

Mobileye Devops-IT home Assignment:

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Tools Used in This Assignment

This assignment leverages a variety of industry-standard tools to facilitate efficient development, testing, and deployment. Below is a brief overview of each tool and its role in my work assignment

Postman: API testing tool used to design, build and test the GitLab document APIs provided. It allows me sending HTTP requests (e.g., GET, POST, PUT, DELETE) to API endpoints and verifying the responses before writing the code

Docker: A platform for developing, shipping, and running applications in lightweight on my Mac Laptop, portable containers. Docker packages software and its dependencies into a single uni

Docker Desktop: application for macOS environments that allows me to build and share containerized applications and microservice

GitHub: platform for version control and collaboration. It is used for hosting my code repository to be share as part of the work assignment

GitLab: Personal account that is used for DevOps lifecycle tool that provides Git repository management, CI/CD

Visual Studio Code (VS Code): source code editor to write the script. It allows me to debugging and write the script

Mac Operating System Dependencies :

- **Requests** module use to send the API call using the ready token and gitlab URL and use by the Python scripts
- **curl** to run the API command using Terminal

GitLab Simulation Environment on Docker provided in the assignment.

REF:<https://archives.docs.gitlab.com/15.11/ee/install/docker.html#install-gitlab-using-docker-engine>

Environment Setup

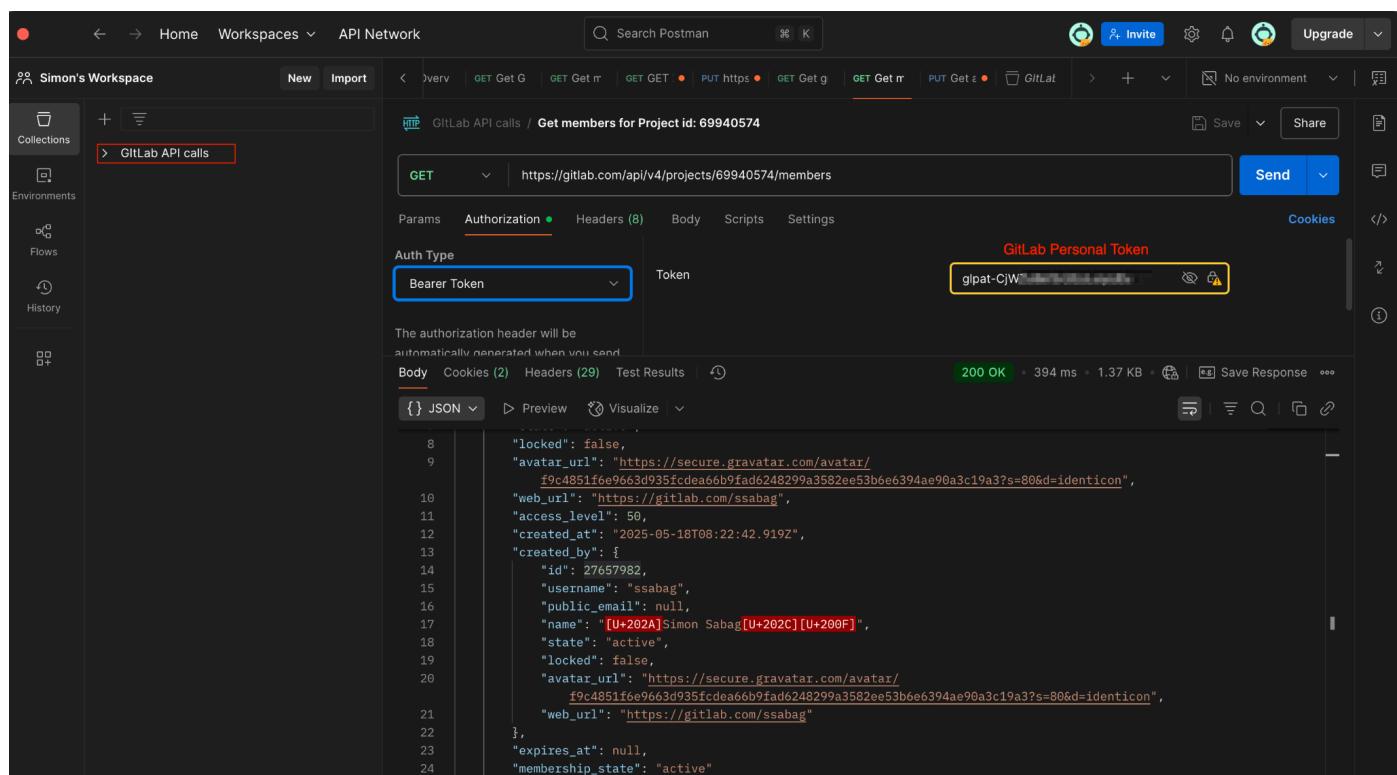
Postman

1. Installation:

- **Download Postman:**
 - Go to the official Postman website:
<https://www.postman.com/downloads/>
 - Postman will automatically detect my OS.
- **Launch Postman:** Open the Postman application and create account

2. Setting up Environments in Postman:

- **Create an Environment:**
 - Setting up the request API call base on the Doc API provided
 - Setting up the Token create in Git lab (will be explained later in this doc)



The screenshot shows the Postman application interface. On the left, there's a sidebar with 'Collections' (GitLab API calls), 'Environments', 'Flows', and 'History'. The main area displays a 'GET' request to 'https://gitlab.com/api/v4/projects/69940574/members'. The 'Authorization' tab is selected, showing 'Bearer Token' and a token input field containing 'glpat-CjW...'. The response status is '200 OK' with a response time of '394 ms'. The response body is a JSON object representing a user member, with lines 8 through 24 visible:

```
8   "locked": false,
9   "avatar_url": "https://secure.gravatar.com/avatar/
f9c4851f6e9663d935fcdea66b9fad6248299a3582ee53b6e6394ae90a3c19a3?s=80&d=identicon",
10  "web_url": "https://gitlab.com/ssabag",
11  "access_level": 50,
12  "created_at": "2025-05-18T08:22:42.919Z",
13  "created_by": {
14    "id": 27657982,
15    "username": "ssabag",
16    "public_email": null,
17    "name": "[U+202A]Simon Sabag[U+202C][U+200F]",
18    "state": "active",
19    "locked": false,
20    "avatar_url": "https://secure.gravatar.com/avatar/
f9c4851f6e9663d935fcdea66b9fad6248299a3582ee53b6e6394ae90a3c19a3?s=80&d=identicon",
21    "web_url": "https://gitlab.com/ssabag"
},
22  "expires_at": null,
23  "membership_state": "active"
```

