

GitHub Actions & GitLab CI/CD

GitHub Actions

- Create a new repository on GitHub, then add the Dockerfile and the index.html files to it, from the exercise repository;

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk ().*

Owner *

iSqloud7

Repository name *

kiii-github-actions

[kiii-github-actions](#) is available.

```
PS C:\Users\Ivan\Desktop> git clone https://github.com/iSqloud7/kiii-github-actions.git
Cloning into 'kiii-github-actions'...
warning: You appear to have cloned an empty repository.
PS C:\Users\Ivan\Desktop> cd .\kiii-github-actions\
PS C:\Users\Ivan\Desktop\kiii-github-actions> notepad Dockerfile
PS C:\Users\Ivan\Desktop\kiii-github-actions>
```

Dockerfile.txt

```
FROM nginx:stable
COPY index.html /usr/share/nginx/html/index.html
```

```
PS C:\Users\Ivan\Desktop\kiii-github-actions> ls

Directory: C:\Users\Ivan\Desktop\kiii-github-actions

Mode                LastWriteTime         Length Name
----                -
-a----           4/27/2025   8:04 PM             67 Dockerfile.txt

PS C:\Users\Ivan\Desktop\kiii-github-actions> Rename-Item .\Dockerfile.txt Dockerfile
PS C:\Users\Ivan\Desktop\kiii-github-actions> ls

Directory: C:\Users\Ivan\Desktop\kiii-github-actions

Mode                LastWriteTime         Length Name
----                -
-a----           4/27/2025   8:04 PM             67 Dockerfile

PS C:\Users\Ivan\Desktop\kiii-github-actions> git add .\Dockerfile
PS C:\Users\Ivan\Desktop\kiii-github-actions> git commit -m "Adding Dockerfile!"
[master (root-commit) d1ba016] Adding Dockerfile!
 1 file changed, 2 insertions(+)
 create mode 100644 Dockerfile
PS C:\Users\Ivan\Desktop\kiii-github-actions> git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 269 bytes | 269.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/iSqloud7/kiii-github-actions.git
 * [new branch]      master -> master
```

kiii-github-actions / Dockerfile

pupinoskii and pupinoskii Adding Dockerfile!

Code Blame 2 lines (2 loc) · 66 Bytes

```
1 FROM nginx:stable
2 COPY index.html /usr/share/nginx/html/index.html
```

```
PS C:\Users\Ivan\Desktop\kiii-github-actions> notepad index.html
PS C:\Users\Ivan\Desktop\kiii-github-actions> ls

Directory: C:\Users\Ivan\Desktop\kiii-github-actions

Mode                LastWriteTime         Length Name
----                -
-a----           4/27/2025   8:04 PM             67 Dockerfile
-a----           4/27/2025   8:06 PM            215 index.html

PS C:\Users\Ivan\Desktop\kiii-github-actions>
```

index.html

```
<!DOCTYPE html>
<html>
<body>
  <h1>GitHub Actions</h1>
  <p>Example HTML webpage for the KIII course at FINKI.</p>
  <p>The course covers the basic aspects of DevOps engineering.</p>
</body>
</html>
```

```
PS C:\Users\Ivan\Desktop\kiii-github-actions> git add .\index.html
PS C:\Users\Ivan\Desktop\kiii-github-actions> git commit -m "Adding index.html!"
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\Ivan\Desktop\kiii-github-actions> git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 433 bytes | 433.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/iSqloud7/kiii-github-actions.git
d1ba016..29b4ceb master -> master
```

kiii-github-actions / index.html

pupinoskii and pupinoskii Adding index/html!

