

POWER TOOLS FOR BROWSER-BASED DESIGN

Stephen Hay
Artifact . Austin . May 5, 2014

TIM “THE TOOLMAN” TAYLOR

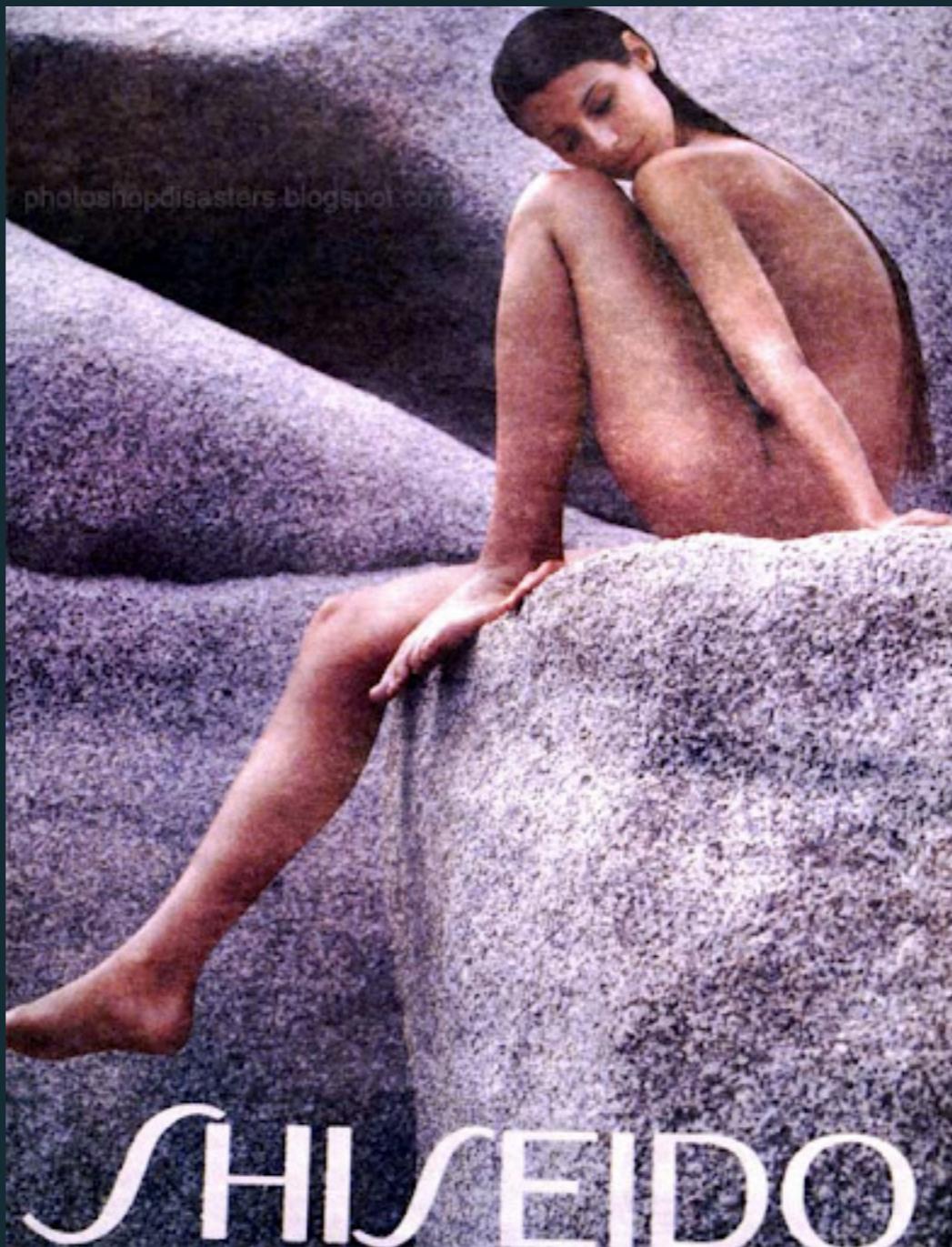




**DAVE
“THE TOOLMAN”
RUPERT**

THE TOOL RULE

It's not about the tools.



<http://psdisasters.com>

A hammer is tool.

It can be used to build things.

It can also be used to break things.

**DESIGN PROCESS
IS A FUNNEL**

THE DESIGN FUNNEL

DEFINE
VALUES & GOALS

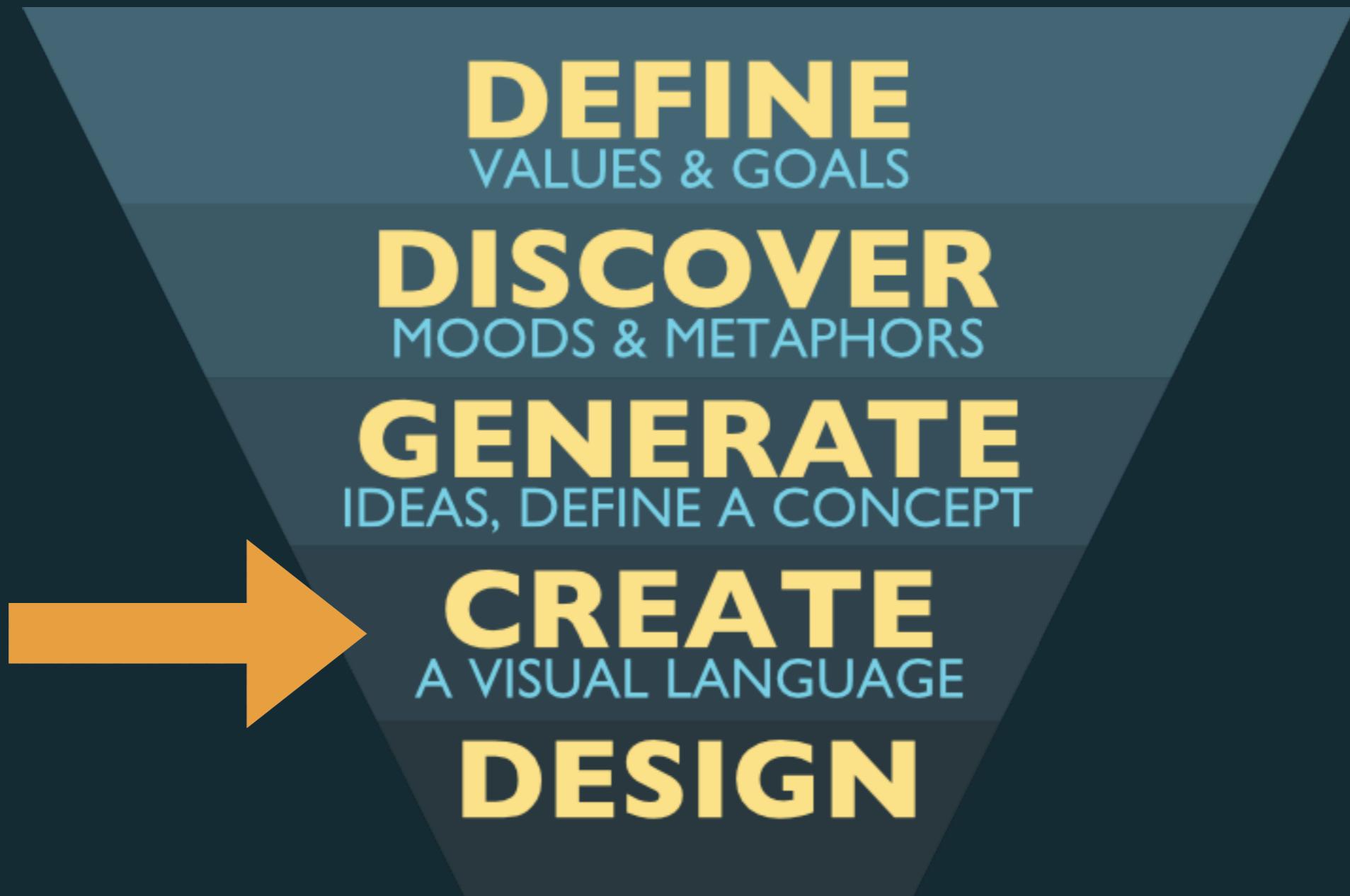
DISCOVER
MOODS & METAPHORS

GENERATE
IDEAS, DEFINE A CONCEPT

CREATE
A VISUAL LANGUAGE

DESIGN

THE DESIGN FUNNEL



VISUAL DESIGN COMPONENTS

VISUAL DESIGN COMPONENTS

CONTENT



Typography
Imagery
Color
Layout

AND ALSO...

AND ALSO...

Creating mockups/comps

“Sketching” in code

Reference

Documentation

Dealing with
CONTENT

```
<H1>HTML</H1>
```

It's not perfect, but for web designers it's ubiquitous and easily converted to other structured formats.

You should probably also learn CSS.

PLAIN TEXT MARKUP

Markdown

reStructuredText

Asciidoc

(and many more!)

