GitHub Actions with Node.js

Focus on what matters: **code**

SENCHACOM
MUNITYDAYS
19

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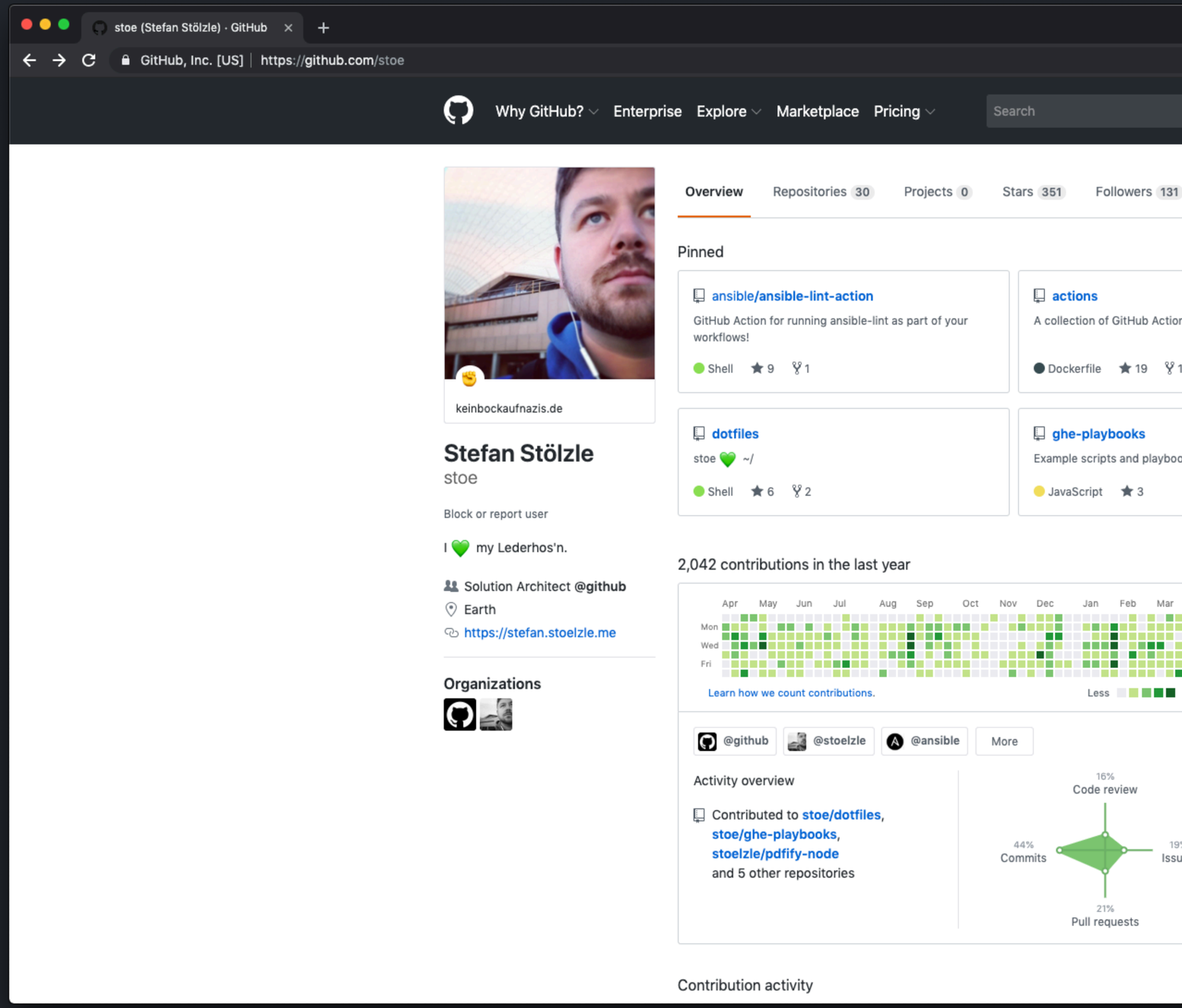
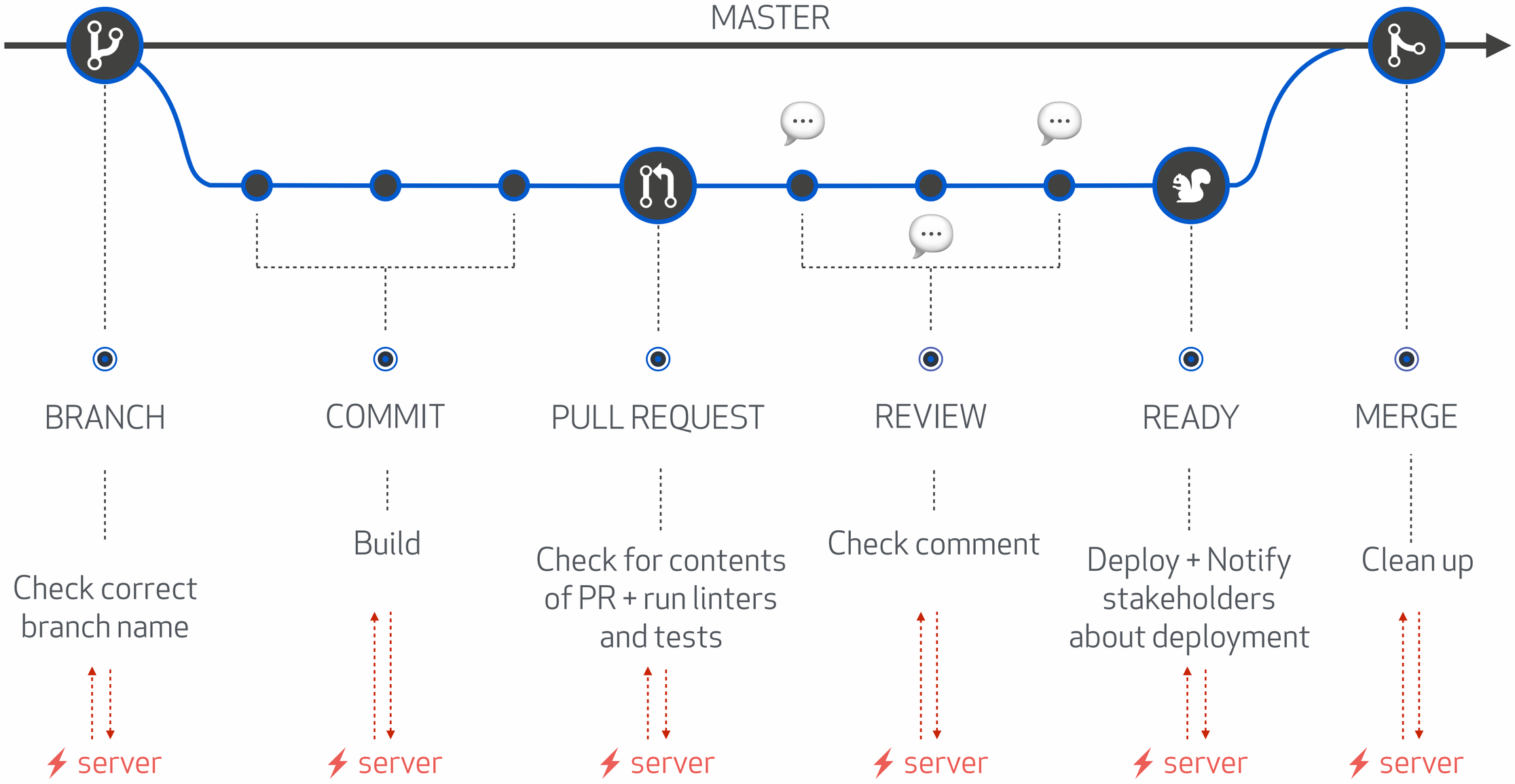
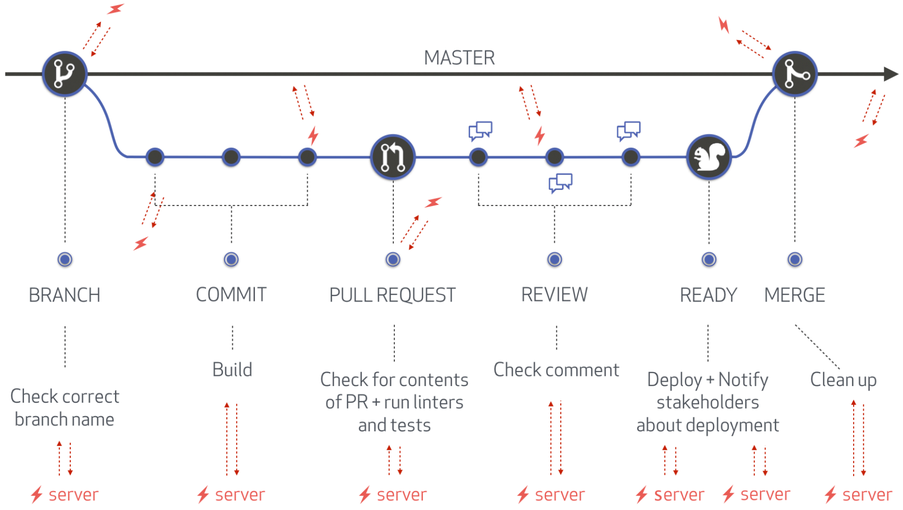


