

What is Github Actions?

- Its a CI/CD Platform built into Github.
- It lets us to automate workflows like building, testing and deploying the code when events occur in the github repo (eg: push, PR, issue, etc.)

Why Github Actions?

- No external CI tool needed
- Automate on push, pull request, release, etc.
- Supports any language (python, node, java, Docker, etc.)
- Run Parallel Jobs
- Save Test Report, Build Output
- Marketplace - 12000+ Prebuilt actions (eg: test, build, lint)

Key Component

- **Workflow**
 - A Complete automation pipeline
 - defined in **.github/workflows/*.yml**
- **Job**
 - Individual Task run on VM (Eg: build, test, deploy, etc)
- **Step**
 - Commands that Run inside a Job
 - Can be shell commands or reusable actions
- **Actions**
 - A packaged, reusable unit of work (from marketplace/ custom)