DON'T LET THE COMMAND
LINE FRIGHTEN YOU.

MARKDOWN

```
- # This is a Markdown example  
| Sagittis lectus, ut feugiat pede lacus quis sapien. Suspendisse  
| porta, felis a fermentum interdum, dui nisl sodales felis, ut  
| fermentum sapien nibh eu nunc.  
  
- ## This is a list  
2 |  
2 | - List item 1  
2 | - List item 2  
2 | - List item 3  
2 | - List item 4  
2 | - List item 5  
2 |  
2 | Lorem ipsum dolor sit amet. Integer sed magna. Duis nisl nulla,  
<markdown [FORMAT=unix] [TYPE=PANDOC] [POS=0008,0001][32%] [LEN=25]  
"test.markdown" [New] 25L, 810C written
```

MARKDOWN

```
- # This is a Markdown example  
| Sagittis lectus, ut feugiat pede lacus quis sapien. Suspendisse  
| porta, felis a fermentum interdum, dui nisl sodales felis, ut  
| fermentum sapien nibh eu nunc.  
  
- ## This is a list  
2 |  
2 | - List item 1  
2 | - List item 2  
2 | - List item 3  
2 | - List item 4  
2 | - List item 5  
2 |  
2 | Lorem ipsum dolor sit amet. Integer sed magna. Duis nisl nulla,  
<markdown [FORMAT=unix] [TYPE=PANDOC] [POS=0008,0001][32%] [LEN=25]  
"test.markdown" [New] 25L, 810C written
```

<http://johnmacfarlane.net/pandoc/>

PANDOC

Pandoc converts documents in one markup format to another, and it supports **lots** of formats.

PANDOC

```
$ pandoc foo.markdown -o foo.html
```

PANDOC

```
artifact → ls
mov           rec          test.markdown
artifact → pandoc test.markdown -o test.html
artifact → █
```

PANDOC

```
artifact → ls
mov           rec          test.markdown
artifact → pandoc test.markdown -o test.html
artifact → █
```

<http://emmet.io/>

EMMET

Emmet allows you to construct HTML via
a CSS selector-like syntax.

NERD MODE

<http://emmet.io/>

EMMET

Emmet allows you to construct HTML via
a CSS selector-like syntax.

EMMET

NERD MODE

```
ul#nav>li.item$*4>a{Item $}
```

```
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~
```

```
<et.html[+] [FORMAT=unix] [TYPE=HTML] [POS=0001,0028][100%] [LEN=1]
```

```
"emmet.html" [New File]
```

```
-- INSERT --
```

EMMET

NERD MODE

```
ul#nav>li.item$*4>a{Item $}
```

```
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~
```

```
<et.html[+] [FORMAT=unix] [TYPE=HTML] [POS=0001,0028][100%] [LEN=1]
```

```
"emmet.html" [New File]
```

```
-- INSERT --
```

Dealing with

TYPOGRAPHY

<http://typecast.com/>

TYPECAST

Type-based prototyping

Great for “sculpting” structured content.

TYPECAST

typecast

 How it works

 Blog

 About

Try it now

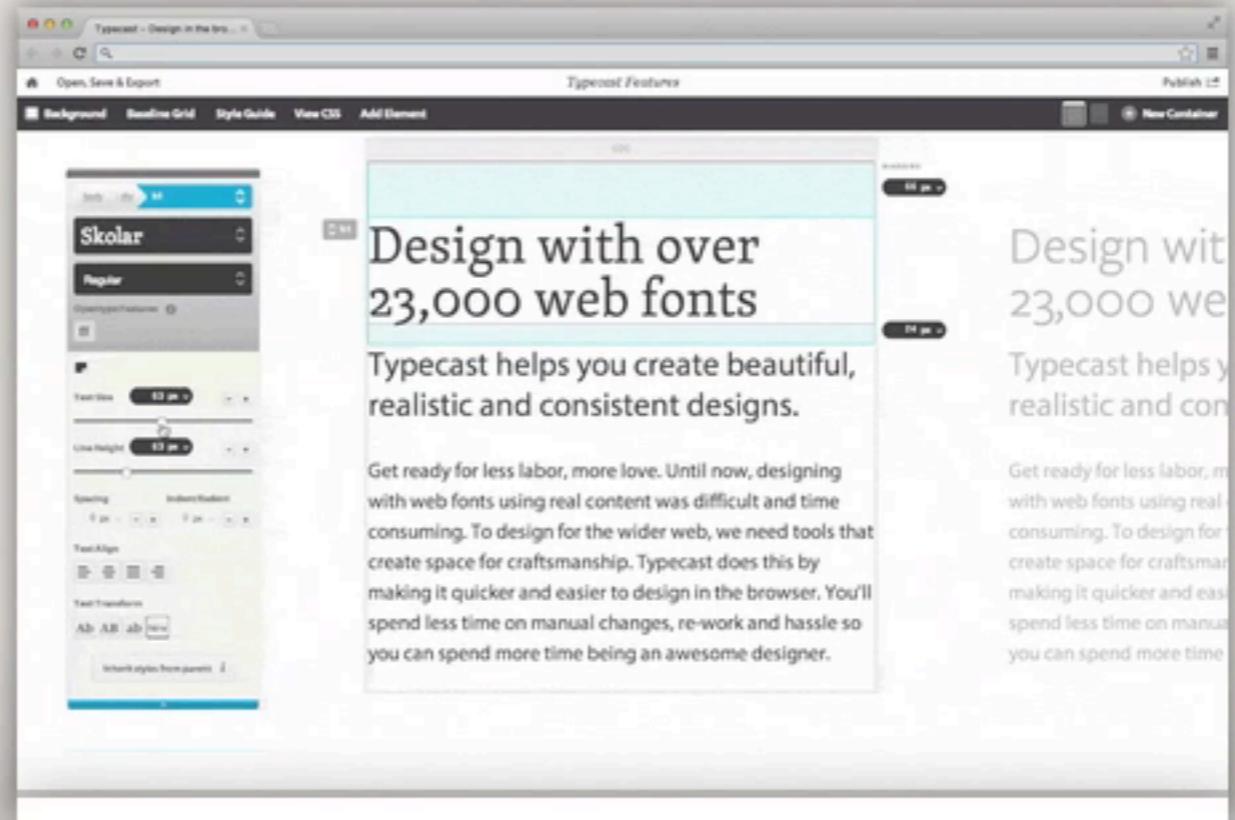
Sign in

Design for the reader by putting type first

Use Typecast to create visual and semantic designs.

Try it now

or [Learn how it works](#)



TYPECAST

typecast

 How it works

 Blog

 About

Try it now

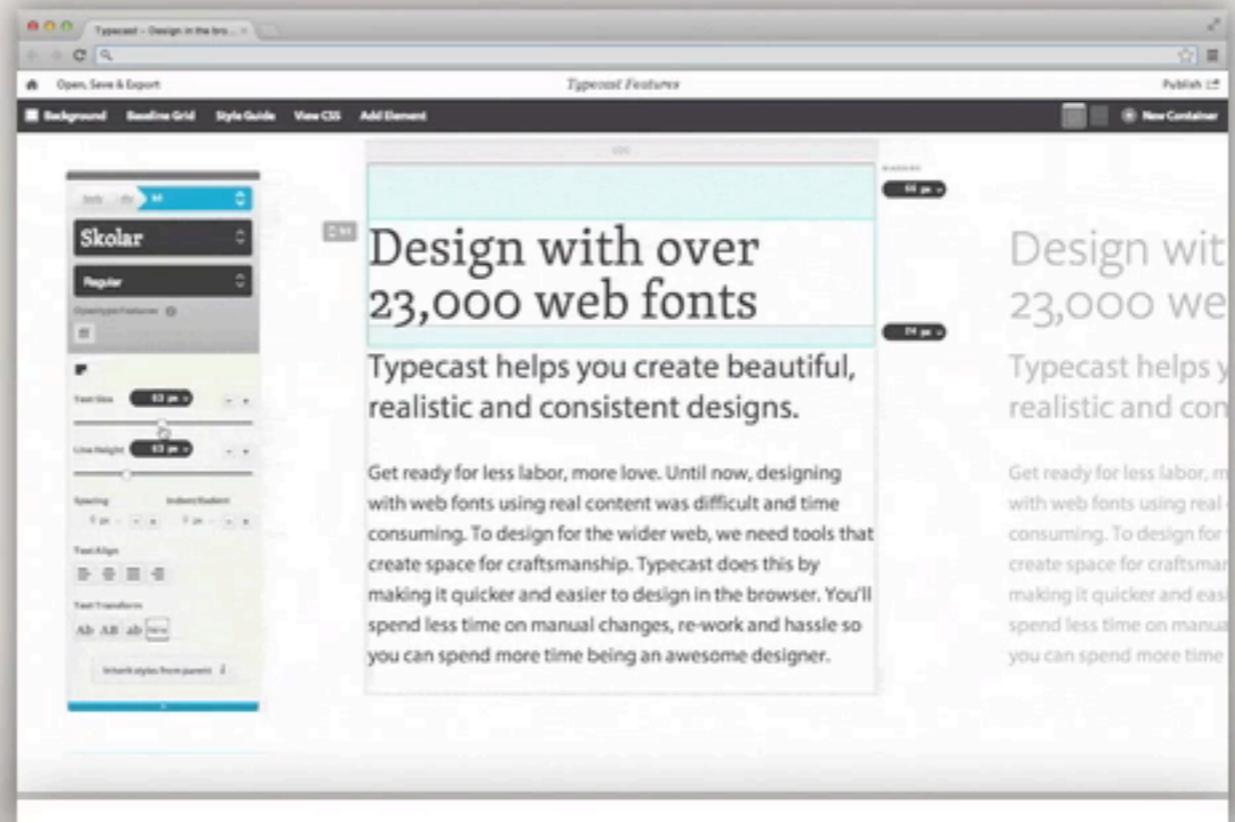
Sign in

Design for the reader by putting type first

Use Typecast to create visual and semantic designs.

