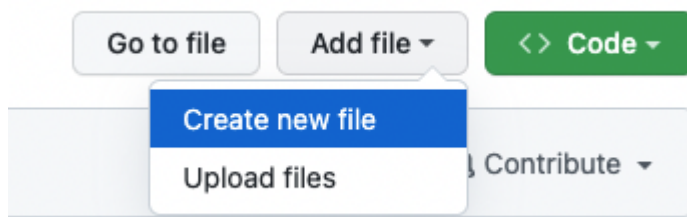# Lab: GitHub Actions / Workflows

Introduction

You only need a GitHub repository to create and run a GitHub Actions workflow. In this guide, you'll add a workflow that demonstrates some of the essential features of GitHub Actions.

The following example shows you how GitHub Actions jobs can be automatically triggered, where they run, and how they can interact with the code in your repository.

Creating your first workflow

1. Create a `.github/workflows` directory in your repository on GitHub if this directory does not already exist.

2. In the `.github/workflows` directory, create a file named `github-actions-demo.yml`.

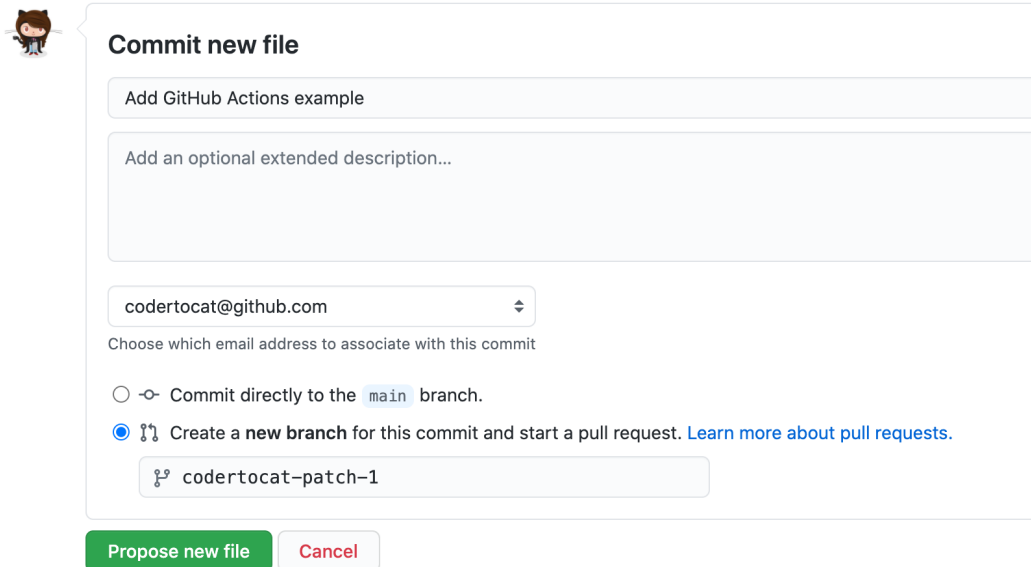   ○ Select the **Add file** drop-down and click **Create new file**.

   ○ In the **Name your file...** field, enter `.github/workflows/github-actions-demo.yml`.

3. Copy the following YAML contents into the `github-actions-demo.yml` file:

```
name: GitHub Actions Demo
run-name: ${{ github.actor }} is testing out GitHub Actions 🚀
on: [push]
jobs:
  Explore-GitHub-Actions:
    runs-on: ubuntu-latest
    steps:
      - run: echo "🎉 The job was automatically triggered by a ${{ github.event_name
}} event."
      - run: echo "🐧 This job is now running on a ${{ runner.os }} server hosted by
GitHub!"
      - run: echo "🔎 The name of your branch is ${{ github.ref }} and your repository
is ${{ github.repository }}."
      - name: Check out repository code
        uses: actions/checkout@v3
      - run: echo "💡 The ${{ github.repository }} repository has been cloned to the
runner."
      - run: echo "🖥️ The workflow is now ready to test your code on the runner."
```

```
- name: List files in the repository
  run: |
    ls ${{ github.workspace }}
- run: echo "🍏 This job's status is ${{ job.status }}."
```

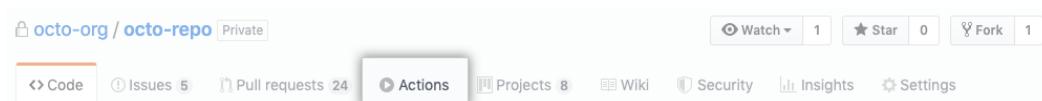4. Scroll to the bottom of the page and select **Create a new branch for this commit and start a pull request**. Then, to create a pull request, click **Propose new file**.
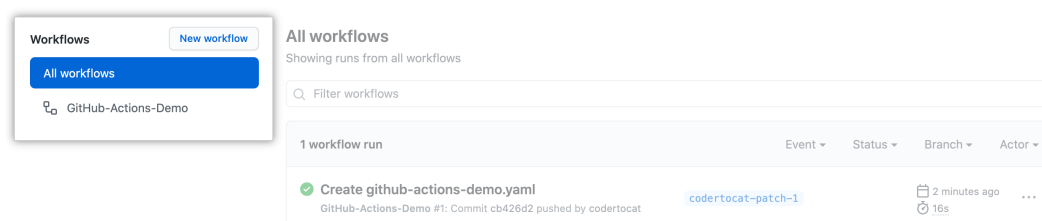

Committing the workflow file to a branch in your repository triggers the `push` event and runs your workflow.

Viewing your workflow results

1. On GitHub.com, navigate to the main page of the repository.

2. Under your repository name, click **Actions**.

3. In the left sidebar, click the workflow you want to see.

4. From the list of workflow runs, click the name of the run you want to see.

5. Under **Jobs** , click the **Explore-GitHub-Actions** job.

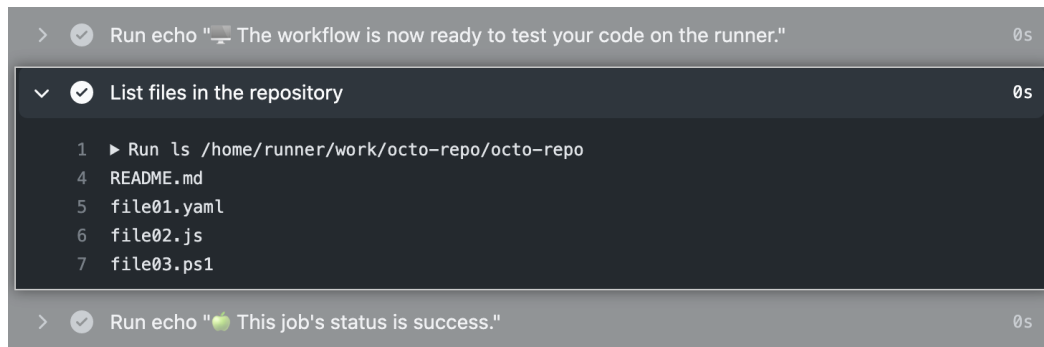6. The log shows you how each of the steps was processed. Expand any of the steps to view its details.

For example, you can see the list of files in your repository:

The example workflow you just added is triggered each time code is pushed to the branch, and shows you how GitHub Actions can work with the contents of your repository.