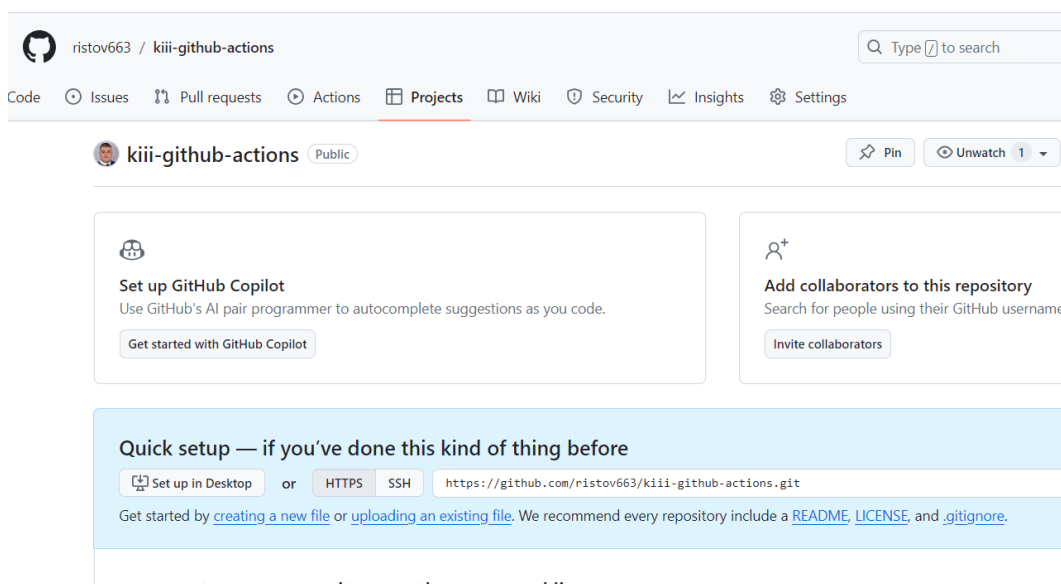


# Class Assignment / Homework V

## Part 1: GitHub Actions

1. Create a new repository on GitHub, then add the Dockerfile and the index.html files to it, from the exercise repository;
2. Create one Action in the repo using the Super-Linter;
3. Extend the Action to include a Docker image building and pushing to Docker Hub;



```
bojan@bojan-VirtualBox: ~/kiii-github-actions
bojan@bojan-VirtualBox:~$ git clone https://github.com/ristov663/kiii-github-actions
Cloning into 'kiii-github-actions'...
warning: You appear to have cloned an empty repository.
bojan@bojan-VirtualBox:~$ cd kiii-github-actions/
bojan@bojan-VirtualBox:~/kiii-github-actions$ git status
On branch main
No commits yet
nothing to commit (create/copy files and use "git add" to track)
bojan@bojan-VirtualBox:~/kiii-github-actions$ nano index.html
bojan@bojan-VirtualBox:~/kiii-github-actions$ nano Dockerfile
bojan@bojan-VirtualBox:~/kiii-github-actions$
```

```
bojan@bojan-VirtualBox: ~/kiii-github-actions
GNU nano 6.2 index.html *
<!DOCTYPE html>
<html>
  <body>
    <h1>GitHub Actions</h1>
    <p>Example HTML webpage for the KIII course at FINKI.</p>
    <p>The course cover the basic aspects of DevOps engineering.</p>
  </body>
</html>
```






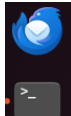
```
bojan@bojan-VirtualBox: ~/kiii-github-actions
GNU nano 6.2 Dockerfile *
FROM nginx:stable
COPY index.html /usr/share/nginx/html/index.html
```



```
bojan@bojan-VirtualBox:~/kiii-github-actions$
bojan@bojan-VirtualBox:~/kiii-github-actions$ git status
On branch main










No commits yet


Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Dockerfile
        index.html





nothing added to commit but untracked files present (use "git add" to track)
bojan@bojan-VirtualBox:~/kiii-github-actions$ git add Dockerfile
bojan@bojan-VirtualBox:~/kiii-github-actions$ git add index.html
bojan@bojan-VirtualBox:~/kiii-github-actions$ git commit -m "First commit of this repo"
[main (root-commit) 8d2602a] First commit of this repo
 2 files changed, 10 insertions(+)
 create mode 100644 Dockerfile
 create mode 100644 index.html
bojan@bojan-VirtualBox:~/kiii-github-actions$ git push
Username for 'https://github.com': ristov663
Password for 'https://ristov663@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 6 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 480 bytes | 480.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ristov663/kiii-github-actions
 * [new branch]      main -> main
bojan@bojan-VirtualBox:~/kiii-github-actions$
```





ristov663 / **kiii-github-actions**




 **kiii-github-actions** Public


  Unwatch 1  Fork 0 



main 


1 Branch 

0 Tags

 Code


 **ristov663** First commit of this repo 8d2602a · 7 minutes ago 1 Commits


 Dockerfile	First commit of this repo	7 minutes ago
 index.html	First commit of this repo	7 minutes ago


 **README**


About



No description, website, or provided.










