

# Designless

## Jake Coppinger

To quickly test the project navigate to dist/ and spin up a Python web server: `python python -m SimpleHTTPServer`

However this setup does not support client side routing, so if you request host:port/write you will get a 404 error.

To install dependencies and build from the source (or serve with the gulp server), follow the following instructions modified from the Google Polymer setup guide.

## Prerequisites

The following major dependencies are required:

- Node.js, used to run JavaScript tools from the command line.
- npm, the node package manager, installed with Node.js and used to install Node.js packages.
- gulp, a Node.js-based build tool.
- bower, a Node.js-based package manager used to install front-end packages (like Polymer).

### **To install dependencies:**

1) Check your Node.js version.

```
node --version
```

The version should be at or above 0.12.x.

2) If you don't have Node.js installed, or you have a lower version, go to [nodejs.org](https://nodejs.org) and click on the big green Install button.

3) Install `gulp` and `bower` globally.

```
npm install -g gulp bower
```

This lets you run `gulp` and `bower` from the command line.

4) Install the local `npm` and `bower` dependencies.

```
npm install && bower install
```

# Building

## Serve / watch

```
gulp serve
```

This outputs an IP address you can use to locally test and another that can be used on devices connected to your network.

## Build & Vulcanize

```
gulp
```

Build and optimize the current project, ready for deployment. This

includes linting as well as vulcanization, image, script, stylesheet and HTML optimization and minification.

# Features

The original proposal for Designless laid out the following capabilities and their timeline:

- Markdown & JSON to layout engine (Week 6)
- Persistent drag & drop interface (Week 6-Week 10)
- Typography & image controls (Week 10-Week 14)
- Publishing & Documentation (Week 14-Week 16)

I intend to implement all the original features planned. This is possible due to my experimentation with a few technologies before embarking on the project to ensure that the features would be realistically achieved.

# MVP Features

In my original proposal I stated:

“ For the Minimum Viable Product I hope to complete a prototype 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. ”

I have created implemented this core layout and Markdown data

storage and specification, the important core of the project that everything will be built on. While I haven't implemented the nested textbox support on the front end I have build the data structure code with this in mind.

Some detail into the components I have implemented to support these features:

- jQuery UI Draggable text boxes
- Persistent layout storage using Lockr.js and HTML5 localStorage with pixel perfect placement
- Pixel and millimetre perfect layout storage through computing the pixel-per-millimetre ratio (layout is based in millimetres as it is for print)
- Export of documents through Google Chrome print dialogue - follow the print icon from the top right of the app, and then hit print
- Live document updating through clean, callback based Markdown structure parsing pipeline (Markdown.structured() in Markdown.js)
- Material design framework derived from the Google Polymer Starter Kit, including customised Grub build chain
- Automatic bower dependency addition to index.html with grub-wiredep build chain in gulpfile.js
- Model/View/Controller separation of code:
  - Markdown.js and Layout.js manage the data structures (Model)

- Document.js manages the view from the data
  - The DOM stores the view objects
- What-You-See-Is-What-You-Mean Markdown editor which has basic visible formatting controls, derived from SimpleMDE Markdown Editor

## Current bugs & Inconsistancies

- When moving from the landing page to the "Write" page, the textarea requires a click to render the text
- Sometimes the textarea does not render at all, reload the page if this happens

## Dependencies and Acknowledgements

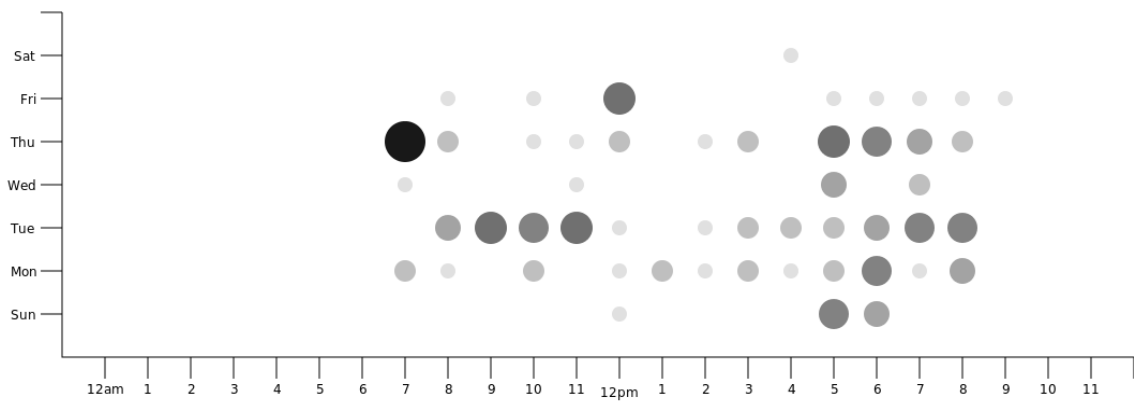
Designless at this stage makes use of the following libraries and resources for the front end (managed with bower):

