

van LAMP naar JAM

statische websites met Hugo

gehost op GitHub

Wie ben ik

- semi gepensioneerd software engineer
- OSS contributor ksml.io (in dienst, axual.com)
- github.com/tonvanbart

Website hosting

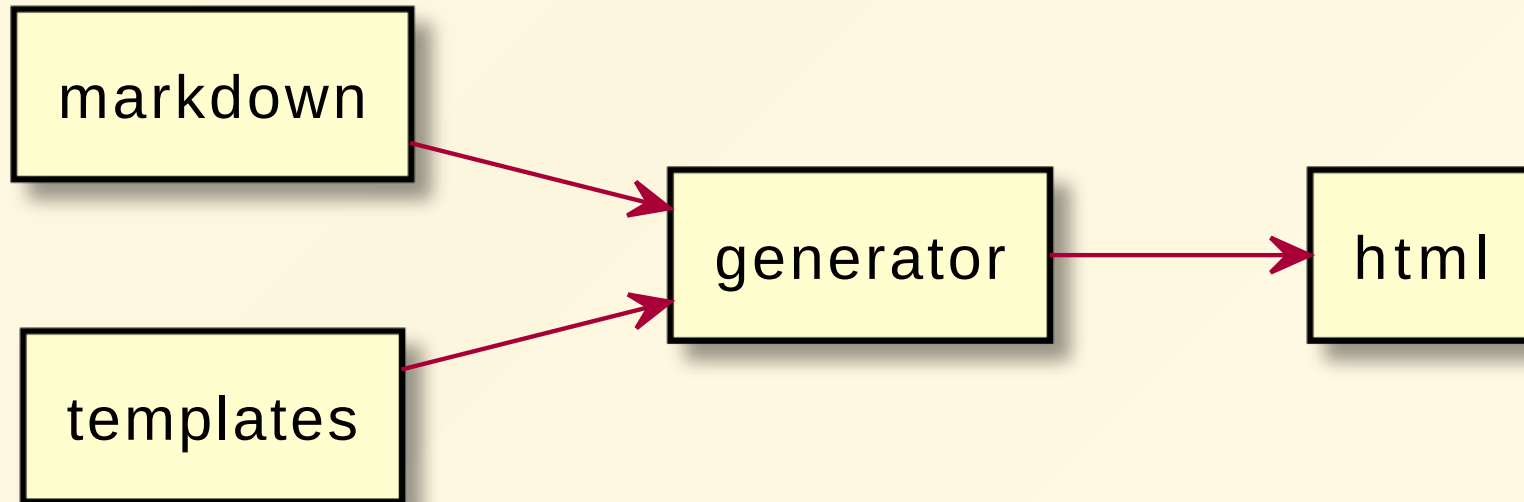
- Veelal Wordpress
- Bekend platform: groot ecosysteem (plugins, themes)
- Hosting moet PHP en MySQL ondersteunen
meer attack surface: bijhouden!
- Pagina's worden on demand gegenereerd: snelheid
- LAMP stack: Linux, Apache, MySQL, PHP

Alternatief: statische websites

- plain HTML
- hosting kan goedkoop of gratis
- snel (geen on demand page generatie)
- minimaal attack surface
- ...onhandig

Statische website generator

- Content tekst (markdown) plus templates
- Jekyll (Ruby), Pelican (Python), Eleventy (node), Hugo (Go)...



Markdown

Lichtgewicht markup, simpele formatting

Zie markdown.org

```
<h1>header level 1</h1>
<h2>level 2</h2>
<p>Paragraph tekst</p>
<p>Tweede paragraph</p>
<a href="http://www.example.com">hyperlink</a>

```

```
# header level 1
## level 2
Paragraph tekst

Tweede paragraph
[hyperlink](http://www.example.com)
![alt text](/plaatje.jpg)
```

Markdown: front matter

Metadata waar de generator iets mee kan:

```
---  
title: "Project kicked off"  
date: 2026-08-01  
summary: "The hugo-demo project is up and running."  
---
```

```
We've started this demo project to show how easy it is to host a Hugo site  
on GitHub Pages, deployed via GitHub Actions.
```