Try it now

or [Learn how it works](#)



css

Dealing with

IMAGES

<http://www.morguefile.com/>

MORGUEFILE

<http://www.morguefile.com/>

MORGUEFILE

Free-to-use images.

<http://www.morguefile.com/>

MORGUEFILE

Free-to-use images.

But if you use stock photography in your finished designs, I will hunt you down.

<http://www.morguefile.com/>

MORGUEFILE

Free-to-use images.

But if you use stock photography in your finished designs, I will hunt you down.

And I will kill you.

MORGUEFILE

morguefile free photos

www.morguefile.com/archive/#/?q=Flower

View Image



Info Keywords Comments Geo X

IMG_5017.JPG
By dantada
8 years, 11 months, 18 days ago

Download Image

Star Heart Measure

morgueFile free photo
You are allowed to copy, distribute, transmit the work and to adapt the work. Attribution is not required. You are prohibited from using this work in a stand alone manner.

Likes 0

Favorites 0

Views 92

Downloads 44

Comments 0

Resolution Print (2592 x 1944 pixels)

Model Release No

Property Release No

www.morguefile.com/archive/display/65298

MORGUEFILE

morguefile free photos

www.morguefile.com/archive/#/?q=Flower

View Image

Info Keywords Comments Geo X

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www.morguefile.com/archive/display/65298

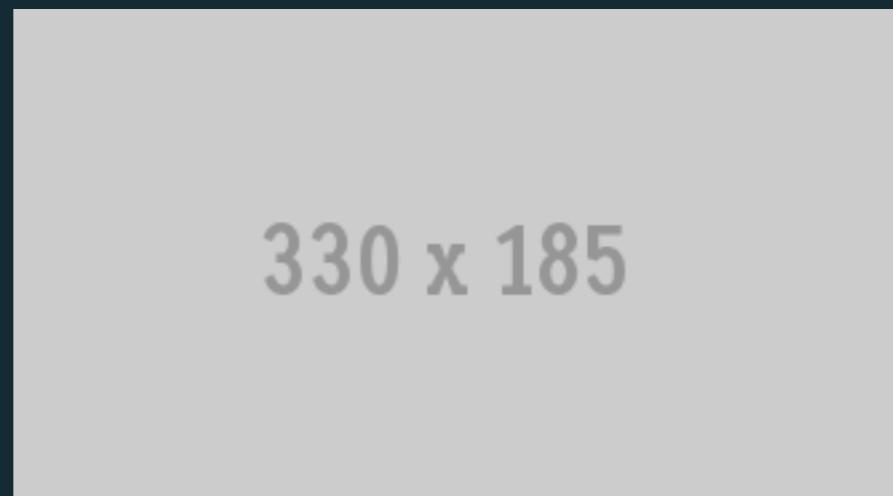
<http://placehold.it/>

PLACEHOLD.IT

Just call a URL and you've got a
placeholder image.

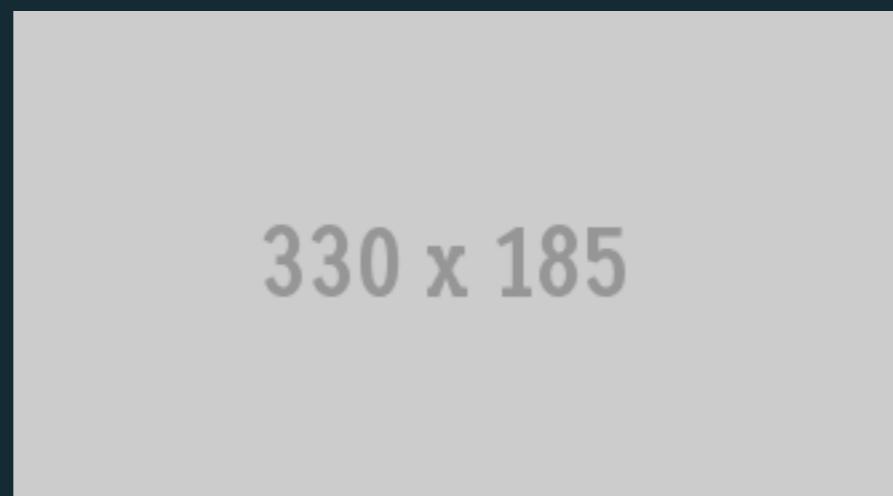
PLACEHOLD.IT

<http://placehold.it/330x185>



PLACEHOLD.IT

<http://placehold.it/330x185>



330 x 185

<http://placehold.it/330x185/b58900/ffffff>



330 x 185

<http://icomoon.io/>

ICOMOON

Construct your own icon font, or
download a set of icons in SVG format.

ICOMON

The screenshot shows the IcoMoon App interface for creating icon fonts. A modal dialog is open in the center, allowing users to customize icon properties:

- Color (hex):** 000000
- Icon Height (pixels):** 30
- Checkboxes:** Include PNG, SVG Sprite
- Download button:** Download (icon)

The background shows a grid of Font Awesome icons, including symbols like a glass, a musical note, a magnifying glass, a close button, a search icon, a refresh, a lock, a flag, a speaker, a barcode, a tag, and various text and media icons.

At the bottom of the interface, there are two buttons: **SVG** and **Font ↗**.

ICOMON

The screenshot shows the IcoMoon App interface for creating icon fonts. A modal dialog is open in the center, allowing users to customize icon properties. The dialog includes fields for 'Color (hex)' set to '000000' and 'Icon Height (pixels)' set to '30'. There are also checkboxes for 'Include PNG' and 'SVG Sprite', and a 'Download' button. The background shows a grid of Font Awesome icons, and a preview panel on the right displays a subset of these icons.