- Google Polymer (Starter kit) Including the various webcomponents as part of this package (iron-, *paper*-)
- Page.js client side router
- jQuery
- jQuery UI
- SimpleMDE markdown editor

- “Marked” markdown parser & compiler
- Lockr.js local storage library

Numerous utilities are installed with npm for the gulp build chain.

# Punchcard



\* 8386441 – Thu, 27 Aug 2015 13:44:40 +1000 (4 hours ago) (HEAD, origin/master, master)  
| Added description, keywords and author – Jake Coppinger  
| \* 1dda795 – Thu, 27 Aug 2015 13:38:54 +1000 (4 hours ago) (origin/darktheme)  
|/ First dark theme steps – Jake Coppinger  
\* 811a63c – Thu, 27 Aug 2015 10:57:42 +1000 (7 hours ago)  
| Fixed gulp build chain bug for export.js – printing – Jake Coppinger  
\* d5e49ed – Thu, 27 Aug 2015 08:36:04 +1000 (9 hours ago)  
| Added print button – Jake Coppinger  
\* 74685ae – Thu, 27 Aug 2015 07:53:01 +1000 (10 hours ago)  
| Added support for independant printing page – Jake Coppinger  
\* 2351cf9 – Thu, 27 Aug 2015 07:08:27 +1000 (11 hours ago) (origin/dev)  
| Fixed typo – Jake Coppinger  
\* 042321e – Thu, 27 Aug 2015 07:05:11 +1000 (11 hours ago)  
| Darkened textbox highlight on write page and added contact details  
on about page – Jake Coppinger  
\* 84fe79b – Tue, 25 Aug 2015 20:59:52 +1000 (2 days ago) (dev)  
| Animated background for divs – Jake Coppinger  
\* 4c478b3 – Tue, 25 Aug 2015 20:40:50 +1000 (2 days ago)  
| Prettied up with proper Markdown and styling – Jake Coppinger  
\* cbeaf58 – Tue, 25 Aug 2015 14:14:20 +1000 (2 days ago)  
| Added divshot configuration – Jake Coppinger  
\* 1ea35da – Tue, 25 Aug 2015 10:33:31 +1000 (2 days ago)  
| Adding basic copyright comments – Jake Coppinger  
\* 1c160ea – Tue, 25 Aug 2015 10:26:24 +1000 (2 days ago)  
| Added possible bug fix for non focusing markdown text – Jake  
Coppinger  
\* a52af1a – Tue, 25 Aug 2015 09:51:43 +1000 (2 days ago)  
| Fix z-index of textarea text – Jake Coppinger  
\* d5a98be – Tue, 25 Aug 2015 08:46:53 +1000 (2 days ago)  
| More comments – Jake Coppinger  
\* ae5ff565 – Tue, 25 Aug 2015 08:09:16 +1000 (2 days ago)  
|\ Merging Mac and Linux work on cleaning up repo Merge  
remote-tracking branch 'origin/dev' into dev – Jake Coppinger  
| \* b90f232 – Mon, 24 Aug 2015 17:39:08 +1000 (3 days ago)  
| | Ignored jshinting – Jake Coppinger  
\* | ee188bc – Tue, 25 Aug 2015 08:08:21 +1000 (2 days ago)  
|/ Deleted deploy folder and added a few comments – Jake Coppinger  
\* 8bf6f39 – Mon, 24 Aug 2015 07:00:37 +1000 (3 days ago)  
| Main.py experiments – Jake Coppinger  
\* 68d1bf5 – Fri, 21 Aug 2015 12:46:34 +1000 (6 days ago)  
| experimental tornado server – Jake Coppinger  
\* 6295181 – Fri, 21 Aug 2015 12:46:13 +1000 (6 days ago)  
| No longer requires markdown comment hack – Jake Coppinger  
\* b45d7a7 – Fri, 21 Aug 2015 12:08:40 +1000 (6 days ago)  
| Moved responsive boxes below A4 page – Jake Coppinger  
\* 847ae3c – Fri, 21 Aug 2015 10:43:24 +1000 (6 days ago)  
| Added paper that floats left – Jake Coppinger  
\* 05ee268 – Fri, 21 Aug 2015 08:16:16 +1000 (6 days ago)  
| Removed markdown text from HTML, now injected from main.js – Jake  
Coppinger  
\* 66ce4f1 – Thu, 20 Aug 2015 20:51:43 +1000 (7 days ago)  
| Styling tweaks and added About page – Jake Coppinger