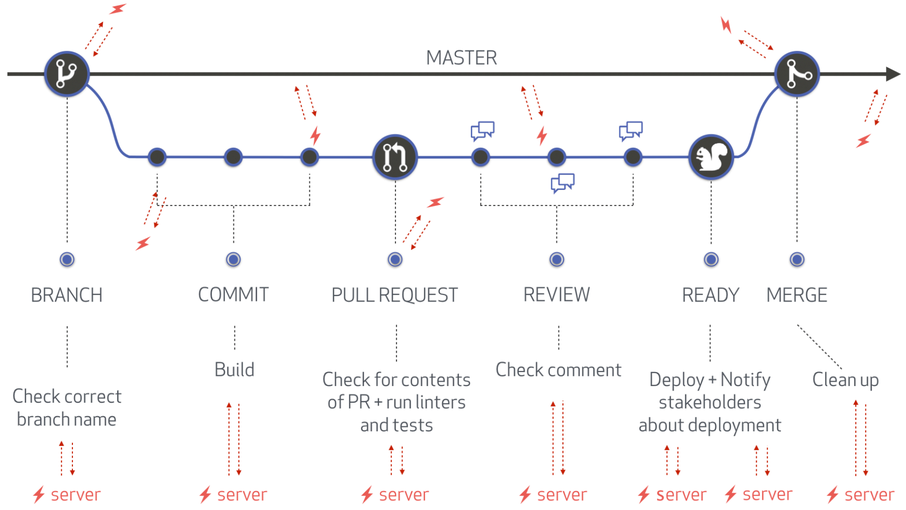
Developers' Flow Today


MASTER
BRANCH
COMMIT
PULL REQUEST
REVIEW
READY
MERGE
Check correct branch name
Build
Check for contents of PR + run linters and tests
Check comment
Deploy + Notify stakeholders about deployment
Clean up
server
server
server
server
server
server

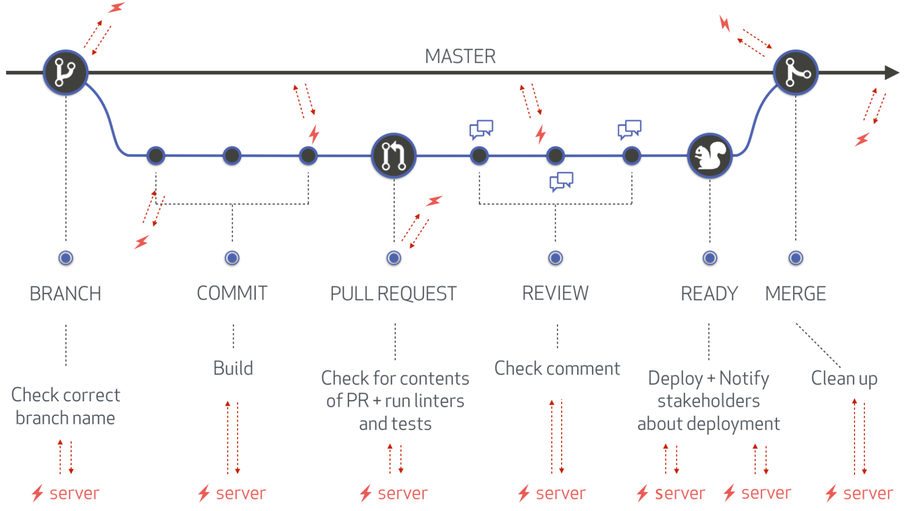
Project X



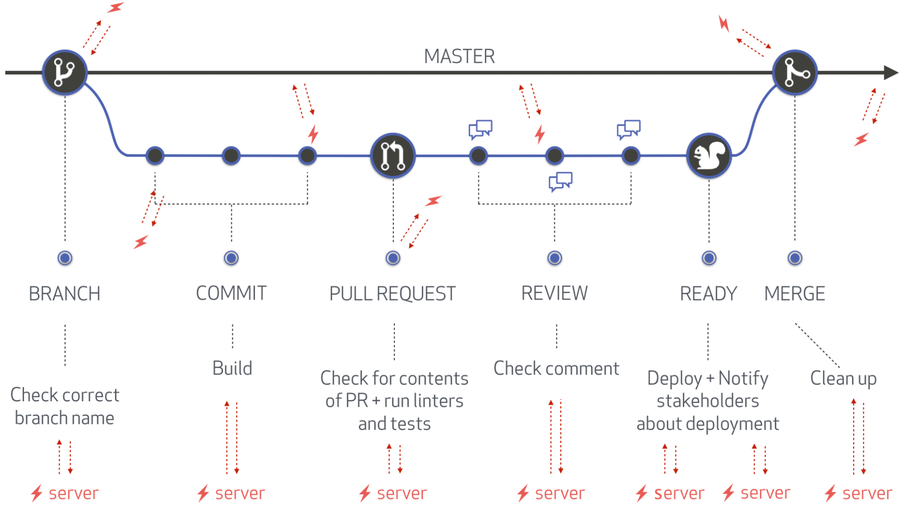
Project Y



Project Z



Project XY



How modular is it?

Maintainable?

Transparent?

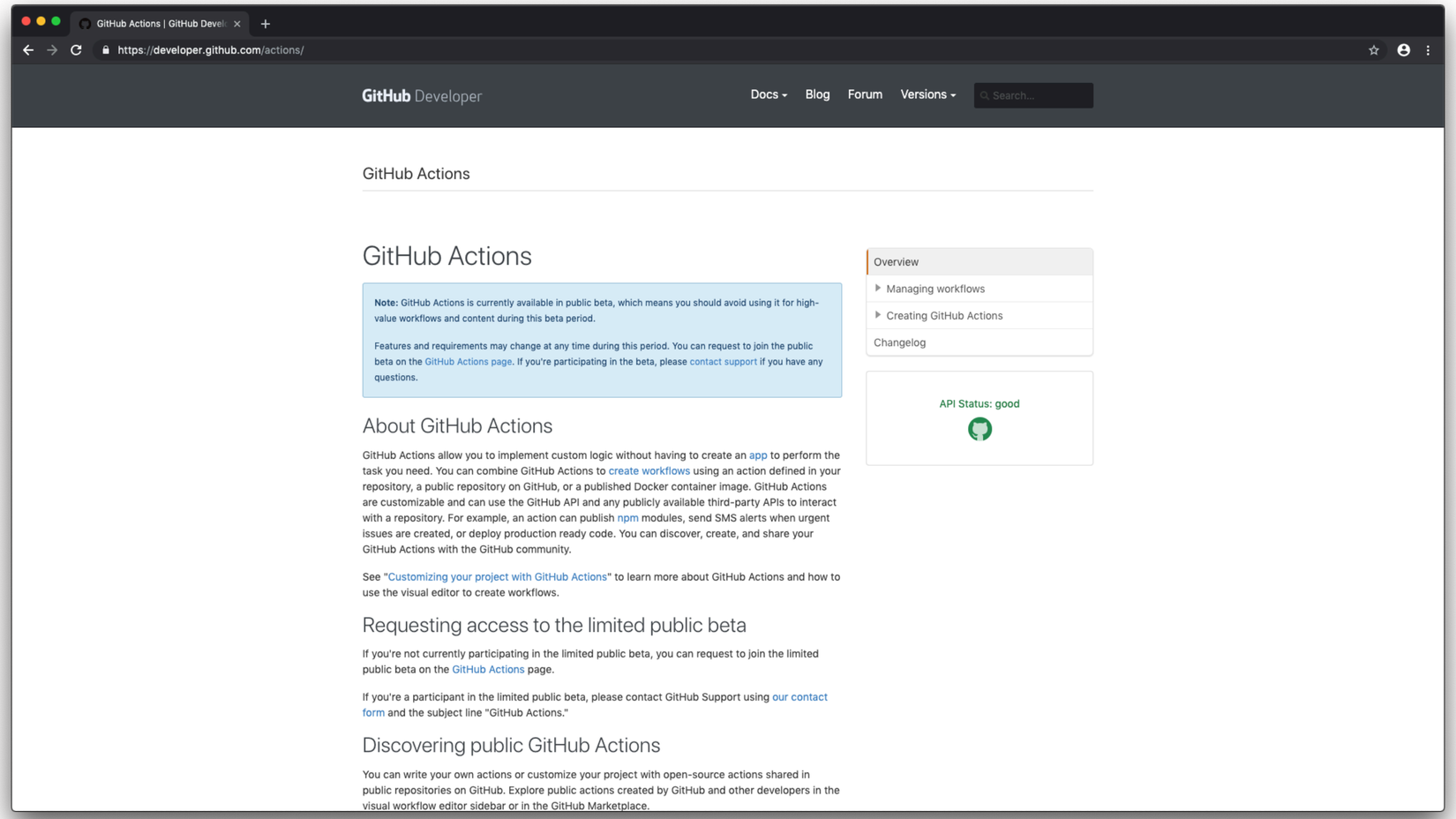
Re-usable?

Speed of delivery?

Actions is an r(evolution) in building workflows!

