Quickstart for GitHub Actions

Try out the features of GitHub Actions in 5 minutes or less.

In this article

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`. For more information, see "Creating new files."

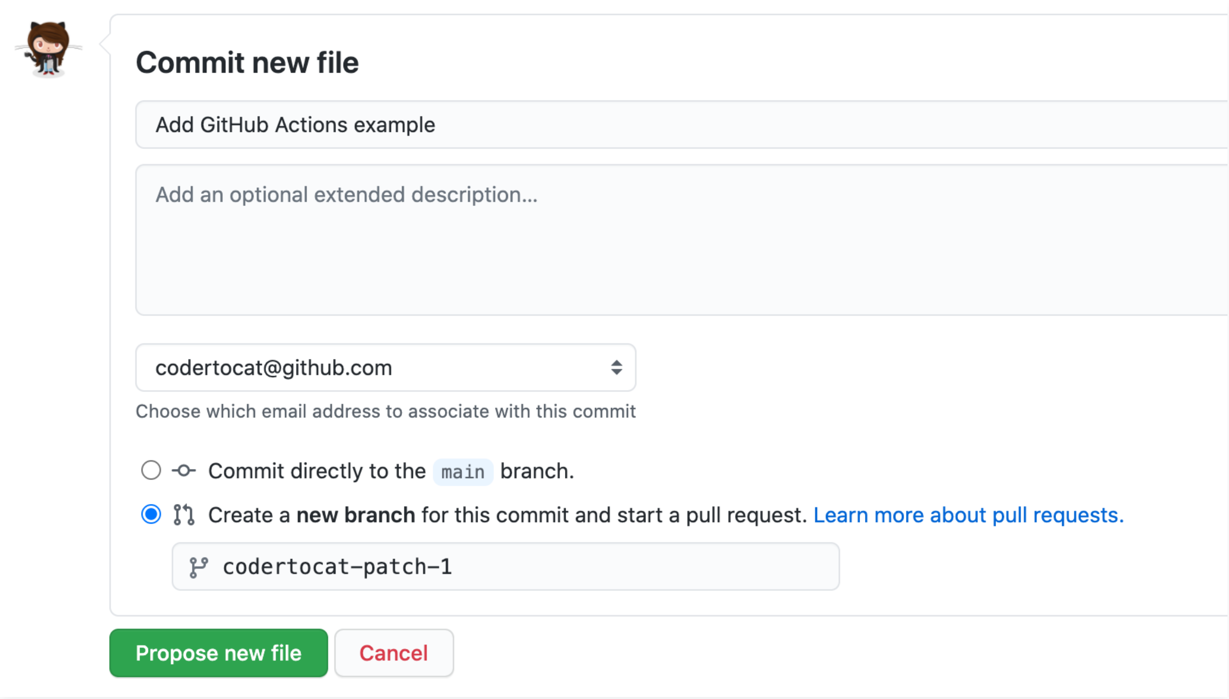
3. Copy the following YAML contents into the `github-actions-demo.yml` file:

YAML

```yaml
name: GitHub Actions Demo
```

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



Commit new file

Add GitHub Actions example

Add an optional extended description...

codertocat@github.com

Choose which email address to associate with this commit

○ Commit directly to the `main` branch.

● Create a **new branch** for this commit and start a pull request. Learn more about pull requests.