\* 6a532c6 – Thu, 20 Aug 2015 19:57:44 +1000 (7 days ago)  
| Added write page and removed hashbangs from URLs – Jake Coppinger

\* ac105a8 – Thu, 20 Aug 2015 19:43:38 +1000 (7 days ago)  
| Integrated Simple Markdown Editor to native material design paper card – Jake Coppinger

\* 2680748 – Thu, 20 Aug 2015 19:10:15 +1000 (7 days ago) (origin/polydev, polydev)  
| Fixed positioning of textboxes in document with new relative position – Jake Coppinger

\* cdfb20e – Thu, 20 Aug 2015 18:37:36 +1000 (7 days ago)  
| Changed color scheme to bright blue and grey – Jake Coppinger

\* 0d9c652 – Thu, 20 Aug 2015 18:21:55 +1000 (7 days ago)  
| Changed log prefix to Designless – Jake Coppinger

\* a798d4e – Thu, 20 Aug 2015 18:21:31 +1000 (7 days ago)  
| Made responsive-width 1280 pixels (before drawer opens by default) – Jake Coppinger

\* dca69a5 – Thu, 20 Aug 2015 18:04:03 +1000 (7 days ago)  
| Fixed SimpleMDE javascript import – Jake Coppinger

\* 36495fa – Thu, 20 Aug 2015 17:55:20 +1000 (7 days ago) (origin/polymer, polymer)  
| Git RM'ed bower\_components – Jake Coppinger

\* c3f7ae5 – Thu, 20 Aug 2015 17:29:23 +1000 (7 days ago)  
| Ignored bower components – Jake Coppinger

\* 991b1c3 – Thu, 20 Aug 2015 15:24:29 +1000 (7 days ago)  
| Fixed simplemde js import – Jake Coppinger

\* 4112f92 – Thu, 20 Aug 2015 15:01:24 +1000 (7 days ago)  
| Fixed node\_modules ignore – Jake Coppinger

\* af1fb60 – Thu, 20 Aug 2015 14:52:42 +1000 (7 days ago)  
| Remved node\_modules and ignored in .gitignore – Jake Coppinger

\* 89b4b4f – Thu, 20 Aug 2015 11:44:56 +1000 (7 days ago)  
| Added Markdown components and fixed Node – Jake Coppinger

\* 46c9d6d – Thu, 20 Aug 2015 08:05:48 +1000 (7 days ago)  
| Added bower componetsn – WORKING – Jake Coppinger

\* e698a08 – Thu, 20 Aug 2015 07:32:15 +1000 (7 days ago)  
| Checking in node modules to git – Jake Coppinger

\* a28be50 – Thu, 20 Aug 2015 07:07:09 +1000 (7 days ago)  
| Decided to check in bower components to Git – Jake Coppinger

\* 724801b – Wed, 19 Aug 2015 19:07:53 +1000 (8 days ago)  
| Added main.js file – Jake Coppinger

\* af3316d – Wed, 19 Aug 2015 19:01:44 +1000 (8 days ago)  
| Added dependances with bower – Jake Coppinger

\* aabca0b – Wed, 19 Aug 2015 17:59:57 +1000 (8 days ago)  
| Wired in wiredep – Jake Coppinger

