

STATIC IS THE NEW DYNAMIC

Static generators are the new Wordpress

INTRODUCTION



WHO IS THIS GUY?

- Steven Hicks
 - Developer at Centare
 - >15 years experience
 - I need more of a digital presence

WHY ARE WE HERE?













CodeKitty77

I should blog stuff.
I wonder what the cool kids
are using these days?

Meh...WordPress is easy.

WHY ARE WE HERE?

-  1/7/2016 - [CodeKitty77.com](#) - Check it out, I'm totally going to blog all the time!
-  1/23/2016 - [CodeKitty77.com](#) - That ElephantJS is so hot right now!
-  2/10/2016 - [news.ycombinator.com](#) - **Sweet new WordPress hack**
-  2/14/2016 - You - Yikes! Updating WordPress.
-  3/20/2016 - [CodeKitty77.com](#) - That ApatosaurusJS is so hot right now!
-  4/2/2016 - [news.ycombinator.com](#) - **WordPress haxored again!**
-  4/24/2016 - You - Ugh. Updating WordPress. I'm gonna miss the Earth Day party.
-  6/20/2016 - [CodeKitty77.com](#) - That SausageEggAndCheeseJS is so hot right now!
-  7/12/2016 - [news.ycombinator.com](#) - **Yessss Another WordPress hack!**
-  9/4/2016 - You - As if. Blogging schmogging. I'll update WordPress next year.

HOW DID WE GET HERE?

- The allure of the dynamic CMS
 - “Easy to set up”
 - “Simple enough for anyone to use”
 - “Building it statically would be a maintenance nightmare”
 - “That’s just how you do it”



WHAT HAVE WE DONE?



- Are we using the right tool for the job?
 - Is your data truly dynamic?
 - Does every user see the same thing?
 - How often does your data change?

WHAT HAVE WE DONE?

- Do you have the time to support a dynamic site?
 - **25%** of websites on the internet run on WordPress ^[1]
 - **70%** of WordPress installs are vulnerable ^[2]
 - **20%** of the top 50 WordPress plugins are vulnerable ^[3]



WHAT HAVE WE DONE?



- What if building a static website is actually really easy?
 - With static site generators, it is!

STATIC VS DYNAMIC



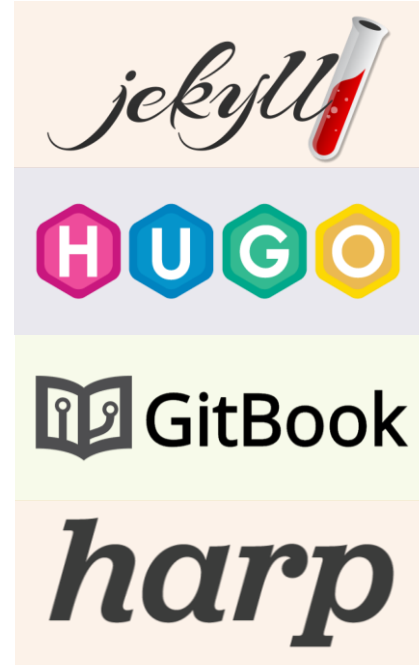
DYNAMIC WEBSITES

- Content is generated dynamically, upon request
 - CMS
 - Custom build
 - Server-side logic
 - Content stored in database