IcoMoon App - Icon Font

icomoon.io/app/#/select/image

Import Icons

Font Awesome

Color (hex) 000000

Icon Height (pixels) 30

Include PNG

SVG Sprite

Download

Icons preview area

SVG

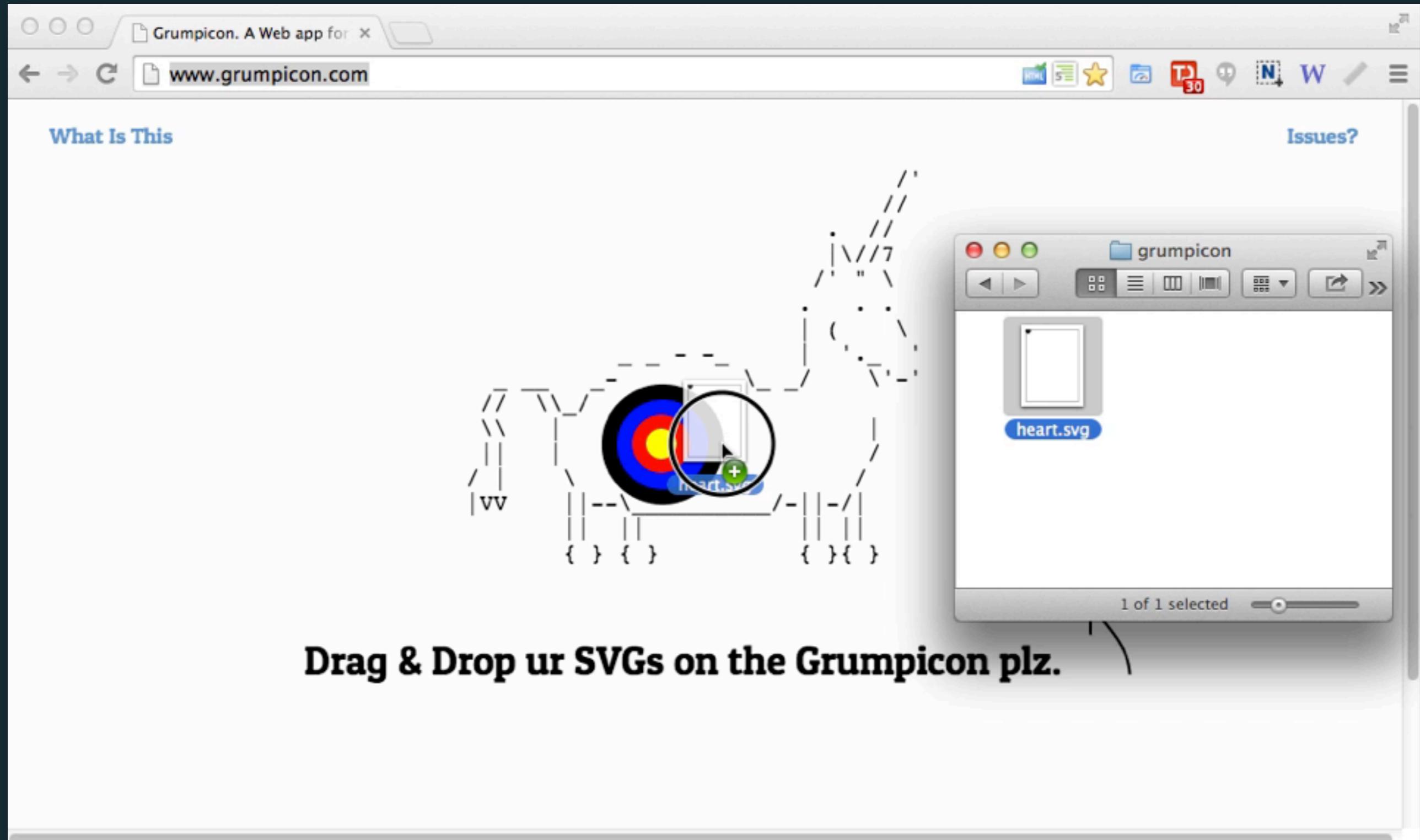
Font ↗

<http://www.grumpicon.com/>

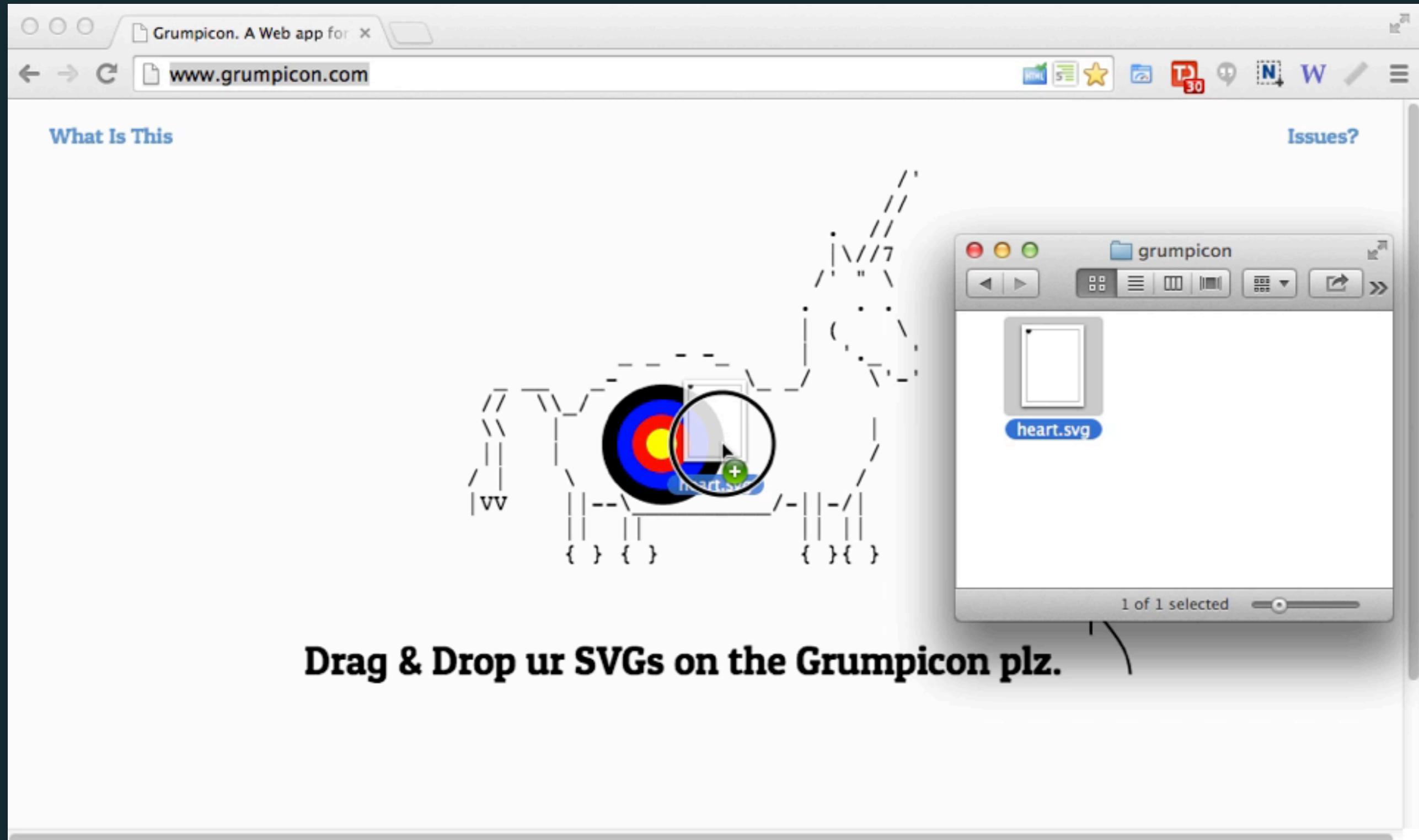
GRUMPICON

Use the Grumpicon to get your SVGs
HD(Retina)-ready.

