STATIC IS THE NEW DYNAMIC

Static generators are the new Wordpress

centare™

INTRODUCTION

WHO IS THIS GUY?

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

WHY ARE WE HERE?

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

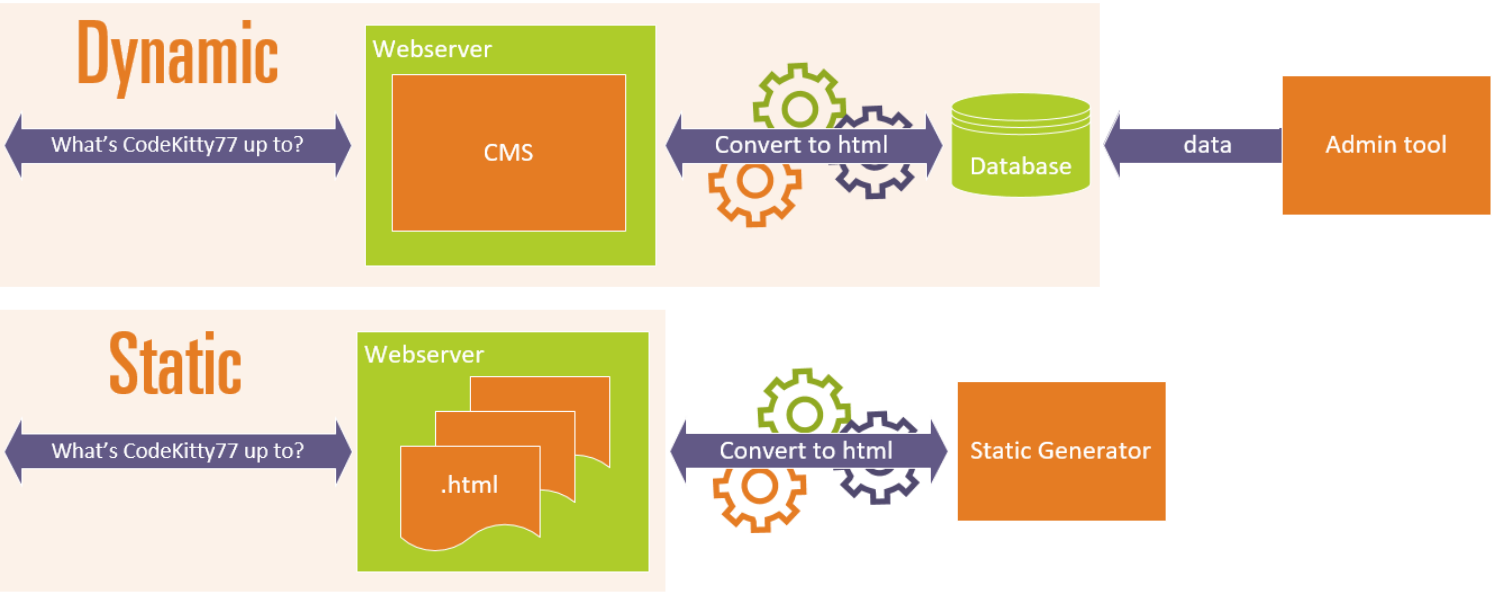
DYNAMIC WEBSITES

- 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



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

HOW DO I…

- 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

TEMPLATING

- 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>
```

TEMPLATING

- 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>
```

TEMPLATING

- Jade

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

MARKUP

- 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?

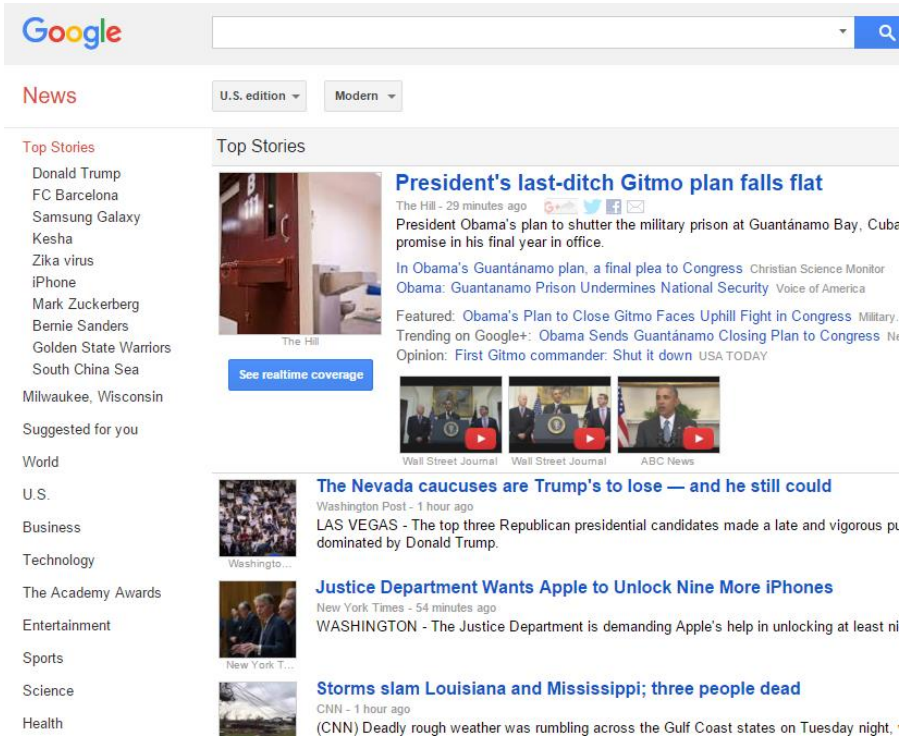
And when should I use it?