Code Blame 8 lines (8 loc) · 208 Bytes

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4 <h1>GitHub Actions</h1>
5 <p>Example HTML webpage for the KIII course at FINKI.</p>
6 <p>The course cover the basic aspects of DevOps engineering.</p>
7 </body>
8 </html>
```

- Create one Action in the repo using the Super-Linter;

Get started with GitHub Actions

Build, test, and deploy your code. Make code reviews, branch management, and issue triaging work the way you want. Select a workflow to get started.

Skip this and set up a workflow yourself →

Categories

Deployment

Security

Continuous integration

Automation

Pages

super linter

Found 1 workflow

Super Linter - Run Linters for several languages

By GitHub Actions

Run linters for several languages on your code base for changed files

Configure

GoCloud7 / kiii-github-actions

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

kiii-github-actions / github / workflows / super-linter.yml in master

Edit Preview Spaces 2 No wrap

```
1 # This workflow executes several linters on changed files based on languages used in your code base whenever
2 # you push a code or open a pull request.
3 #
4 # You can adjust the behavior by modifying this file.
5 # For more information, see:
6 # https://github.com/github/super-linter
7 name: Lint Code Base
8
9 on:
10   push:
11     branches: [ "master" ]
12   pull_request:
13     branches: [ "master" ]
14 jobs:
15   run-linters:
16     runs-on: ubuntu-latest
17     steps:
18       - name: Checkout code
19         uses: actions/checkout@v4
20       - name: Full git history is needed to get a proper list of changed files within "super-linter"
21         fetch-depth: 0
22       - name: Lint Code Base
23         uses: github/super-linter@v4
24     env:
25       VALIDATE_ALL_CODEBASE: false
26       DEFAULT_BRANCH: "master"
27       GITHUB_TOKEN: ${{ secrets.GITHUB_TOKEN }}
```

Marketplace Documentation

Search Marketplace for Actions

Featured Actions

- Setup Node.js environment By actions ⭐ 4.2k
- Upload a Build Artifact By actions ⭐ 3.5k
- Download a Build Artifact By actions ⭐ 1.5k
- Setup Go environment By actions ⭐ 1.5k
- First Interaction By actions ⭐ 794

kgcloud? / kill-github-actions

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

kill-github-actions / .github / workflows / super-linter.yml in master

Cancel changes Commit changes...

Edit Preview