 Activity


 0 stars


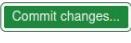
 1 watching

 0 forks

ristov663 / **kiii-github-actions**




 **kiii-github-actions** / **.github / workflows /**  in **main**

 Cancel changes  Commit changes...

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: [ "main" ]
12   pull_request:
13     branches: [ "main" ]
14 jobs:
15   run-lint:
16     runs-on: ubuntu-latest
17     steps:
18       - name: Checkout code
19         uses: actions/checkout@v3
```

Marketplace Documentation


Featured Actions

 **Cache** By actions 4.2k



Cache artifacts like dependencies and build outputs to improve workflow execution time










 **Setup Node.js environment** By actions 3.6k


Setup a Node.js environment by adding problem matchers and optionally downloading and adding it to the PATH


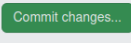
 **Setup Java JDK** By actions 1.4k

Set up a specific version of

ristov663 / **kiii-github-actions**




 **kiii-github-actions** / **.github / workflows /**  in **main**

 Cancel changes  Commit changes...

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: [ "main" ]
12   pull_request:
13     branches: [ "main" ]
14 jobs:
15   run-lint:
16     runs-on: ubuntu-latest
17     steps:
18       - name: Checkout code
19         uses: actions/checkout@v3
```

Commit changes

Commit message

Extended description

☒ Commit directly to the main branch

☐ Create a new branch for this commit and start a pull request [Learn more about pull requests](#)

Cancel

Commit changes

Marketplace Documentation

Featured Actions

 **Cache** By actions 4.2k

Cache artifacts like dependencies and build outputs to improve workflow execution time

 **Setup Node.js environment** By actions 3.6k

Setup a Node.js environment by adding problem matchers and optionally downloading and adding it to the PATH

 **Setup Java JDK** By actions 1.4k

Set up a specific version of

Use **control + shift + m** to toggle the **tab** key moving focus. Alternatively, use **esc** then **tab** to move to the next interactive

ristov663 / kiii-github-actions

Q Type to search

>

+

+

+

+

+

+

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

Lint Code Base

✔ Create super-linter.yml #1

Re-run all jobs

Summary

Jobs

✔ run-lint

Run details

Usage

Workflow file

run-lint

succeeded now in 1m 40s

Beta Give feedback

Search logs

> ✔ Set up job1s

> ✔ Pull ghcr.io/github/super-linter:v4.10.01m 26s

> ✔ Checkout code1s

> ✔ Lint Code Base19s

> ✔ Post Checkout code0s

> ✔ Complete job0s

kiii-github-actions / index.html

ristov663 Update index.html9cf900e · nowHistory

CodeBlame9 lines (9 loc) · 235 Bytes

RawCopyDownloadEdit

```
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   <p>Line with error!!!
8 </body>
9 </html>
```

ristov663 / kiii-github-actions

Q Type to search

>

+

+

+

+

+

+

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

Lint Code Base

✖ Update index.html #2

Re-run jobs

Summary

Jobs

✖ run-lint

Run details

Usage

Workflow file

run-lint

failed now in 1m 47s

Beta Give feedback

Search logs

> ✔ Set up job1s

> ✔ Pull ghcr.io/github/super-linter:v4.10.01m 32s

> ✔ Checkout code0s

> ✖ Lint Code Base9s

> ✔ Post Checkout code0s

> ✔ Complete job0s

All workflows

Filter workflow runs

Showing runs from all workflows

3 workflow runs			Event ▾	Status ▾	Branch ▾	Actor ▾
✔	Second update on index.html	main	Lint Code Base #3: Commit <a href="#">22bf011</a> pushed by ristov663	🕒 7 minutes ago 🕒 1m 59s	...	
✖	Update index.html	main	Lint Code Base #2: Commit <a href="#">9cf900e</a> pushed by ristov663	🕒 11 minutes ago 🕒 1m 57s	...	
✔	Create super-linter.yml	main	Lint Code Base #1: Commit <a href="#">0648f77</a> pushed by ristov663	🕒 16 minutes ago 🕒 1m 49s	...	

