

КИИИ Лаб 5

Classroom Assignments & Homework


- Part 1: GitHub Actions
 - Create a new repository on [GitHub](#), then add the `Dockerfile` and the `index.html` files to it, from the [exercise repository](#);
 - Create one Action in the repo using the Super-Linter;
 - Extend the Action to include a Docker image building and pushing to Docker Hub;
- Part 2: GitLab CI/CD
 - Create a new repository on [GitLab](#), and add the `Dockerfile` and the `index.html` files to it;
 - Create one CI script which will build and push a Docker image to Docker Hub;

PART 1: GITHUB ACTIONS

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 *
 BeratAhmetaj

Repository name *
KIII_Lab_Temporary
✔ KIII_Lab_Temporary is available.

Great repository names are short and memorable. Need inspiration? How about **musical-winner** ?

Description (optional)

☐  **Public**
Anyone on the internet can see this repository. You choose who can commit.

☒  **Private**
You choose who can see and commit to this repository.

Initialize this repository with:

☐ **Add a README file**
This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore


.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: None

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

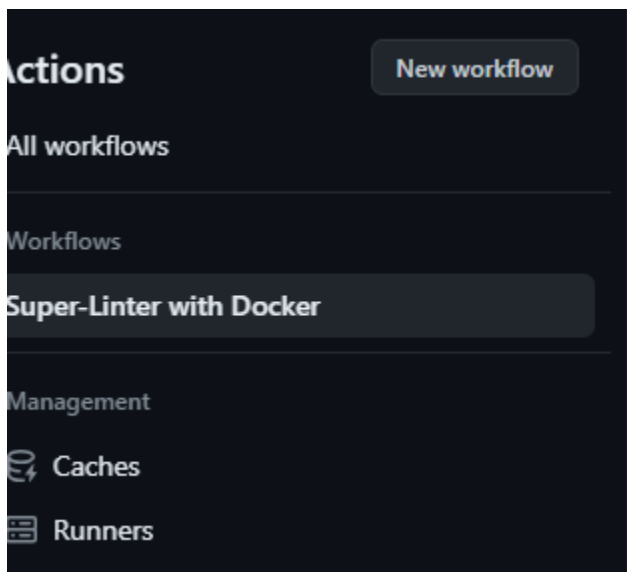
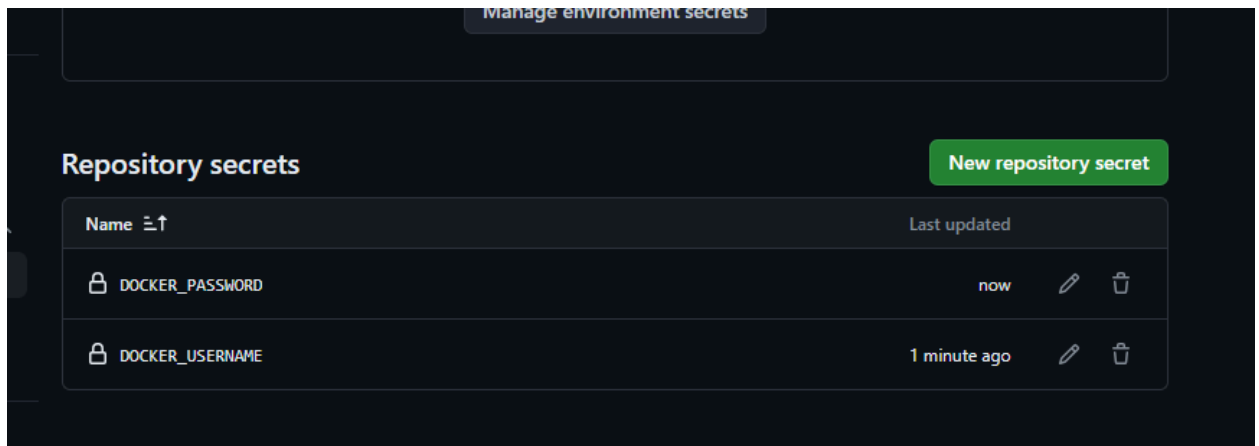
 You are creating a private repository in your personal account.

Create repository

```
echo "# KIII_Lab_Temporary" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M master
git remote add origin https://github.com/BeratAhmetaj/KIII_Lab_Temporary.git
git push -u origin master
```

Name	Date modified	Type	Size
.git	4/4/2024 9:15 PM	File folder	
.github	4/4/2024 9:21 PM	File folder	
Dockerfile	4/4/2024 9:19 PM	File	1 KB
index.html	4/4/2024 9:17 PM	Chrome HTML Do...	1 KB

```
! super-linter.yml
C: > Users > berat > OneDrive > Documents > Github > KIII_Lab_Temporary > .github > workflows > ! super-linter.yml
1  name: Super-Linter with Docker
2
3  on:
4    push:
5      branches:
6        - main
7    pull_request:
8      branches:
9        - main
10
11  jobs:
12    super-linter-docker:
13      name: Lint code and Build Docker image
14      runs-on: ubuntu-latest
15      steps:
16        - name: Checkout code
17          uses: actions/checkout@v2
18
19        - name: Set up Super-Linter
20          uses: github/super-linter@v4
21          with:
22            github-token: ${ secrets.GITHUB_TOKEN }
23            commit-lint: "false"
24            python-lint: "false"
25            ruby-lint: "false"
26            jsonlint: "false"
27            ansible-lint: "false"
28
29        - name: Login to Docker Hub
30          uses: docker/login-action@v1
31          with:
32            username: ${ secrets.DOCKER_USERNAME }
33            password: ${ secrets.DOCKER_PASSWORD }
34
35        - name: Build Docker image
36          run: docker build -t yourdockerusername/repositoryname:latest .
37
38        - name: Push Docker image to Docker Hub
39          run: docker push yourdockerusername/repositoryname:latest
40
```



PART 2: GITLAB

🔍 Search or go to...