Waarom Hugo

- single binary
- geen dependencies om te installeren
- makkelijk in te zetten in publish automatisering

Hugo: directory structuur

```
my-project/
├── archetypes/
│   └── default.md
├── assets/
├── config/
│   ├── _default/
│   └── hugo.toml
├── content/
├── data/
├── i18n/
├── layouts/
├── public/      <-- created when you build your project
├── resources/   <-- created when you build your project
├── static/
└── themes/
```

Demo: Hugo

Git

Git is: versiebeheer voor code;

"Wie heeft wat wanneer gedaan, en waarom?"

- `git init`: breng deze folder onder versiebeheer
- `git add`: voeg deze file/wijziging toe aan de administratie
- `git commit`: leg deze wijziging(en) definitief vast

```
> git init
> git add nllgg-post.md
> git commit -m 'blogpost over nllgg toegevoegd'
```

Git remotes

Meerdere versies van een Git repo, op verschillende machines.
Hiermee kunnen ontwikkelaars samen werken aan een repo

- `git remote add {NAAM} {URL}`: voeg de remote op url {URL} toe als {NAAM}
- `git push {NAAM}`: stuur de lokale historie naar de remote
- `git pull {NAAM}`: haal de historie op uit de remote

Github

Centrale plek om een remote op te slaan; gratis voor OSS.
Naast een Git remote biedt Github extra voorzieningen: project wiki, **project websites**, issue tracking, **CI/CD workflows**, en meer.

```
git remote add origin git@github.com:ownernaam/reponaam.git
```

Github Pages

- website served vanuit een Github repo
- Gepubliceerd vanuit een branch, of vanuit een workflow
- Standaard URL: <https://usernaam.github.io/projectnaam>
- Ondersteunt HTTPS
- Custom domain is mogelijk

Github pages: custom domain

Dit vereist twee stappen:

1. Provider DNS: CNAME record verwijst naar github user

CNAME	▼	marktplaats-xs.vanbart.c	tonvanbart.github.io.
CNAME	▼	astronauts.vanbart.org	tonvanbart.github.io.
CNAME	▼	scanqr.vanbart.org	tonvanbart.github.io.

2. custom domein toevoegen in settings

Github Pages: settings

GitHub Pages

[GitHub Pages](#) is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is live at <https://www.europrez.com/>

Last [deployed](#) by  [tonvanbart](#) last month

[Visit site](#)

[Unpublish site](#)

Build and deployment

Source

GitHub Actions ▾

Your site was last deployed to the [github-pages](#) environment by the [Deploy Hugo site to Pages](#) workflow.

[Learn more about deploying to GitHub Pages using custom workflows](#)

Custom domain

Custom domains allow you to serve your site from a domain other than `tonvanbart.github.io`. [Learn more about configuring custom domains](#).

[Save](#)

[Remove](#)

