



# Static Site Generation

Who needs a database anyway?

Ottawa Canada  
Linux Users Group

# What is a SSG?

- A static site generator, often abbreviated as SSG, is a tool that transforms content from one format, such as Markdown or AsciiDoc, into another format, usually HTML, and lays out pages so that the site's look and feel is consistent across all pages. Static sites can be deployed to any web server.

- <http://nanoc.ws/about>

# What is Special about Static Sites

- Nothing
- They are typically a collection of HTML, CSS and probably a little javascript magic to make it user friendly

# What are the benefits?

- No database
- Nothing dynamically generated
- Fast
- Reasonably secure
- Previewable
- Versionable

# What are the Disadvantages?

- Static
- Posts have to be uploaded
- Site has to be managed without built-in tools
- No database
- Little in the way of fancy add-ons

# So why would I want one?

- You might need to set up a small site for a specific function
- You may need to make available a collection of documents and you already have them in a convertible format (Markdown comes to mind)
- Other cases?

# Difficulty to Setup

- Typically - not very
- If you have any command-line experience and you have the appropriate toolkit, this is pretty easy to do

# Some SSGs

- Pelican
  - python
- Sculpin
  - php
- MetalSmith
  - node.js



A sculpin is a pretty ugly fish

# INSTALLING SCULPIN



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# But first, a picture of the fish



# Why pick Sculpin?

- A piece of software named after a fish appealed to me for the demo
- Sculpin are native to the North Atlantic and I have caught them when fishing
- The spines are nasty
- Given some peoples conception of PHP, ugly and nasty seem to be their commentary
- Availability of a Q&D demo

# Getting started

- In order to keep this quick, I'm going to use a digitalocean droplet as my source machine
- The target will also be a digitalocean droplet with apache.
- I'm also going to use the prebuilt sculpin image rather than compile it

# On your source documentation host

- Download and install Sculpin

```
$ curl -O https://download.sculpin.io/\  
sculpin.phar
```

```
$ chmod +x sculpin.phar
```

```
$ mv sculpin.phar ~/bin/sculpin
```

**Yes, I am aware this is not a secure practice,  
this is for the Q&D demo**

This example comes from: <https://sculpin.io/getstarted/>



# Continuing the install...

- Download and Install a Starter Kit

```
$ cd ~
```

```
$ git clone https://github.com/\  
sculpin/sculpin-blog-skeleton.git \  
myblog
```

```
$ cd myblog
```

```
$ sculpin install
```