- Security
- 🕒 Code security and analysis

🔑 Deploy keys

🔑 Secrets and variables

Actions

Codespaces

Dependabot
- Integrations
- 📧 GitHub Apps

📧 Email notifications

🔗 Autolink references

Repository secrets

New repository secret

Name <input type="text"/>	Last updated
🔒 DOCKERHUB_TOKEN	now <div>✎ 🗑</div>
🔒 DOCKERHUB_USERNAME	now <div>✎ 🗑</div>

ristov663 / kiii-github-actions

CodeIssuesPull requestsActionsProjectsWikiSecurityInsightsSettings

kiii-github-actions / .github / workflows / docker-publish.yml in main

Cancel changes

EditPreview

Spaces2No wrap

```
1 name: Docker
2
3 # This workflow uses actions that are not certified by GitHub.
4 # They are provided by a third-party and are governed by
5 # separate terms of service, privacy policy, and support
6 # documentation.
7
8 on:
9   schedule:
10     - cron: '40 21 * * *'
11   push:
12     branches: [ "main" ]
13     # Publish semver tags as releases.
14     tags: [ 'v*.*.*' ]
15   pull_request:
16     branches: [ "main" ]
17
18 env:
19   # Use docker.io for Docker Hub if empty
20   REGISTRY: ghcr.io
21   # github.repository as <account>/<repo>
22   IMAGE_NAME: kiii-github-actions
```

MarketplaceDocumentation

Search Marketplace for Actions

Featured Actions

Setup Node.js environment

By actions

Setup a Node.js environment by adding problem matchers and optionally down and adding it to the PATH

Upload a Build Artifact

By actions

Upload a build artifact that can be used subsequent workflow steps

Setup Java JDK

By actions

Set up a specific version of the Java JDK add the command-line tools to the PAT

Setup Go environment

By actions

ristov663 / kiii-github-actions

CodeIssuesPull requestsActionsProjectsWikiSecurityInsightsSettings

kiii-github-actions / .github / workflows / super-linter-docker-build in main

Cancel changesCommit changes...

EditPreview

Spaces2No wrap

```
7 name: Lint Code Base and Docker Build and Push
8
9 on:
10   push:
11     branches: [ "main" ]
12   pull_request:
13     branches: [ "main" ]
14   jobs:
15     run-lint:
16       runs-on: ubuntu-latest
17       steps:
18         - name: Checkout code
19           uses: actions/checkout@v3
20         with:
21           # Full git history is needed to get a proper list of changed files within 'super-linter'
22           fetch-depth: 0
23
24         - name: Lint Code Base
25           uses: github/super-linter@v4
26           env:
27             VALIDATE_ALL_CODEBASE: false
28             DEFAULT_BRANCH: "main"
29
30         - name: Docker Build and Push
31           uses: docker/build-push-action@v3
32           with:
33             context: .
34             file: ./Dockerfile
35             push: true
36             tags: kiii-github-actions:latest
```

MarketplaceDocumentation

Search Marketplace for Actions

Featured Actions

Cache

By actions

Cache artifacts like dependencies and build outputs to improve workflow execution time

4.2k

Setup Node.js environment

By actions

Setup a Node.js environment by adding problem matchers and optionally downloading and adding it to the PATH

3.6k

Upload a Build Artifact

By actions

Upload a build artifact that can be used by subsequent workflow steps

2.9k

Setup Java JDK

By actions

Set up a specific version of the Java JDK and add the command-line tools to the PATH

1.4k

EditPreview

Spaces2No wrap

```
26 env:
27   VALIDATE_ALL_CODEBASE: false
28   DEFAULT_BRANCH: "main"
29   GITHUB_TOKEN: ${ secrets.GITHUB_TOKEN }
30
31 docker:
32   runs-on: ubuntu-latest
33   needs: run-lint
34   steps:
35     - name: Set up QEMU
36       uses: docker/setup-qemu-action@v3
37
38     - name: Set up Docker Buildx
39       uses: docker/setup-buildx-action@v3
40
41     - name: Login to Docker Hub
42       uses: docker/login-action@v3
43       with:
44         username: ${ secrets.DOCKERHUB_USERNAME }
45         password: ${ secrets.DOCKERHUB_TOKEN }
46
47     - name: Build and push
48       uses: docker/build-push-action@v5
49       with:
50         push: true
51         tags: ristov663/kii-demo-01:latest
52
```