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arn GitLab 8%

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Auto DevOps

It will automatically build, test, and deploy your application based on a predefined CI/CD configuration. Learn more in the [Auto DevOps documentation](#)

Enable in settings

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main Killabstemp

History Find file Edit Code

Initial commit

Berat Ahmetaj authored 1 minute ago

a2b566d9

Name	Last commit	Last update
README.md	Initial commit	1 minute ago

README.md

Killabstemp

🔔 0

☆ Star 0

🍴 Fork 0

Project information

1 Commit

1 Branch

0 Tags

3 KiB Project Storage

README

[+ Add LICENSE](#)

[+ Add CHANGELOG](#)

[+ Add CONTRIBUTING](#)

[+ Add Kubernetes cluster](#)

Name	Date modified	Type	Size
Dockerfile	4/4/2024 9:19 PM	File	1 KB
index.html	4/4/2024 9:31 PM	Chrome HTML Do...	1 KB
gitlab-ci.yml	4/4/2024 9:29 PM	Yaml Source File	2 KB

Upload New File

Berat Ahmetaj authored right now

Name	Last commit
Dockerfile	Upload New File
README.md	Initial commit
gitlab-ci.yml	Upload New File
index.html	Upload New File

README.md

Killabstemp

Getting started

```
! super-linter.yml
C: > Users > berat > OneDrive > Documents > Github > KIII_Lab_Temporary > .github > workflows > ! super-linter.yml

1  name: Super-Linter with Docker
2
3  on:
4    push:
5      branches:
6        - main
7    pull_request:
8      branches:
9        - main
10
11  jobs:
12    super-linter-docker:
13      name: Lint code and Build Docker image
14      runs-on: ubuntu-latest
15      steps:
16        - name: Checkout code
17          uses: actions/checkout@v2
18
19        - name: Set up Super-Linter
20          uses: github/super-linter@v4
21          with:
22            github-token: ${ secrets.GITHUB_TOKEN }
23            commit-lint: "false"
24            python-lint: "false"
25            ruby-lint: "false"
26            jsonlint: "false"
27            ansible-lint: "false"
28
29        - name: Login to Docker Hub
30          uses: docker/login-action@v1
31          with:
32            username: ${ secrets.DOCKER_USERNAME }
33            password: ${ secrets.DOCKER_PASSWORD }
34
35        - name: Build Docker image
36          run: docker build -t yourdockerusername/repositoryname:latest .
37
38        - name: Push Docker image to Docker Hub
39          run: docker push yourdockerusername/repositoryname:latest
40
```



beratahmetaj

user Joined March 8, 2024

General

Security

Default Privacy

Notifications

Convert Account

Deactivate Account

Access Tokens

New Access Token

Tokens marked **AUTO-GENERATED** are created on your behalf by Docker Desktop for the CLI to use for authentication. You can have a maximum of 5 auto-generated tokens associated with your account. [Learn more](#)

<input type="checkbox"/>	Description	Source	Scope	Last Used	Created	
<input type="checkbox"/>	Generated by Docker De...	AUTO-GENERATED	Read, Write, Delete	Mar 29, 2024 00:36:46	Mar 08, 2024 11:56:07	⋮
<input type="checkbox"/>	github	MANUAL	Read, Write, Delete	Never	Apr 04, 2024 21:28:27	⋮

Two-Factor Authentication

```
image: docker:stable

stages:
  - build

variables:
  DOCKER_IMAGE_TAG: latest

before_script:
  - docker login -u $DOCKER_USERNAME -p $DOCKER_PASSWORD

build:
  stage: build
  script:
    - docker build -t $DOCKER_USERNAME/repositoryname:$DOCKER_IMAGE_TAG .
    - docker push $DOCKER_USERNAME/repositoryname:$DOCKER_IMAGE_TAG
```

Artifacts

A job artifact is an archive of files and directories saved by a job when it finishes.

Variables







Variables store information that you can use in job scripts. Each project can define a maximum of 8000 variables. [Learn more.](#)

Variables can be accidentally exposed in a job log, or maliciously sent to a third party server. The masked variable feature can help reduce the risk of accidental variable values, but is not a guaranteed method to prevent malicious users from accessing variables. [How can I make my variables more secure?](#)

Variables can have several attributes. [Learn more.](#)

- **Protected:** Only exposed to protected branches or protected tags.
- **Masked:** Hidden in job logs. Must match masking requirements.
- **Expanded:** Variables with `$` will be treated as the start of a reference to another variable.

CI/CD Variables </> 2 Reveal values Ad

Key ↑	Value	Environments
password  DOCKER_PASSWORD Expanded	***** 	All (default) 
username  DOCKER_USERNAME Protected Expanded	***** 	All (default) 

Group variables (inherited)

These variables are inherited from the parent group.

CI/CD Variables </> 0

Key	Attributes	Environments	Group
There are no variables yet.			

Add variable

✔ Variable password has been successfully added.

Type

Variable (default)

Environments 

All (default)

Flags 

☐ Protect variable
Export variable to pipelines running on protect branches and tags only.

☐ Mask variable
Variable will be masked in job logs. Requires values to meet regular expression requirement

☒ Expand variable reference
`$` will be treated as the start of a reference to another variable.

Description (optional)

The description of the variable's value or usage.

Key

You can use CI/CD variables with the same name in different places, but the variables might overwrite each other. [What is the order of precedence for variables?](#)

Value