GRUMPICON



GRUMPICON

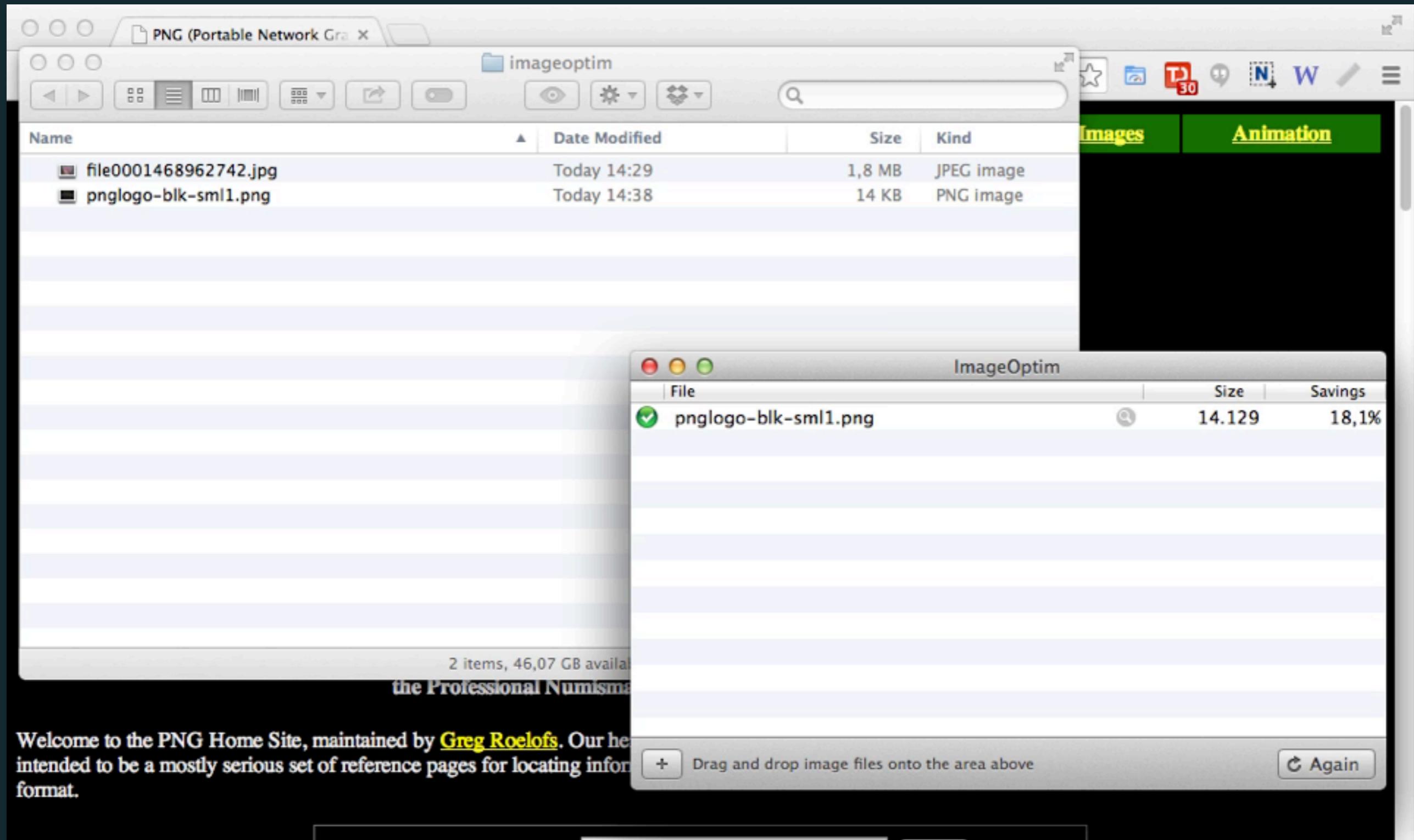


<http://imageoptim.com/>

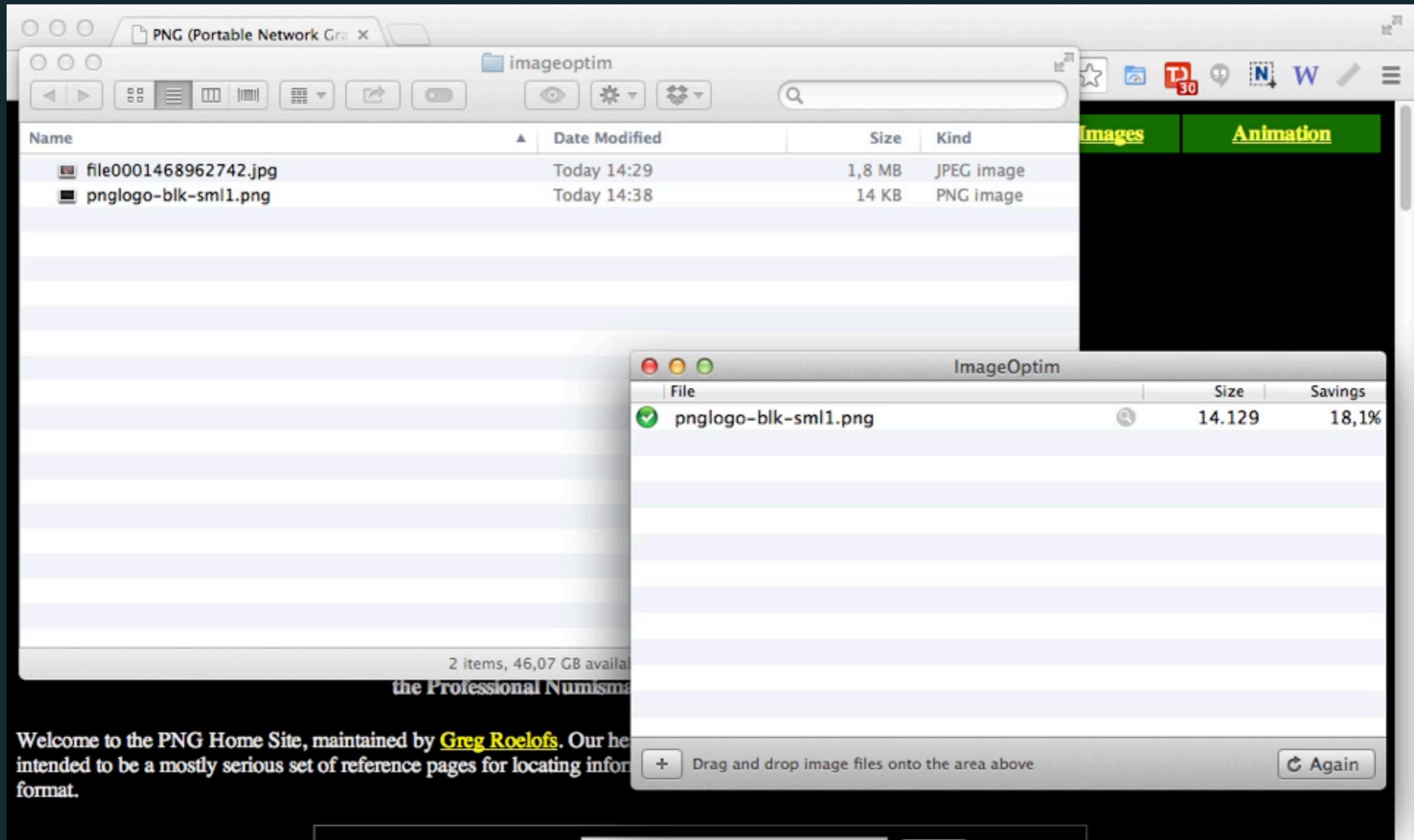
IMAGEOPTIM

Optimizes images (OS X)

IMAGEOPTIM



IMAGEOPTIM



NERD MODE

<http://emmet.io/>

IMAGEMAGICK

Wicked command line
black magic for images.

It's actually a suite of tools.

NERD MODE

IMAGEMAGICK

animate • compare • composite •
conjure • convert • display • identify •
import • mogrify • montage • stream

IMAGEMAGICK

NERD MODE

IMAGEMAGICK

NERD MODE

```
convert foo.gif foo.png
```

IMAGEMAGICK

NERD MODE

```
convert foo.gif foo.png
```

```
convert foo.jpg -resize 50% foo.png
```

IMAGEMAGICK

NERD MODE

```
convert foo.gif foo.png
```

```
convert foo.jpg -resize 50% foo.png
```

```
convert input.png -colorspace RGB  
+sigmoidal-contrast 11.6933 -define  
filter:filter=Sinc -define filter>window=Jinc  
-define filter:lobes=3 -resize 400%  
-sigmoidal-contrast 11.6933 -colorspace sRGB  
output.png
```

IMAGEMAGICK

NERD MODE

```
convert foo.gif foo.png
```

```
convert foo.jpg -resize 50% foo.png
```

```
convert input.png -colorspace RGB  
+sigmoidal-contrast 11.6933 -define  
filter:filter=Sinc -define filter>window=Jinc  
-define filter:lobes=3 -resize 400%  
-sigmoidal-contrast 11.6933 -colorspace sRGB  
output.png
```