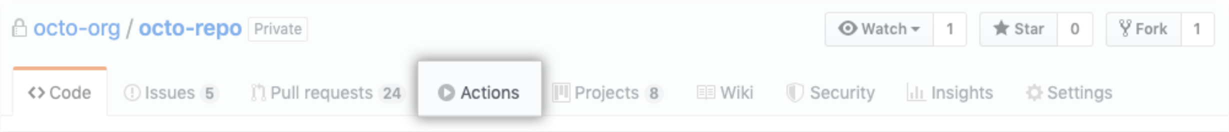
codertocat-patch-1

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

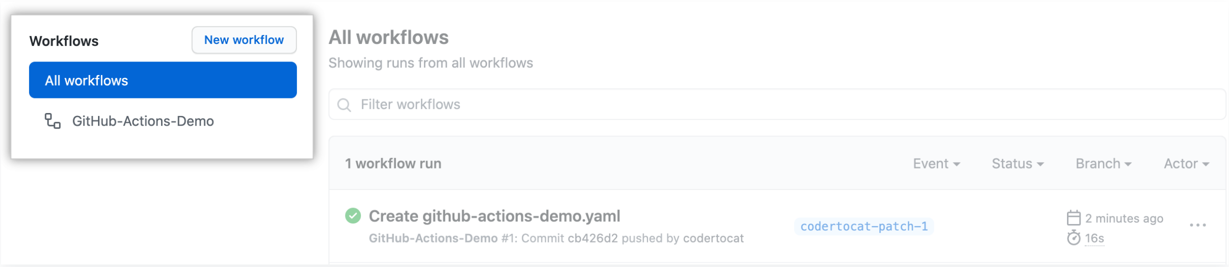
Viewing your workflow results

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

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

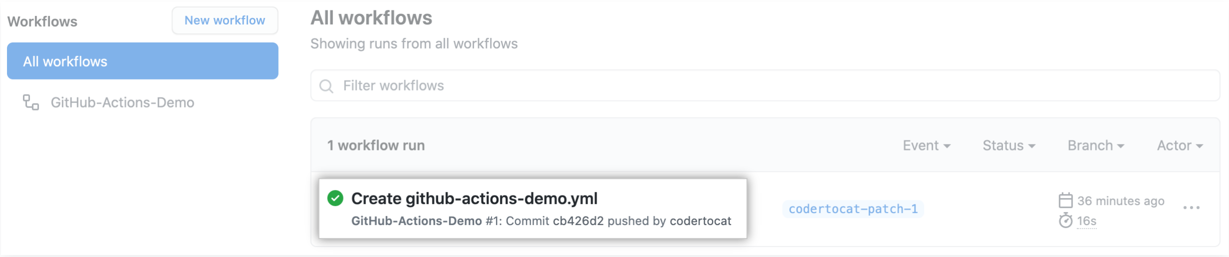


3 In the left sidebar, click the workflow you want to see.



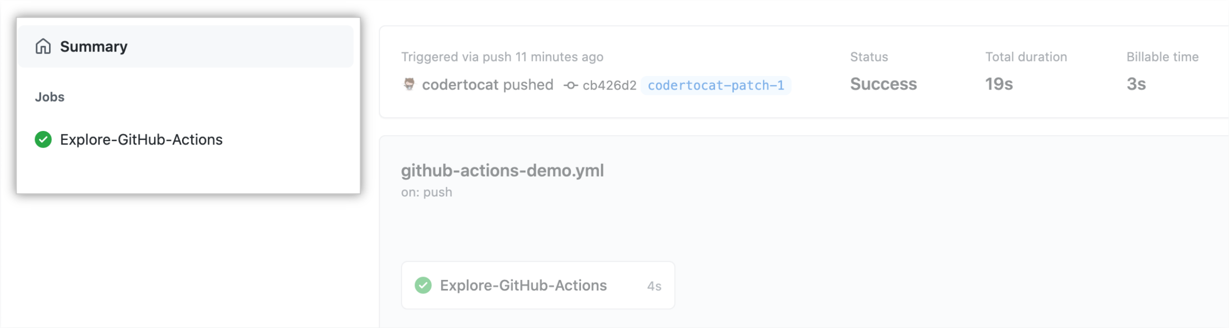
Create github-actions-demo.yaml
GitHub-Actions-Demo #1: Commit cb426d2 pushed by codertocat
codertocat-patch-1
2 minutes ago
16s

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



Create github-actions-demo.yml
GitHub-Actions-Demo #1: Commit cb426d2 pushed by codertocat
codertocat-patch-1
36 minutes ago
16s

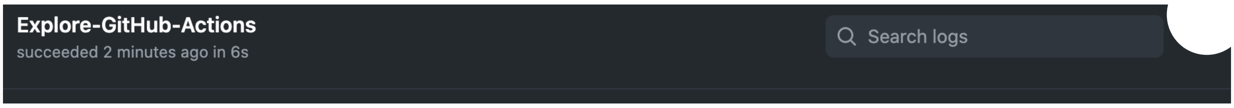
5 Under **Jobs** , click the **Explore-GitHub-Actions** job.