\* 4a18b8a – Wed, 19 Aug 2015 17:43:25 +1000 (8 days ago)  
| Initial deploy of Polymer – Jake Coppinger

| \* 47ea9f8 – Thu, 27 Aug 2015 12:01:01 +1000 (6 hours ago) (origin/ui)  
| | Just rubbish here – Jake Coppinger

| \* b7aafc3 – Wed, 19 Aug 2015 17:24:26 +1000 (8 days ago) (ui)  
| | Broken really bad – Jake Coppinger

| \* 3786f75 – Wed, 19 Aug 2015 14:31:15 +1000 (8 days ago)  
| | New color theme – Jake Coppinger

| \* 1d2f042 – Wed, 19 Aug 2015 14:07:02 +1000 (8 days ago)  
| | Getting used to this gulp beast – Jake Coppinger

| \* 4129501 – Wed, 19 Aug 2015 14:01:00 +1000 (8 days ago)



| | Ignoring log files – Jake Coppinger  
| \* 8bd2fe7 – Wed, 19 Aug 2015 12:17:27 +1000 (8 days ago)  
|/ Re building with polymer example – Jake Coppinger  
\* 1673238 – Wed, 19 Aug 2015 11:55:55 +1000 (8 days ago) (origin/prettybuttons, prettybuttons)  
| Light colors menu – Jake Coppinger  
\* d96836c – Wed, 19 Aug 2015 07:53:22 +1000 (8 days ago)  
| Working on paper – Jake Coppinger  
\* 85bfaee – Tue, 18 Aug 2015 19:45:20 +1000 (9 days ago)  
| Working on tabs – Jake Coppinger  
\* 87ddef1 – Tue, 18 Aug 2015 19:03:57 +1000 (9 days ago)  
| Added button prototypes – Jake Coppinger  
\* a380155 – Tue, 18 Aug 2015 18:23:35 +1000 (9 days ago)  
| Added Roboto font files – Jake Coppinger  
\* dda1343 – Tue, 18 Aug 2015 18:09:52 +1000 (9 days ago)  
| Moved notes out of deploy – Jake Coppinger  
\* e153f33 – Tue, 18 Aug 2015 18:08:55 +1000 (9 days ago)  
| Working! Fixed bug of re formatted (pre) markdown – Jake Coppinger  
\* cdc393a – Tue, 18 Aug 2015 17:38:29 +1000 (9 days ago)  
| Removed polymer example – Jake Coppinger  
\* a5c9031 – Tue, 18 Aug 2015 17:37:03 +1000 (9 days ago)  
| Added Grunt automation and Polymer – Jake Coppinger  
\* bd32abb – Tue, 18 Aug 2015 16:38:02 +1000 (9 days ago)  
| Installed Polymer – Jake Coppinger  
\* 9261fab – Tue, 18 Aug 2015 16:37:13 +1000 (9 days ago)  
| More ui cleaning – Jake Coppinger  
\* 6d336f4 – Tue, 18 Aug 2015 15:10:47 +1000 (9 days ago)  
| Prettifying editor – Jake Coppinger  
\* 9a0eb49 – Tue, 18 Aug 2015 12:58:27 +1000 (9 days ago)  
| Added scss file – Jake Coppinger  
\* 1a221b3 – Tue, 18 Aug 2015 11:18:09 +1000 (9 days ago)  
| Starting to work on fonts and editor background – Jake Coppinger  
\* c1a8a58 – Tue, 18 Aug 2015 10:33:01 +1000 (9 days ago)  
| Re enabled client side layout save – Jake Coppinger  
\* 8ab35f0 – Tue, 18 Aug 2015 09:57:42 +1000 (9 days ago)  
| More integration of layout.js – Jake Coppinger  
\* a5be04b – Tue, 18 Aug 2015 09:46:08 +1000 (9 days ago)  
| Barely working layout class – Jake Coppinger  
\* 1957c46 – Tue, 18 Aug 2015 08:52:38 +1000 (9 days ago)  
| Mostly finished off layout class, ready to integrate – Jake Coppinger  
\* 443e9c0 – Mon, 17 Aug 2015 18:51:29 +1000 (10 days ago)  
| Added insertTextbox function into Layout – Jake Coppinger  
\* 30180a2 – Mon, 17 Aug 2015 18:44:40 +1000 (10 days ago)  
| Cleaned up index and debug html files – Jake Coppinger  
\* 7351fe3 – Mon, 17 Aug 2015 18:40:11 +1000 (10 days ago)  
|\ Merge branch 'master' into dev Bringing layout insertion work into dev – Jake Coppinger  
| \* 38d5e64 – Mon, 17 Aug 2015 18:18:05 +1000 (10 days ago)  
| | New heading adds new box to layout – Jake Coppinger  
| \* 20ad34d – Mon, 17 Aug 2015 13:01:35 +1000 (10 days ago)  
| | Working live typing with proper line breaks – Jake Coppinger  
| \* 4a6f793 – Mon, 17 Aug 2015 10:17:18 +1000 (10 days ago)  
| | Removed markdown and installed marked – Jake Coppinger  
| \* c162373 – Mon, 17 Aug 2015 08:19:37 +1000 (10 days ago)

