collected and displayed in an alphabetized “Index” section at the end of your document.

Character Substitution

Markua 0.30 automatically converts common character sequences:

You Type	You Get	Name
`--`	—	Em-dash
`--` (with spaces)	–	En-dash
`...`	…	Ellipsis

New Part Syntax

Parts now use the attribute syntax in Markua 0.30:

```
{class: part}
# Part One: Getting Started
```

The legacy `-#` syntax is still supported for backward compatibility.

* * *

Download the App File

Download link is at the end of this manual. Watch the video demo

System Requirements

Supported Browsers

Browser	Support Level	Notes
Google Chrome	✅ Full Support	Best experience, native file saving
Microsoft Edge	✅ Full Support	Same engine as Chrome
Mozilla Firefox	⚠️ Partial	Download-based saving only
Apple Safari	⚠️ Partial	Download-based saving only

Recommended Setup

- Modern web browser (Chrome 90+ or Edge 90+ recommended)
- Screen resolution: 1280x720 or higher
- JavaScript enabled
- Internet connection (for loading external libraries)

* * *

App Interface Overview

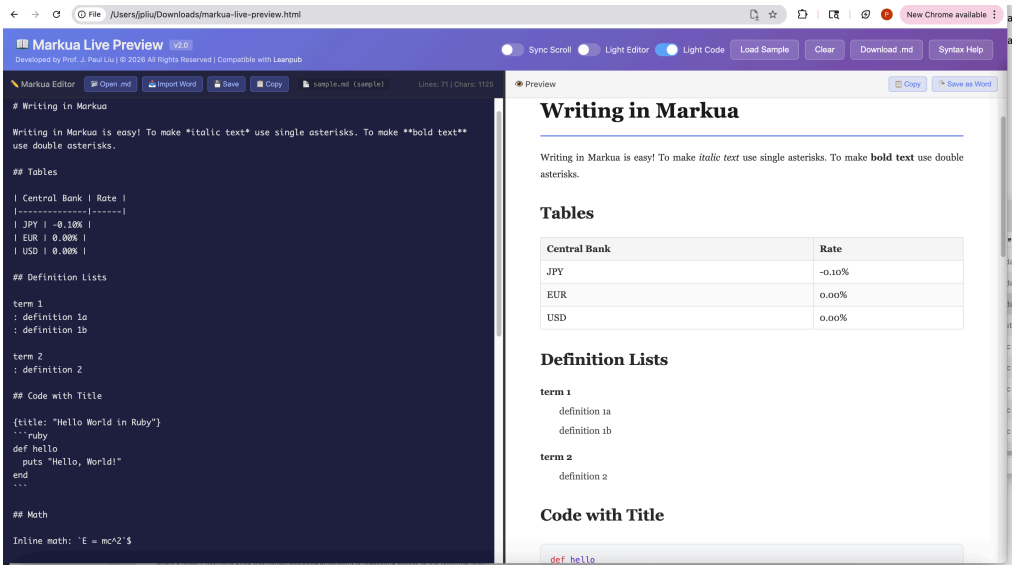

Figure 1. markua1.png

The application consists of several main areas:

Header Bar

The header bar contains:

- **Application title and version** (now showing v3.0 with Markua 0.30 badge)
- **Toggle switches** for Sync Scroll, Light Editor, and Light Code themes
- **Action buttons**: Load Sample, Clear, Download .md, Syntax Help

Editor Panel (Left)

The left panel is your writing area:

- **Panel header** with file operation buttons
- **Text editor** for writing Markua content
- **Status bar** showing line and character count

Preview Panel (Right)

The right panel shows the rendered output:

- **Panel header** with Copy and Save as Word buttons
- **Live preview** of your formatted document
- **NEW: Footnotes section** (when footnotes are used)
- **NEW: Index section** (when index entries are added)

Resizable Divider

The vertical divider between panels can be dragged to adjust the width ratio.

Syntax Help Panel

Click “Syntax Help” to open the reference panel, now updated with all Markua 0.30 features marked with “NEW” badges.

* * *

File Operations

Opening a Markua File

To open an existing `.md` file:

1. Click the 📂 **Open .md** button in the editor panel
2. Select a Markua or Markdown file from your computer
3. The file content will load into the editor
4. The filename appears in the panel header

Browser Differences: In Chrome/Edge, opening a file allows you to save directly back to the original location. In Firefox/Safari, you’ll need to download a new copy when saving.

