Exploring And Investigating The Advantages Of Static Websites

Introduction

This project is based on the development of static websites and how their advantages can be utilised in the mass market. Currently, static websites are not commonly used, mainly due to the web development experience required to be able to understand and use the technologies involved.

A static site consists of **HTML**, **CSS** and sometimes **JavaScript**. They don't use any database functionality or server-side scripting.

28% Of the Internet is currently powered by WordPress

But only **40%** of these sites are kept up to date, leaving massive security flaws

53% Mobile websites abandonded if page takes more than 3 seconds to load

And **57%** of users say they won't recommend a business with a poorly-designed mobile site

Static Website

Server → Client's Browser

Dynamic Website

Server → Database → Client's Browser

Problem

- Users turning to easy solutions such as WordPress because they don't have the skills required for building static sites
- WordPress has many security flaws due to it being open-source and often not being kept updated
- Jekyll sites and static sites in general are not easy to update/maintain, due to them usually not having a front-facing CMS
- Dynamic sites such as WordPress are slower and larger in file size, making them particularly bad on mobile devices and crash under heavy user loads

Why?

- Static sites are faster and more secure, due to the lack of database connections
- Mobile devices have limited network connections and smaller processors, therefore websites need to be as small as possible
- Websites need to be lighter and smaller in file size to improve loading times
- Content on static sites can be controlled by text files, these are local and accessible at all times
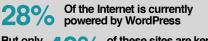
Audience

- Targeted at novice users, ones with no web development experience but who would benefit from the advantages that a static website has
- Bloggers, students or small businesses
- Someone that needs a small, content-based website with no complex functionality

Tests have shown that Jekyll sites are **164%** faster than sites created using WordPress

61% of users are unlikely to return to a mobile site they had trouble accessing and **40%** visit a competitor's site instead

Solution

- The proposed solution will take advantage of static sites by using local text files, such as an excel document, to control the content
- When building the site, users will upload their excel document and an online tool will then generate them a static Jekyll website, ready for hosting
- Users will be able to pick from a range of website templates
- There isn't a complex CMS to learn so users with minimal ability can edit content on a website
- Each HTML template will have an excel file to be able to edit corresponding content
- Websites that are created will be lighter and faster, making them much better when thinking about loading times on mobile devices
- Due to the sites being light, they have hardly any load on the servers that host them, therefore they won't crash with a spike in user levels

Jekyll website generator **Simple**
Content is local Easy to use
Scalability for HTML templates
No complex CMS **Output is fast**
Small in file size No load on servers
Blog friendly **SEO friendly**
Better for mobile devices

A typical user journey

Browse website templates →

Add content to document →

Upload to online website generator →

Download template excel document →

Complete template →

Downloadable website ready for hosting

Nathan Kettle