OMGWTF MODE

IMAGEMAGICK

NERD MODE



Contrast Stretch



Convolve



Crop



Despeckle



Distort



Draw



Detect Edges



Emboss



Equalize

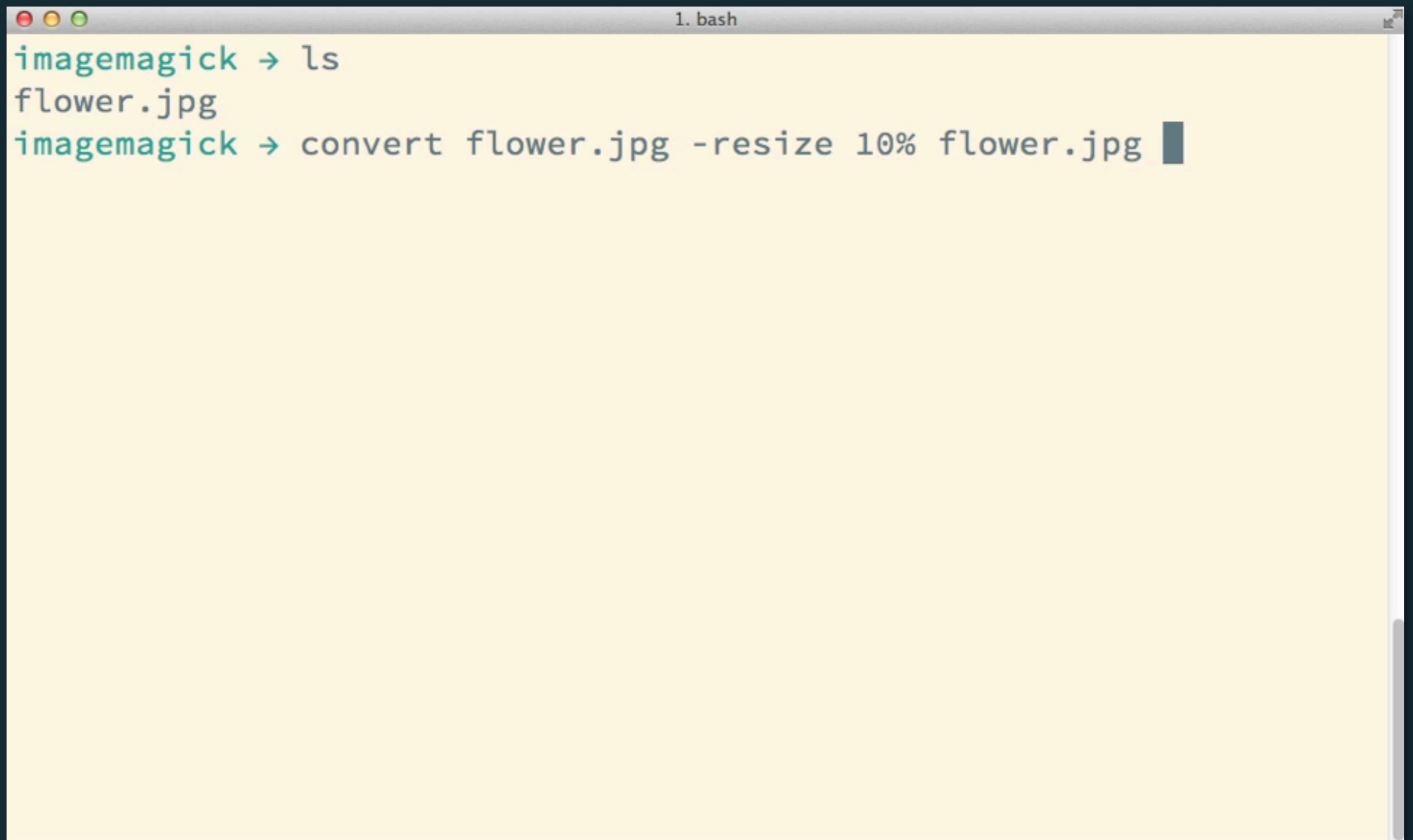


Explode



IMAGEMAGICK

NERD MODE



A screenshot of a terminal window titled "1. bash". The window has a dark header bar with three colored window control buttons (red, yellow, green) on the left and the title "1. bash" in the center. The main area of the terminal is light-colored and contains the following text:

```
imagemagick → ls  
flower.jpg  
imagemagick → convert flower.jpg -resize 10% flower.jpg █
```

The terminal window is set against a dark background, and the overall aesthetic is that of a Mac OS X desktop environment.

IMAGEMAGICK

NERD MODE

A screenshot of a terminal window titled "1. bash". The window has a dark header bar with three colored window control buttons (red, yellow, green) on the left and a close button on the right. The main area of the terminal is light-colored and contains the following text:

```
imagemagick → ls  
flower.jpg  
imagemagick → convert flower.jpg -resize 10% flower.jpg █
```

The terminal window is set against a dark background.

Dealing with
COLOR

<https://kuler.adobe.com/>

KULER

Colors.

KULER

Adobe Kuler

Create

Explore

My Themes

Sign up | Sign in

Save

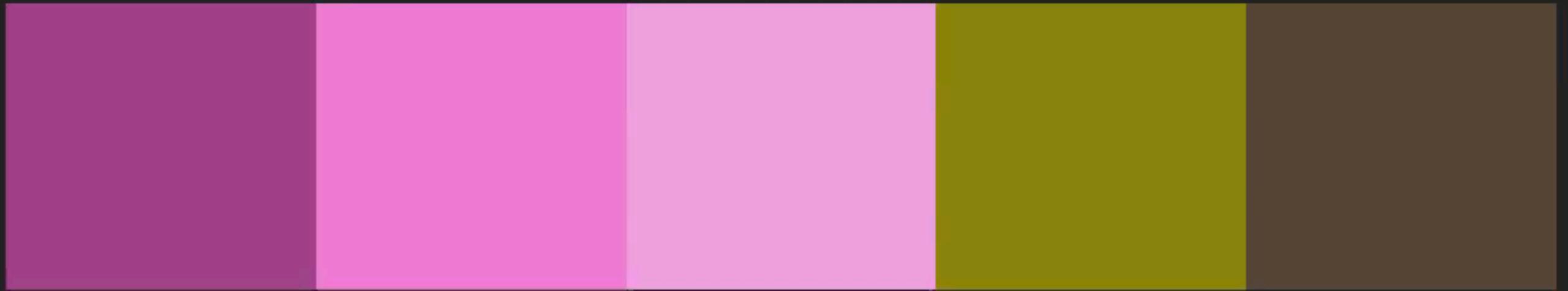
flower



Color Mood



Colorful



KULER

Adobe Kuler

Create

Explore

My Themes

Sign up | Sign in

Save

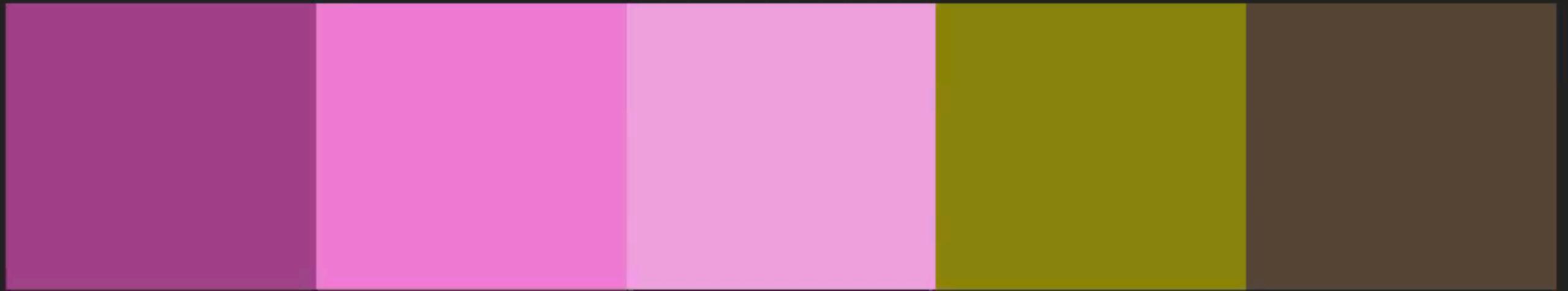
flower



Color Mood



Colorful



css

Dealing with

Layout

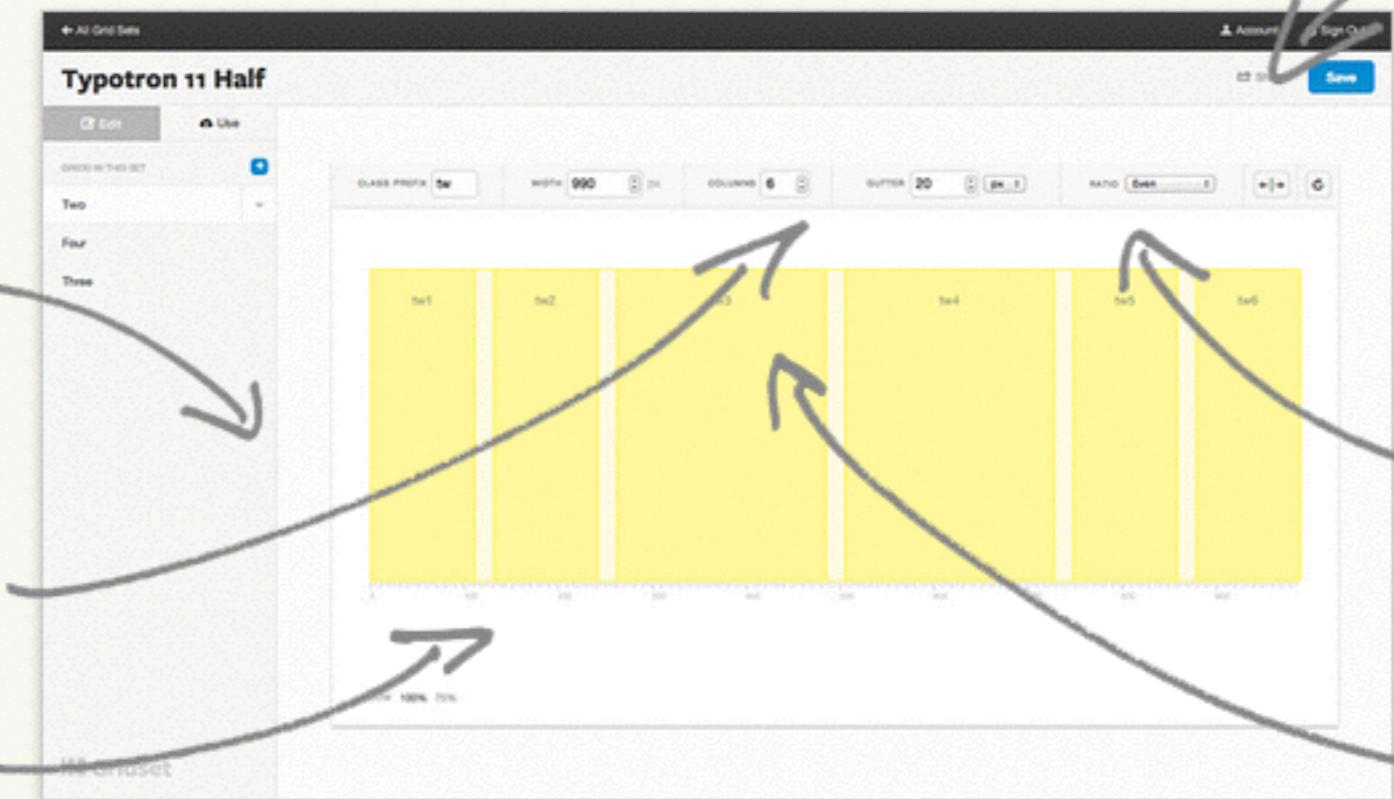
<https://gridsetapp.com/>

GRIDSET

Create web layout grids with a GUI

GRIDSET

<https://gridsetapp.com/>



Create multiple grids in your set: one for every break-point - great for Responsive Design!