MarketplaceDocumentation

Search Marketplace for Actions

Featured Actions

Cache

By actions

Cache artifacts like dependencies and build outputs to improve workflow execution time

4.2k

Setup Node.js environment

By actions

Setup a Node.js environment by adding problem matchers and optionally downloading and adding it to the PATH

3.6k

Upload a Build Artifact

By actions

Upload a build artifact that can be used by subsequent workflow steps



2.9k

Setup Java JDK

By actions

Set up a specific version of the Java JDK and add the command-line tools to the PATH

1.4k

 ristov663 Update super-linter-docker-build-and-push.yml 

Code Blame 51 lines (49 loc) · 1.42 KB

```

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 and Docker Build and Push
8
9  on:
10   push:
11     branches: [ "main" ]
12   pull_request:
13     branches: [ "main" ]
14   jobs:
15     run-lint:
16       runs-on: ubuntu-latest
17       steps:
18         - name: Checkout code
19           uses: actions/checkout@v3
20         with:
21           # Full git history is needed to get a proper list of changed files within 'super-linter'
22           fetch-depth: 0
23
24         - name: Lint Code Base
25           uses: github/super-linter@v4
26         env:
27           VALIDATE_ALL_CODEBASE: false
28           DEFAULT_BRANCH: "main"
29           GITHUB_TOKEN: ${ secrets.GITHUB_TOKEN }
30       docker:
31         runs-on: ubuntu-latest
32         needs: run-lint
33         steps:
34           -
35             name: Set up QEMU
36             uses: docker/setup-qemu-action@v3
37           -
38             name: Set up Docker Buildx
39             uses: docker/setup-buildx-action@v3
40           -
41             name: Login to Docker Hub
42             uses: docker/login-action@v3
43           with:
44             username: ${ secrets.DOCKERHUB_USERNAME }
45             password: ${ secrets.DOCKERHUB_TOKEN }
46           -
47             name: Build and push
48             uses: docker/build-push-action@v5
49           with:
50             push: true
51             tags: ristov211151/kiii-demo-01:latest

```

ristov663 / kiii-github-actions

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

kiii-github-actions / .github / workflows / super-linter-docker-build-and-push.yml

Commit changes

Commit message

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

Extended description

Add an optional extended description.

☒ Commit directly to the main branch

☐ Create a new branch for this commit and start a pull request [Learn more about pull requests](#)

Cancel Commit changes

Marketplace Documentation

Search Marketplace for Actions

Featured Actions

- Cache**  
By actions  
Cache artifacts like dependencies and outputs to improve workflow execution.
- Setup Node.js environment**  
By actions  
Setup a Node.js environment by adding problem matchers and optionally downloading and adding it to the PATH.
- Upload a Build Artifact**  
By actions  
Upload a build artifact that can be used in subsequent workflow steps.

ristov663 / kiii-github-actions

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Actions

New workflow

All workflows

Workflows

- Lint Code Base
- Lint Code Base and Docker Build and Push

Management

- Caches
- Runners

All workflows

Showing runs from all workflows

Filter workflow runs

9 workflow runs

Event	Status	Branch	Actor
Changes in commit	Success	main	ristov663
Changes in commit	Success	main	ristov663
Update super-linter-docker-build-and-push.yml	Success	main	ristov663
Update super-linter-docker-build-and-push.yml	Failure	main	ristov663

ristov663 / kiii-github-actions

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

← Lint Code Base and Docker Build and Push

**Create super-linter-docker-build-and-push.yml #1**

Summary

Jobs

- run-lint
- docker

Run details

- Usage
- Workflow file

Triggered via push 36 minutes ago

ristov663 pushed 089b0f main

Status

Failure

Total duration

2m 20s

Artifacts

—

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

on: push

run-lint 1m 50s

docker 13s



ristov663 / kiii-github-actions

Type to search

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

← Lint Code Base and Docker Build and Push

Changes in commit #3

Summary

Jobs

Run details

Usage

Workflow file

Re-run triggered 5 minutes ago

Status

Total duration

Artifacts

ristov663

ffe92a2

main

Success

2m 18s

—

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

on: push

run-lint

1m 40s

docker

20s

dockerhub

Explore

Repositories

Organizations

Search Docker Hub

ctrl+K

?