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

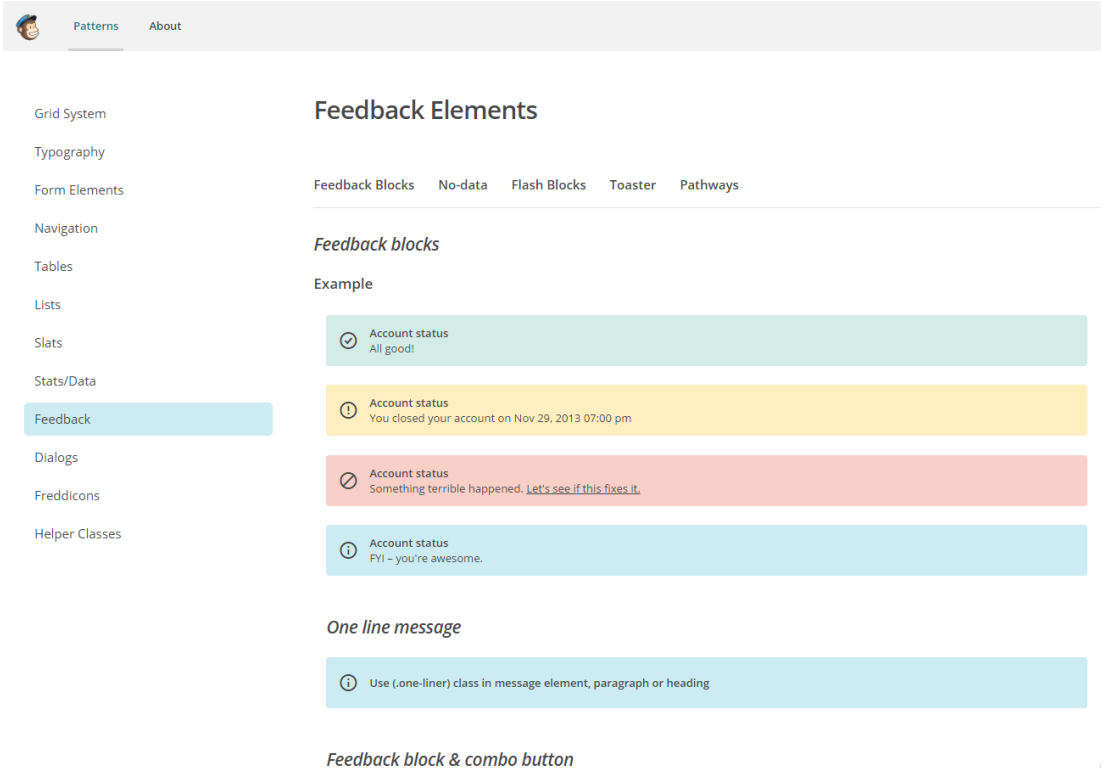
WHEN DO I USE STATIC?

- 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



WHEN DO I USE STATIC?

- You are building a simple site
  - Blog
  - Portfolio
  - Brochure site
  - Documentation
  - Style guide



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?

