

GitHub Actions Workflow for Deploying Hugo Website

 claude.ai/chat/8057e203-d5dc-4f72-99b6-e5d09e4f9fce



BY ANTHROPIC

I'll explain this GitHub Actions workflow file line by line. This workflow automates the process of building and deploying a Hugo website to GitHub Pages.

yaml

```
#####  
## Build and Deploy Hugo Website to GitHub Pages  
## Author: Jérémie Lumbroso <lumbroso@seas.upenn.edu>  
## Date: 2024-02-24  
#####
```

These are comment lines providing metadata about the workflow file, including the purpose, author, and creation date.

yaml

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

This sets the name of the workflow as it will appear in the GitHub Actions tab of your repository.

yaml

```
on:
  push:
    branches:
      - main # Set a branch to deploy
```

This section defines when the workflow will run. It triggers whenever code is pushed to the "main" branch.

yaml

```
jobs:
  deploy:
```

The "jobs" section defines the jobs to be executed. Here, there's a single job named "deploy".

yaml

```
runs-on: ubuntu-22.04
```


This specifies that the job will run on an Ubuntu 22.04 runner (virtual machine).

yaml

```
steps:
```

The "steps" section defines the individual tasks that will be performed sequentially.

yaml

```
- 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
```

This step checks out your repository code using GitHub's checkout action (v3.5.1).

- `submodules: true` ensures any Git submodules are also checked out (often used for Hugo themes)
- `fetch-depth: 0` retrieves the complete Git history, needed for Hugo's .GitInfo and .Lastmod features

yaml

```
- name: 🛠 Initialize Hugo Environment
  uses: peaceiris/actions-hugo@v2.6.0
  with:
    hugo-version: "0.144.1"
    extended: true
```

This step sets up Hugo using the peaceiris/actions-hugo action:

- Specifies Hugo version 0.144.1
- Uses the "extended" version of Hugo (which includes Sass/SCSS support)

yaml

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

This step runs the Hugo command to build your website:

- `-D` includes draft content
- `--gc` runs garbage collection during build
- `--minify` compresses the output files

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"
```

This final step deploys the built website to GitHub Pages:

- Uses the peaceiris/actions-gh-pages action
- `github_token` authenticates with GitHub (GITHUB_TOKEN is automatically provided)
- `publish_branch` specifies that the site will be deployed to the gh-pages branch
- `user_name` and `user_email` set the git commit author for the deployment

yaml

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

A commented-out option that you can uncomment if you're using a custom domain for your GitHub Pages site.

This workflow efficiently automates the entire process of building your Hugo site and deploying it to GitHub Pages whenever you push changes to your main branch.



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