

Setting up a Website/ Blog

using Static site generators

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1 Static website generators

Recently I have begun to look again at static website generators for creating websites and blogs. Static Website Generation is not a new concept, I have used a number of Perl based ones in the past, but more recently they have seemed to get some energy as alternatives to a CSS and particularly as they suit documentation and publishing to some cloud services such as *github pages*. There is a number of them about and I am going to outline my thoughts and how to use them.

- Jekyll
- Hyde
- Pelican
- Nikola

2 Jekyll

Is a Ruby Static website generator, it seems quite favoured with github pages

3 Hyde

Is a Static website generator which uses python, similar to its alter ego Jekyll.

3.1 Install

The easiest way to install Hyde was to use `easy_install`.

```
sudo easy_install hyde
```

3.2 Create Hyde Project

```
mkdir hydesite  
cd hydesite  
hyde -s create
```

3.3 Generate Site and Run on Local Server

You then generate the static html, and you can view it by running the hyde server.

```
hyde gen  
hyde serve
```

4 Pelican

Is a Static website generator which uses python

4.1 Installation

```
pip install pelican
pip install Markdown
mkdir mysite
cd mysite
pelican-quickstart
```

This uses *pip* to install pelican and markdown, *pelican-quickstart* sets up the plumbing of your pelican website.

The site is configured using settings.py (or pelicanconf.py). The layout is set out in the theme which is used, at the moment we will use one of the simple themes notforme. You can change a theme or modify it or compose your own by editing the css and templates for the theme.

4.2 Adding Content

Here we will have two types of content on the website standard pages, and blog posts.

4.2.1 Pages

Pages are stored in the pages directory in the content directory e.g. about.md, contact.md etc. they are traditional webpages and are not listed or timestamped with author or category information as Blog post or news item is.

Title: About

##This is About page

This is a blog generated by Pelican using Python...

(if you were just using it to generate a static website without any news items or blog you would just have the pages of the site here.

4.2.2 Blogs

Any markdown page in the content directory which is in a directory other than pages is treated as a blog.

Date: 2015-1-9

Title: My First Blog Post

```
##this is my first blog post in pelican##  
Here is the main text of my first blog post
```

The Date is the time the post will timestamped at, and you can have minutes as well, the Title is the title you will see and the

4.3 Generating the Website

```
pelican content/ -s settings.py
```

The site is then generated in the *output* directory.

5 Deploying/Publishing

5.1 Github Pages

Most of the newer static website generators are conveniently setup for publishing on github pages (username.github.io).

5.2 DropBox

You can also deploy to your Dropbox account.

5.3 FTP to a Host

You can just FTP the contents of the output directory to you host, the website should be generated to the domain and page of your host.

```
git add .  
git commit -m "updates"  
git push origin master
```

6 Nikola

Another static website generator.

7 Markdown

Since i have used Markdown for the above here is a few items from it

7.1 Headings

Headings are indicated by the Hash Symbol, the number of which indicate if it is H1, H2, H3 etc.

```
#This is H1
##This is H2
###This is H3
####This is H4
#####This is H5
#####This is H6
```

7.2 Bold, Italics or Strikethrough

For empasis Bold or Italics are often used, and sometime text needs to have a line through it.

Italics uses **asterisks** or *_underscores_* resulting in *italicised*

Bold uses ****two asterisks**** or **__two underscores__** resulting in **bolded**

Strikerhough is achived by using two tildes(
) e.g.

2tildes

results a line through the text.

7.3 Links

A link can be as simple, where just the URL is written

```
<http://www.gnu.org>
```

A piece of text can be set as a link to a URL

```
[Pelican](http://blog.getpelican.com/)
```

You can add ALT text to it, in the case below Get Pelican would display when your mouse hovers over the link Pelican.

```
[Pelican](http://blog.getpelican.com/ "Get Pelican")
```

7.4 Lists

7.4.1 Unordered Lists

You can use +, - or * to an unordered list

```
* First Item
* Second Item
* Third Item
```

```
- First Item
- Second Item
- Third Item
```

```
+ First Item
+ Second Item
+ Third Item
```

7.4.2 Ordered Lists

```
1 First Item
2 Second Item
3 Third Item
```

7.5 tables

A	B	Result	
----	----	:-----	
True	True	True	
True	False	False	
False	True	False	
False	False	False	

7.6 Inserting an Image

Inserting an image with markdown.

```
![Pelican](../../images/pelican.jpg)
```

In this case i have an image in a directory in the main file so to be accessed from a markdown file in the /content/pages/ directory you have to specify the page

8 Conclusion

To me the benefits of using a static website generator, are speed of a static website, no time delay due to interaction with a database or dynamic page generation, great power to customise the site with editing the themes and editing the css. It does take the composition of content away from concerns of how it is displayed on the page. Also it does provide something different from the ubiquitous wordpress CMS websites which seem about. The negatives are that it does require some technical nous to set up, its graphical side may be limited to what is available and your own graphic knowhow, it doesn't have the dynamic functionality which plugins provide for many CMS systems. Overall I like SSG and I think they are a powerful tool to generate a website.

References

- [1] A. Weckler, *Social Networking Tools*, Computers in Business : Sunday Business Post (September 2007), 8-11 available at <http://www.thepost.ie>.

A Appendix 1

A.1 sitemap.xml

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