| | Working markdown writer and barely functioning vim mode – Jake Coppinger

| \* 894f164 – Sun, 16 Aug 2015 18:04:03 +1000 (11 days ago)

| | Added fancy markdown editor – Jake Coppinger

\* | 015183b – Mon, 17 Aug 2015 18:37:04 +1000 (10 days ago)

|/ Working on Layout class – Jake Coppinger

\* bd04443 – Sun, 16 Aug 2015 17:39:31 +1000 (11 days ago) (origin/fluidboxes, fluidboxes)

| Successfully updates box content on keyup – Jake Coppinger

\* 5b24a5a – Sun, 16 Aug 2015 17:02:29 +1000 (11 days ago)

| Added textbox creation for box headers that don't exist in Document.updte() – Jake Coppinger

\* 973306c – Tue, 11 Aug 2015 11:10:25 +1000 (2 weeks ago)

| Starting to work on progressive, realtime box updating – Jake Coppinger

\* a5f014e – Tue, 11 Aug 2015 10:43:32 +1000 (2 weeks ago)

| Made textbox above page – Jake Coppinger

\* dd9bb6c – Tue, 11 Aug 2015 09:33:17 +1000 (2 weeks ago)

| Cleaning up – Jake Coppinger

\* 2d59351 – Tue, 11 Aug 2015 09:05:46 +1000 (2 weeks ago)

| Finished localStorage layout save – Jake Coppinger

\* ea5a12a – Mon, 10 Aug 2015 16:41:25 +1000 (2 weeks ago)

| broken: Trying to fix box position bugs – Jake Coppinger

\* 75147bf – Fri, 7 Aug 2015 12:44:28 +1000 (3 weeks ago)

| Added callback for moving box position – Jake Coppinger

\* 17627c2 – Fri, 7 Aug 2015 12:32:37 +1000 (3 weeks ago)

| Changed layout format for size and position box data to be grouped – Jake Coppinger

\* 833d538 – Thu, 6 Aug 2015 17:25:05 +1000 (3 weeks ago)

| Beginning to develop functionality for callbacks on moving boxes – Jake Coppinger

\* 2164184 – Thu, 6 Aug 2015 07:52:40 +1000 (3 weeks ago)

| Cleaned up and added start and stop callback functions – Jake Coppinger

\* 0160ded – Thu, 6 Aug 2015 07:21:17 +1000 (3 weeks ago)

| More cleaning and added helpful link – Jake Coppinger

\* 3fa5474 – Thu, 6 Aug 2015 07:04:28 +1000 (3 weeks ago)

| Added lockr to project, wiped debug javascript – Jake Coppinger

\* ada964f – Tue, 4 Aug 2015 20:44:25 +1000 (3 weeks ago)

| Added box on box resize – Jake Coppinger

\* 3f8195f – Tue, 4 Aug 2015 20:43:33 +1000 (3 weeks ago)

| Relatively stable document creation from markdown text and layout – Jake Coppinger

\* 95a8412 – Tue, 4 Aug 2015 19:54:14 +1000 (3 weeks ago)

| Creates box objects before rendering – Jake Coppinger

\* 5c93f41 – Tue, 4 Aug 2015 19:06:17 +1000 (3 weeks ago)

| Cleaned up box creation initialiser function arguments – Jake Coppinger

\* c9c862f – Tue, 4 Aug 2015 11:14:01 +1000 (3 weeks ago)

| Created class for Boxes, started integrating this to render pipeline – Jake Coppinger

\* ceeeca7 – Mon, 3 Aug 2015 20:52:01 +1000 (3 weeks ago)

| Added DPI scaling – need to fix a lot though – Jake Coppinger

\* 74204e3 – Mon, 3 Aug 2015 14:27:04 +1000 (3 weeks ago)

| Working on document rendering – about to add content rendering for  
each box – Jake Coppinger

\* 2962bf0 – Mon, 3 Aug 2015 13:01:42 +1000 (3 weeks ago)  
| BROKEN: Need to fix the markdown document object model – Jake  
Coppinger

\* c6f7c6a – Mon, 3 Aug 2015 12:54:43 +1000 (3 weeks ago)  
| Multiline markdown and cleaning up – Jake Coppinger

