



```
#####  
## Build and Deploy Hugo Website to GitHub Pages  
## Author: Jérémie Lumbroso <lumbroso@seas.upenn.edu>  
## Date: 2024-02-24  
#####  
name: 🏠 Build and Deploy GitHub Pages  
on:  
  push:  
    branches:  
      - main # Set a branch to deploy  
jobs:  
  deploy:  
    runs-on: ubuntu-22.04  
    steps:  
      - name: 📄 Check Out Source Repository  
        uses: actions/checkout@v3.5.1  
        with:  
          submodules: true # Fetch Hugo themes (true OR recursive)  
          fetch-depth: 0 # Fetch all history for .GitInfo and .Lastmod  
      - name: 🛠 Initialize Hugo Environment  
        uses: peaceiris/actions-hugo@v2.6.0  
        with:  
          hugo-version: "0.123.4"  
          extended: true  
      - name: 📦 Compile Hugo Static Files
```

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Claude 3.5 Sonnet  Choose style 

```
github_token: ${{ secrets.GITHUB_TOKEN }}  
publish_branch: gh-pages  
user_name: "github-actions[bot]"  
user_email: "github-actions[bot]@users.noreply.github.com"  
## NOTE: uncomment below if using a custom domain  
## cname: mydomain.com  
  
explain line by line
```

I'll explain this GitHub Actions workflow file line by line. It's used to automatically build and deploy a Hugo website to GitHub Pages.

yaml

```
name: 🏠 Build and Deploy GitHub Pages
```

Defines the name of the workflow that will appear in the GitHub Actions interface.

yaml

```
on:
  push:
    branches:
      - main
```

Specifies when the workflow should run - in this case, whenever code is pushed to the `main` branch.

yaml

```
jobs:
  deploy:
    runs-on: ubuntu-22.04
```

Defines a job named "deploy" that will run on Ubuntu 22.04.

yaml

```
steps:
  - name: 📄 Check Out Source Repository
    uses: actions/checkout@v3.5.1
    with:
      submodules: true
      fetch-depth: 0
```

First step: Checks out your repository code using `actions/checkout@v3.5.1`.

- `submodules: true` ensures Hugo themes (stored as submodules) are also fetched
- `fetch-depth: 0` fetches the complete Git history for proper versioning information

yaml

```
- name: 🚀 Initialize Hugo Environment
  uses: peaceiris/actions-hugo@v2.6.0
  with:
    hugo-version: "0.123.4"
    extended: true
```

Sets up Hugo in the workflow environment:

- Uses the `peaceiris/actions-hugo` action version 2.6.0
- Installs Hugo version 0.123.4
- `extended: true` installs the extended version of Hugo which includes SCSS/SASS support

yaml

```
- name: 📁 Compile Hugo Static Files
  run: hugo -D --gc --minify
```

Builds the Hugo website:

- `-D` includes draft content
- `--gc` runs garbage collection during build

- `--minify` minimizes the output files for better performance

yaml

```
- name: 🚀 Publish to GitHub Pages
  uses: peaceiris/actions-gh-pages@v3.9.3
  with:
    github_token: ${ secrets.GITHUB_TOKEN }
    publish_branch: gh-pages
    user_name: "github-actions[bot]"
    user_email: "github-actions[bot]@users.noreply.github.com"
```

Final step: Deploys the built site to GitHub Pages:

- Uses `peaceiris/actions-gh-pages` action to handle deployment
- `github_token` uses the automatically provided GitHub token for authentication
- `publish_branch` specifies the branch where the site will be published (gh-pages)
- Sets the Git commit author to the GitHub Actions bot

yaml

```
## NOTE: uncomment below if using a custom domain
## cname: mydomain.com
```

Optional configuration commented out - can be uncommented to set a custom domain for the GitHub Pages site.

ⓘ Claude does not have the ability to run the code it generates yet.

📋 Copy ↺ Retry 📌 🗨



Claude can make mistakes. Please double-check responses.