Actions enable all kinds of developer automation

IFTTT helps your apps and de
https://ifttt.com
IFTTT
Build new service
Sign in
Sign up
A world that
works for y
IFTTT is the free way to get all your a
vices
talking to each other. Not everything on the internet
plays nice, so we're on a mission to build a more
connected world.
Enter your email
Get started
or
Continue with Google
Continue with Facebook
Pizza party on
the 2nd floor!
IFTTT
"if this, then that"

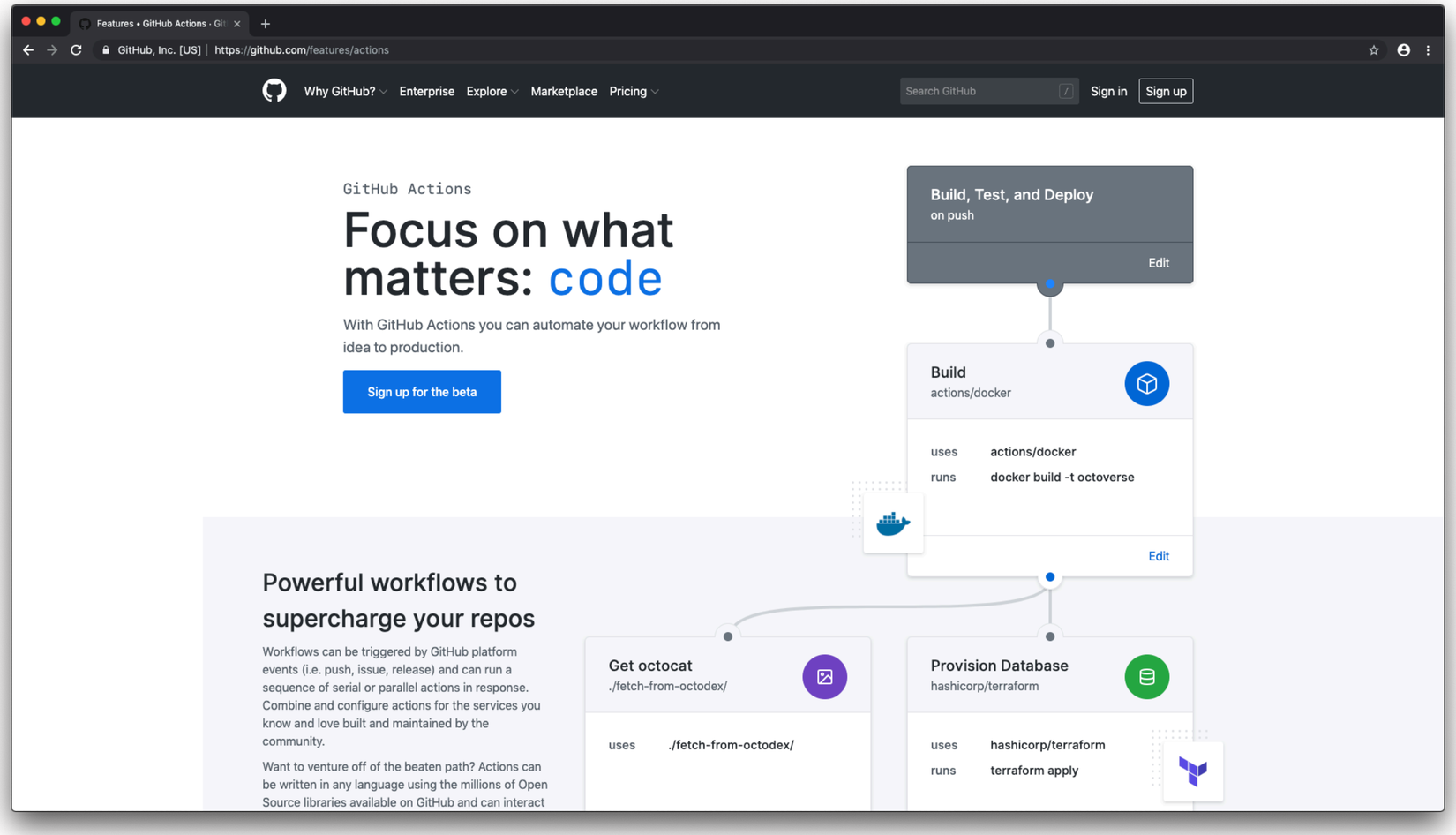


developer.github.com/actions

Event name	`GITHUB_SHA`	`GITHUB_REF`	Event description
check_run	Check run commit	Check suite branch	Triggered when a check run is `created`, `rerequested`, `completed`, or has a `requested_action`.
check_suite	Check suite commit	Check suite branch	Triggered when a check suite is `completed`, `requested`, or `rerequested`.
commit_comment	Commit that was commented on	n/a	Triggered when a commit comment is created.
create	Resolved by branch or tag	Branch or tag created	Represents a created repository, branch, or tag.
delete	Last commit on default branch	Default branch	Represents a deleted branch or tag.
deployment	Commit to be deployed	Branch/tag to be deployed (empty if commit)	Represents a deployment. Deployments created with a commit SHA may not have a GitHub ref.
deployment_status	Commit being deployed	Branch/tag to be deployed (empty if commit)	Represents a deployment status. Deployments created with a commit SHA may not have a GitHub ref.
fork	Last commit on default branch	Default branch	Triggered when a user forks a repository.
gollum	Last commit on default branch	Default branch	Triggered when a Wiki page is created or updated.

26 events

beta



github.com/features/actions

beta

32k signups

in 24 hours

Built by you, run by us

Executed as containers

Current runtime environment resources

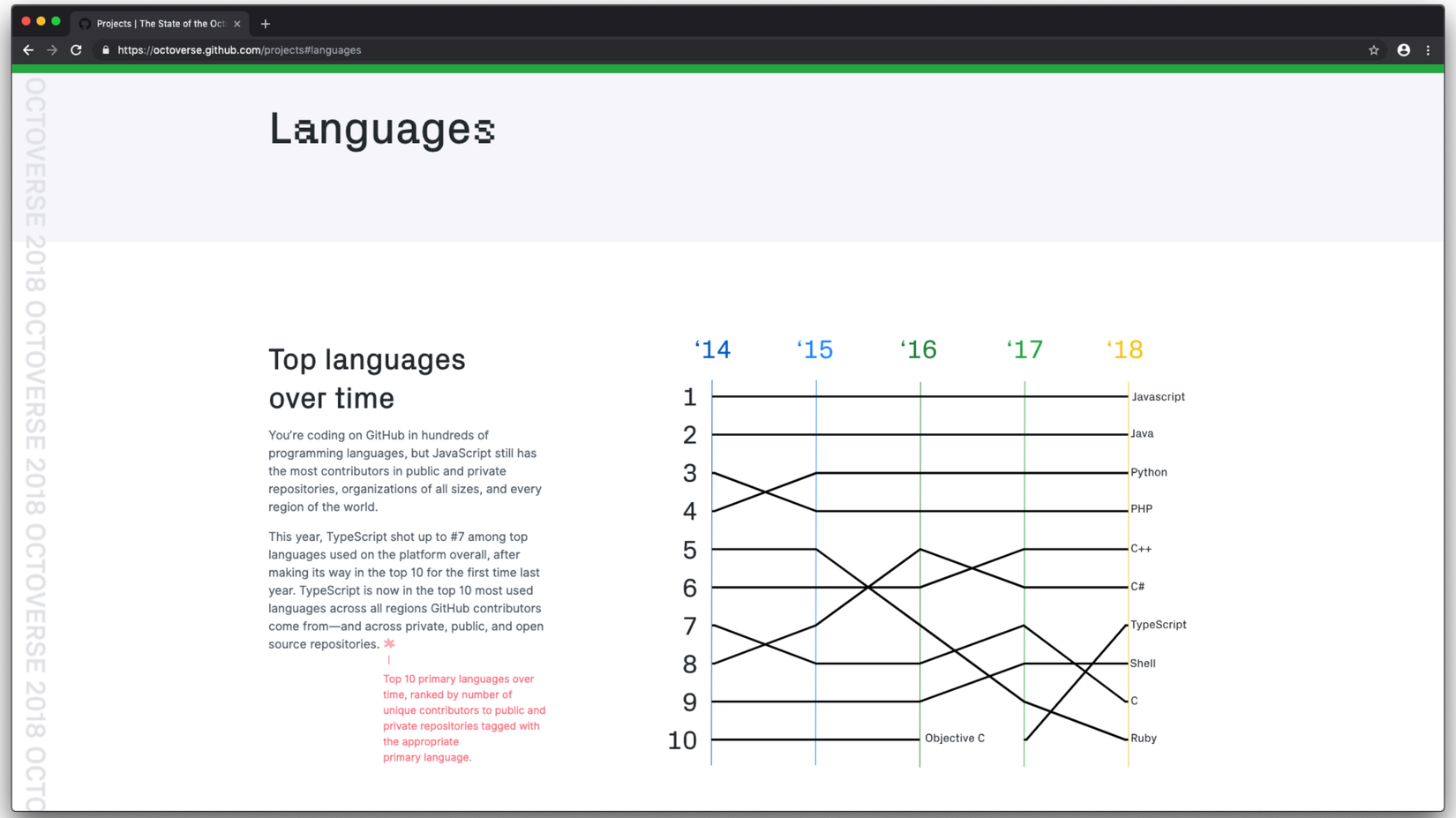
- 1 virtual CPU
- Up to 3.75 GB of memory
- Remote network access
- Environment variables describing current workflow context
- Write access to the filesystem
- 100 GB of disk space