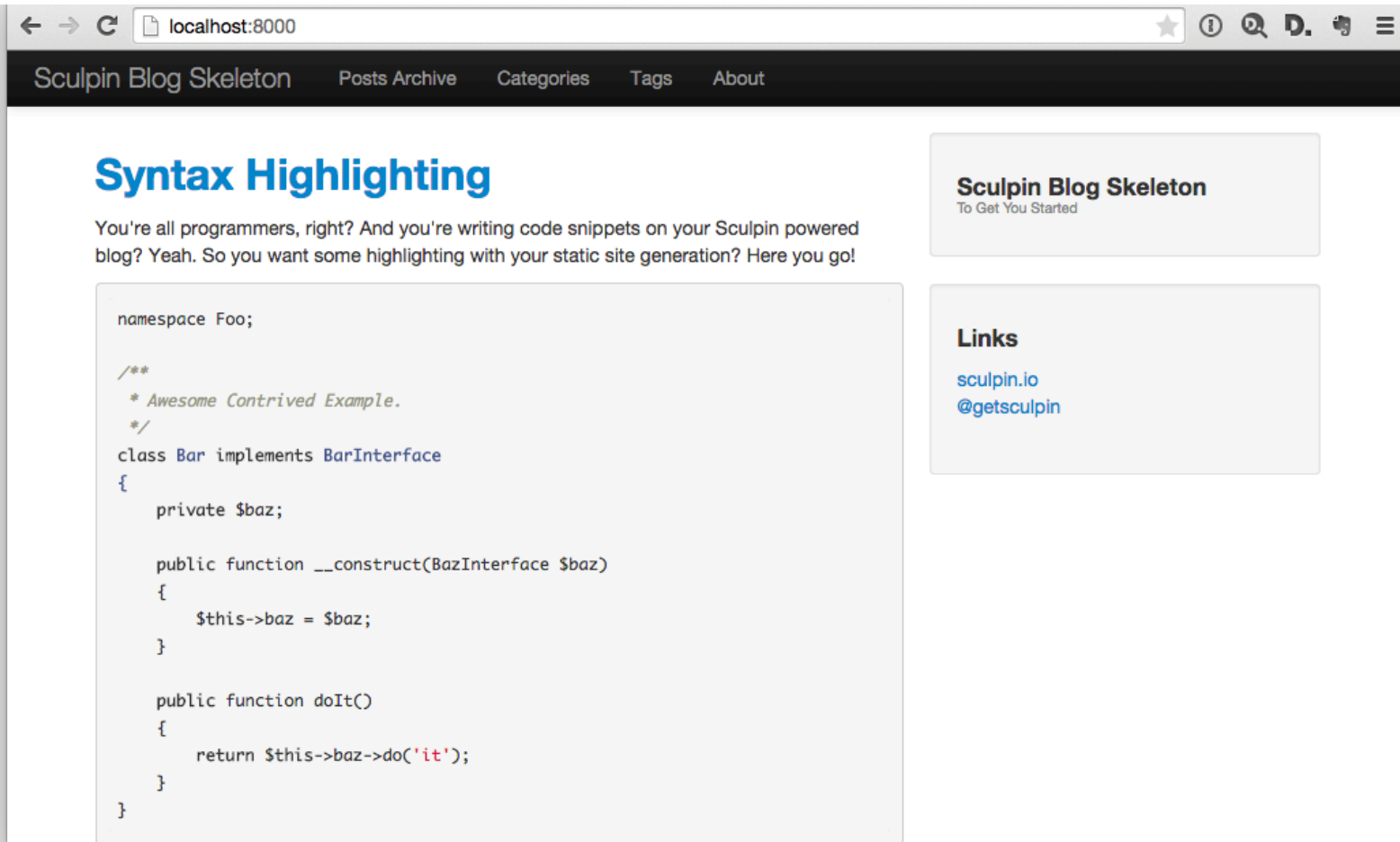
# Starting a local test

- Run Sculpin

```
sculpin generate --watch --server
```

- This starts a server on localhost:8000

# Test Page



The screenshot shows a web browser window with the address bar set to localhost:8000. The page title is "Sculpin Blog Skeleton". The navigation menu includes "Posts Archive", "Categories", "Tags", and "About". The main content area features a post titled "Syntax Highlighting" with the following text: "You're all programmers, right? And you're writing code snippets on your Sculpin powered blog? Yeah. So you want some highlighting with your static site generation? Here you go!". Below the text is a code block with PHP code. The right sidebar contains two widgets: "Sculpin Blog Skeleton" with the subtitle "To Get You Started" and "Links" with the links "sculpin.io" and "@getsculpin".

```
namespace Foo;

/**
 * Awesome Contrived Example.
 */
class Bar implements BarInterface
{
    private $baz;

    public function __construct(BazInterface $baz)
    {
        $this->baz = $baz;
    }

    public function doIt()
    {
        return $this->baz->do('it');
    }
}
```



# Add a page

- Add some additional content to Sculpin

```
$ cd ~/myblog
```

```
$ cd source
```

```
$ cd _posts
```

```
$ touch 2020-01-07-time-travel.md
```

# Add this to the file we created

```
---  
title: Time travel  
tags:  
  - future  
  - time  
categories:  
  - time  
---  
  
# Hello world.  
  
I am in the future.  
  
*Markdown is cool.*  
  
**So is twig, because it knows this page's name is:  
{{ page.title }}**
```

# Reload the browser...

localhost:8000

Sculpin Blog Skeleton Posts Archive Categories Tags About

## Time travel

# Hello world.

I am in the future.

*Markdown is cool.*

**So is twig, because it knows this page's name is: Time travel**

Tags: [future](#), [time](#)

## Syntax Highlighting

You're all programmers, right? And you're writing code snippets on your Sculpin powered blog? Yeah. So you want some highlighting with your static site generation? Here you go!

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**Sculpin Blog Skeleton**  
To Get You Started

**Links**  
[sculpin.io](#)  
[@getsculpin](#)

# Publish to a real webserver

- Make Sculpin generate the production ready site:

```
$ cd myblog
```

```
$ sculpin generate --env=prod
```

```
$ rsync -update -raz -progress \  
output_prod/ \  
user@example.com:public_html
```

# Load the Production Site

← → ↻ droplet.arrow-eye.com

Sculpin Blog Skeleton Posts Archive Categories Tags About

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**Sculpin Blog Skeleton**  
To Get You Started

**Links**  
[sculpin.io](http://sculpin.io)  
[@getsculpin](https://twitter.com/getsculpin)

Creating a site from a few static files

# DEMO



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# Resources

- <http://superdevresources.com/static-site-generators-2015/>
- <http://mashable.com/2014/08/28/static-website-generators/>
- <https://staticsitegenerators.net/>
- Sculpin photo
  - <https://newfoundlander.wordpress.com/2013/06/26/at-the-petty-harbour-mini-aquarium/>
- Demo:
  - <https://sculpin.io/getstarted/>
- Digital Ocean – play with droplets, get a \$10.00 credit
  - <https://www.digitalocean.com/?refcode=89da7ab534fb>