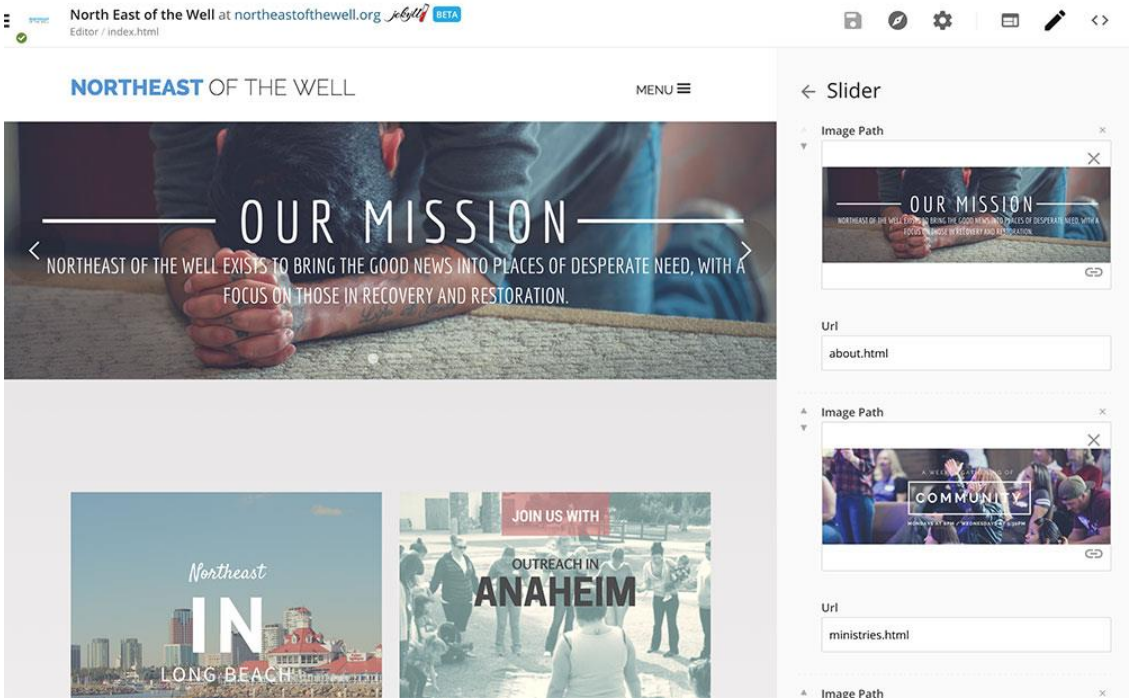
- Or you have the technical courage to meet other dynamic needs
  - Combining third party services with custom client-side javascript
  - Site Search
    - lunr.js + static json describing all content
  - User profiles
    - Firebase
    - UserApp.io

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

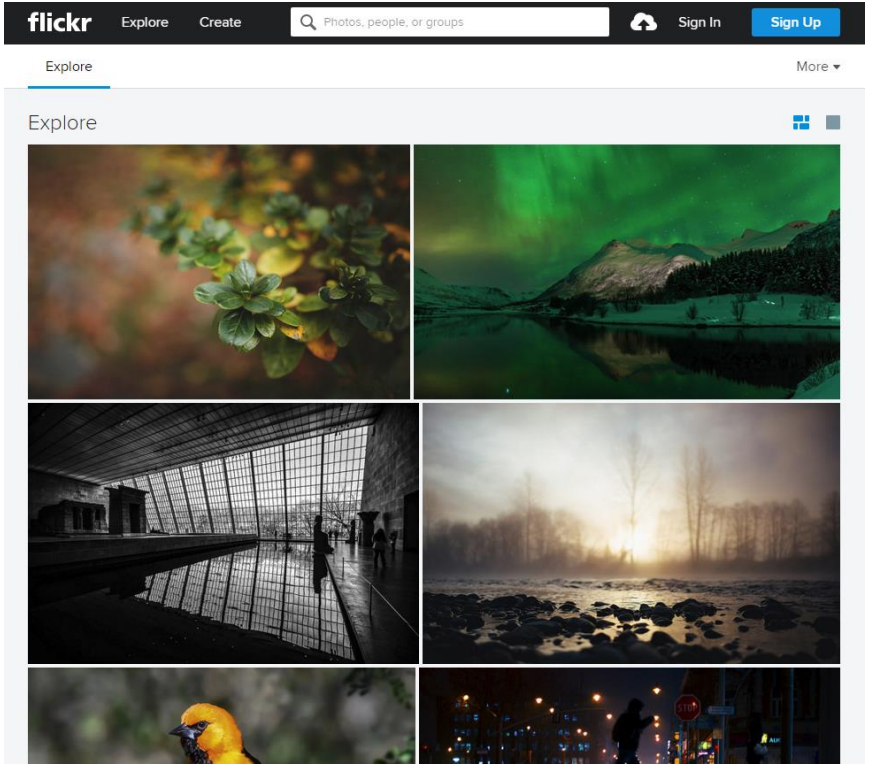
ADMIN UI CHALLENGES

- 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
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* The smell of bacon
* The smell of long walks on the beach
```

GIMME SOME OPTIONS

	harp	HUGO	jekyll	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/