CI/CD Staging Deployment Guide

Deploy GitHub 'dev' branch to a live Staging Site

By Richard Igwegbu, Founder - Unix Training Academy

Lesson Objective

Set up a staging CI/CD pipeline to deploy your GitHub `dev` branch to a separate GitHub Pages site using GitHub Actions.

Step 1: Create a Staging Repo

- Go to GitHub and create a new public repo: `richard_portfolio_site_staging`
- Do NOT add README, license, or gitignore

Step 2: Create a Personal Access Token (PAT)

- 1. Go to https://github.com/settings/tokens -> Generate new token (classic)
- 2. Select `repo` scope
- 3. Copy the token and store it somewhere safe

Step 3: Add the PAT to Repo Secrets

In your main repo (`richard_portfolio_site`):

- Go to Settings -> Secrets -> Actions -> New repository secret

- Name it: PERSONAL_TOKEN

- Value: paste the token

Step 4: Create `.github/workflows/staging.yml`

name: Deploy to Staging GitHub Pages
on:
push:
branches:
- dev
permissions:
contents: write
jobs:
deploy-staging:
runs-on: ubuntu-latest
steps:
- name: Checkout dev branch
uses: actions/checkout@v3
- name: Deploy to Staging Repo
uses: peaceiris/actions-gh-pages@v3
with:
external_repository: richardigwegbu1/richard_portfolio_site_staging
publish_dir: .
personal_token: \${{ secrets.PERSONAL_TOKEN }}

Step 5: Commit & Push

git add .github/workflows/staging.yml git commit -m "Add staging CI/CD workflow" git push origin dev

Step 6: Enable GitHub Pages in Staging Repo

In the `richard_portfolio_site_staging` repo:

- Go to Settings -> Pages
- Source: `gh-pages` branch, root folder
- Save

Result

Your staging site is now live at:

https://richardigwegbu1.github.io/richard_portfolio_site_staging/

Every push to your dev branch now updates the staging environment!