Docker & Docker Desktop

Below is a screen capture of my personal docker hub account:

The screenshot shows the Docker Desktop interface. On the left, a sidebar has 'Images' selected. The main area displays a table of images. The 'Local' tab is active, showing 7 images used across 6 GB of storage. The 'Docker Hub repositories' tab is also visible. The table includes columns for Name, Tag, Image ID, Created, Size, and actions. Three images are highlighted: 'node-app' (tag 1.0), 'ssabag/simon-repo' (tag latest), and 'mongo' (tag latest). The right side of the interface shows a user profile with a large 'S' icon, 'PERSONAL ssabag', 'Account Settings', 'Upgrade', and 'Sign out' options.

Name	Tag	Image ID	Created	Size	Action
node-app	1.0	5faa06ece374	6 days ago	258.83 MB	
ssabag/simon-repo	latest	5faa06ece374	6 days ago	258.83 MB	
mongo	latest	2e018e386e89	17 days ago	1.17 GB	

Below is a screen capture of Running docker on my Mac laptop:

```
Last login: Sun May 18 22:17:35 on ttys014
[simonsabag@MacBook-Air-sl-Simon ~ % docker images
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
gitlab/gitlab-ee    latest   4d7a2f20d77d  4 days ago   6.23GB
node-app            1.0      5faa06ece374  5 days ago   259MB
ssabag/simon-repo  latest   5faa06ece374  5 days ago   259MB
mongo               latest   2e018e386e89  2 weeks ago  1.17GB
nginx               latest   c15da4c91de8  4 weeks ago  281MB
gcr.io/k8s-minikube/kicbase v0.0.46  46b5a68db74f  4 months ago  1.72GB
gcr.io/k8s-minikube/kicbase <none>   fd2d445ddc3   4 months ago  1.72GB
dockercloud/hello-world latest   c6739be46772  7 years ago   43.9MB
simonsabag@MacBook-Air-sl-Simon ~ % docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED          STATUS           PORTS          NAMES
38f1fb8dcde6        gitlab/gitlab-ee:latest "/assets/init-contai..." 11 hours ago   Up 11 hours (healthy)  0.0.0.0:22->22/tcp, 0.0.0.0:80->80/tcp, 0.0.0.0:443->443/tcp  gitlab
simonsabag@MacBook-Air-sl-Simon ~ % docker
Usage: docker [OPTIONS] COMMAND
A self-sufficient runtime for containers

Common Commands:
  run      Create and run a new container from an image
  exec    Execute a command in a running container
  ps      List containers
  build   Build an image from a Dockerfile
```

GitHub

Below is a screen capture of using my GitHub account for delivery the code:

The screenshot shows a GitHub repository named 'Home-Assignment-'. The repository is private. It contains one branch ('main') and no tags. The most recent commit was made by 'ssabag4' 10 minutes ago, titled 'Delete Mobileye Devops-IT home Assignment -Simon Sabag.docx'. This commit includes four files: '.gitlab-ci.yml', 'Dockerfile', 'main.py', and 'requirements.txt', all created within the last 18 minutes. A 'README' file is also present.

GitLab

To effectively simulate API calls, I'm using my personal GitLab account and it's also been configured. And I have populated it with data. This allows for realistic testing and validation using various tools and methods:

The API Doc link use:<https://archives.docs.gitlab.com/15.11/ee/api/members.html#roles>

Below is a screen capture of my GitLab account with the populated data:

The screenshot shows the GitLab interface for the project 'my-gitlab-app'. The left sidebar is open, showing sections like Project, Pipelines, Manage, Plan, Code, Build, Secure, Deploy, Operate, Monitor, and Analyze. The Pipelines section is selected. On the right, the 'Pipelines' page displays a list of stages. There are several stages listed, each with its status (Passed or Failed), duration (e.g., 1 day ago), and a detailed view button. Some stages show errors or specific log messages. The bottom of the page shows navigation links for previous and next pages.

I have generated a GitLab personal **Access token** with the full suite of scopes for the purpose of work assignment. However, for optimal security, it is advisable to configure the token with only the necessary permissions.

The screenshot shows the 'User Settings / Access tokens' page. On the left sidebar, 'Access tokens' is selected. The main area displays a table titled 'Active personal access tokens' with one entry:

Token name	Description	Scopes	Created	Last Used	Last Used IPs	Expires	Action
Token_python_script	Token_python_script	api, read_api, read_user, create_runner, manage_runner, k8s_proxy, self_rotate, read_repository, write_repository, read_registry, write_registry, read_virtual_registry, write_virtual_registry, ai_features	May 18, 2025	10 hours ago	93.172.143.15	in 1 month	Delete

My Group and Projects Overview of GitLab Groups and Projects Structure:

The top screenshot shows the 'Your work / Groups' page. The sidebar has 'Groups' selected. The main area lists two groups:

Name	Type	Members	Last Activity	Action
ssabag76-group	Developer	0	2 days ago	More
ssabag-group	Owner	0	5 days ago	More

The bottom screenshot shows the 'ssabag-group / my-gitlab-app / Branches' page. The sidebar has 'Branches' selected. The main area shows a list of branches:

Branch	Status	Last Commit	Actions
main	default protected	3a09eb4b · using the build we creat in our deployment · 1 day ago	More
feature/mysite	protected	de474aad · fixing code · 1 day ago	More
feature/simple-pipeline	protected	1dea5a39 · simplify pipeline · 2 days ago	More
feature/lint4	protected	cca19b50 · new merge request · 2 days ago	More
feature/lint3	protected	b4d7e4a8 · adding comment · 2 days ago	More
feature/newtest	protected	867fc1f1 · adding lint 2 · 2 days ago	More
feature/lint	protected	351471e1 · revert · 2 days ago	More