Precise control over columns, gutters and more.

Zoom in and out for fine-grained editing of complex grids.

Share your grids with others.

Create complex ratio grids easily.

Gridset gets out of your way. Resize, drag and drop in a WYSIWYG interface.

<http://bradfrostweb.com/demo/ish/>

ISH.

<http://bradfrostweb.com/demo/ish/>

ISH.

Stress-test your responsive layout.

<http://bradfrostweb.com/demo/ish/>

ISH.

Stress-test your responsive layout.

Don't cry.

ISH

ish. yet another viewport n^o X 15%

bradfrostweb.com/demo/ish/?url=http%3A%2F%2Fartifactconf.com

Enter any URL GO SIZE 784.2 PX / 49.01 EM S M L FULL RANDOM DISCO HAY!

ARTIFACT
CONFERENCE

ARTIFACT is an intimate two-day, single-track conference that helps web designers and developers adapt their tools and processes to the challenges of designing for a multi-device world.

bradfrostweb.com/demo/ish/?url=http%3A%2F%2Fartifactconf.com#

ISH

ish. yet another viewport n^o X 15%

bradfrostweb.com/demo/ish/?url=http%3A%2F%2Fartifactconf.com

Enter any URL GO SIZE 784.2 PX / 49.01 EM S M L FULL RANDOM DISCO HAY!

ARTIFACT
CONFERENCE

ARTIFACT is an intimate two-day, single-track conference that helps web designers and developers adapt their tools and processes to the challenges of designing for a multi-device world.

bradfrostweb.com/demo/ish/?url=http%3A%2F%2Fartifactconf.com#

css

Creating
MOCKUPS/COMPS

DREAMWEAVER, PART II

DREAMWEAVER, PART II

GUI tools for designing that output code.

DREAMWEAVER, PART II

GUI tools for designing that output code.

Advantage: mockup in browser

DREAMWEAVER, PART II

GUI tools for designing that output code.

Advantage: mockup in browser

Disadvantage: **magic**

DREAMWEAVER, PART II

I DON'T ENDORSE ANY OF THESE.
I'M JUST NAMING EXAMPLES.

Macaw <http://macaw.co/>

Easel <https://www.easel.io/>

CoffeeCup <http://www.coffeecup.com/>

FRAMEWORKS

I DON'T ENDORSE ANY OF THESE.
I'M JUST NAMING EXAMPLES.

Bootstrap <http://getbootstrap.com/>

Zurb Foundation <http://foundation.zurb.com/>

NERD MODE

STATIC SITE GENERATORS

Jekyll

Dexy

+ Many others

STATIC SITE GENERATORS

A quick example with Dexy

```
{% from 'macros/nav.jinja' import menu with context -%}
<!DOCTYPE html>
<html lang="en">
  {% block head -%}
  {% include 'macros/_head.html' -%}
  {% endblock %}
<body>
  {% block page -%}
  <div id="page">
    {{ content }}
  </div>
  {% endblock %}
  <nav>
    {% block nav_menu -%}
<.html [FORMAT=dos] [TYPE=HTMLDJANGO] [POS=0001,0001] [4%] [LEN=22]
"_base.html" [dos] 22L, 463C
```

STATIC SITE GENERATORS

A quick example with Dexy

```
{% from 'macros/nav.jinja' import menu with context -%}
<!DOCTYPE html>
<html lang="en">
  {% block head -%}
  {% include 'macros/_head.html' -%}
  {% endblock %}
<body>
  {% block page -%}
  <div id="page">
    {{ content }}
  </div>
  {% endblock %}
  <nav>
    {% block nav_menu -%}
<.html [FORMAT=dos] [TYPE=HTMLDJANGO] [POS=0001,0001] [4%] [LEN=22]
"_base.html" [dos] 22L, 463C
```

NERD MODE

TEMPLATING

Jinja2

Mustache

+ Many others

TEMPLATES

Jinja2 example

```
{% extends '_base.html' %}

{% block page %}
<div id="page">
    {{ content }}
</div>
{% endblock %}
```

~
~
~
~
~
~
~
~

```
<.html [FORMAT=dos] [TYPE=HTMLDJANGO] [POS=0005,0001][71%] [LEN=7]
"~/Desktop/artifact/mockup/_template.html" [dos] 7L, 111C
```

TEMPLATES

Jinja2 example

```
{% extends '_base.html' %}

{% block page %}
<div id="page">
    {{ content }}
</div>
{% endblock %}
```

~
~
~
~
~
~
~
~

```
<.html [FORMAT=dos] [TYPE=HTMLDJANGO] [POS=0005,0001][71%] [LEN=7]
"~/Desktop/artifact/mockup/_template.html" [dos] 7L, 111C
```