\* 4cd61c2 – Mon, 3 Aug 2015 10:26:01 +1000 (3 weeks ago)  
| Broke out MarkdownJson into class – Jake Coppinger

\* d1c7b1c – Sat, 1 Aug 2015 16:37:50 +1000 (4 weeks ago)  
| Working on regex where marked – Jake Coppinger

\* d09c20c – Wed, 29 Jul 2015 17:36:07 +1000 (4 weeks ago)  
| Finished YICTE and ITMP proposals – Jake Coppinger

\* cefd596 – Mon, 27 Jul 2015 20:38:30 +1000 (4 weeks ago)  
| Working on main proposal – Jake Coppinger

\* a76b424 – Mon, 27 Jul 2015 19:38:52 +1000 (4 weeks ago)  
| Added names and YICTE proposal – Jake Coppinger

\* 34031e8 – Mon, 27 Jul 2015 17:40:12 +1000 (4 weeks ago)  
| Moving documentation – Jake Coppinger

\* 3108e33 – Mon, 27 Jul 2015 15:50:46 +1000 (4 weeks ago)  
| Added project proposal spec for school – Jake Coppinger

\* 954dc4a – Mon, 27 Jul 2015 15:33:45 +1000 (4 weeks ago)  
| Work on markdown html – Jake Coppinger

\* 4ede2eb – Mon, 27 Jul 2015 07:53:16 +1000 (4 weeks ago)  
| Working on markdown splitting in debug.js – Jake Coppinger

\* 0faf737 – Sun, 26 Jul 2015 18:37:59 +1000 (5 weeks ago)  
| cleaning up – Jake Coppinger

\* 3822bd8 – Sun, 26 Jul 2015 18:34:46 +1000 (5 weeks ago)  
| Relative textbox generator – Jake Coppinger

\* ddc07f – Sun, 26 Jul 2015 17:34:04 +1000 (5 weeks ago)  
| Working printing in chrome – Jake Coppinger

\* e1d3279 – Sun, 26 Jul 2015 17:06:33 +1000 (5 weeks ago)  
| First prototype layout structure – Jake Coppinger

\* e2625a2 – Sun, 26 Jul 2015 12:56:41 +1000 (5 weeks ago)  
| More work on the proposal – Jake Coppinger

\* 014d655 – Thu, 23 Jul 2015 20:45:12 +1000 (5 weeks ago)  
| Working on more ideas for integrating site to files – Jake Coppinger

\* 18ee49e – Thu, 23 Jul 2015 17:15:28 +1000 (5 weeks ago)  
| Begun statement – Jake Coppinger

\* 3dc02f7 – Thu, 23 Jul 2015 17:05:24 +1000 (5 weeks ago)  
| Added names and cleaned up – Jake Coppinger

\* ca82693 – Thu, 23 Jul 2015 12:41:41 +1000 (5 weeks ago)  
| Development goals start – Jake Coppinger

\* 2df0dd3 – Thu, 23 Jul 2015 12:26:30 +1000 (5 weeks ago)  
| More ideas at IT camp – Jake Coppinger

\* 46f77b4 – Tue, 21 Jul 2015 15:52:51 +1000 (5 weeks ago)  
| More work on proposal and moved idea files – Jake Coppinger

\* d8aeb88 – Tue, 21 Jul 2015 11:14:42 +1000 (5 weeks ago)  
| More work – Jake Coppinger

\* d263bdf – Tue, 21 Jul 2015 11:03:58 +1000 (5 weeks ago)  
| Beginning of project proposal and course content – Jake Coppinger

\* 7844001 – Mon, 25 May 2015 20:50:45 +1000 (3 months ago)  
| Added box coordinates and beginning pages – Jake Coppinger

\* 3364ef8 – Fri, 22 May 2015 21:17:51 +1000 (3 months ago)

| Can't figure out why Chrome won't print the exact mm page size on A4  
- Jake Coppinger  
\* ac29475 - Fri, 22 May 2015 20:29:08 +1000 (3 months ago)  
| First revision testing before CSS pages - Jake Coppinger  
\* 4ee31d7 - Fri, 22 May 2015 19:39:06 +1000 (3 months ago)  
| A function for text boxes - Jake Coppinger  
\* a57d2f4 - Fri, 22 May 2015 18:19:24 +1000 (3 months ago)  
| Divs instead of text boxes - Jake Coppinger  
\* 373209c - Fri, 22 May 2015 17:38:52 +1000 (3 months ago)  
Initial boilerplate commit - Jake Coppinger