

# YAML Terms for GitHub Actions

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## Workflow Syntax

Work flow triggers are events that cause a workflow to run:

- Events that occur in your workflow's repository
- Events that occur outside of GitHub and trigger a `repository_dispatch` event on GitHub
- Scheduled times
- Manual

`name` : The name of the GitHub Action

`on` : When or condition of when the workflow is triggered. There are different filters, branches, labels, that can be used to trigger the workflow.

`jobs` : A jobs runs in a runner environment as determined by `runs-on`

## Course Notes

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### Workflow Components

**Actions:** Reusable tasks that perform specific jobs within a workflow

**Workflows:** Automated processes defined in your repository that coordinate one or more jobs, triggered by events or on a schedule

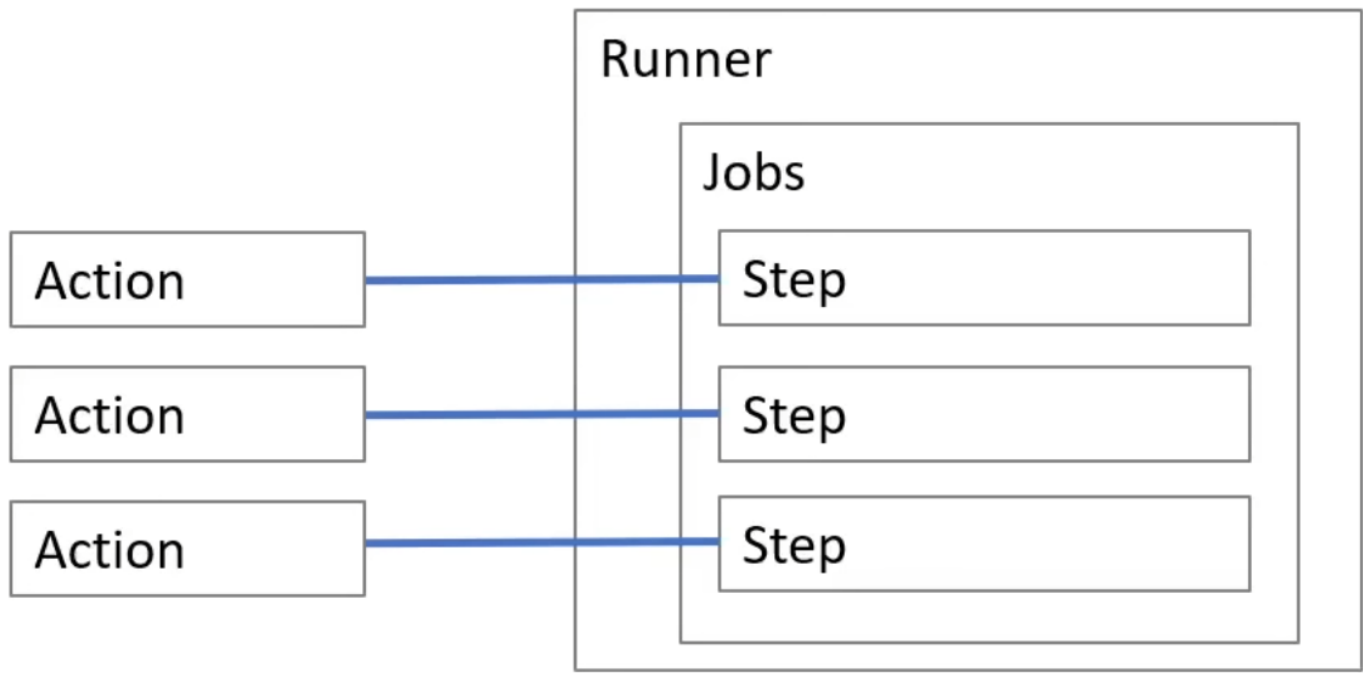
**Jobs:** Groups of steps that execute on the same runner, typically running in parallel unless configured otherwise

**Steps:** Individual tasks within a job that run commands or actions sequentially

**Runs:** Instances of workflow execution triggered by events, representing the complete run-through of a workflow

**Runners:** Servers that host the environment where the jobs are executed, available as GitHub-hosted or self-hosted options

**Marketplace:** A platform to find and share reusable actions



## Scheduling Events

**Schedule** can use a **cron expression** to trigger a workflow at a specific time or day

For example:

```
on:
  schedule:
    - cron: '30 5 * * 1,3'
    - cron: '30 5 * * 2,4'

jobs:
  test_schedule:
    runs-on: ubuntu-latest
    steps:
      - name: Not on Monday or Wednesday
        if: github.event.schedule != '30 5 * * 1,3'
        run: echo "Skip this step on Monday and Wednesday"
      - name: Every time
        run: echo "This step will always run"
```