Dockerfile

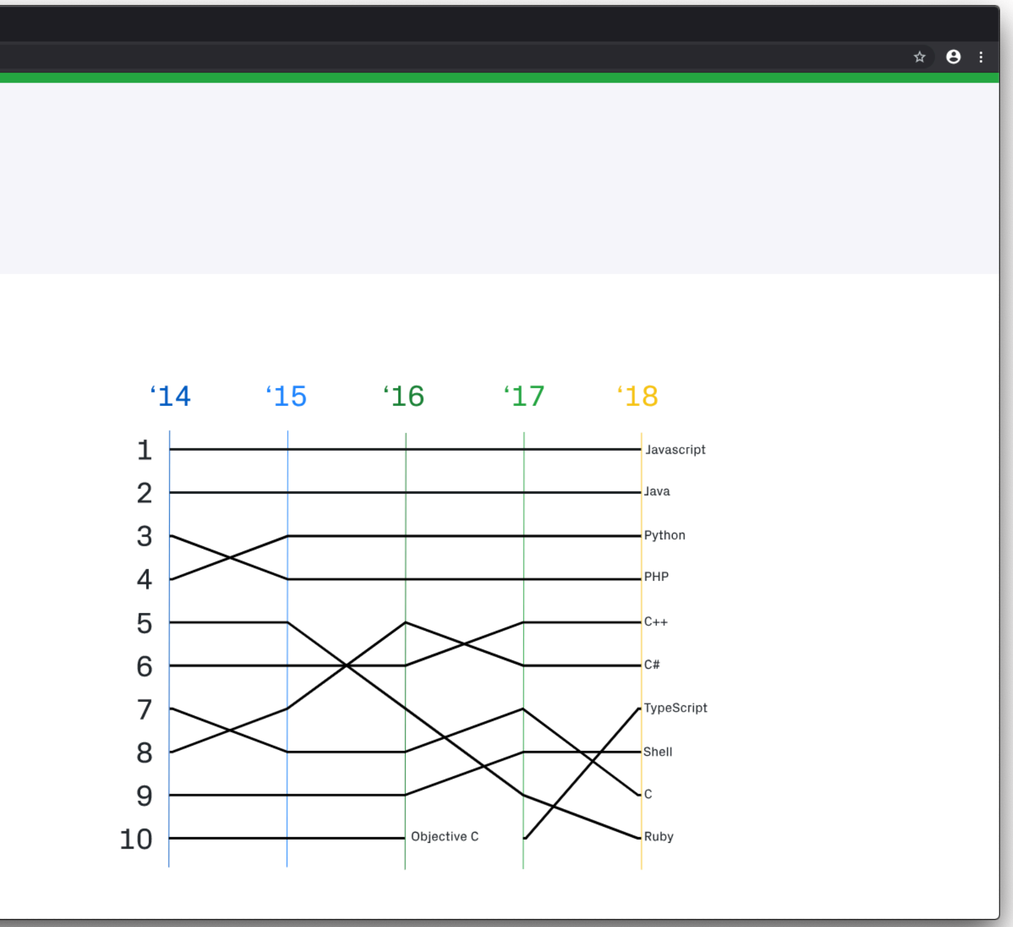
```
FROM debian:9.5-slim

# ...

COPY "entrypoint.sh" "/entrypoint.sh"

ENTRYPOINT ["/entrypoint.sh"]
```

entrypoint.sh

```
#!/bin/sh

set -e

echo "Hello Sencha Community Days"
```



octoverse.github.com/projects#languages



JavaScript

- is the most popular programming language on GitHub
- and has been for > 5 years

Dockerfile

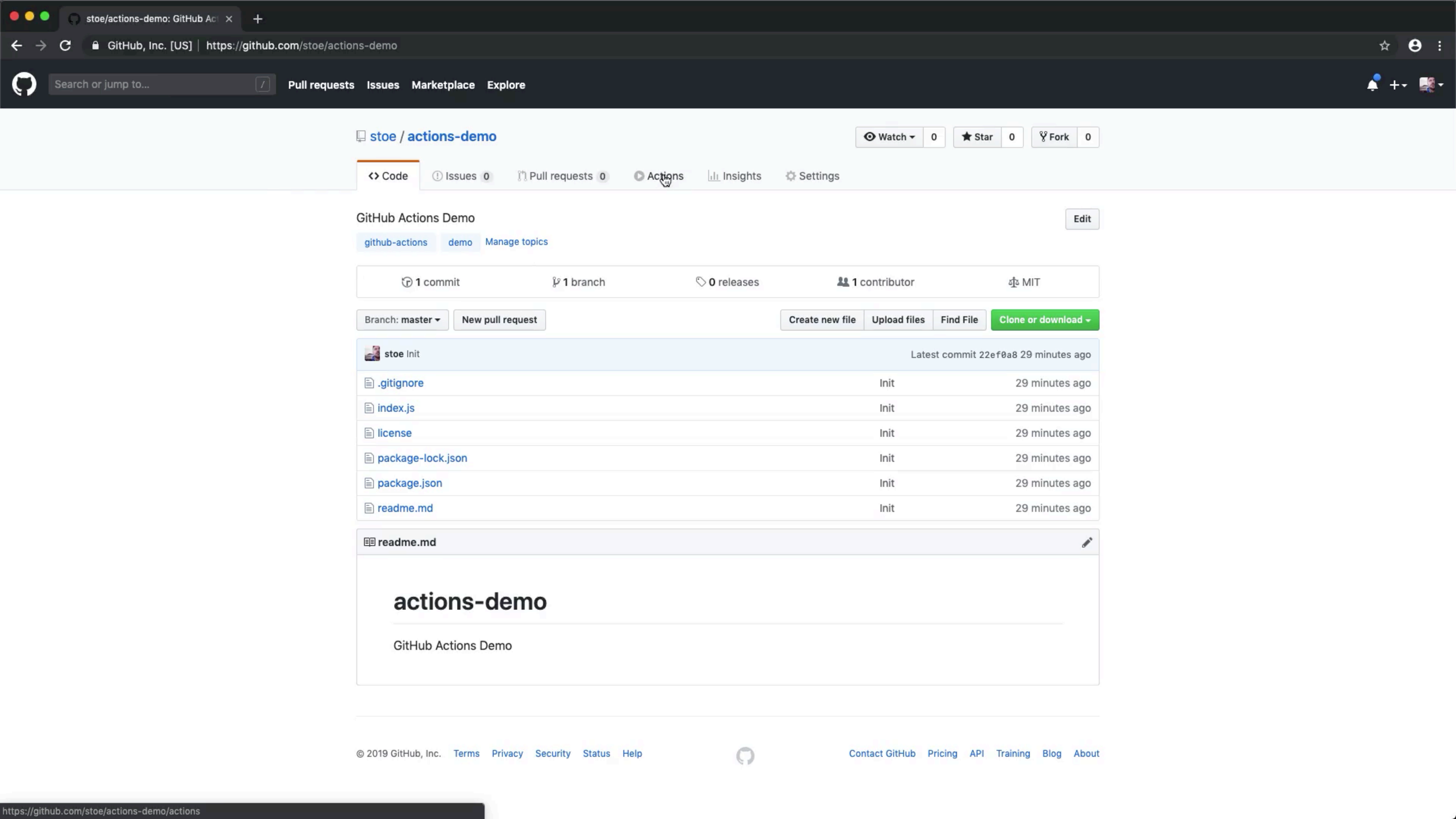
```
FROM node:10-slim

# ...

COPY package*.json ./
RUN npm ci
COPY . .

ENTRYPOINT ["node", "/entrypoint.js"]
```

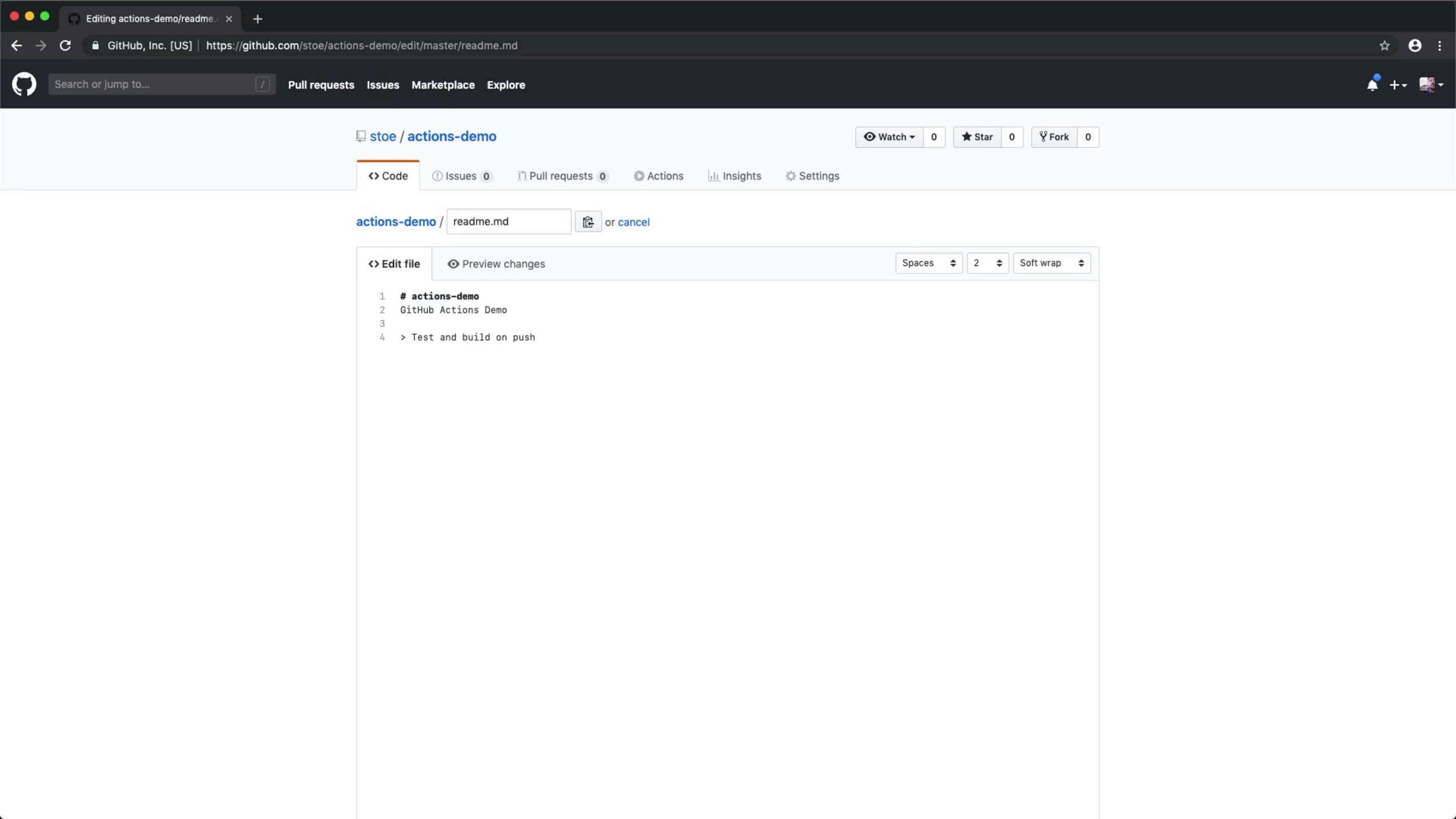
entrypoint.js

```
#!/usr/bin/env node

// github.com/JasonEtco/actions-toolkit
const {Toolkit} = require('actions-toolkit');

Toolkit.run(async tools => {

  // ...


  tools.log('Hello Sencha Community Days');

  // ...


});
```