● DNS Check in Progress

☒ Enforce HTTPS

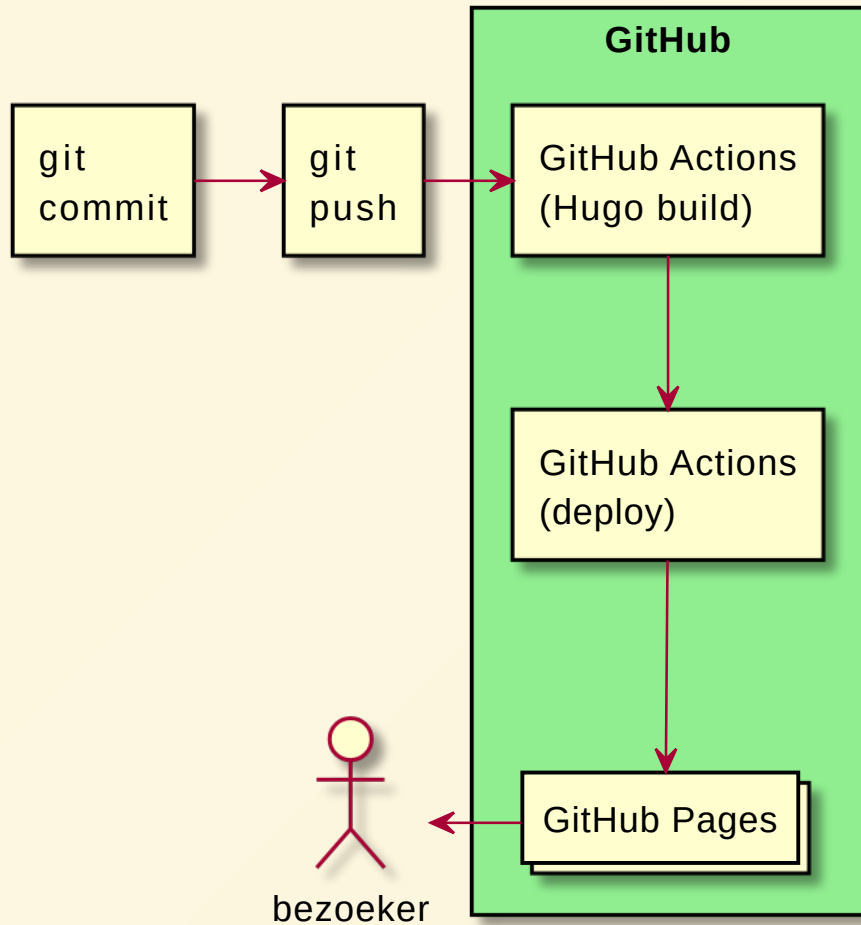
HTTPS provides a layer of encryption that prevents others from snooping on or tampering with traffic to your site.

When HTTPS is enforced, your site will only be served over HTTPS. [Learn more about securing your GitHub Pages site with HTTPS](#).

Github Actions

- automatisering voor Continuous Integration/Delivery
- een of meer "jobs" met elk een of meer "steps"
- getriggerd door "events" in de repo als push, release

Het plan



- `git push` start workflow
- job 1: bouw de site (Hugo)
- job 2: publish naar Pages
- profit/world domination

