

# Designless

A Markdown-based desktop publishing platform in the browser.

## Proposal

Jake Coppinger 2015

# Abstract.

*A Markdown-based desktop publishing platform in the browser*

For plain text writing, Markdown is quickly becoming a popular format choice for writers. It allows the author to write in plain text and use simple symbols to create structure - you use an asterisk for *italics*, or two asterisks for **bold**. It is more transparent and structured than a Word document and more human friendly than HTML or LaTeX. While writing in this format is great, there is no straightforward method of designing the text into a printed document layout. I propose a modern web app which makes use of Markdown for writing and a drag and drop interface for designing the layout of the page. I envision a nested box model interface for the layout mode where boxes are the base unit, and can be nested to easily create complex designs - a revolutionary approach to the problem of brilliant design. By storing the attributes of these boxes including typography details in a plain text format, versioning software like Git could track changes of the text as well as the layout - enabling powerful collaboration never before possible in graphic design.

# Project Purpose.

The current landscape of design focused writing tools and word processors is bleak.

Microsoft Word is slow and bloated, with a proprietary format that is often ill-rendered, fractured version control features and limited mobile device support - and creating beautifully designed documents is a nightmare.

Apple Pages has advantages over Word in its design strengths and simple interface but it has other limitations. Writing on mobile devices is painful with full scaled down pages, the document format is extremely proprietary and version control is impossible.

Adobe InDesign is the king of document design and desktop publishing - its box model and page management features are immensely powerful. These come at a cost - a financial cost and slow software. While it works great for the final step of document publishing, one wouldn't think of writing in it due to its cluttered interface.

By creating a browser based writing and design application integrated with Dropbox or Git repositories, users can write Markdown in the browser or their editor of choice (eg. iA Writer, Byword, Vim, Emacs) and then design beautiful documents seamlessly. I envision the most innovative feature to be a nested box model interface for the layout where textbox like entities can be nested, enabling a rapid, structured design method which can be recorded in a human readable JSON format. Along with the plain text nature of Markdown, these documents will be easily versionable using Git or any type of version control and enabling collaboration never before possible on well designed documents.

As the user will be writing in the web-centric Markdown format, they will be able to publish their content to online blogs such as Medium simultaneously as they pushlist print materials. There is no other document writing solution that can keep a linear, web-ready text structure while designing complex documents.

# Project Outcome.

My final goal is to create a writing and design tool that is constructive for creating writing and lets users design beautiful documents in a seamless workflow. I will be publishing and promoting the project publically for others to make use of.

To demonstrate the usefullness of this product I will compose the final project report document entirely with this application - including the respective Markdown and layout files.

For the Minimum Viable Product I hope to complete a protoype which can take Markdown and design structure as a JSON file and render the document layout in the browser, complete with nested textbox-like element support.

# Team Member Capabilities.

I have experience in front end HTML/CSS/JavaScript design and back end work in Python. I anticipate there will be a large amount of JavaScript for managing the operation of the front end of the website which will challenge and extend me. All these skills will be helpful in the creation of this project.

# Initial Issues.

Creating a great user experience in web apps is hard, but it can be done - by using modern web technologies like HTML5, CSS3 and JavaScript libraries I will create a productive application. The box model structure and user experience needs to be spot on as this will be the truly innovative aspect of my application. This will involve some complex JavaScript and connecting third party services like Dropbox or Github - while I have worked with JavaScript before this will definately be a challenge.

# Deliverables timeline.

## Deliverables:

Web app and documentation report

## Timeline:

Markdown & JSON to layout engine

Completion: Week 6

Persistent drag and drop interface

Duration: 4 weeks

Completion: Week 10

Typography & image controls

Duration: 4 weeks

Completion: Week 14

Polishing & Documentation

Duration: 2 weeks

Completion: Week 16