Demo

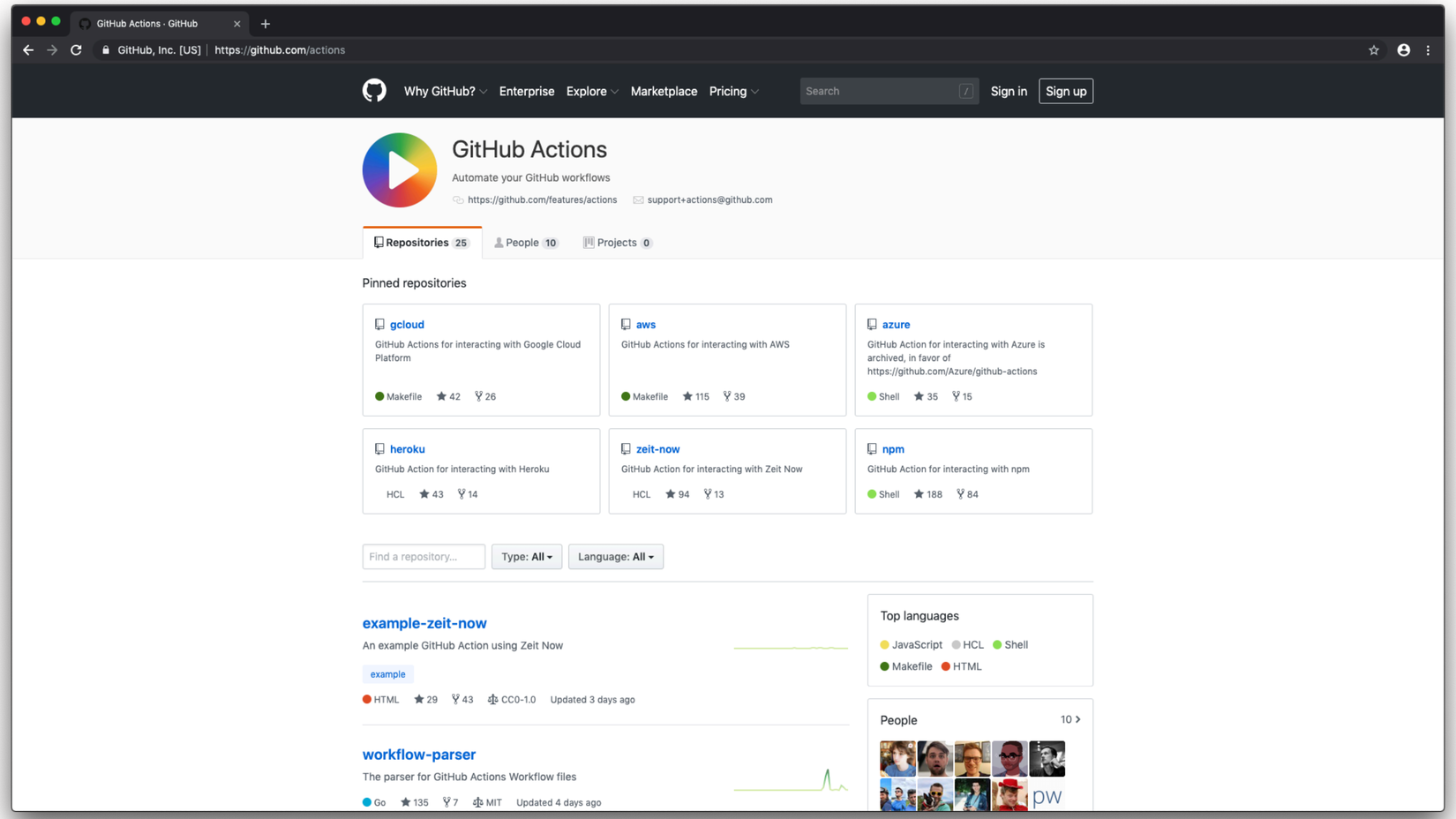
Live Hacking...


stoe/actions-demo: GitHub Act
GitHub, Inc. [US] | https://github.com/stoe/actions-demo
Search or jump to...
Pull requests
Issues
Marketplace
Explore
stoe / actions-demo
Watch 0
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Actions
Insights
Settings
GitHub Actions Demo
Edit
github-actions
demo
Manage topics
1 commit
1 branch
0 releases
1 contributor
MIT
Branch: master
New pull request
Create new file
Upload files
Find File
Clone or download
stoe Init
Latest commit 22ef0a8 29 minutes ago
.gitignore Init 29 minutes ago
index.js Init 29 minutes ago
license Init 29 minutes ago
package-lock.json Init 29 minutes ago
package.json Init 29 minutes ago
readme.md Init 29 minutes ago
readme.md
actions-demo
GitHub Actions Demo
© 2019 GitHub, Inc.
Terms
Privacy
Security
Status
Help
Contact GitHub
Pricing
API
Training
Blog
About
https://github.com/stoe/actions-demo/actions


Editing actions-demo/readme.
GitHub, Inc. [US] | https://github.com/stoe/actions-demo/edit/master/readme.md
Search or jump to...
Pull requests
Issues
Marketplace
Explore
stoe / actions-demo
Watch 0
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Actions
Insights
Settings
actions-demo / readme.md
or cancel
Edit file
Preview changes
Spaces
2
Soft wrap
1 # actions-demo
2 GitHub Actions Demo
3
4 > Test and build on push

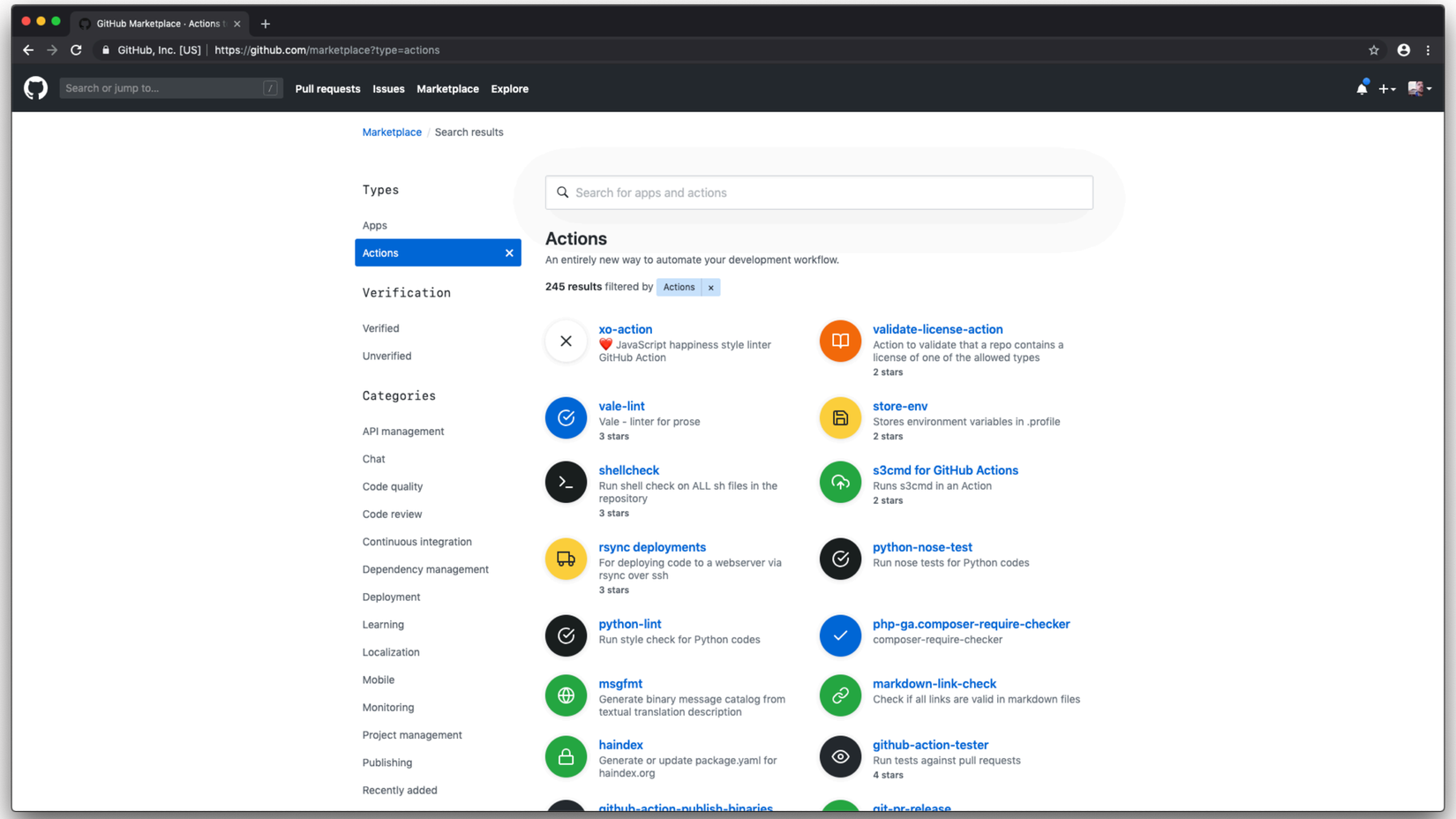
main.workflow

```
workflow "Test on push" {
  on = "push"
  resolves = ["test"]
}

action "build" {
  uses = "actions/npm@master"
  args = "install"
}

action "test" {
  uses = "actions/npm@master"
  needs = ["build"]
  args = "test"
}
```



