Events triggers a workflow to run.

Events:

Repository Events: Push, Pull request, Open/Close Issue, Merge Branch.

External Events: Sending a Post request to a Rest API

Scheduled Times: Everyday at 6 PM

Manually: Pressing a Button.

Workflow can contains one or more Jobs.

Each Job is going to run in Runner Machine.

A Job can contain one or more steps. These steps can be run directly in runner machine or inside a docker container. Steps can be simple commands, actions, containers.

Each Job can run independent or parallel. Because each job will run on it’s own Runner Machine.

We can run Job each after another, if they are depend on each other.

Runner Machine:

Github Hosterd Runners (Windows/Linux/MacOS with tools installed)

Self Hosted Runners (More Responsibilty/Customization)

Larger Runners (Hosted by Github with more RAM & CPU)

**Create First-workflow**

First create a file under .github/workflows/<your file name>.yml. And insert below in it.

name: My First Workflow

on: [push]

jobs:

run-shell-commands:

runs-on: ubuntu-latest

steps:

* name: echo a string

run: echo “Hello world”

* name: Multiline Command

run: |

node -v

npm -v