Github Actions trigger en build

```
on:
  push:
    branches: [main]

jobs:
  build:
    runs-on: ubuntu-latest
    steps:
      - name: Setup Hugo
        uses: peaceiris/actions-hugo@v3

      - name: Build
        run: hugo --minify

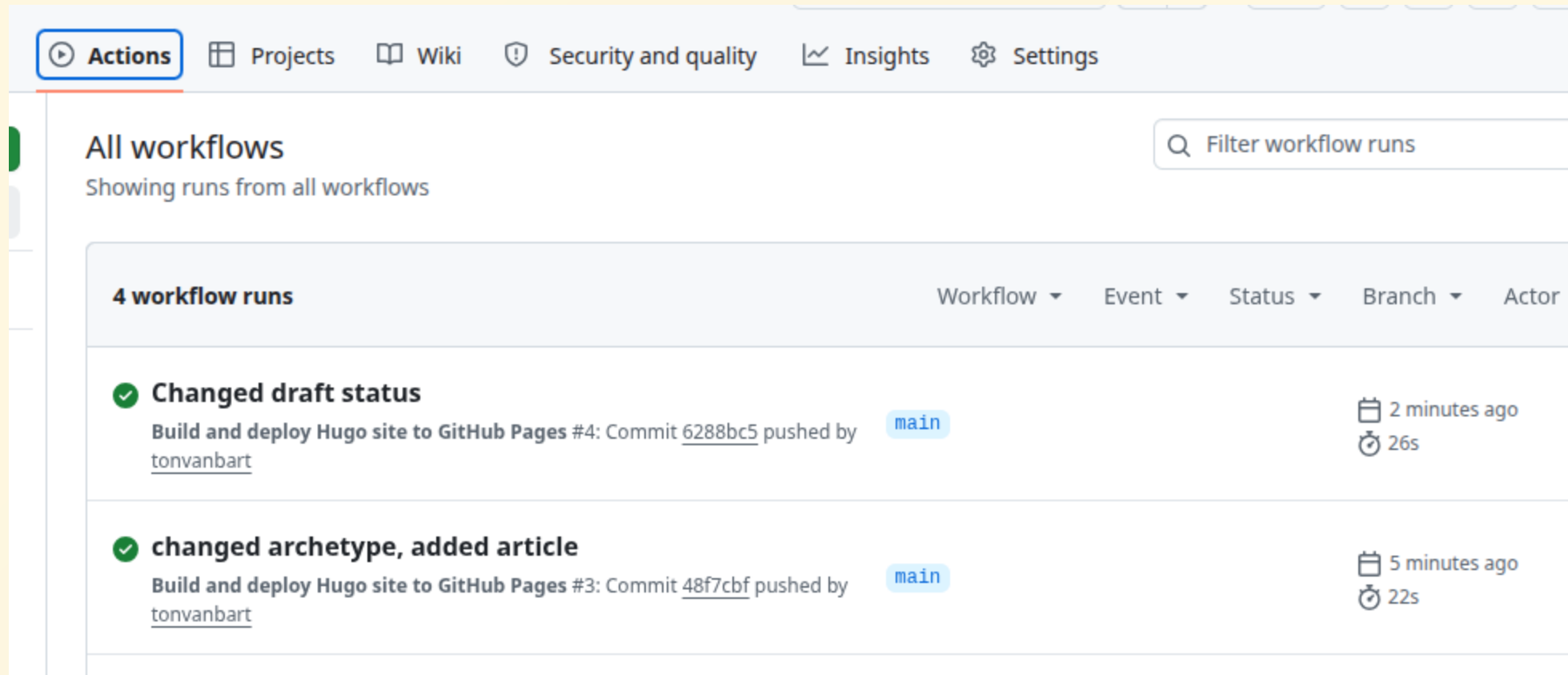
      - name: Upload artifact
        uses: actions/upload-pages-artifact@v3

      (...)
```

Github Actions deploy

```
jobs:  
  
  (...)   
  
  deploy:  
    needs: build  
    runs-on: ubuntu-latest  
    steps:  
      - name: Deploy to GitHub Pages  
        uses: actions/deploy-pages@v4
```

Github Actions: status scherm



The screenshot displays the GitHub Actions interface. At the top, a navigation bar includes links for Actions (highlighted with a red box), Projects, Wiki, Security and quality, Insights, and Settings. Below this, the 'All workflows' section is visible, with a search bar labeled 'Filter workflow runs'. The main content area shows a list of workflow runs. The first run is titled 'Changed draft status' and the second is 'changed archetype, added article'. Both runs are marked with a green checkmark, indicating they completed successfully. Each run entry includes a description of the workflow, the commit hash, the user who pushed the commit, the branch name (main), and the time and duration of the run.

4 workflow runs		Workflow ▾	Event ▾	Status ▾	Branch ▾	Actor ▾
✓	Changed draft status Build and deploy Hugo site to GitHub Pages #4: Commit 6288bc5 pushed by tonvanbart				main	
						2 minutes ago 26s
✓	changed archetype, added article Build and deploy Hugo site to GitHub Pages #3: Commit 48f7cbf pushed by tonvanbart				main	
						5 minutes ago 22s

Demo: git push en site herbouw

Wat te doen met... forms?

- geen server betekent geen form handling
- Google Form embed (lelijk!)
- op te lossen met serverless functie
- JAMstack: **J**avascript, **A**PIs, (statische) **M**arkup

Voorbeeld: Formspre

- Dienst om form submits te verwerken, free tier
- aanmelden met email
- validaties (niet getest)
- form data in dashboard

TIMTOWTDI

- andere hosting
- andere site generators
- andere form oplossing
- WYSIWYG editing

Bedankt!

github.com/tonvanbart/hugo-demo

hugo-demo.vanbart.org