The screenshot shows the GitLab interface for the 'my-gitlab-app' project. The left sidebar is collapsed, and the main area displays the 'Jobs' section under the 'Pipelines' heading. There are 342 total jobs, with 342 finished. A search bar at the top right allows filtering by job name. Below the search bar, a table lists six completed pipelines:

Status	Job	Pipeline	Coverage
Passed	#10066939398: netlify_prod ⌚ 00:00:51 ⌚ 1 day ago	#1822909502 created by 🧑	Stage: deploy
Passed	#10066939396: build_website ⌚ 00:00:24 ⌚ 1 day ago	#1822909502 created by 🧑	Stage: build
Passed	#10066909230: netlify_prod ⌚ 00:00:49 ⌚ 1 day ago	#1822902149 created by 🧑	Stage: deploy_prod
Passed	#10066909228: netlify_staging ⌚ 00:00:49 ⌚ 1 day ago	#1822902149 created by 🧑	Stage: deploy_staging
Passed	#10066909225: unit_tests ⌚ 00:00:25 ⌚ 1 day ago	#1822902149 created by 🧑	Stage: test
Passed	#10066909223: test_artifacts ⌚ 00:00:11 ⌚ 1 day ago	#1822902149 created by 🧑	Stage: test

For this work assignment, the "**Test**" project within my GitLab environment functions as the primary repository during the work for hosting the application's codebase.

The screenshot shows the GitLab interface for the 'test' project. The left sidebar is collapsed, and the main area displays the repository details. The repository name is 'test'. The code tab is selected, showing the following commit history:

- adding env (Simon Sabag, 11 hours ago)
- Initial commit (11 hours ago)
- test image (11 hours ago)
- test3 (1 day ago)

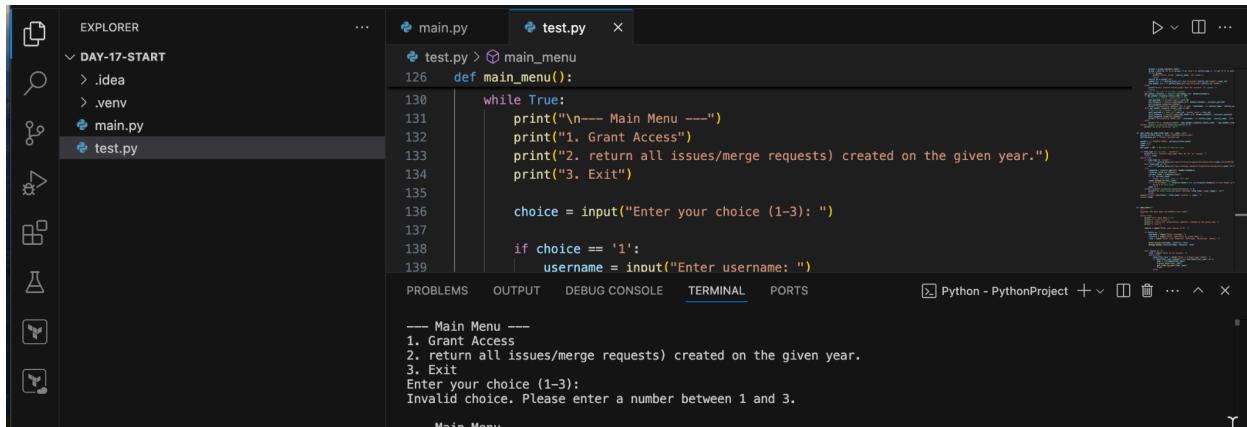
On the right side, there is a 'Project information' sidebar with the following details:

- 28 Commits
- 1 Branch
- 0 Tags
- 323 KIB Project Storage
- README
- CI/CD configuration
- Add LICENSE
- Add CHANGELOG
- Add CONTRIBUTING
- Add Kubernetes cluster
- Add Wiki
- Configure Integrations

Utilizing the integrated IDE within GitLab, and code changes will be committed to both **branches** and the **main** branch.

Visual Studio Code (VS Code)

- Development of the **main.py** script will be carried out in Visual Studio Code (VSC).



```
EXPLORER          main.py    test.py
└ DAY-17-START
  > .idea
  > .venv
  main.py
  test.py

126 def main_menu():
127     while True:
128         print("\n--- Main Menu ---")
129         print("1. Grant Access")
130         print("2. return all issues/merge requests) created on the given year.")
131         print("3. Exit")
132
133         choice = input("Enter your choice (1-3): ")
134
135         if choice == '1':
136             username = input("Enter username: ")

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS
Main Menu
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3):
Invalid choice. Please enter a number between 1 and 3.
```

Operating System Dependencies:

The following dependencies need to be installed on your operating system:

- **brew install jq**: Installs jq, a command-line JSON processor used here to format the output of curl requests for better readability.
- **pip3 install requests**: Installs the requests Python library, which is a necessary module for the Python script (main.py).



```
simonsabag@MacBook-Air-21:~$ brew install jq
Auto-updating Homebrew...
Adjust how often this is run with HOMEBREW_AUTO_UPDATE_SECS or disable with
HOMEBREW_NO_AUTO_UPDATE. Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).
=> Auto-updated Homebrew!
Updated 3 taps (hashicorp/tap, homebrew/core and homebrew/cask).
=> New Formulae
bower-mail                                chart-releaser                           mender-cli                               timoni
bowtie                                    curl                                     font-savate                             nextcloud-talk
burp-suite@professional@early-adopter      burp-suite@early-adopter                  font-savate                             nextcloud-talk
You have 4 outdated formulae installed.

=> Downloading https://ghcr.io/v2/homebrew/core/jq/manifests/1.7.1-1
#####
=> Fetching dependencies for jq: oniguruma
=> Downloading https://ghcr.io/v2/homebrew/core/oniguruma/manifests/6.9.10
#####
100.0%
```

example of curl command:

```
simonsabag@MacBook-Air-sl-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjW" "https://gitlab.com/api/v4/projects/69940574/members/27657982" | jq
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          Dload Upload Total Spent   Left Speed
100  702  100  702   0     0  2337      0  ---:---:---:--- 2332
{
  "id": 27657982,
  "username": "ssabag",
  "public_email": null,
  "name": "Simon Sabag",
  "state": "active",
  "locked": false,
  "avatar_url": "https://secure.gravatar.com/avatar/f9c4851f6e9663d935fcdea66b9fad6248299a3582ee53b6e6394ae90a3c19a3?s=80&d=identicon",
  "web_url": "https://gitlab.com/ssabag",
  "access_level": 50,
  "created_at": "2025-05-18T08:22:42.919Z",
  "created_by": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": null,
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://secure.gravatar.com/avatar/f9c4851f6e9663d935fcdea66b9fad6248299a3582ee53b6e6394ae90a3c19a3?s=80&d=identicon",
    "web_url": "https://gitlab.com/ssabag"
  },
  "expires_at": null,
  "membership_state": "active"
}
```