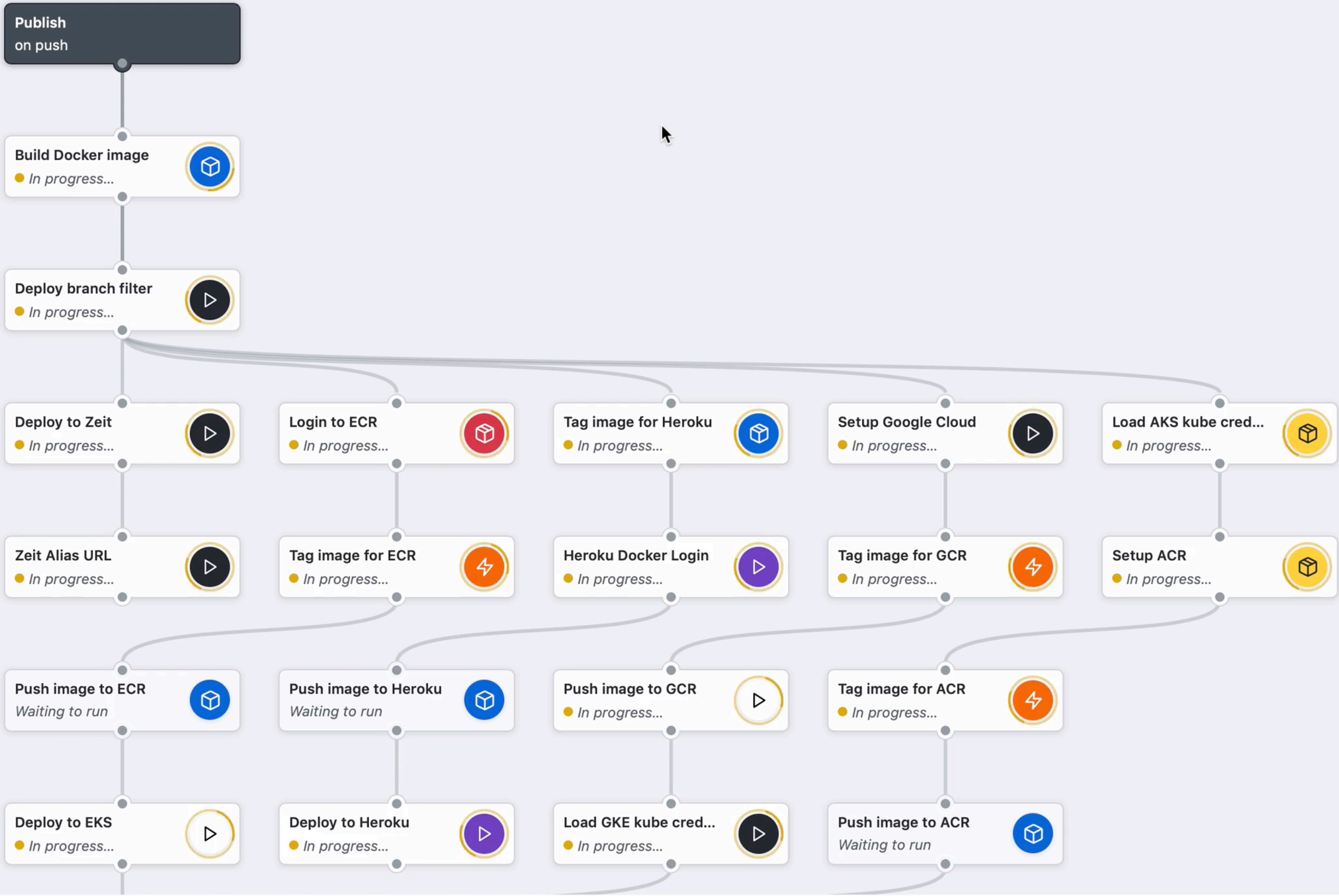
github.com/actions

beta



github.com/marketplace

github.com/nektos/act


Publish
on push
Build Docker image
In progress...
Deploy branch filter
In progress...
Deploy to Zeit
In progress...
Login to ECR
In progress...
Tag image for Heroku
In progress...
Setup Google Cloud
In progress...
Load AKS kube cred...
In progress...
Zeit Alias URL
In progress...
Tag image for ECR
In progress...
Heroku Docker Login
In progress...
Tag image for GCR
In progress...
Setup ACR
In progress...
Push image to ECR
Waiting to run
Push image to Heroku
Waiting to run
Push image to GCR
In progress...
Tag image for ACR
In progress...
Deploy to EKS
In progress...
Deploy to Heroku
In progress...
Load GKE kube cred...
In progress...
Push image to ACR
Waiting to run

SATELLITE

BERLIN, GERMANY

MAY 23rd 2019

Thank you

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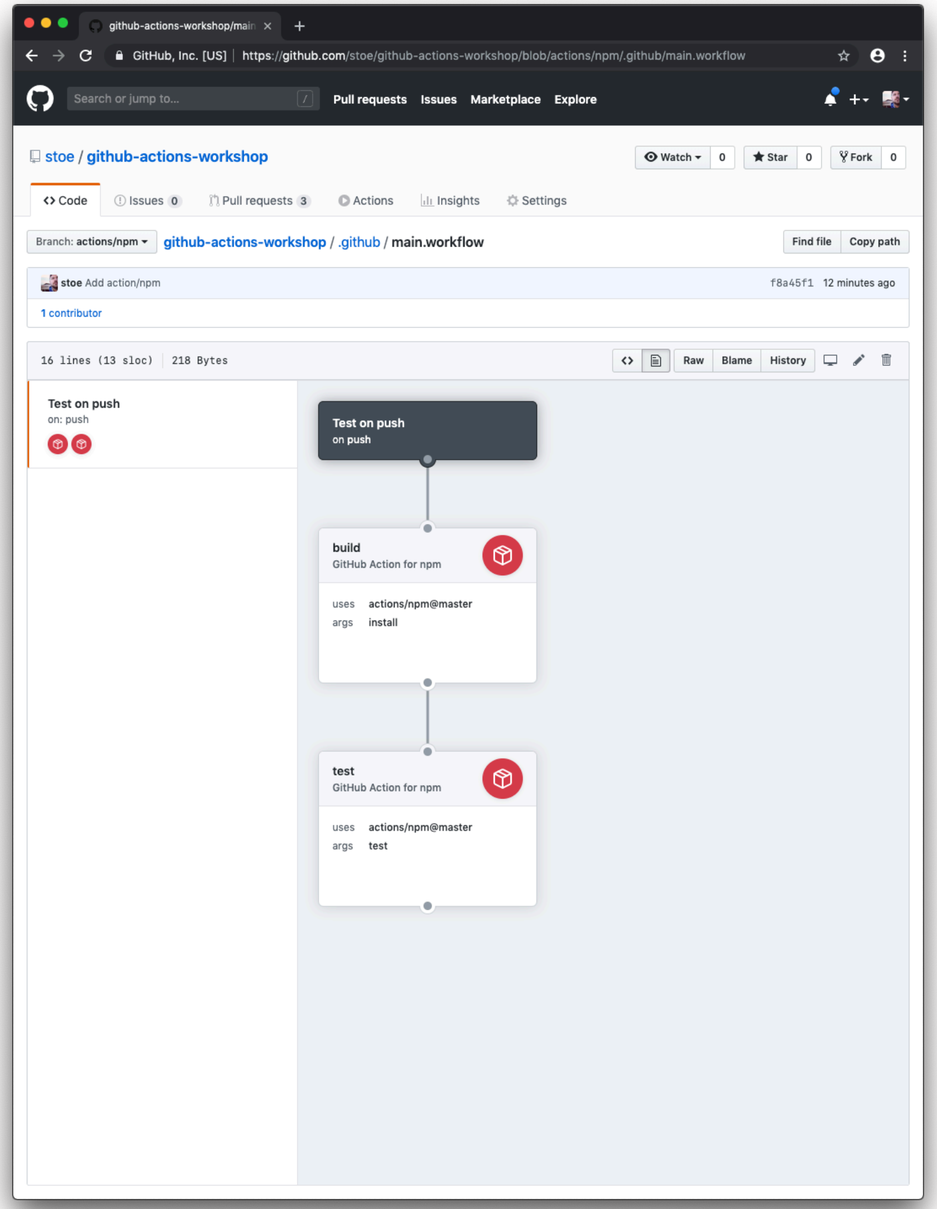
Appendix

