

PHP+Static = Phanstatic

by Tamas Erdelyi

**Every side project
starts with an itch**

Popular blogging platforms



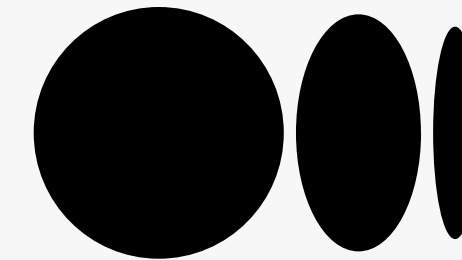
Drupal



Tumblr



Blogger



Medium



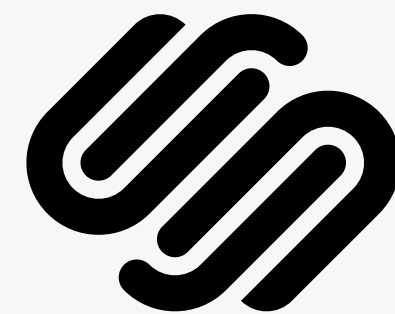
Substack



WordPress



Wix



Squarespace



LinkedIn

Concern #1
Bloatware

Concern #2
Proprietary

Concern #3

Size and speed

Median webpage size

Timeseries of Total Kilobytes
Source: httparchive.org



Historical bandwidth averages

Year	Average download (Mbps)	Change (Mbps)	Percentage
2023	46.79	+7.41	30.04%
2022	35.98	+6.19	20.78%
2021	29.79	+4.96	19.98%
2020	24.83	+13.8	125.11%
2019	11.03	+1.89	20.68%
2018	9.14	+1.73	23.35%
2017	7.41	-	-

Source: <https://www.cable.co.uk/broadband/speed/worldwide-speed-league>

Worldwide broadband speed league 2023



United Kingdom
Rank
34
Mean download speed (Mbps)
93.63
Unique IPs tested
16484752
Total tests
75308937
Download a 5GB movie (HH:MM:SS)
0:07:17

Superfast 30 Mbps and faster

Generated: Saturday 6th July 2024

UK	England	Northern Ireland	Scotland	Wales
98.0%	98.3%	98.3%	96.3%	97.3%

Full Fibre - Fibre to the Premises

Generated: Saturday 6th July 2024

UK	England	Northern Ireland	Scotland	Wales
67.8%	67.5%	95.2%	61.4%	67.4%

● 200-300 Mbps ● 100-200 Mbps ● 50-100 Mbps ● 20-50 Mbps ● 0-20 Mbps

**It seems that size
doesn't matter**



It still matters for SEO

**And it also affects the
carbon footprint**

5.44 billion active internet users
account for **3.9%** of global
greenhouse gas emissions

**This is equivalent to
the amount produced by the
entire global airline industry**

Sources: <https://globalcarbonbudget.org>, <https://foundation.mozilla.org/en/blog/ai-internet-carbon-footprint/>
<https://datareportal.com/reports/digital-2023-global-overview-report/>

Netflix can produce around
1.1 million metric tons of CO2 annually –
equivalent of 240,000 passenger cars

YouTube produces **6.5 million**,
TikTok around **14.7 million**

Global emissions was 37.7 billion in 2023,
these three services responsible for 0.0591%.

Sources: <https://foundation.mozilla.org/en/blog/ai-internet-carbon-footprint/>

The original Website Carbon calculator

Estimate your web page carbon footprint:

Your web page address

By using this carbon calculator, you agree to the information that you submit being stored and published in our public database.

<https://www.websitecarbon.com>

Website carbon results for: meetup.com/php-sw/events/301945171



Oh no! This web page achieves a carbon rating of D

This is dirtier than **59%** of all web pages globally



Learn about our [rating system](#)

This page was last tested on 4 Jul, 2024. [Test again](#)

Copy URL



Oh my, **0.61g of CO2** is produced every time someone visits this web page.

[How do we calculate this?](#)



**73.15kg of CO2
equivalent.**

As much CO2 as boiling
water for 9,911 cups of tea



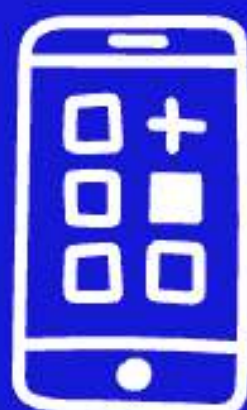
78 billion bubbles

Woah, that's a lot of bubbles!



4 trees

This web page emits the
amount of carbon that 4
trees absorb in a year.