Gitlab Docker Simulator Incase I will need another environment for testing

- Pull the Docker Image:** Begin by retrieving the official GitLab Docker image using the **docker login/pull** commands. This will download the necessary files to run GitLab locally.
- Extract the Initial Root Password:** After the container starts, I retrieve the initial root password. This is typically found in the container's logs.
- Populate Data:** populating my GitLab environment with projects, users, groups, and any other necessary data for my work assignment.

```
simonsabag@MacBook-Air-sl-Simon ~ % docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
simonsabag@MacBook-Air-sl-Simon ~ % sudo docker run --detach \
--hostname gitlab.example.com \
--publish 443:443 --publish 80:80 --publish 22:22 \
--name gitlab \
--restart always \
--volume $GITLAB_HOME/config:/etc/gitlab \
--volume $GITLAB_HOME/logs:/var/log/gitlab \
--volume $GITLAB_HOME/data:/var/opt/gitlab \
--shm-size 256m \
gitlab/gitlab-ee:latest
Unable to find image 'gitlab/gitlab-ee:latest' locally
latest: Pulling from gitlab/gitlab-ee
f1693e13474a: Pull complete
e7b27b55dc1c: Pull complete
7ce78e09c07: Pull complete
5e642901bc45: Pull complete
7a23267aa225: Pull complete
0622fac788ed: Pull complete
bfb53bdd7179: Pull complete
2deac9729e44: Pull complete
ee5bc962df9b: Pull complete
Digest: sha256:4d7a2f2b0d7d211f1fd8be64653af6a4b74f89f153fa0eb6a0faa8f6273ca48e
Status: Downloaded newer image for gitlab/gitlab-ee:latest
WARNING: The requested image's platform (linux/amd64) does not match the detected host platform (linux/arm64/v8) and no specific platform was requested
38f1fb8dcde66e8f7db58f99acdd03536e038c07b7488a2b7dcca184ca67622b
simonsabag@MacBook-Air-sl-Simon ~ % docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
38f1fb8dcde6 gitlab/gitlab-ee:latest "/assets/init-contai..." 11 seconds ago Up 10 seconds (health: starting) 0.0.0.0:22->22/tcp, 0.0.0.0:80->80/tcp, 0.0.0.0:443->443/tcp gitlab
simonsabag@MacBook-Air-sl-Simon ~ %
simonsabag@MacBook-Air-sl-Simon ~ % docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
38f1fb8dcde6 gitlab/gitlab-ee:latest "/assets/init-contai..." 50 seconds ago Up 49 seconds (health: starting) 0.0.0.0:22->22/tcp, 0.0.0.0:80->80/tcp, 0.0.0.0:443->443/tcp gitlab
simonsabag@MacBook-Air-sl-Simon ~ %
zsh: command not found: ping
simonsabag@MacBook-Air-sl-Simon ~ % ping gitlab.example.com
ping: cannot resolve gitlab.example.com: Unknown host
simonsabag@MacBook-Air-sl-Simon ~ % docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
38f1fb8dcde6 gitlab/gitlab-ee:latest "/assets/init-contai..." 3 minutes ago Up 3 minutes (healthy) 0.0.0.0:22->22/tcp, 0.0.0.0:80->80/tcp, 0.0.0.0:443->443/tcp gitlab
simonsabag@MacBook-Air-sl-Simon ~ %
```

```

simonsabag@MacBook-Air-sl-Simon Day-17-start % docker exec -it gitlab bash -c 'cat /etc/gitlab/initial_root_password' | grep -i password
#           1. If provided manually (either via $GITLAB_ROOT_PASSWORD environment variable or via $gitlab_rails['initial_root_password'] setting in `gitlab.rb`, it was
# or the first time (usually, the first reconfigure run).
#
#           2. Password hasn't been changed manually, either via UI or via command line.
#
#           If the password shown here doesn't work, you must reset the admin password following https://docs.gitlab.com/ee/security/reset_user_password.html#reset-your-
Password: h7jSE1vRlTr9hanNe

```

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31.48% / 800% (8 CPUs available) **6.57GB / 7.47GB**

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<input type="checkbox"/>	Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
<input type="checkbox"/>	fervent_morse	a840221708c1	node-app:1.0	3001:3000	0%	6 days ago	
<input type="checkbox"/>	condescending_shar	b221a428d675	node-app:1.0	3000:3000	0%	6 days ago	
<input type="checkbox"/>	minikube	8d6ff19d944c	k8s-minikube/kicbas	0.22 Show all ports (5)	0%	6 days ago	
<input type="checkbox"/>	youthful_jennings	419c6da85e70	nginx		0%	8 days ago	
<input type="checkbox"/>	gitlab	38f1fb8dcde6	gitlab/gitlab-ee:latest	22.22 <small>22.22</small> 443.443 <small>443.443</small> 80.80 <small>80.80</small> Show less	31.48%	16 hours ago	

localhost/users/sign_in i [Home](#)

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GitLab Enterprise Edition

Username or primary email

Password

[Forgot your password?](#)

Remember me

[Sign in](#)

Don't have an account yet? [Register now](#)

User Settings / Access tokens

Your new personal access token has been created.

Personal access tokens

You can generate a personal access token for each application you use that needs access to the GitLab API. You can also use personal access tokens to authenticate against Git over HTTP. They are the only accepted password when you have Two-Factor Authentication (2FA) enabled.

Your new personal access token

.....

Make sure you save it - you won't be able to access it again.