Importing a Word Document

To convert a Word document to Markua:

1. Click the 📥 **Import Word** button
2. Select a `.docx` or `.doc` file
3. The content will be converted to Markua format

The import process automatically:

- Converts Word heading styles (Heading 1, 2, 3…) to Markua headings
- Detects bold-only paragraphs that look like headings

- Preserves bold, italic, and other text formatting
- Converts tables to Markua table format
- Converts lists (bulleted and numbered)
- Preserves hyperlinks

Note: Images embedded in Word documents are not imported. You'll need to add image references manually after import.

Saving Your Work

Click the 💾 **Save** button to save your document.

For New Documents or Samples

The file will download directly with the default or current filename.

For Opened Files

A dialog appears with two options:

Option	Description
📁 **Update Original File**	Opens a save dialog to overwrite the original file
📄 **Save as New File**	Downloads as `filename_copy.md`

Browser-Specific Behavior

Chrome / Microsoft Edge:

- First save: Choose location via save dialog
- Subsequent saves: Saves directly to the same file (no dialog)
- Full File System Access API support

Firefox / Safari:

- Every save downloads a new file
- Navigate to original location and replace manually
- No direct file system access due to browser limitations

Tip: For the best editing experience with direct save support, use Google Chrome or Microsoft Edge.

Copying Markua Content

Click the 📋 **Copy** button in the editor panel to copy the raw Markua source code to your clipboard. This is useful for:

- Pasting into Leanpub's manuscript editor
- Sharing code snippets
- Backup purposes

* * *

Preview Options

Copying Preview Content

Click 📋 **Copy** in the preview panel to copy the formatted content. This copies:

- Rich text (HTML) format for pasting into word processors
- Plain text fallback for simple editors

Exporting to Word

Click 📄 **Save as Word** to download your document as a `.doc` file that can be opened in Microsoft Word, Google Docs, or other word processors.

The export preserves:

- All heading levels
- Text formatting (bold, italic, strikethrough)
- Code blocks with syntax highlighting
- Tables
- Blockquotes and special blocks
- Figure captions
- **NEW: Footnotes section**

* * *

Editor Settings

Sync Scroll

Toggle: Sync Scroll (green when enabled)

When enabled, scrolling in the editor automatically scrolls the preview to the matching position, and vice versa.

- ✅ **On:** Editor and preview scroll together
- ❌ **Off:** Scroll each panel independently

Light Editor Theme

Toggle: Light Editor (yellow when enabled)

Switches the editor between dark and light color schemes.

Setting	Editor Background	Text Color
Off (Dark)	Dark purple (#1e1e3f)	Light gray
On (Light)	White	Dark gray

Light Code Theme

Toggle: Light Code (blue when enabled)

Switches code block styling in the preview.

Setting	Code Background	Text Color
Off (Dark)	Dark (#282c34)	Light syntax colors
On (Light)	Light gray (#f6f8fa)	Dark syntax colors

* * *

Header Buttons

Load Sample

Loads a sample Markua document demonstrating various features including all new v3.0 capabilities:

- Headings and text formatting
- **NEW: Footnotes with references**
- **NEW: Crosslinks and section IDs**
- **NEW: Index entries**
- **NEW: Character substitution examples**
- Tables and definition lists
- Code blocks with titles
- Math equations
- Special blocks (tips, warnings, asides)
- Blockquotes
- Links and images

Clear

Clears the editor completely.

Warning: This action cannot be undone. Make sure to save your work first!

Download .md

Downloads the current content as a Markdown file. Same as clicking Save for a new document.

Syntax Help

Opens a sliding panel on the right side with a quick reference of Markua syntax elements, now including all Markua 0.30 features:

- Headings
- Text formatting
- **NEW: Footnotes**
- **NEW: Crosslinks & IDs**
- **NEW: Index Entries**
- **NEW: Character Substitution**
- Blockquotes
- Asides and blurbs
- Special blocks
- Code blocks
- Lists
- Links and images
- Math equations
- Tables
- Attributes

Click again to close the panel.

* * *

Markua 0.30 Syntax Guide

Footnotes

Footnotes allow you to add references, citations, or additional information without interrupting the flow of your text.

Syntax:

```
This is a statement that needs a source[^1]. You can use any identifier[^note].

[^1]: This is the footnote content for reference 1.
[^note]: Footnote identifiers can be words or numbers.
```

Result:

- Footnote references appear as superscript links
- Clicking a reference scrolls to the footnote
- Each footnote has a backlink (↩️) to return to the text

Tip: Place all footnote definitions at the end of your chapter or document for better organization.