165 kWh of energy

As much CO2 as 13,791 full
charges of an average
smartphone



165kWh of energy

That's enough electricity to
drive an electric car
1,059km.

**All I need is HTML, CSS,
and some JavaScript...**

That's called Jamstack:

JavaScript, APIs, Markup

- Home
- Glossary
- Jamstack TV
- Site Generators
- Headless CMS
- Community Survey

- Who's doing the building?
- What is the Jamstack Community building?
- How are we building?
- Emerging Trends in the Jamstack Community



What is **Jamstack**?

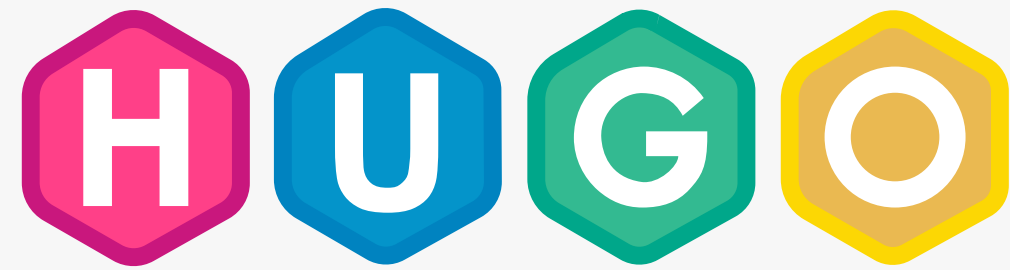
Jamstack is an architectural approach that decouples the web experience layer from data and business logic, improving flexibility, scalability, performance, and maintainability.

Jamstack removes the need for business logic to dictate the web experience.

It enables a composable architecture for the web where custom logic and 3rd party services are consumed through APIs.

**Let's find a
static site generator!**

Popular static site generators



Hugo (GoLang)



Jekyll (Ruby)



11ty (JavaScript, NodeJS)



Gatsby

Gatsby
(JavaScript, React)



Gridsome
(JavaScript, VueJS)

Gridsome

Gridsome
Sucks

Upgrade to Nuxt.js

Upgrade to Nuxt.js

SPA, really?