Active personal access tokens (2)

Token name	Description	Scopes	Created	Last Used	Last Used IPs	Expires	Action
new_token		api, read_api, read_user, create_runner, manage_runner, k8s_proxy, self_rotate, read_repository, write_repository, read_virtual_registry, write_virtual_registry, ai_features, sudo, admin_mode, read_service_ping	May 18, 2025	Never	-	in 4 weeks	

docker_test_group / Test1

Test1

main / test1 /

Add new file

Administrator authored 10 hours ago

b3bf5495

History

Name	Last commit	Last update
ci	Add new file	10 hours ago
.gitlab-ci.yml	Add new file	10 hours ago
README.md	Initial commit	10 hours ago
main.py	my py code	10 hours ago
requirements.txt	Add new file	10 hours ago

README.md

Test1

Project information

- 5 Commits
- 1 Branch
- 0 Tags
- 9 KIB Project Storage

README

CI/CD configuration

+ Add LICENSE

+ Add CHANGELOG

+ Add CONTRIBUTING

Auto DevOps enabled

+ Add Kubernetes cluster

+ Add Wiki

+ Configure Integrations

Testing Using Postman, Curl, Code (POC)

- Getting ALL Merge Request in my account
- https://gitlab.com/api/v4/merge_requests
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/merge_requests" | JQ .

GitLab API calls / get ALL merge_requests

GET https://gitlab.com/api/v4/merge_requests Send

Params Authorization Headers (8) Body Scripts Settings Cookies

Auth Type Bearer Token Token

Body Cookies (2) Headers (29) Test Results 200 OK 613 ms 4.48 KB Save Response

{ } JSON Preview Visualize

	id	iid	project_id	title	description	state	created_at	updated_at	merged_by																
0	384133796	21	69905560	adding app version control and name		merged	2025-05-17T15:27:36.711Z	2025-05-17T15:30:07.474Z	<table border="1"><tr><td>id</td><td>27657982</td></tr><tr><td>username</td><td>ssabag</td></tr><tr><td>public_email</td><td></td></tr><tr><td>name</td><td>Simon Sabag</td></tr><tr><td>state</td><td>active</td></tr><tr><td>locked</td><td>false</td></tr><tr><td>avatar_url</td><td>https://gitlab.com/u/27657982/avatar.png</td></tr><tr><td>web_url</td><td>https://gitlab.com/ssabag</td></tr></table>	id	27657982	username	ssabag	public_email		name	Simon Sabag	state	active	locked	false	avatar_url	https://gitlab.com/u/27657982/avatar.png	web_url	https://gitlab.com/ssabag
id	27657982																								
username	ssabag																								
public_email																									
name	Simon Sabag																								
state	active																								
locked	false																								
avatar_url	https://gitlab.com/u/27657982/avatar.png																								
web_url	https://gitlab.com/ssabag																								
	384132421	20	69905560	e2e job cleanout		merged	2025-05-17T14:43:40.356Z	2025-05-17T14:45:31.097Z	<table border="1"><tr><td>id</td><td>27657982</td></tr><tr><td>username</td><td>ssabag</td></tr><tr><td>public_email</td><td></td></tr><tr><td>name</td><td>Simon Sabag</td></tr></table>	id	27657982	username	ssabag	public_email		name	Simon Sabag								
id	27657982																								
username	ssabag																								
public_email																									
name	Simon Sabag																								

```
simonsabag@MacBook-Air-sl-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/merge_requests" | JQ .
```

```
% Total % Received % Xferd Average Speed Time Time Time Current
100 43867 100 43867 0 0 76148 0 --:--:--:--:--:-- 76290
[ {
  "id": 384133796,
  "iid": 21,
  "project_id": 69905560,
  "title": "adding app version control and name",
  "description": "",
  "state": "merged",
  "created_at": "2025-05-17T15:27:36.711Z",
  "updated_at": "2025-05-17T15:30:07.474Z",
  "merged_by": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  },
  "merge_user": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  },
  "merged_at": "2025-05-17T15:30:06.884Z",
}
```

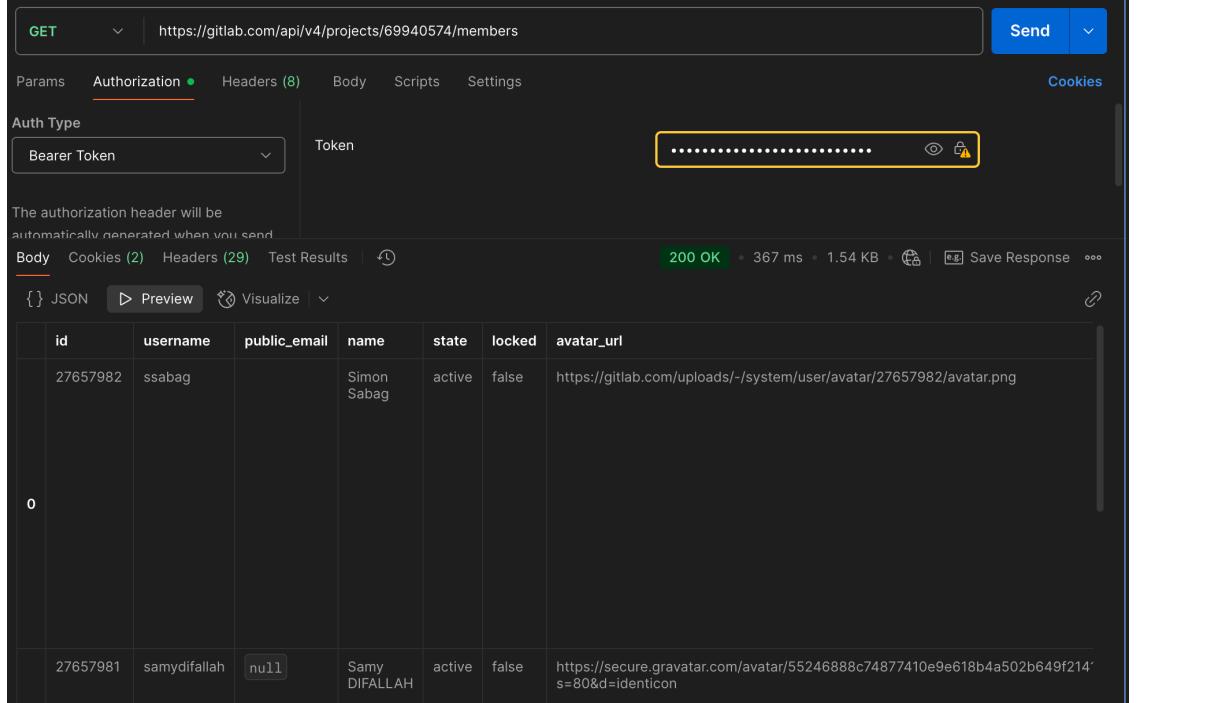
- **Getting ALL members in GroupID: 106969600 (with Token)**
- <https://gitlab.com/api/v4/groups/106969600/members/all>
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/groups/106969600/members/all" | JQ .

