Continuous Integration with GitHub Actions



Aaron Stewart
PROGRAM ARCHITECT
www.github.com/a-a-ron

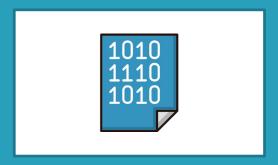
Core Concepts Overview



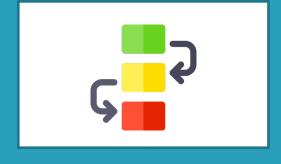
Actions



Runners



Artifacts



Jobs/Steps



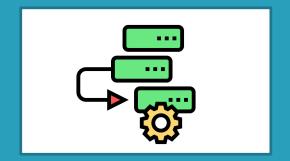
CI/CD



Workflow File



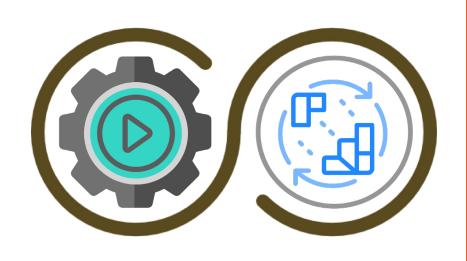
Events



Workflow Run



Continuous Integration (CI)



Adhere to your team's quality standards

Run automated test builds triggered by commits

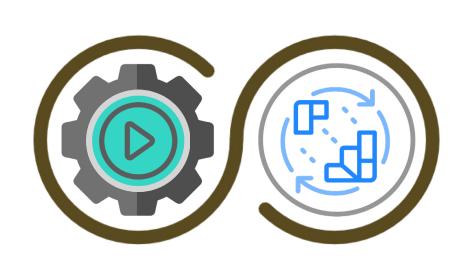
See check statuses directly on GitHub

Reduce context switching and errors

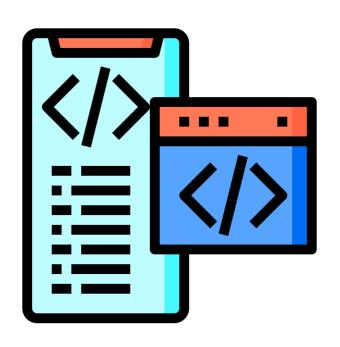
Improve consistency



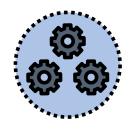
GitHub Actions







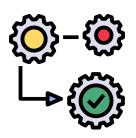
Customize a Workflow Beyond a Template



Test against multiple target environments



Branch protections



Dedicated test jobs



Required reviews



Access to build artifacts



Obvious approvals



Working with Build Artifacts

1010 1110 1010

- Artifacts are the files created when you build and test your code
- Binary, package, or log files



In Summary



GitHub Actions Hero

Cloned, modified, and pushed a new Git repository to GitHub

Added a Node.js template workflow and added CI to our project

Added and fixed failing tests

Added multiple target environments

Separated our workflow into dedicated build and test jobs

Access to build artifacts within our test job