Crosslinks and IDs

Create internal navigation within your document by assigning IDs to sections and linking to them.

Assigning an ID:

```
{id: getting-started}
## Getting Started

{id: advanced-topics}
## Advanced Topics
```

Creating a crosslink:

```
For basics, see [Getting Started](#getting-started).
For more details, see [Advanced Topics](#advanced-topics).
```

Crosslinks are styled with a dashed underline to distinguish them from external links.

Index Entries

Build a professional book index by marking terms throughout your text.

Basic index entry:

```
The Markua{i: "Markua"} format is powerful.
```

Index entry with subterm:

```
We discuss error handling{i: "errors, handling"} in this chapter.
```

How it works:

- Index markers appear as small 📑 icons in the preview
- All entries are collected into an alphabetized “Index” section
- Entries are grouped by first letter with letter headings

Note: Index entries in the preview are for visualization. Leanpub generates the actual index with page numbers when publishing.

Character Substitution

Markua 0.30 automatically improves typography by converting common character sequences:

Em-dash (–):

```
He was running--or so he thought--toward safety.
```

Result: He was running—or so he thought—toward safety.

En-dash (–):

```
See pages 10 -- 20 for more information.
```

Result: See pages 10 – 20 for more information.

Ellipsis (…):

```
And then... it happened.
```

Result: And then… it happened.

Note: Character substitution only applies outside of code blocks and inline code.

Part Headings (New Syntax)

Markua 0.30 introduces attribute-based part headings:

New syntax (recommended):

```
{class: part}
# Part One: Introduction
```

Legacy syntax (still supported):

```
-# Part One: Introduction
```

* * *

Classic Markua Syntax Guide

Headings

```
# Chapter Title (H1)
## Section (H2)
### Sub-section (H3)
#### Sub-sub-section (H4)
##### H5
###### H6

{class: part}
# Part Heading (special large heading)
```

Text Formatting

Syntax	Result
italic or _italic_	*italic*
bold	**bold**
bold italic	***bold italic***
~~strikethrough~~	~~strikethrough~~
`inline code`	`inline code`
^superscript^	superscript
~subscript~	subscript

Links and Images

```
[Link Text](https://example.com)

![Alt text](image.jpg)

![Alt text](image.jpg "Figure Title")

{alt: "description", title: "Title"}
![](image.jpg)
```

Lists

Unordered List:

```
- Item one
- Item two
- Item three
```

Ordered List:

```
1. First item
2. Second item
3. Third item
```

Definition List:

```
term
: definition

another term
: definition one
: definition two
```

Code Blocks

Simple code block:

````
```javascript
function hello() {
    console.log("Hello, World!");
}
```
````

Code block with title:

````
{title: "Hello World Example"}
```javascript
function hello() {
    console.log("Hello, World!");
}
```
````

Tables

```
| Header 1 | Header 2 | Header 3 |
|----------|----------|----------|
| Cell 1   | Cell 2   | Cell 3   |
| Cell 4   | Cell 5   | Cell 6   |
```

Blockquotes

```
> This is a quote.
> It can span multiple lines.
>
> --Author Name, *Source*
```

Special Blocks

Markua supports several types of admonition blocks:

```
A> This is an aside.

B> This is a blurb.

T> This is a tip.

W> This is a warning.

E> This is an error.

I> This is information.

Q> This is a question.

D> This is a discussion.

X> This is an exercise.
```

Long-form syntax:

```
{aside}
This is a longer aside that can contain
multiple paragraphs and other content.
{/aside}

{blurb, class: warning}
This is a warning blurb.
{/blurb}
```

Math Equations (LaTeX)

Inline math:

```
The equation `E = mc^2`$ is famous.
```

Block math:

```
{title: "Quadratic Formula"}
```latexmath
x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}
```
```

Attributes

Attributes provide metadata for the following element:

```
{sample: true}
# Chapter Title

{title: "Figure Caption"}
![](image.jpg)

{id: my-section}
## Important Section

{class: part}
# Part One

{pagebreak}
```

* * *

Keyboard Shortcuts

Shortcut	Action
`Tab`	Insert 4 spaces (indent)
`Ctrl/Cmd + A`	Select all text
`Ctrl/Cmd + C`	Copy selected text
`Ctrl/Cmd + V`	Paste text
`Ctrl/Cmd + Z`	Undo

* * *

Tips and Best Practices

For Book Writing

Tip: Start each chapter in a separate file, then combine them when ready to publish on Leanpub.