STATIC WEBSITES

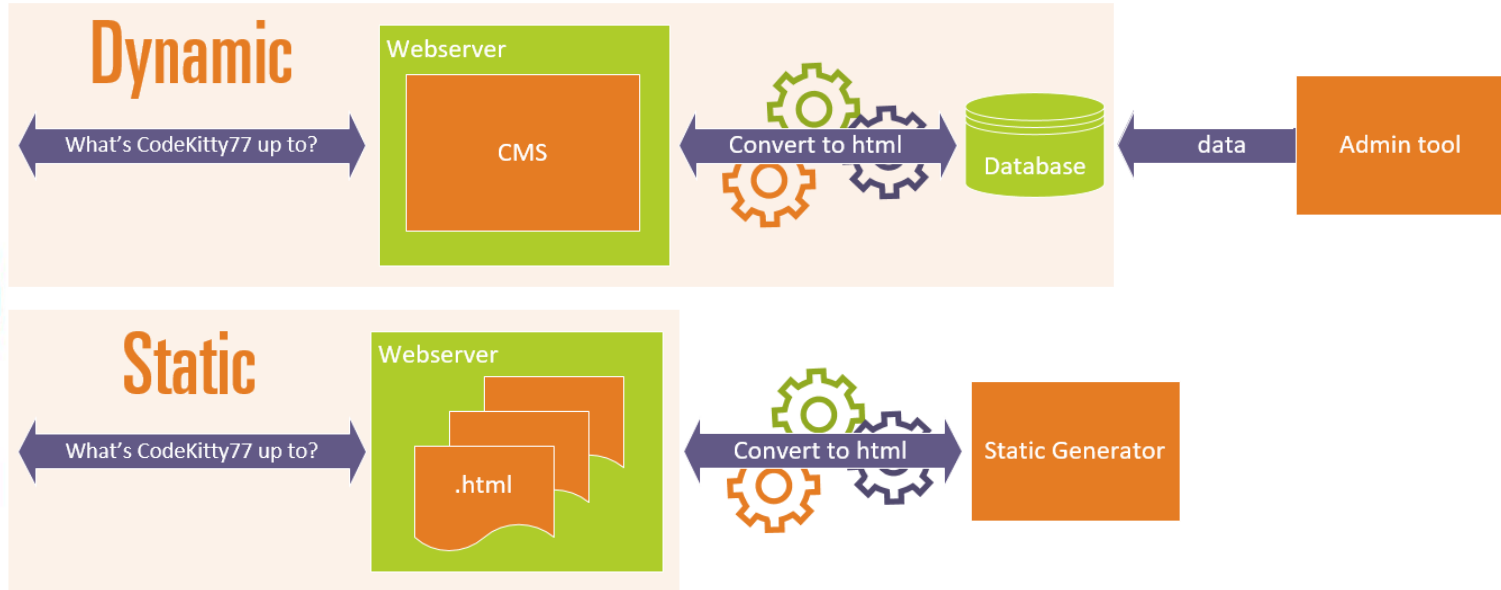
- Does not mean “my content never changes”
- Content is stored statically
- Dynamic data is processed when the content is created
 - Using a static site generator



DYNAMIC VS STATIC



CodeKitty77sBiggestFan™



HOW DO I...

■ Install?

- Each generator is different
- All have good tutorials on setup

■ Customize?

- Some support themes
- All let you write your own CSS/LESS/SASS/Stylus



- Write content?
 - Using your favorite text editor
 - With your favorite templating and/or markup languages
 - Templating: data can be injected
 - Markup: data can't be injected

EJS

```
<!doctype html>
<html>
  <head>
    <title><%- title %> - CodeKitty77.com Rooolz</title>
    <link rel="stylesheet" href="/css/main.css"/>
  </head>
  <body>
    <div class="container content">
      <%- yield %>
    </div>
  </body>
</html>
```


■ Handlebars

```
<!doctype html>
<html>
  <head>
    <title>{{ title }} - CodeKitty77.com Rooolz</title>
    <link rel="stylesheet" href="/css/main.css"/>
  </head>
  <body>
    <div class="container content">
      {{> yield }}
    </div>
  </body>
</html>
```

■ Jade

```
doctype
html
  head
    title= title
    | - CodeKitty77.com Rooolz
    link(rel="stylesheet" href="/css/main.css")
  body
    .container.content
      != yield
```

■ Markdown

```
# I am CodeKitty77
```

```
### I like stuff
```

Some things I like are

- * Sweet Camaros
- * The smell of fresh cut grass
- * The smell of bacon
- * The smell of long walks on the beach

```
<h1>I am CodeKitty77</h1>
```

```
<h3>I like stuff</h3>
```

```
<p>Some things I like are</p>
```

```
<ul>
```

```
  <li>Sweet Camaros</li>
```

```
  <li>The smell of fresh cut grass</li>
```

```
  <li>The smell of bacon</li>
```

```
  <li>The smell of long walks on the beach</li>
```

```
</ul>
```

DEMO

Creating a simple static site with Harp



WHY STATIC?

And when should I use it?



WHY STATIC?