R

ristov211151 / [Repositories](#) / [kiii-demo-01](#) / [Tags](#)

Using 0 of 1 private repositories. [Get more](#)

General

Tags

Builds

Collaborators

Webhooks

Settings

Sort by

Newest

Filter Tags

Delete

TAG

latest

Last pushed 11 hours ago by ristov211151

docker pull ristov211151/kiii-demo-01:latest

Copy

Digest

OS/ARCH

Last pull

Compressed Size

0c01af324d7e

linux/amd64

9 hours ago

54.39 MB

ristov211151/kiii-demo-01

Updated about 11 hours ago

This repository does not have a description

INCOMPLETE

This repository does not have a category

INCOMPLETE

Tags

This repository contains 1 tag(s).


Tag	OS	Type	Pulled	Pushed
latest	linux/amd64	Image	9 hours ago	11 hours ago




## Part 2: GitLab CI/CD


1. Create a new repository on GitLab, and add the Dockerfile and the index.html files to it;
2. Create one CI script which will build and push a Docker image to Docker Hub;


kiii / kiii-gitlab-cicd / Repository



main ▾ kiii-gitlab-cicd / + ▾ History

 **Added index.html**  
Bojan Ristov authored just now


Name	Last commit
 Dockerfile	Added Dockerfile
 README.md	Initial commit
 index.html	Added index.html



 README.md

 **Added Dockerfile**  
Bojan Ristov authored 1 minute ago

 Dockerfile  67 B Blame Edit ▾

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

 **Added index.html**  
Bojan Ristov authored 1 minute ago

 index.html  241 B Blame Edit ▾

```
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     <p>New paragraph</p>
8   </body>
9 </html>
```

kiiii / kiiii-gitlab-cicd / CI/CD Settings

CI/CD Variables </> 4

Reveal valuesAdd variable

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

Added yml file

Bojan Ristov authored 2 minutes ago

a38b0d60

.gitlab-ci.yml 960 B

BlameEditReplaceDelete

```
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
```

kiiii / kiiii-gitlab-cicd / Jobs

All 1

Finished

Filter jobs

Status	Job	Pipeline	Coverage
<div> Passed</div> <div>00:00:44</div> <div>just now</div>	<div>#6645403519: docker-build</div> <div> main  a38b0d60</div>	<div>#1256456539 created by </div> <div>Stage: build</div>	

## docker-build

✓ Passed Started 1 minute ago by Bojan Ristov

Search job log

```
1 Running with gitlab-runner 16.11.0~pre.21.gaa21be2d (aa21be2d)
2 on blue-3.saas-linux-small-amd64.runners-manager.gitlab.com/default zxcgkjAP, system ID: s_d5d3abbd
   fd9a
3   feature flags: FF_USE_IMPROVED_URL_MASKING:true
4   Preparing the "docker+machine" executor 00:31
5 Using Docker executor with image docker:latest ...
6 Starting service docker:dind ...
7 Pulling docker image docker:dind ...
8 Using docker image sha256:1eeb10c9d6c50879f0303574f312ad616070f07af8f874410e7967270751d1f5 for docke
   r:dind with digest docker@sha256:a2d55c6061a342e42db62654b7b7cdf16113828a80b3827cbd9453806c08549c ...
9 Waiting for services to be up and running (timeout 30 seconds)...
10 Pulling docker image docker:latest ...
11 Using docker image sha256:1eeb10c9d6c50879f0303574f312ad616070f07af8f874410e7967270751d1f5 for docke
   r:latest with digest docker@sha256:a2d55c6061a342e42db62654b7b7cdf16113828a80b3827cbd9453806c08549c
   ...
12 Preparing environment 00:00
13 Running on runner-zxcgkjap-project-56940627-concurrent-0 via runner-zxcgkjap-s-l-s-amd64-171339522-f
   38-fb10
```



Duration: 44 seconds  
Finished: just now  
Queued: 0 seconds  
Timeout: 1h (from project) ⓘ  
Runner: #12270835 (zxcgkjAPH) 3-blue.saas-linux-small-amd64.runners-manager.gitlab.com/default

Commit a38b0d60 ⓘ  
Added yml file

Pipeline #1256456539 ✓ Passed for main ⓘ

build ▾

Related jobs

→ ✓ docker-build

ristov211151 / Repositories / kiii-demo-02 / latest



### ristov211151/kiii-demo-02:latest

MANIFEST DIGEST sha256:fb49ca84a34c1d4a29e43fa52aca9da68cb72249cbce4cb1fc3390645d01d455 ⓘ

OS/ARCH	COMPRESSED SIZE ⓘ	LAST PUSHED	TYPE	MANIFEST DIGEST
linux/amd64	54.39 MB	2 minutes ago by ristov211151	Image	sha256:fb49ca84... ⓘ

Image Layers Vulnerabilities

**Изработил:**  
**Бојан Ристов (211151)**