GitHub Action

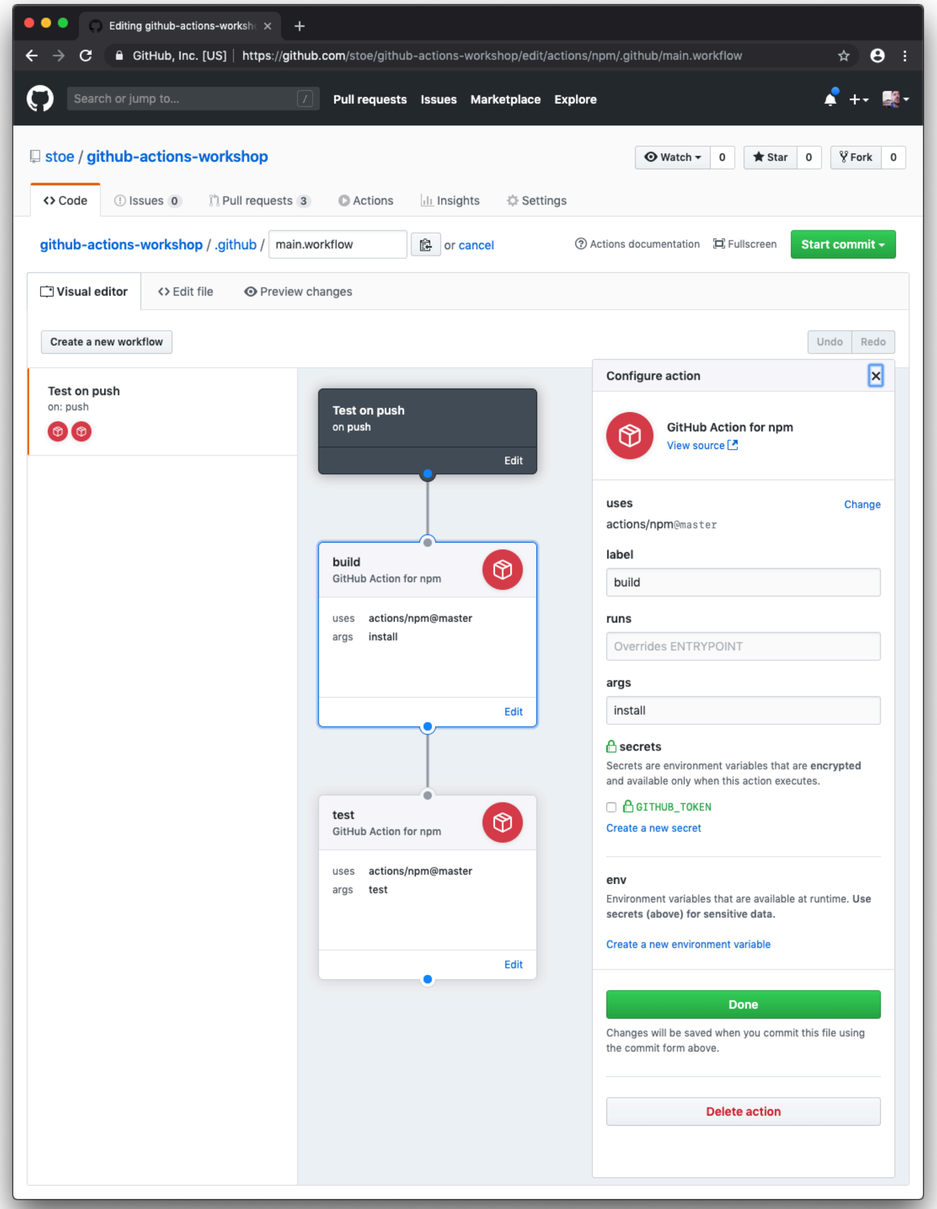
default



github.com/sencha-community-days/sencha-community-days-action/tree/actions/npm

GitHub Action

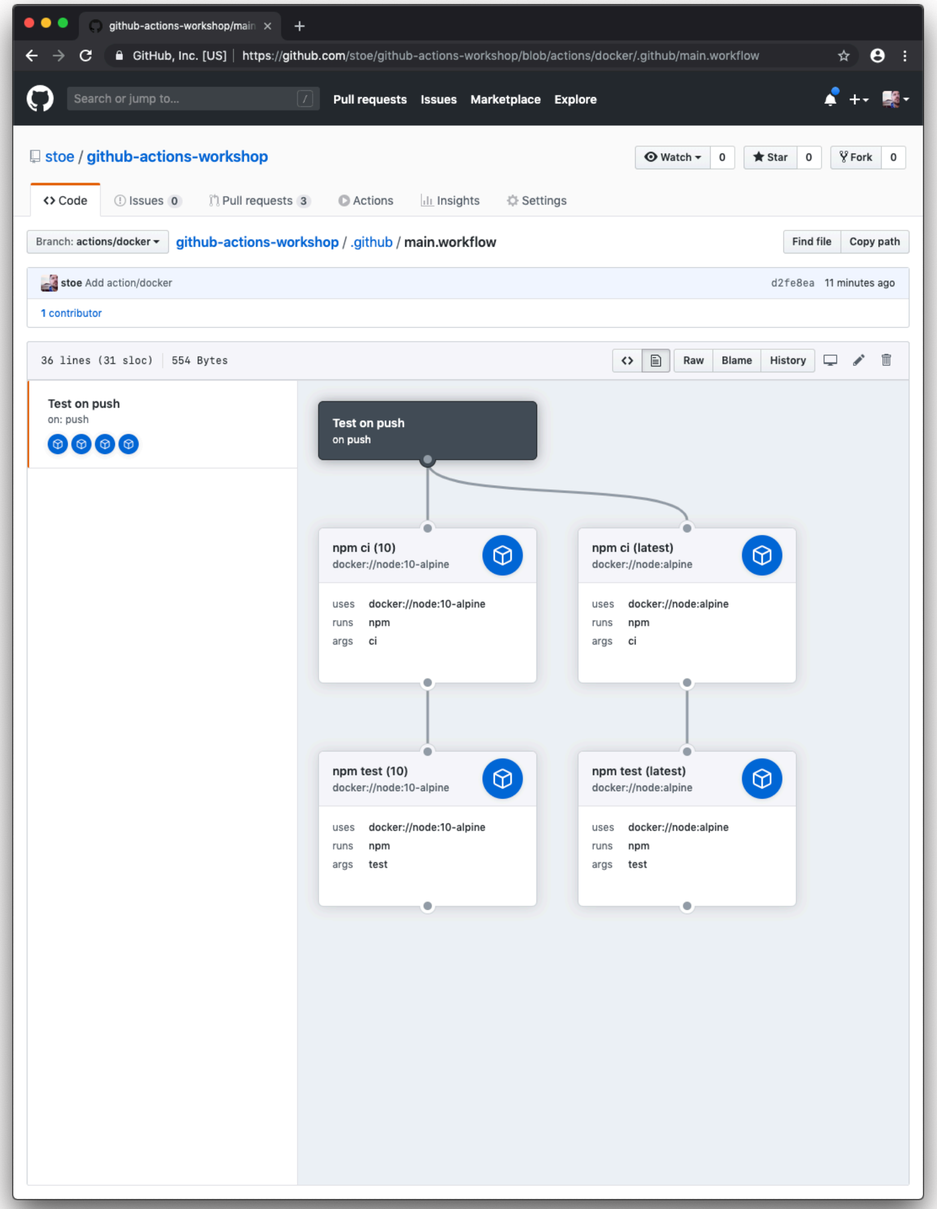
default



github.com/sencha-community-days/sencha-community-days-action/tree/actions/npm

GitHub Action

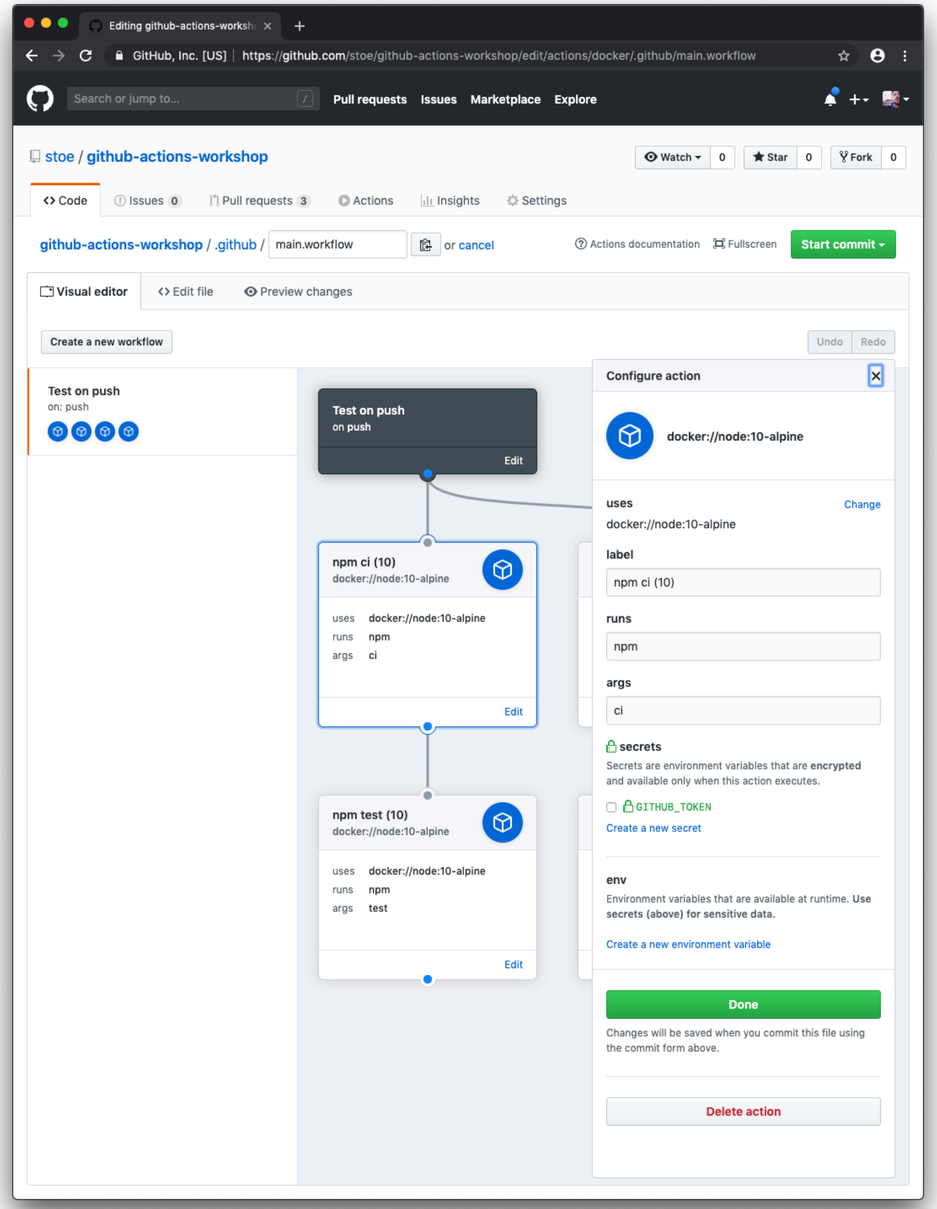
docker



github.com/sencha-community-days/sencha-community-days-action/tree/actions/docker

GitHub Action

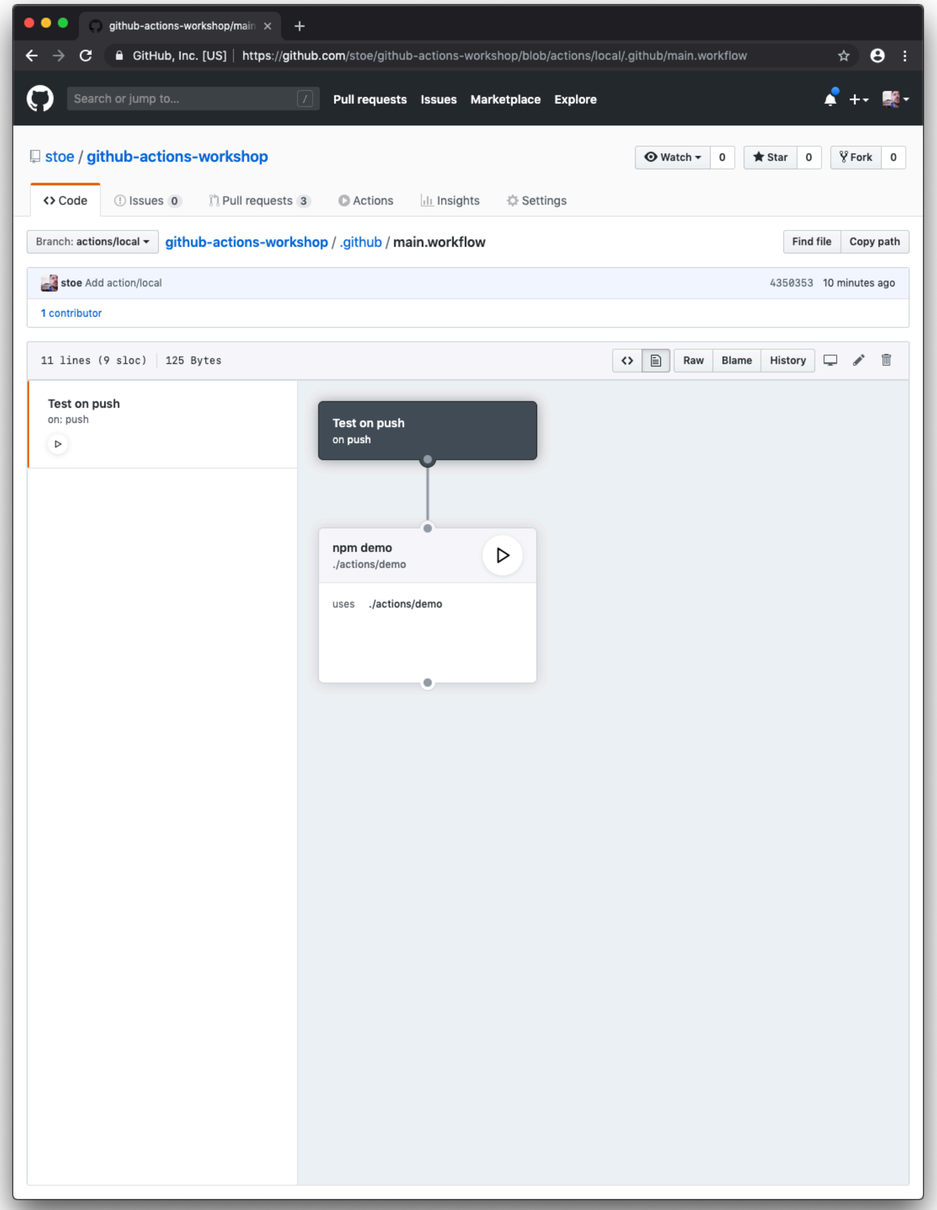
docker



github.com/sencha-community-days/sencha-community-days-action/tree/actions/docker

GitHub Action