The authorization header will be automatically generated when you send the request. Learn more about [Bearer Token](#) authorization.

	<code>id</code>	<code>username</code>	<code>public_email</code>	<code>name</code>	<code>state</code>	<code>locked</code>	<code>avatar_url</code>
0	27657982	ssabag		Simon Sabag	active	false	https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png
1	27953483	ssabag76	null	Shimon Sabag	active	false	https://secure.gravatar.com/avatar/bd49fb91e3d46451768a609c8602611f78ead4385073535adcfb7829ffd45167?s=80&d=identicon

```
simonsabag@MacBook-Air-s1-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/groups/106969600/members/all" | JQ .
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          Dload Upload Total Spent   Left Speed
100  1638  100  1638    0     0  4000      0 --:--:-- --:--:-- 4004
[
  {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag",
    "access_level": 50,
    "created_at": "2025-05-05T20:19:20.879Z",
    "expires_at": null,
    "membership_state": "active"
  },
  {
    "id": 27953483,
    "username": "ssabag76",
    "public_email": null,
    "name": "Shimon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://secure.gravatar.com/avatar/bd49fb91e3d46451768a609c8602611f78ead4385073535adcfb7829ffd45167?s=80&d=identicon",
    "web_url": "https://gitlab.com/ssabag76",
    "access_level": 10,
    "created_at": "2025-05-10T13:55:01.015Z",
    "created_by": {
      "id": 27657982,
      "username": "ssabag",
      "public_email": "",
      "name": "Simon Sabag",
      "state": "active",
      "locked": false,
      "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
      "web_url": "https://gitlab.com/ssabag"
    },
    "expires_at": null,
    "membership_state": "active"
  }
]
```

- **Getting ALL members in Project ID 69940574 (with Token)**
- <https://gitlab.com/api/v4/projects/69940574/members>
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx"
<https://gitlab.com/api/v4/projects/69940574/members | jq .>



The screenshot shows a Postman interface with the following details:

- Method:** GET
- URL:** https://gitlab.com/api/v4/projects/69940574/members
- Authorization:** Bearer Token (with a redacted token value)
- Headers:** (8) including Content-Type: application/json
- Body:** (0)
- Response Status:** 200 OK
- Response Time:** 367 ms
- Response Size:** 1.54 KB
- Content:** A JSON array of member objects. The first object is for user 'ssabag' (id: 27657982), and the second object is for user 'samydifallah' (id: 27657981).

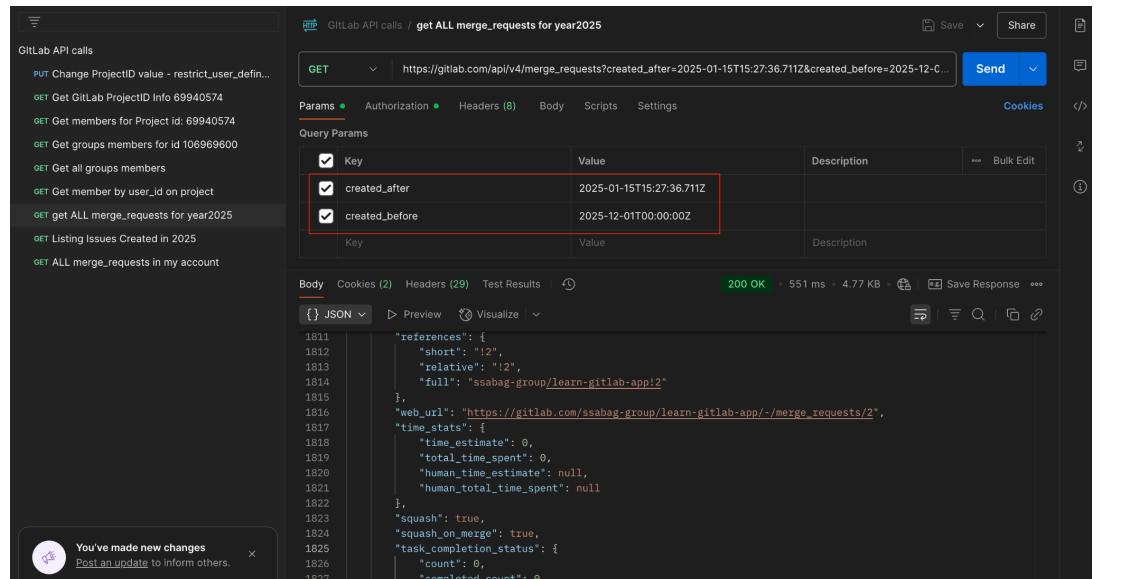
```

simonsabag@MacBook-Air-sl-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/groups/106969600/members/all" | jq .
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          Dload  Upload Total Spent   Left Speed
100 1638 100 1638    0     0 4140      0 --:--:--:--:--:-- 4136
[ {
  "id": 27657982,
  "username": "ssabag",
  "public_email": "",
  "name": "Simon Sabag",
  "state": "active",
  "locked": false,
  "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
  "web_url": "https://gitlab.com/ssabag",
  "access_level": 50,
  "created_at": "2025-05-05T20:19:20.879Z",
  "expires_at": null,
  "membership_state": "active"
},
{
  "id": 27953483,
  "username": "ssabag76",
  "public_email": null,
  "name": "Shimon Sabag",
  "state": "active",
  "locked": false,
  "avatar_url": "https://secure.gravatar.com/avatar/bd49fb91e3d46451768a609c860261f78ead4385073535adcfb7829ffd45167?s=80&d=identicon",
  "web_url": "https://gitlab.com/ssabag76",
  "access_level": 10,
  "created_at": "2025-05-18T13:55:01.015Z",
  "created_by": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  },
  "expires_at": null,
  "membership_state": "active"
},
{
  "id": 27657981,

