



# Beginner Exercise: Build a GitHub Actions Pipeline with Python, pytest, and Heroku Deployment

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## Goal

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Create a **GitHub Actions** pipeline based on the following requirements. The pipeline will:

1. Set up **Python 3.9**.
  2. Install **dependencies** using `pip`.
  3. Run **tests** using `pytest`.
  4. Deploy the application to **Heroku**.
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## Requirements

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### 1. Trigger: Manual Workflow

- The pipeline must **only run manually** using the `workflow_dispatch` trigger. This means the workflow will only be triggered when started manually from the GitHub web interface.

### 2. Jobs and Steps

#### Job 1: Build and Test the Application

- **Runs on** `ubuntu-latest`.
- **Step 1:** Check out the repository using `actions/checkout@v4`.
- **Step 2:** Set up **Python 3.9** using `actions/setup-python@v4`.
- **Step 3:** Install dependencies using `pip install -r requirements.txt`.
- **Step 4:** Run **tests** using `pytest`.

#### Job 2: Deploy to Heroku

- **Runs on** `ubuntu-latest`.
  - **Step 1:** Check out the repository using `actions/checkout@v4`.
  - **Step 2:** Deploy the application to Heroku using `akhilshns/heroku-deploy@v3.12.12` (you can treat this as an action when using GitHub Actions).
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#### Results:

- The first job should complete **successfully**.
  - The second job should run but **fail**, since no **authentication details** were provided.
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