1. Use `{sample: true}` at the top of chapters you want included in your sample book
2. Use `{class: part}` with `#` for Part headings to organize your book into sections
3. Use `{pagebreak}` sparingly—let the publishing system handle pagination
4. **NEW:** Add index entries as you write to build your index incrementally
5. **NEW:** Use crosslinks for "see Chapter X" references

For Code Documentation

Tip: Always add titles to code blocks for better figure references.

```
{title: "Installation Command"}
```bash
npm install my-package
```
```

For Academic Writing

Tip: Use footnotes for citations and LaTeX math blocks for equations.

```
The relationship is described by `F = ma`$ where *F* is force,
*m* is mass, and *a* is acceleration[^newton].

[^newton]: Newton, Isaac. *Philosophiæ Naturalis Principia Mathematica*, 1687.
```

For Technical Books

Tip: Use index entries and crosslinks to make your book navigable.

```
{id: error-handling}
## Error Handling

When working with exceptions{i: "exceptions"}, you should always...

For related information, see [Logging](#logging) in the next chapter.
```

For Best Performance

1. **Use Chrome or Edge** for the best save experience
2. **Save frequently** using the Save button
3. **Use Sync Scroll** to keep editor and preview aligned
4. **Toggle Light themes** based on your environment

* * *

Troubleshooting

Common Issues

Q: The preview doesn't update

A: Make sure JavaScript is enabled in your browser. Try refreshing the page.

Q: Math equations don't render

A: Math rendering requires an internet connection to load MathJax. Check your connection and refresh.

Q: Footnotes don't appear

A: Make sure you have both the reference `[^id]` in your text AND the definition `[^id]: content` somewhere in your document.

Q: Character substitution isn't working

A: Character substitution only works outside of code blocks and inline code. Make sure your dashes aren't inside backticks.

Q: Index entries don't show up

A: Index entries require the exact syntax `{i: "term"}` with quotes around the term. Check for typos.

Q: Tables appear with white/invisible text

A: This was fixed in version 2.0. Make sure you're using the latest version.

Q: Word import loses my headings

A: Ensure your Word document uses proper heading styles (Heading 1, Heading 2, etc.) rather than just bold text. The import does attempt to detect bold-only paragraphs as headings, but using proper styles gives better results.

Q: I can't save directly to my file

A: Direct saving requires Chrome or Edge browser and works best when the page is served via HTTPS. When opening files locally, use the "Update Original File" option and navigate to your file location.

Getting Help

For issues or feature requests, contact the developer or submit feedback through your organization's support channels.

* * *

Version History

Version 3.0 (Current)

Major Update: Markua 0.30 Support

- **NEW: Footnotes** – Full support with clickable references and backlinks
- **NEW: Crosslinks & IDs** – Internal document navigation with `{id: ...}` and `[text](#id)`
- **NEW: Index Entries** – Automatic index generation with `{i: "term"}` syntax
- **NEW: Character Substitution** – Automatic em-dash (—), en-dash (–), and ellipsis (…)
- **NEW: Part Syntax** – Support for `{class: part}` attribute on headings
- **NEW: Updated Syntax Panel** – All new features documented with "NEW" badges
- **NEW: Enhanced Sample Document** – Demonstrates all Markua 0.30 features
- Updated header with Markua 0.30 compatibility badge
- Improved Word export with footnotes support

Version 2.0

- Added save dialog with Update/Save As options
- Added Copy button for Markua source
- Fixed table text color display
- Improved Word import heading detection
- Added mammoth.js style mapping for better heading conversion
- Added smart bold-to-heading detection

Version 1.0

- Initial release
- Real-time Markua preview
- Word import/export
- LaTeX math support
- Theme toggles
- Syntax highlighting

* * *

Credits

Markua Live Preview was developed by Prof. J. Paul Liu.

Third-Party Libraries

- Mammoth.js – Word document conversion
- Highlight.js – Code syntax highlighting
- MathJax – LaTeX math rendering

About Markua

Markua is a Markdown dialect created by Peter Armstrong for Leanpub.

- **Markua Spec (0.30):** https://markua.com
- **Markua Manual (0.10):** https://leanpub.com/markua/read

Markua 0.30 is now the default for new books on Leanpub and includes features like footnotes, crosslinks, index entries, and improved document settings.

* * *

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Compatible with Leanpub | Supports Markua 0.30

Next: Download the App File

Downlaod the App file: “markua-live-preview-v3.html”

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