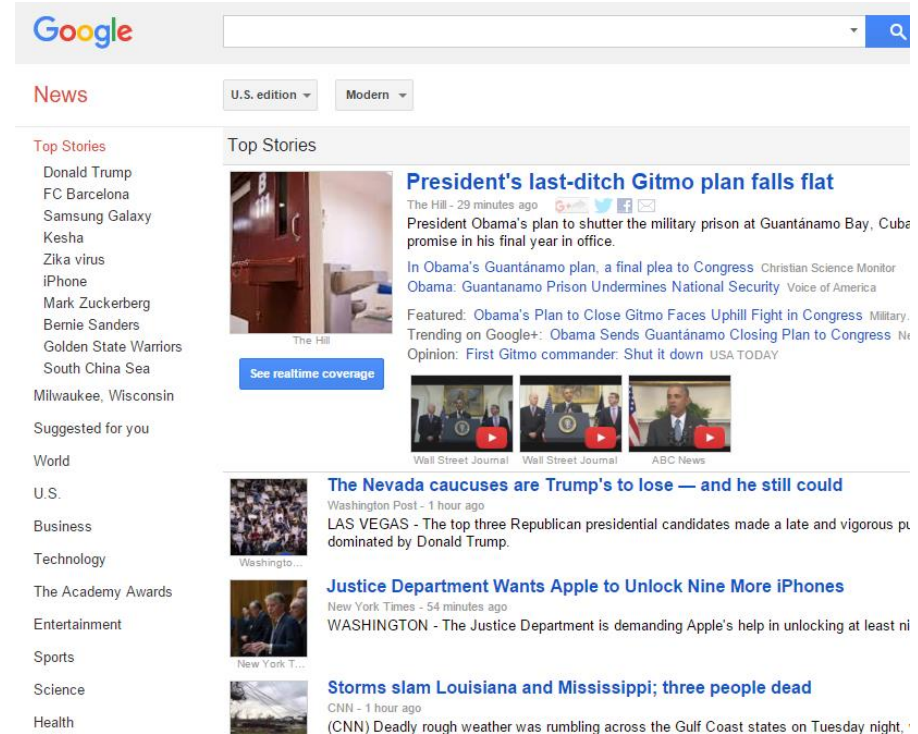
- **Speed**
 - Static html files serve faster
 - Static html files are CDN-ready
- **Security**
 - Dynamic CMS's are more hackable
- **Simplicity**
 - Fewer moving parts
- **Source control**
 - Your content is in your source control repository



WHEN DO I USE STATIC?

You are not writing a massive amount of content

- A blog-worth of content is perfect for static
- A newsfeed-worth of content should be dynamic



The screenshot shows a Google News interface. At the top is the Google logo and a search bar. Below it are tabs for "News", "U.S. edition", and "Modern". The main content area is divided into two columns. The left column lists "Top Stories" with links to Donald Trump, FC Barcelona, Samsung Galaxy, Kesha, Zika virus, iPhone, Mark Zuckerberg, Bernie Sanders, Golden State Warriors, South China Sea, Milwaukee, Wisconsin, and "Suggested for you". The right column displays several news articles. The top article is "President's last-ditch Gitmo plan falls flat" by The Hill, dated 29 minutes ago. Below it are three video thumbnails from Wall Street Journal and ABC News. Further down are three more articles: "The Nevada caucuses are Trump's to lose — and he still could" from Washington Post (1 hour ago), "Justice Department Wants Apple to Unlock Nine More iPhones" from New York Times (54 minutes ago), and "Storms slam Louisiana and Mississippi; three people dead" from CNN (1 hour ago).

WHEN DO I USE STATIC?

You are building a simple site

- Blog
- Portfolio
- Brochure site
- Documentation
- Style guide

The screenshot shows a web page titled 'Patterns' with a navigation bar containing 'Patterns' and 'About'. A sidebar on the left lists various design patterns: Grid System, Typography, Form Elements, Navigation, Tables, Lists, Slats, Stats/Data, Feedback (highlighted), Dialogs, Freddicons, and Helper Classes. The main content area is titled 'Feedback Elements' and includes sub-sections for 'Feedback Blocks', 'No-data', 'Flash Blocks', 'Toaster', and 'Pathways'. Under 'Feedback blocks', there is an 'Example' section showing four message boxes: a green success message 'Account status All good!', a yellow warning message 'Account status You closed your account on Nov 29, 2013 07:00 pm', a red error message 'Account status Something terrible happened. [Let's see if this fixes it.](#)', and a blue info message 'Account status FYI - you're awesome.' Below this is a section for 'One line message' showing a blue box with the text 'Use (.one-liner) class in message element, paragraph or heading'. At the bottom, there is a section for 'Feedback block & combo button'.