```

● Getting ALL MR for given year 2025

- curl --header "PRIVATE-TOKEN: <your_access_token>"
["https://gitlab.example.com/api/v4/projects/123/merge_requests?created_after=2024-01-01T00:00:00Z&created_before=2025-01-01T00:00:00Z"](https://gitlab.example.com/api/v4/projects/123/merge_requests?created_after=2024-01-01T00:00:00Z&created_before=2025-01-01T00:00:00Z)
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx"
["https://gitlab.com/api/v4/merge_requests?created_after=2025-01-15T15:27:36.711Z&created_before=2025-12-01T00:00:00Z"](https://gitlab.com/api/v4/merge_requests?created_after=2025-01-15T15:27:36.711Z&created_before=2025-12-01T00:00:00Z)



The screenshot shows the Postman interface with the following details:

- Method:** GET
- URL:** https://gitlab.com/api/v4/merge_requests?created_after=2025-01-15T15:27:36.711Z&created_before=2025-12-01T00:00:00Z
- Params:**
 - created_after: 2025-01-15T15:27:36.711Z
 - created_before: 2025-12-01T00:00:00Z
- Body:** JSON (empty)
- Headers:** (29 items listed)
- Test Results:** 200 OK (551 ms, 4.77 KB)

Code Block (Terminal Output):

```

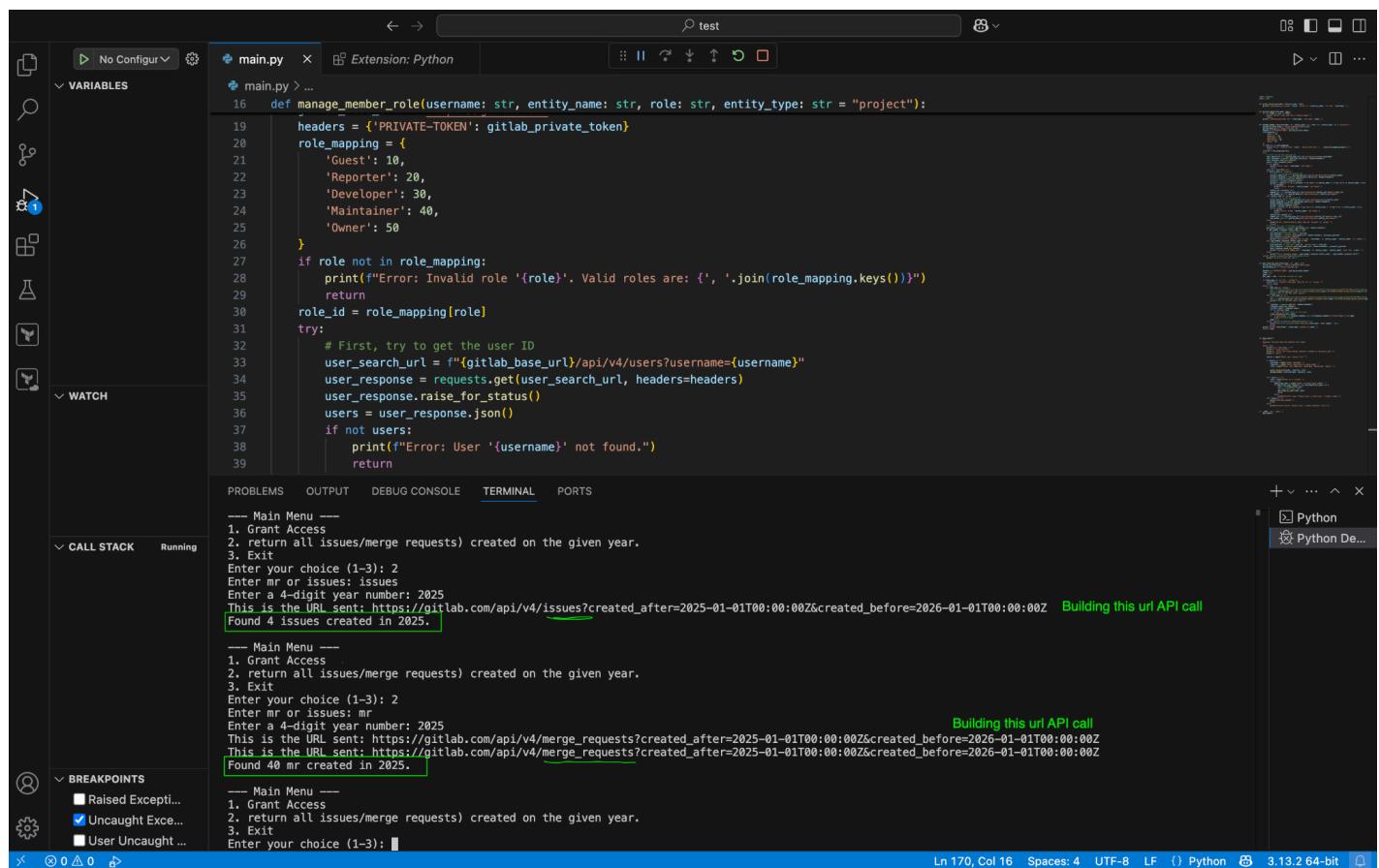
simonsabag@MacBook-Air-s1-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/merge_requests?created_after=2025-01-01T00:00:00Z&created_before=2025-12-01T00:00:00Z"
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          0     0      0      0      0      0      0      0
100 43867  100 43867  0     0  70329  0  --:--:--:--:--:--:--:--:--: 70412
[ {
  "id": 384133796,
  "iid": 21,
  "project_id": 69905560,
  "title": "Adding app version control and name",
  "description": "",
  "state": "merged",
  "created_at": "2025-05-17T15:27:36.711Z",
  "updated_at": "2025-05-17T15:30:07.474Z",
  "merged_at": "2025-05-17T15:27:36.711Z",
  "merge_user": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  },
  "merge_commit": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  }
}
]

```

- checking user name
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/users?username=ssabag" | jq .

```
simonsabag@MacBook-Air-sl-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/users?username=ssabag" | jq .
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          Dload  Upload Total Spent   Left Speed
100  238  100  238    0     0  541      0 --:--:-- --:--:-- 542
[{
  "id": 27657982,
  "username": "ssabag",
  "public_email": "",
  "name": "Simon Sabag",
  "state": "active",
  "locked": false,
  "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
  "web_url": "https://gitlab.com/ssabag"
}]
simonsabag@MacBook-Air-sl-Simon ~ %
```

The code will be simulated using the debugger in Visual Studio Code (VSC).