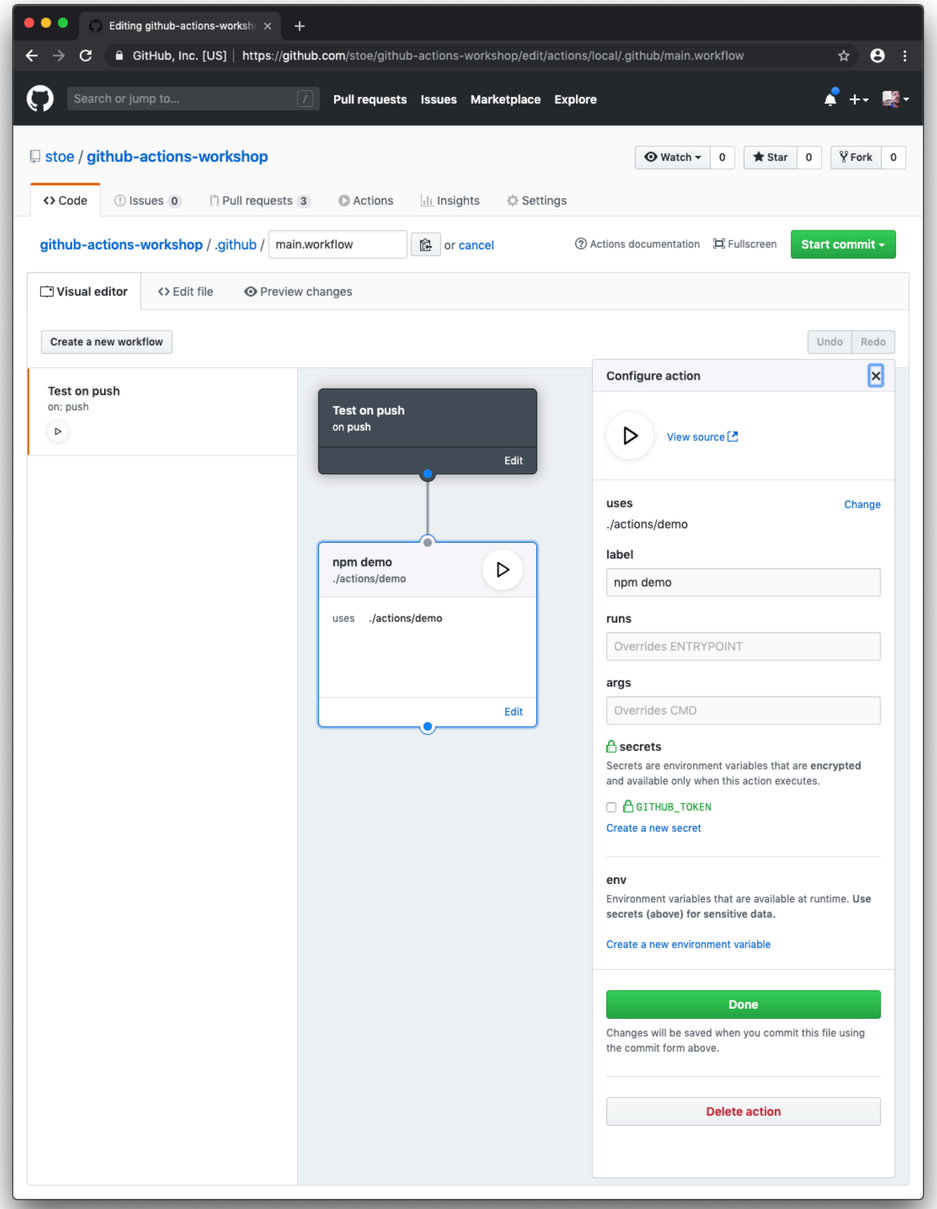
local



github.com/sencha-community-days/sencha-community-days-action/tree/actions/local

GitHub Action

local



github.com/sencha-community-days/sencha-community-days-action/tree/actions/local

Resources

- https://github.com/features/actions
- https://developer.github.com/actions
- https://github.com/actions
- https://github.com/marketplace?type=actions
- https://octoverse.github.com/projects#languages
- https://github.com/nektos/act
- https://github.com/sencha-community-days/sencha-community-days-action
- https://github.com/stoe/xo-action
- https://github.com/JasonEtco/actions-toolkit