Patterns About

Grid System
Typography
Form Elements
Navigation
Tables
Lists
Slats
Stats/Data
Feedback
Dialogs
Freddicons
Helper Classes

Feedback Elements

Feedback Blocks No-data Flash Blocks Toaster Pathways

Feedback blocks

Example

- Account status All good!
- Account status You closed your account on Nov 29, 2013 07:00 pm
- Account status Something terrible happened. [Let's see if this fixes it.](#)
- Account status FYI - you're awesome.

One line message

Use (.one-liner) class in message element, paragraph or heading

Feedback block & combo button

WHEN DO I USE STATIC?

- Any of your dynamic needs can be met by a third party
 - Disqus
 - Social widgets
 - Google custom search

WHEN DO I USE STATIC?

- Or you have the technical courage to meet other dynamic needs
 - Combining third party services with custom client-side javascript
 - Site Search
 - lunr.js + static json describing all content
 - User profiles
 - Firebase
 - UserApp.io

WHEN DO I USE DYNAMIC?

- Your content authors lack technical skill and/or courage
 - Content is written with a templating language
 - Markdown
 - Jade
 - EJS
 - There are admin UI's, but all have challenges



ADMIN UI CHALLENGES

Hexo Admin

- Lacks features

Netlify CMS

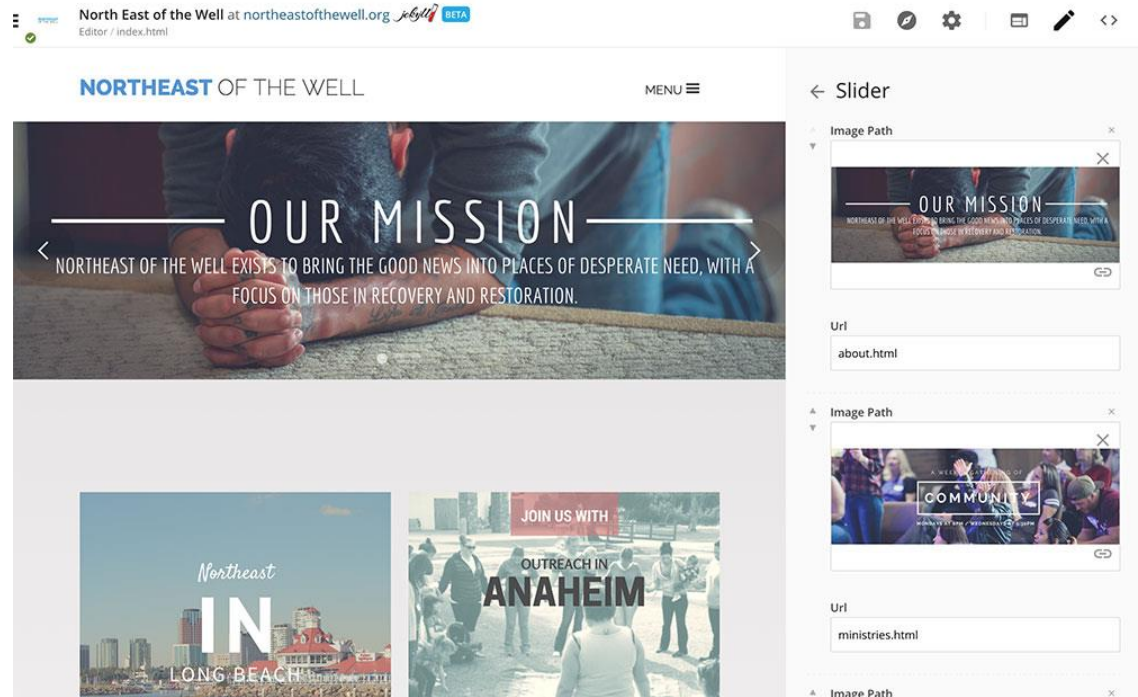
- Lacks features

Contentful

- Difficult setup

CloudCannon

- Not cheap



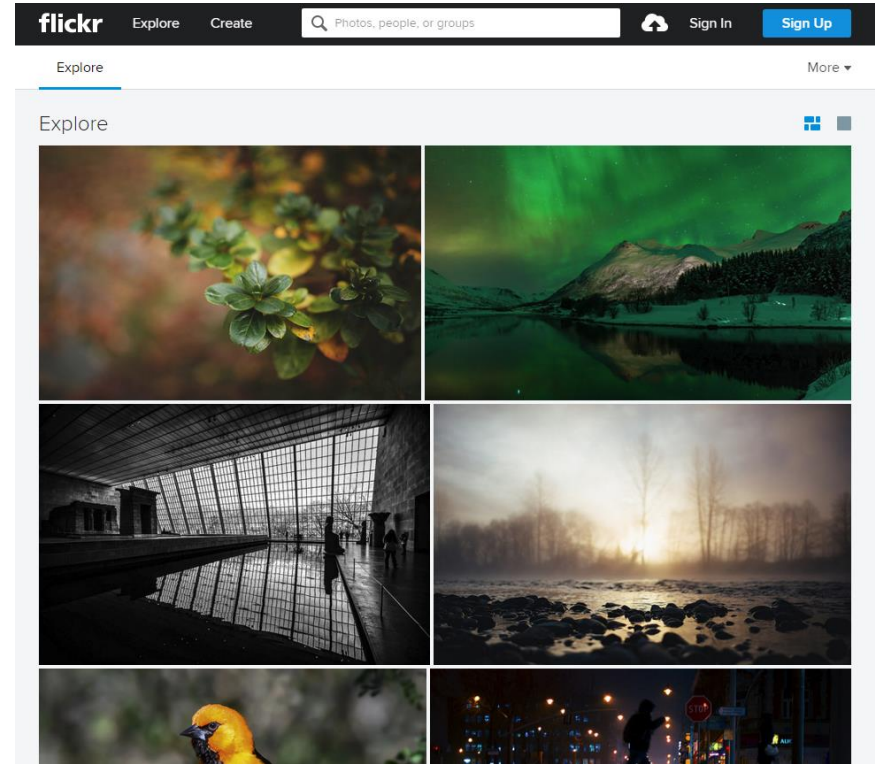
WHEN DO I USE DYNAMIC?

Your content changes A LOT

- Every content change rebuilds the site.

Your content is truly dynamic

- User-based content
- Complex filtering and searching
- Extensive product taxonomies



WHEN DO I USE DYNAMIC?

- You are scared of the command line
 - If you are, like I was, now is a good time not to be.



CHOOSING A STATICGEN

Without losing your mind



HOW DO I CHOOSE?

- Go to www.staticgen.com
- Determine your criteria
- Try a few
- Pick one that works best for you



DETERMINE YOUR CRITERIA

- Engine language