**Why the heck I went with
JavaScript at the first place?**

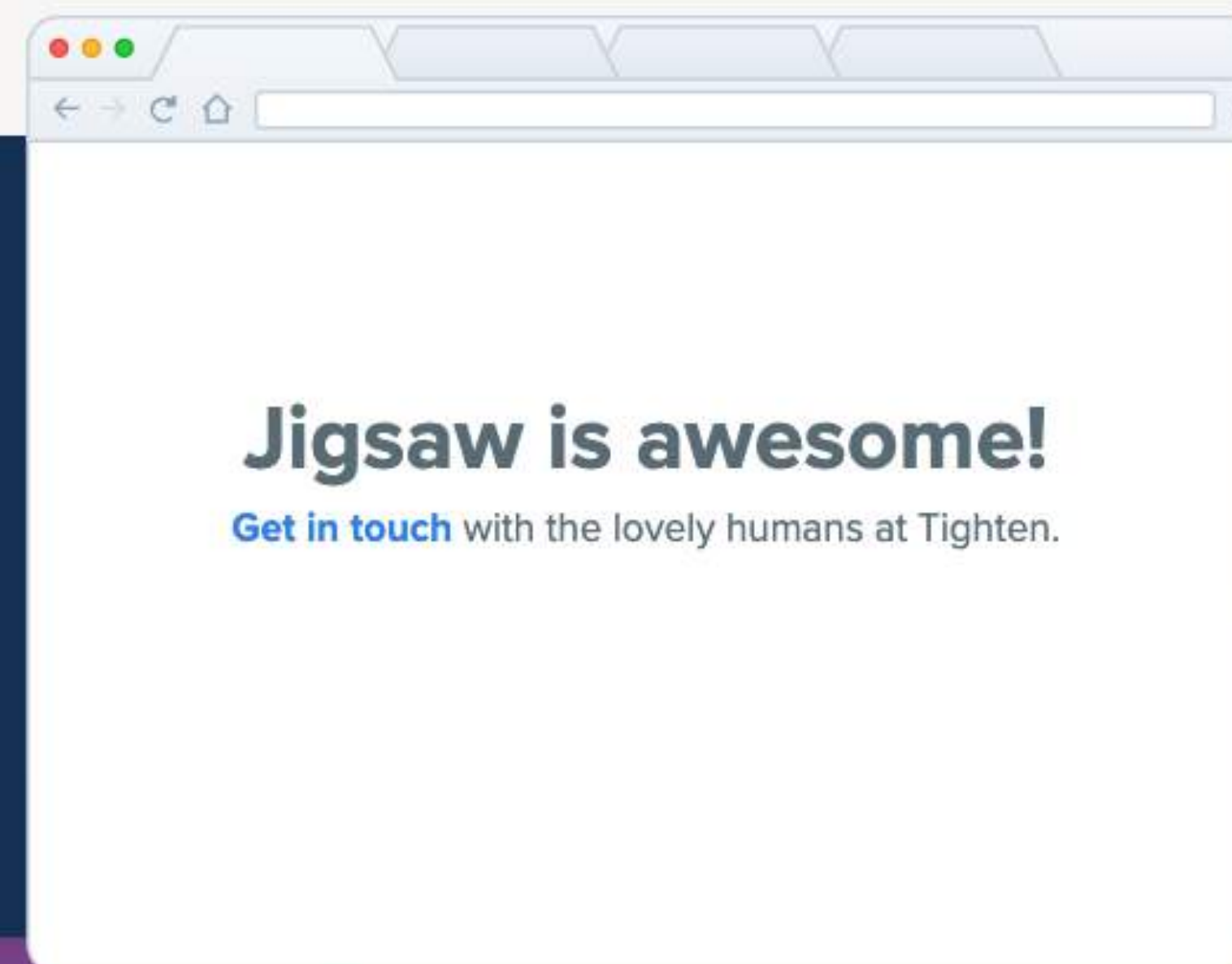
**Let's find a
static site generator!**

PHP Edition

Static sites for modern developers

Jigsaw is a framework for rapidly building static sites using the same modern tooling that powers your web applications.

```
1 ---
2 title: "Jigsaw is awesome!"
3 ---
4
5 @extends('layouts.master')
6
7 @section('content')
8     <h1>{{ $page->title }}</h1>
9     <p>Contact us at {{ $page->contact_email }}</p>
10 @endsection
```



Composer

```
"require": {  
  "php": "^8.2",  
  "illuminate/collections": "^11.0",  
  "illuminate/console": "^11.0",  
  "illuminate/container": "^11.0",  
  "illuminate/filesystem": "^11.0",  
  "illuminate/support": "^11.0",  
  "illuminate/view": "^11.0",  
  "league/commonmark": "^2.4",  
  "michelf/php-markdown": "^2.0",  
  "mnapoli/front-yaml": "^2.0",  
  "nunomaduro/collision": "^8.1",  
  "spatie/laravel-ignition": "^2.4",  
  "symfony/console": "^6.0 || ^7.0",  
  "symfony/error-handler": "^6.0 || ^7.0",  
  "symfony/finder": "^6.0 || ^7.0",  
  "symfony/process": "^6.0 || ^7.0",  
  "symfony/var-dumper": "^6.0 || ^7.0",  
  "symfony/yaml": "^6.0 || ^7.0",  
  "vlucas/phpdotenv": "^5.6"  
},
```

npm

```
"devDependencies": {  
  "laravel-mix": "^6.0.39",  
  "laravel-mix-jigsaw": "^2.0.0",  
  "postcss": "^8.4.14",  
  "postcss-import": "^14.0.0",  
  "tailwindcss": "^3.1.6"  
}
```



Sculpin

[About](#)

[Get Started](#)

[Download](#)

[Documentation](#)

[Community](#)

[Blog](#)

Sculpin

Static Site Generator



Sculpin is a **static site generator** written in **PHP**. It converts **Markdown files, Twig templates** and standard HTML into a **static HTML site** that can be **easily deployed**.

Composer

```
"require": {  
  "php": "^8.0 || ^7.4",  
  "ext-mbstring": "*",  
  "ext-fileinfo": "*",  
  "dflydev/ant-path-matcher": "^1.0.3",  
  "dflydev/apache-mime-types": "^1.0.1",  
  "dflydev/dot-access-configuration": "^2.0.0",  
  "doctrine/inflector": "^1.3",  
  "league/mime-type-detection": "^1.13.0",  
  "michelf/php-markdown": "^1.9",  
  "netcarver/textile": "^3.6",  
  "react/http": "^1.0",  
  "sculpin/sculpin-theme-composer-plugin": "^1.0",  
  "symfony/config": "^v5.4",  
  "symfony/console": "^v5.4",  
  "symfony/dependency-injection": "^v5.4",  
  "symfony/event-dispatcher": "^v5.4",  
  "symfony/filesystem": "^v5.4",  
  "symfony/finder": "^v5.4",  
  "symfony/http-kernel": "^v5.4",  
  "symfony/yaml": "^v5.4",  
  "twig/twig": "^3.0",  
  "webignition/internet-media-type": "^0.4.8"  
},
```

npm

Only in project skeletons

CLEAVER

A **blazing-fast** static site generator using Laravel's Blade templates

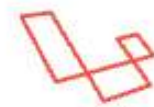
Cleaver is a PHP static site generator that helps you rapidly develop websites using **Laravel's Blade** templating engine, **JSON** or **Markdown** content files and the utility-first **Tailwind** CSS library.