css

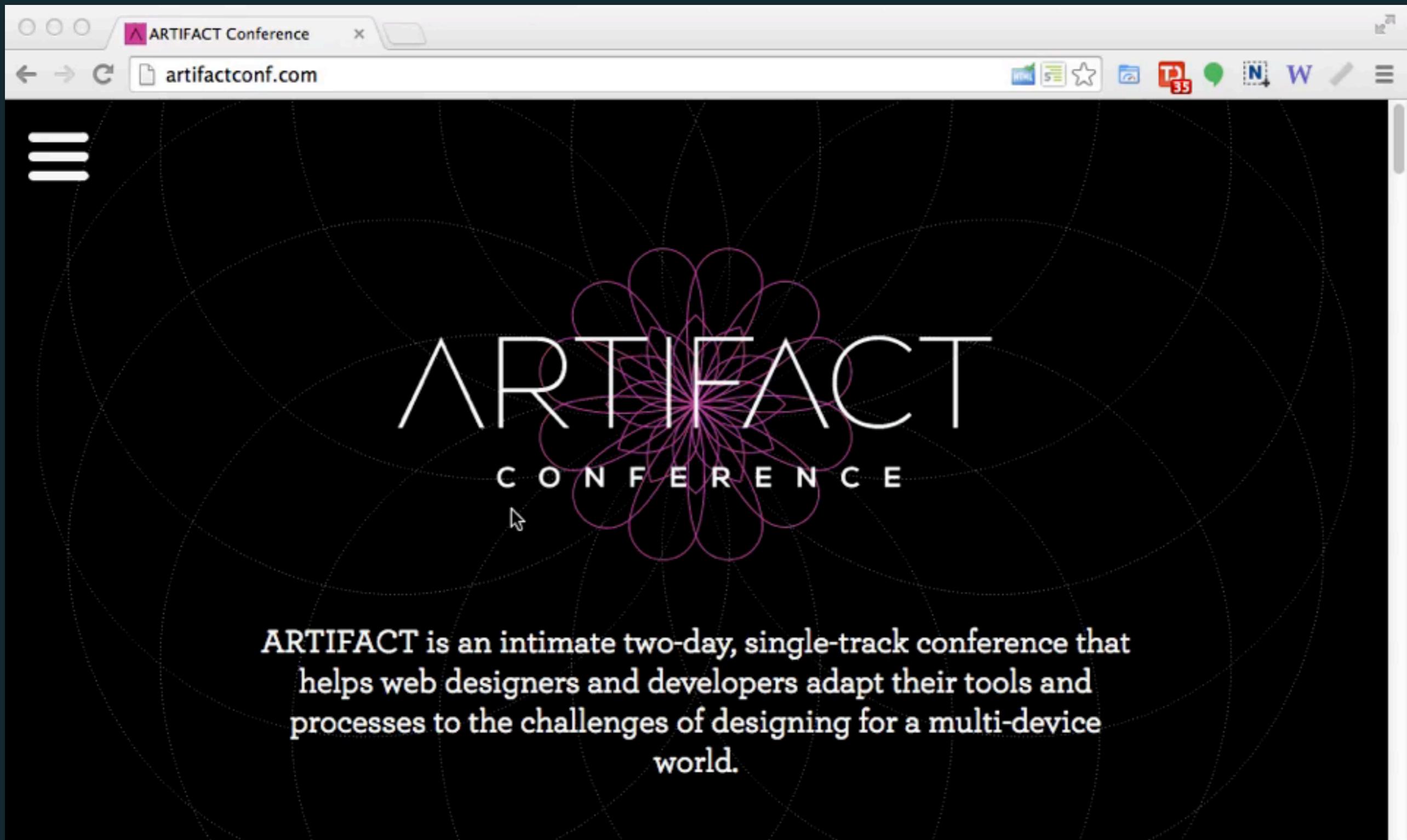
Tools for

SKETCHING IN CODE

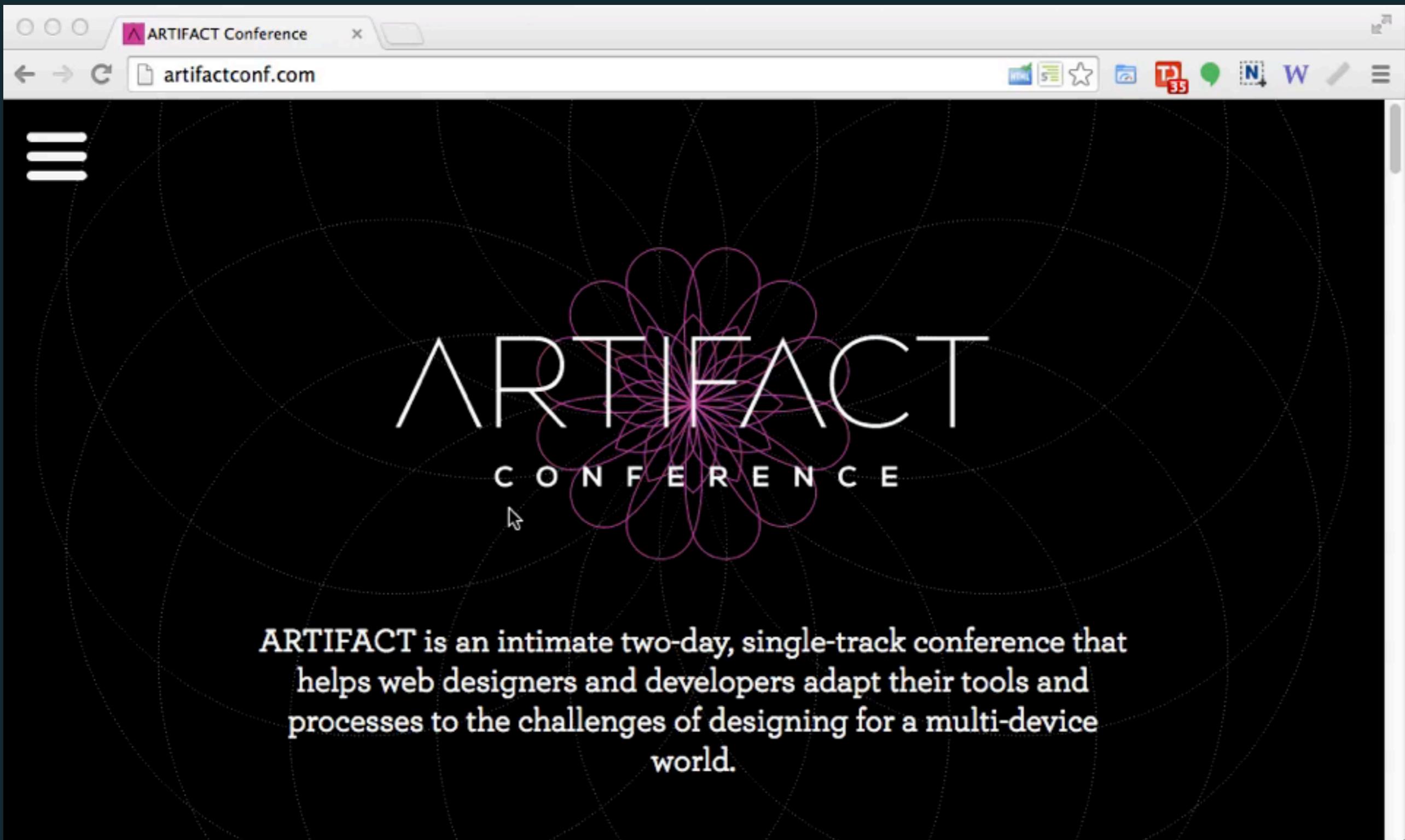
BROWSER DEV TOOLS

Tweak on an existing design
in the browser.

DEV TOOLS



DEV TOOLS



JSBIN

Very useful playground for HTML/CSS/JS

JSBIN

JS Bin - Collaborative JavaScript Editor

jsbin.com/qilah/1/edit

Bins Add library Share

HTML CSS JavaScript Console Output

Output Run with JS Auto-run JS

SMASHING MAGAZINE



HTML

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>JS Bin</title>
</head>
<body>
  <h1>Smashing <span>Magazine</span></h1>
</body>
</html>
```

CSS

```
body {
  font-size: 100%;
}
h1 {
  font-family: Helvetica, Arial,
  sans-serif;
  font-size: 2.4em;
  letter-spacing: .05em;
  text-transform: uppercase;
  color: #f24026;
  width: 6em;
  position: relative;
}
span, span:before, span:after {
  position: absolute;
}
span {
  display: block;
  top: 35px;
  left: 2px;
  color: #a9a9ab;
  font-weight: 100;
  font-size: .65em;
  letter-spacing: .45em;
}
span:after {
  content: '';
  display: block;
  width: 3.8em;
  height: 3.8em;
```

JSBIN

JS Bin - Collaborative JavaScript Editor

jsbin.com/qilah/1/edit

Bins Add library Share

HTML CSS JavaScript Console Output

Output Run with JS Auto-run JS

SMASHING MAGAZINE



HTML

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>JS Bin</title>
</head>
<body>
  <h1>Smashing <span>Magazine</span></h1>
</body>
</html>
```

CSS

```
body {
  font-size: 100%;
}
h1 {
  font-family: Helvetica, Arial,
  sans-serif;
  font-size: 2.4em;
  letter-spacing: .05em;
  text-transform: uppercase;
  color: #f24026;
  width: 6em;
  position: relative;
}
span, span:before, span:after {
  position: absolute;
}
span {
  display: block;
  top: 35px;
  left: 2px;
  color: #a9a9ab;
  font-weight: 100;
  font-size: .65em;
  letter-spacing: .45em;
}
span:after {
  content: '';
  display: block;
  width: 3.8em;
  height: 3.8em;
```

css

Producing

DOCUMENTATION

ASCIIDOCCTOR

So awesome that we should
share a moment of silence.

ASCIIDOCCTOR



A screenshot of a web browser window titled "This is a Markdown example". The address bar shows the file path: "file:///Users/stephenhay/Desktop/artifact/test.html". The browser interface includes standard buttons for back, forward, and search, along with icons for star, file, print, and other functions.

This is a Markdown example

Sagittis lectus, ut feugiat pede lacus quis sapien. Suspendisse porta, felis a fermentum interdum, dui nisl sodales felis, ut fermentum sapien nibh eu nunc. ↗

This is a list

- List item 1
- List item 2
- List item 3
- List item 4
- List item 5

Integer sed magna. Duis nisl nulla, porta ut, molestie sit amet, tincidunt eu, enim. Cras eu mauris. Cras in nulla nisi, id tempor finibus, mi vel dapibus, nullam dolor id lobortis. Cras eu mauris. Cras in nulla nisi, id tempor finibus, mi vel dapibus, nullam dolor id lobortis.

ASCIIDOCCTOR



A screenshot of a web browser window titled "This is a Markdown example". The address bar shows the file path: "file:///Users/stephenhay/Desktop/artifact/test.html". The browser interface includes standard buttons for back, forward, and search, along with icons for star, file, print, and other functions.

This is a Markdown example

Sagittis lectus, ut feugiat pede lacus quis sapien. Suspendisse porta, felis a fermentum interdum, dui nisl sodales felis, ut fermentum sapien nibh eu nunc. ↗

This is a list

- List item 1
- List item 2
- List item 3
- List item 4
- List item 5

Integer sed magna. Duis nisl nulla, porta ut, molestie sit amet, tincidunt eu, enim. Cras eu mauris. Cras in nulla nisi, id tempor finibus, mi vel dapibus, nullam dolor id lobortis tincidunt, non eu dapibus.

NERD MODE

DEXY

Keep prose and code separate.

DEXY

NERD MODE

```
styleguide.markdown|pandoc|hd|ft|jinja:
  - partials
  - screenshots
  - sources
partials:
  - _*.html
screenshots:
  - screenshots.js|casperjs:
    - casperjs: { "add-new-files" : True }
sources:
  - mockup/styles/base.css|idio
```

~
~

```
</dexy.yaml [FORMAT=unix] [TYPE=YAML] [POS=0001,0001] [8%] [LEN=12]
"dexy.yaml" 12L, 246C
```

DEXY

NERD MODE

```
styleguide.markdown|pandoc|hd|ft|jinja:
  - partials
  - screenshots
  - sources
partials:
  - _*.html
screenshots:
  - screenshots.js|casperjs:
    - casperjs: { "add-new-files" : True }
sources:
  - mockup/styles/base.css|idio
```

~
~

```
</dexy.yaml [FORMAT=unix] [TYPE=YAML] [POS=0001,0001] [8%] [LEN=12]
"dexy.yaml" 12L, 246C
```

LEARNING

The reference manual for web-based tools is the web itself.

REFERENCE

WebPlatform.org

Mozilla Developer Network

HTML5Rocks

Anything Brad Frost writes

RELAX.

If something solves a problem for you,
don't be afraid to add it to your toolbox.

Part of the fun of web design is trying out
new ways of solving problems.

THANK YOU!

@stephenhay