Your first action

Basic Template

```
# This is a basic workflow to help you get started with Actions

name: CI

# Controls when the workflow will run
on:
  # Triggers the workflow on push or pull request events but only for the "main" branch
  push:
    branches: [ "main" ]
  pull_request:
    branches: [ "main" ]

  # Allows you to run this workflow manually from the Actions tab
  workflow_dispatch:

# A workflow run is made up of one or more jobs that can run sequentially or in parallel
jobs:
  # This workflow contains a single job called "build"
  build:
    # The type of runner that the job will run on
    runs-on: ubuntu-latest

    # Steps represent a sequence of tasks that will be executed as part of the job
    steps:
      # Checks-out your repository under $GITHUB_WORKSPACE, so your job can access it
      - uses: actions/checkout@v3

      # Runs a single command using the runners shell
      - name: Run a one-line script
        run: echo Hello, world!
      - name: Print existing files
        run: ls -a

      # Runs a set of commands using the runners shell
      - name: Run a multi-line script
```

```
    run: |
      echo Add other actions to build,
      echo test, and deploy your project.
```

Workflow and Action Attributes

name:

- Used to name the workflow.
- Not required

on:

- The GitHub event that triggers the workflow (see list in the next page)
- Required
- The event can be activities within repo, schedules and webhooks.

Syntax:

```
  on:
    {even trigger}: [branch name]
```

jobs:

->Workflows must have at least one job

->Each job must have an identifier

runs-on:

->The type of machine needed to run the job - runner

->Options:

Virtual Machine	Processor (CPU)	Memory (RAM)	Storage (SSD)	OS (YAML workflow label)	Notes
Linux	2	7 GB	14 GB	`ubuntu-latest`, `ubuntu-22.04`, `ubuntu-20.04`	The `ubuntu-latest` label currently uses the Ubuntu 22.04 runner image.
Windows	2	7 GB	14 GB	`windows-latest`, `windows-2022`, `windows-2019`	The `windows-latest` label currently uses the Windows 2022 runner image.
macOS	3	14 GB	14 GB	`macos-latest`, `macos-12`, `macos-11`	The `macos-latest` workflow label currently uses the macOS 12 runner image.
macOS	4	14 GB	14 GB	`macos-13` [Beta]	N/A

branch_protection_rule

check_run

check_suite

create

delete

deployment

deployment_status

discussion

discussion_comment

fork

gollum

issue_comment

issues

label

merge_group

milestone

page_build

project

project_card

project_column

public

pull_request

pull_request_comment (use issue_comment)

pull_request_review

pull_request_review_comment

pull_request_target

push

registry_package

release

repository_dispatch

schedule

status

watch

workflow_call

workflow_dispatch

workflow_run

steps:

->List of actions or commands

->Access to the file system

->Each step runs in its own process

uses:

->Identifies an action to use

->The "uses" attribute defines the Docker image that will run the Action.

->Defines the location of that action

Actions are bundles of code used to perform a specific task or operation, and essentially, actions are docker images.

run:

->Runs commands in the virtual environments' shell

name:

->An optional identifies for the step

->can be paired with uses and runs.