[Documentation](#)

[View Source](#)

Version 1.5.7

```
composer create-project aschmelyun/cleaver your-site-name
```



Laravel Blade

Use the power of Blade to quickly craft templates and modularize your site code. Any Laravel veterans will feel right at home, while those inexperienced users should be able to pick up the easy syntax of the templating engine in no time.



Tailwind

Out of the box Cleaver includes the popular Tailwind CSS library. Using a utility-first approach to styling elements means less time tweaking elements on the front-end, letting you scaffold and prototype a website much faster.



JSON

Aiming for ease of use with data-driven pages, Cleaver gives you the ability to use JSON as content files. Each key's value is parsed out and accessible through the requested Blade template as a variable with the key name.



Markdown

For heavier content-driven pages, you have the ability to use Markdown content files as well. Key:value pairs for the layout, path, and others are taken as variables from the top section, while the rest of the markup is parsed as content.

Composer

```
"require": {  
  "php": ">=7.2.5",  
  "aschmelyun/laravel-blade": "^8.0",  
  "symfony/finder": "^5.1",  
  "codedungeon/php-cli-colors": "~1.0",  
  "ext-json": "*",  
  "symfony/filesystem": "^5.1",  
  "erusev/parsedown-extra": "^0.8.1",  
  "symfony/console": "^5.1",  
  "tightenco/collect": "^5.4",  
  "kitetail/zttp": "^0.6.0"  
},
```

npm

```
"devDependencies": {  
  "autoprefixer": "^10.3.4",  
  "browser-sync": "^2.27.5",  
  "browser-sync-webpack-plugin": "^2.3.0",  
  "jquery": "^3.6.0",  
  "lodash": "^4.17.21",  
  "mix-tailwindcss": "^1.3.0",  
  "node-cmd": "^5.0.0",  
  "on-build-webpack2": "^0.2.0",  
  "postcss": "^8.3.6",  
  "sass": "^1.39.0",  
  "sass-loader": "^12.1.0",  
  "tailwindcss": "^2.2.10",  
  "vue": "^2.6.14",  
  "vue-template-compiler": "^2.6.14"  
}
```

**Nah, I'll just write something
from scratch...**

Meet Phanstatic^{BETA}

Composer

```
"require": {  
  "php": ">=8.2",  
  "league/commonmark": "^2.4",  
  "spatie/yaml-front-matter": "^2.0",  
  "symfony/console": "^7.1",  
  "symfony/filesystem": "^7.0",  
  "symfony/finder": "^7.0"  
},
```

npm

```
None  
That's your choice!
```

What does it do?

- Converts PHP pages to HTML
- Converts a set of Markdown files to HTML with an index page
- Copies your assets to the destination folder
- You can upload a `dist/` folder to any web server
- Bare minimum start: `content/my-first-page.php`

Structure

- Configuration
 - ConfigBuilder which creates a Config object
- Console commands
 - build, preview, config
- Content builders
 - Pages, Collections, Assets

Built-in context

Pages

- Each page has a `$site` and `$page` variable with context

Collections

- Collection pages has `$site`, `$page`, and `$collection`
- Collection index file has `$page`, `$site`, `$collection` and `$pagination`

Architectural challenges

- Built on Symfony Console
- Small Symfony components: Filesystem and Finder
- Reading a YAML header
- Converting Markdown to HTML
- Page context
- Configuration must be available for helper functions
- Throw exceptions for issues inside your source files
- Naming is seriously HARD

Quick Demo

What's next before v1.0.0?

- Better support of custom content builders (maybe with a DI container?)
- Built-in Reading time data and Table of Content on Collection pages
 - (float) `$page->readingTime`
 - (array) `$page->tableOfContents`
- Command to generate boilerplates
- Read Collections from JSON API endpoints
- Ability to upload assets straight to a CDN
- Add more tests
- Documentation and guides

Closing thoughts

1. Keep it simple
2. Read about green coding
3. Share your knowledge
4. Scratch your own itches

X / Twitter: @terdelyi

LinkedIn: <https://linkedin.com/in/terdelyi>

Phanstatic: <https://github.com/terdelyi/phanstatic>

```
composer create-project --stability=dev terdelyi/phanstatic
```