```

1 # This workflow executes several linters on changed files based on languages used in your code base when
2 # you push a code or open a pull request.
3 #
4 # You can adjust the behavior by modifying this file.
5 # For more information, see:
6 # https://github.com/github/super-linter
7 name: Lint Code Base
8
9 on:
10   push:
11     branches: [ "master" ]
12   pull_request:
13     branches: [ "master" ]
14 jobs:
15   run-lint:
16     runs-on: ubuntu-latest
17     steps:
18       - name: Checkout code
19         uses: actions/checkout@v4
20       - name: Lint Code Base
21         uses: github/super-linter@v4
22         with:
23           # All git history is needed to get a proper list of changed files within 'super-linter'
24           fetch-depth: 0
25       - name: Post Checkout code
26         uses: actions/checkout@v4
27       - name: Lint Code Base
28         uses: github/super-linter@v4
29         with:
30           # All git history is needed to get a proper list of changed files within 'super-linter'
31           fetch-depth: 0
32       - name: Lint Code Base
33         uses: github/super-linter@v4
34         with:
35           # All git history is needed to get a proper list of changed files within 'super-linter'
36           fetch-depth: 0
37       - name: Lint Code Base
38         uses: github/super-linter@v4
39         with:
40           # All git history is needed to get a proper list of changed files within 'super-linter'
41           fetch-depth: 0
42       - name: Lint Code Base
43         uses: github/super-linter@v4
44         with:
45           # All git history is needed to get a proper list of changed files within 'super-linter'
46           fetch-depth: 0
47       - name: Lint Code Base
48         uses: github/super-linter@v4
49         with:
50           # All git history is needed to get a proper list of changed files within 'super-linter'
51           fetch-depth: 0
52       - name: Lint Code Base
53         uses: github/super-linter@v4
54         with:
55           # All git history is needed to get a proper list of changed files within 'super-linter'
56           fetch-depth: 0
57       - name: Lint Code Base
58         uses: github/super-linter@v4
59         with:
60           # All git history is needed to get a proper list of changed files within 'super-linter'
61           fetch-depth: 0
62       - name: Lint Code Base
63         uses: github/super-linter@v4
64         with:
65           # All git history is needed to get a proper list of changed files within 'super-linter'
66           fetch-depth: 0
67       - name: Lint Code Base
68         uses: github/super-linter@v4
69         with:
70           # All git history is needed to get a proper list of changed files within 'super-linter'
71           fetch-depth: 0
72       - name: Lint Code Base
73         uses: github/super-linter@v4
74         with:
75           # All git history is needed to get a proper list of changed files within 'super-linter'
76           fetch-depth: 0
77       - name: Lint Code Base
78         uses: github/super-linter@v4
79         with:
80           # All git history is needed to get a proper list of changed files within 'super-linter'
81           fetch-depth: 0
82       - name: Lint Code Base
83         uses: github/super-linter@v4
84         with:
85           # All git history is needed to get a proper list of changed files within 'super-linter'
86           fetch-depth: 0
87       - name: Lint Code Base
88         uses: github/super-linter@v4
89         with:
90           # All git history is needed to get a proper list of changed files within 'super-linter'
91           fetch-depth: 0
92       - name: Lint Code Base
93         uses: github/super-linter@v4
94         with:
95           # All git history is needed to get a proper list of changed files within 'super-linter'
96           fetch-depth: 0
97       - name: Lint Code Base
98         uses: github/super-linter@v4
99         with:
100          # All git history is needed to get a proper list of changed files within 'super-linter'
101          fetch-depth: 0

```

Commit changes

Commit message

Create super-linter.yml

Extended description

Add an optional extended description...

Commit directly to the master branch

Create a new branch for this commit and start a pull request

Cancel Commit changes

Marketplace Documentation

Search Marketplace for Actions

Featured Actions

- Setup Node.js environment
- Upload a Build Artifact
- Download a Build Artifact
- Setup Go environment
- First Interaction

Lint Code Base

Create super-linter.yml #1

Re-run all jobs Latest #2

Summary

Jobs

run-lint

Run details

Usage

Workflow file

run-lint succeeded now in 1m 30s

Search logs

- Set up job 1s
- Pull ghcr.io/github/super-linter:v4.10.0 1m 15s
- Checkout code 1s
- Lint Code Base 10s
- Post Checkout code 0s
- Complete job 0s

Actions

New workflow

All workflows

Showing runs from all workflows

Filter workflow runs

Help us improve GitHub Actions

Give feedback

1 workflow run

Create super-linter.yml

Lint Code Base #1: Commit 4cae15e pushed by kgcloud7

master

15 minutes ago

1m 36s

◦ Extend the Action to include a Docker image building and pushing to Docker Hub;

dockerhub

Explore My Hub

Search Docker Hub

Ctrl+K

Repositories

All repositories within the ivkeex namespace.

Search by repository name

All content

Create a repository

Name	Last Pushed	Contains	Visibility	Scout
ivkeex/kii-jenkins	16 days ago	IMAGE	Public	Inactive

Create access token

A personal access token is similar to a password except you can have many tokens and revoke access to each one at any time. [Learn more](#)

Access token description
github-actions-access-token

Expiration date
None

Optional
Access permissions
Read, Write, Delete

Read, Write, Delete tokens allow you to manage your repositories.

Cancel Generate

Repository secrets

[New repository secret](#)

Name ↕	Last updated
DOCKERHUB_TOKEN	now
DOCKERHUB_USERNAME	1 minute ago

[kiii-github-actions / .github / workflows /](#)

[iScloud7](#) New workflow for DockerHub.yml

Name	Last commit message
..	
docker-build-and-push.yml	New workflow for DockerHub.yml
super-linter.yml	Create super-linter.yml

- Combine super-linter.yml and docker-build-and-push.yml in one .yml file;

```
# This workflow executes several linters on changed files based on languages used in your code base whenever
# you push a code or open a pull request.
#
# You can adjust the behavior by modifying this file.
# For more information, see:
# https://github.com/github/super-linter
name: Lint Code Base and Docker Build and Push

on:
  push:
    branches: [ "master" ]
  pull_request:
    branches: [ "master" ]
jobs:
  run-lint:
    runs-on: ubuntu-latest
    steps:
      - name: Checkout code
        uses: actions/checkout@v3
        with:
          # Full git history is needed to get a proper list of changed files within `super-linter`
          fetch-depth: 0