 - js, ruby, go,...
- Templating language
 - markdown, jade, ejs, handlebars,...
- Simplicity vs customization
- Plugins
- Frontmatter

FRONTMATTER

Frontmatter

about.md content

```
+++
title = "Who is CodeKitty77?"
draft = false
date = "2016-02-22"
+++

# I am CodeKitty77
### I like stuff

Some things I like are

* Sweet Camaros
* The smell of fresh cut grass
* The smell of bacon
* The smell of long walks on the beach
```

Not frontmatter

_data.json _src

```
{
  "about":{
    "title":"Who is CodeKitty77?",
    "draft":true,
    "date":"2016-02-22"
  }
}
```

about.md _src

```
# I am CodeKitty77
### I like stuff

Some things I like are

* Sweet Camaros
* The smell of fresh cut grass
* The smell of bacon
* The smell of long walks on the beach
```

GIMME SOME OPTIONS

harp



METALSMITH

Well supported				
Easy to set up				
Simple				
Customizable				
Extensible				
Themes				
Plugins				
Fast compilation				
Javascript				
Frontmatter				

HOSTING A STATICGEN

It's just static files!



WHERE DO I HOST A STATIC SITE?

■ Anywhere

- Your site is literally just static files.
- Any host will do.

■ Amazon S3

■ Netlify

- If you can use free tier
- CDN by default

■ Github Pages

- Great option for free hosting
- Associated with a user/group or a project on Github

WHERE ARE WE GOING?



WHERE IS STATICGEN HEADED?

- It needs to be easier to write content
- I think we are getting there soon
- Get started at staticgen.com!



QUESTIONS?



THANK YOU!



REFERENCES

1. “Wordpress runs 25% of the internet”

- <http://w3techs.com/technologies/details/cm-wordpress/all/all>

2. “70% of Wordpress installs are vulnerable”

- <http://www.wpwhitesecurity.com/wordpress-security-news-updates/statistics-70-percent-wordpress-installations-vulnerable/>

3. “20% of top 50 Wordpress plugins are vulnerable”

- <http://www.wpwhitesecurity.com/wordpress-security-news-updates/statistics-70-percent-wordpress-installations-vulnerable/>