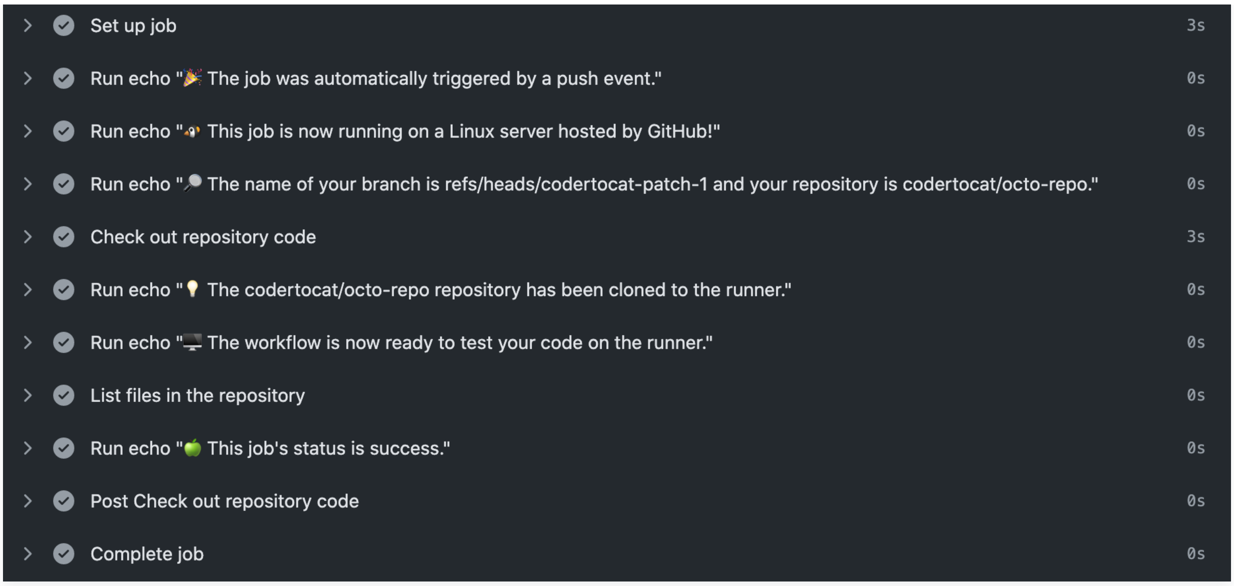


Triggered via push 11 minutes ago
codertocat pushed cb426d2 codertocat-patch-1

Status	Total duration	Billable time
Success	19s	3s

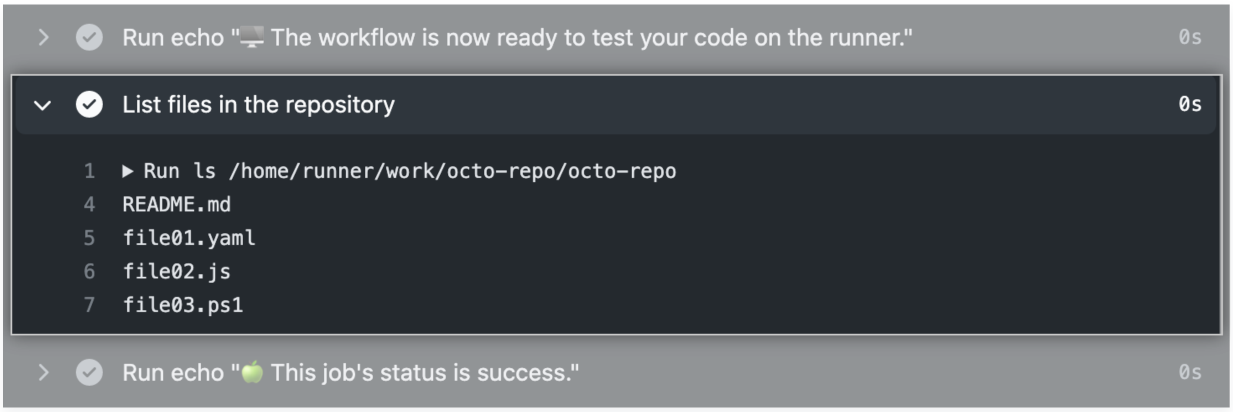
6 The log shows you how each of the steps was processed. Expand any of the steps to view its details.





```
Set up job                                                                                       3s
Run echo "🎉 The job was automatically triggered by a push event."                                0s
Run echo "🐧 This job is now running on a Linux server hosted by GitHub!"                         0s
Run echo "🔎 The name of your branch is refs/heads/codertocat-patch-1 and your repository is codertocat/octo-repo."   0s
Check out repository code                                                                        3s
Run echo "💡 The codertocat/octo-repo repository has been cloned to the runner."                  0s
Run echo "🖥️ The workflow is now ready to test your code on the runner."                          0s
List files in the repository                                                                     0s
Run echo "🍏 This job's status is success."                                                       0s
Post Check out repository code                                                                   0s
Complete job                                                                                     0s
```

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



```
Run echo "🖥️ The workflow is now ready to test your code on the runner."     0s
List files in the repository                                                0s
▶ Run ls /home/runner/work/octo-repo/octo-repo
README.md
file01.yaml
file02.js
file03.ps1
Run echo "🍏 This job's status is success."                                  0s
```

More starter workflows

GitHub provides preconfigured starter workflows that you can customize to create your own continuous integration workflow. GitHub analyzes your code and shows you CI starter workflows that might be useful for your repository. For example, if your repository contains Node.js code, you'll see suggestions for Node.js projects. You can use starter workflows as a starting place to build your custom workflow or use them as-is.

You can browse the full list of starter workflows in the actions/starter-workflows repository.

For examples that demonstrate more complex features of GitHub Actions, see "Examples." You can see detailed examples that explain how to test your code on a runner, access the GitHub CLI can see detailed examples that explain how to test your code on a runner, access the GitHub CLI, and use advanced features such as concurrency and test matrices.

Next steps

The example workflow you just added runs each time code is pushed to the branch, and shows you how GitHub Actions can work with the contents of your repository. But this is only the beginning of what you can do with GitHub Actions:

- Your repository can contain multiple workflows that trigger different jobs based on different events.
- You can use a workflow to install software testing apps and have them automatically test your code on GitHub's runners.

GitHub Actions can help you automate nearly every aspect of your application development processes. Ready to get started? Here are some helpful resources for taking your next steps with

GitHub Actions:

- "Learn GitHub Actions" for an in-depth tutorial.