      - name: Lint Code Base
        uses: github/super-linter@v4
        env:
          VALIDATE_ALL_CODEBASE: false
          DEFAULT_BRANCH: "main"
          GITHUB_TOKEN: ${ secrets.GITHUB_TOKEN }
```

```
docker:
  runs-on: ubuntu-latest
  needs: run-lint
  steps:
    -
      name: Set up QEMU
      uses: docker/setup-qemu-action@v3
    -
      name: Set up Docker Buildx
      uses: docker/setup-buildx-action@v3
    -
      name: Login to Docker Hub
      uses: docker/login-action@v3
      with:
        username: ${ secrets.DOCKERHUB_USERNAME }
        password: ${ secrets.DOCKERHUB_TOKEN }
    -
      name: Build and push
      uses: docker/build-push-action@v5
      with:
        push: true
        tags: ivkeex/kiii-jenkins:latest
```

isqloud7 / kiii-github-actions

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

← Lint Code Base and Docker Build and Push

Update linter-and-docker-build-and-push.yml #1

Summary

Jobs

run-lint

docker

Run details

Usage

Workflow file

Triggered via push 2 minutes ago

Status

Total duration

Artifacts

isqloud7 pushed 4c79316 master Success 2m 2s -

linter-and-docker-build-and-push.yml

on: push

run-lint 1m 33s

docker 19s

ivkeex/kiii-jenkins

Last pushed 12 minutes ago · Repository size: 138.8 MB

Add a description

Add a category

General Tags Image Management BETA Collaborators Webhooks Settings

Tags

DOCKER SCOUT INACTIVE

Activate

This repository contains 14 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	less than 1 day	12 minutes

GitLab CI/CD

- Create a new repository on GitLab, and add the Dockerfile and the index.html files to it;

K

kiii-gitlab-cicd

Free

main

kiii-gitlab-cicd

+

Find file

Edit

Code

Delete README.md

Ivan Pupinoski authored 8 minutes ago

cb01c05b

History

Name	Last commit	Last update
Dockerfile	Adding Dockerfile and index.html!	9 minutes ago
index.html	Adding Dockerfile and index.html!	9 minutes ago

- Create one CI script which will build and push a Docker image to Docker Hub;

ivanpupinoski / kiii-gitlab-cicd / Pipeline editor

main

Pipeline #1788899877 passed

Pipeline passed for 4e974237 19 seconds ago

Pipeline syntax is correct. Learn more

Edit Visualize Validate Full configuration

CI/CD Catalog

Help

```
1 # This file is a template, and might need editing before it works on your project.
2 # Build a Docker image with CI/CD and push to the GitLab registry.
3 # Docker-in-Docker documentation: https://docs.gitlab.com/ee/ci/docker/using_docker_build.html
4 #
5 # This template uses one generic job with conditional builds
6 # for the default branch and all other (MR) branches.
7 docker-build:
8   # Use the official docker image.
9   image: docker:latest
10  stage: build
11  services:
12    - docker:dind
13  before_script:
14    - docker login -u "$CI_REGISTRY_USER" -p "$CI_REGISTRY_PASSWORD" $CI_REGISTRY
15    # Default branch leaves tag empty (= latest tag)
16    # All other branches are tagged with the escaped branch name (commit ref slug)
17  script:
18    - docker build --pull -t "$CI_REGISTRY_IMAGE" .
19    - docker push "$CI_REGISTRY_IMAGE"
20  # Run this job in a branch where a Dockerfile exists
21  rules:
22    - if: $CI_COMMIT_BRANCH
23      exists:
24        - Dockerfile
25  --
```

CI/CD Variables 4

Reveal values Add variable

Key	Value	Environments	Actions
CL_REGISTRY	*****	All (default)	
CL_REGISTRY_IMAGE	*****	All (default)	
CL_REGISTRY_PASSWORD	*****	All (default)	
CL_REGISTRY_USER	*****	All (default)	

Repositories / kiii-jenkins / General

ivkeex/kiii-jenkins

Last pushed 1 minute ago · Repository size: 138.8 MB

Add a description

Add a category

General

Tags

Image Management

Collaborators

Webhooks

Settings

Tags

DOCKER SCOUT INACTIVE

This repository contains 14 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	less than 1 day	1 minute