Grant Role' access to Project 'Test4' for user 'ssabag76'. (code)

The screenshot shows a code editor window with a Python file named `main.py`. The code defines a function `manage_member_role` which takes a `username`, `entity_name`, `role`, and `entity_type` as parameters. It uses a mapping of roles to IDs and makes API requests to GitLab to update the user's role in a specific project. A terminal window below the code shows the execution of the script and the successful grant of the 'Developer' role to the user 'ssabag76' in the project 'Test4'.

```
def manage_member_role(username: str, entity_name: str, role: str, entity_type: str = "project"):
```

```
    role_mapping = {
        'Guest': 10,
        'Reporter': 20,
        'Developer': 30,
        'Maintainer': 40,
        'Owner': 50
    }

    if role not in role_mapping:
        print(f"Error: Invalid role '{role}'. Valid roles are: {', '.join(role_mapping.keys())}")
        return

    role_id = role_mapping[role]
    try:
        # First, try to get the user ID
        user_search_url = f"{gitlab_base_url}/api/v4/users?username={username}"
        user_response = requests.get(user_search_url, headers=headers)
        user_response.raise_for_status()
        users = user_response.json()
        if not users:
            print(f"Error: User '{username}' not found.")
            return
        user_id = users[0]['id']

        if entity_type == "project":
            # First, try to get the project ID
            project_search_url = f"{gitlab_base_url}Test"
            project_response = requests.get(project_search_url, headers=headers)
            project_response.raise_for_status()
            projects = project_response.json()
            project = next(p for p in projects if p['name'] == entity_name or str(p['id']) == entity_name, None)
            if not project:
                print(f"Error: Project '{entity_name}' not found.")
                return
            project_id = project['id']
            url = f'{gitlab_base_url}/api/v4/projects/{project_id}/members/{user_id}'
            data = {'access_level': role_id}
            response = requests.put(url, json=data, headers=headers)
            response.raise_for_status()
            print(f"Successfully updated role of user '{username}' in project '{entity_name}' to '{role}'.")

    except requests.exceptions.RequestException as e:
        print(f"Request failed: {e}")

if __name__ == "__main__":
    main()
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3): 1
Enter username: ssabag76
Enter repository or group name: Test4
Enter role (Reporter, Developer, Maintainer, Owner): Developer
Attempting to grant 'Developer' access to 'Test4' for user 'ssabag76'.
Successfully updated role of user 'ssabag76' in project 'Test4' to 'Developer'.
```

— Main Menu —
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3): ■

The screenshot shows a Postman collection interface. A GET request is being prepared to the URL `https://gitlab.com/api/v4/users?username=ssabag76`. The 'Params' tab is selected, showing a parameter `username` with the value `ssabag76`. The 'Body' tab is also visible. The response status is `200 OK` with a response time of `296 ms` and a size of `1.92 KB`. The JSON response body is displayed, showing a single user object with fields like `id`, `username`, `public_email`, `name`, `state`, `locked`, `avatar_url`, and `web_url`.

GET https://gitlab.com/api/v4/users?username=ssabag76

Params • Authorization Headers (7) Body Scripts Settings

Query Params

Key	Value	Description
username	ssabag76	
Key	Value	Description

Body Cookies (2) Headers (30) Test Results | 200 OK • 296 ms • 1.92 KB • e.g. |

{ } JSON ▾ ▷ Preview ⚡ Visualize |

```
1 [ 
2   {
3     "id": 27953483,
4     "username": "ssabag76",
5     "public_email": null,
6     "name": "Shimon Sabag",
7     "state": "active",
8     "locked": false,
9     "avatar_url": "https://secure.gravatar.com/avatar/
10      bd49fb91e3d46451768a609c860261f78ead4385073535adcfb7829ffd45167?s=80&d=identicon",
11     "web_url": "https://gitlab.com/ssabag76"
12   ]

```

- **Listing Issues Created in Year 2025**
- **Example:** curl --header "PRIVATE-TOKEN: <your_access_token>" "https://gitlab.example.com/api/v4/issues?created_after=2024-01-01T00:00:00Z&created_before=2025-01-01T00:00:00Z"
- curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/issues?created_after=2025-01-01T00:00:00Z&created_before=2025-12-01T00:00:00Z"

ID	IID	Project ID	Title	Description	State	Created At	Updated At	Closed At	Closed By																
167524843	4	69905560	This is Test issue 4	This is Test issue 4	closed	2025-05-19T08:57:35.855Z	2025-05-19T08:58:18.454Z	2025-05-19T08:58:18.440Z	<table border="1"> <tr><td>id</td><td>27657982</td></tr> <tr><td>username</td><td>ssabag</td></tr> <tr><td>public_email</td><td></td></tr> <tr><td>name</td><td>Simon Sabag</td></tr> <tr><td>state</td><td>active</td></tr> <tr><td>locked</td><td>false</td></tr> <tr><td>avatar_url</td><td>https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png</td></tr> <tr><td>web_url</td><td>https://gitlab.com/ssabag</td></tr> </table>	id	27657982	username	ssabag	public_email		name	Simon Sabag	state	active	locked	false	avatar_url	https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png	web_url	https://gitlab.com/ssabag
id	27657982																								
username	ssabag																								
public_email																									
name	Simon Sabag																								
state	active																								
locked	false																								
avatar_url	https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png																								
web_url	https://gitlab.com/ssabag																								
0																									
167524820	3	69905560	This is a test issue 4	This is a test issue 4	opened	2025-05-19T08:57:35.855Z	2025-05-19T08:58:18.454Z	null	null																

```
simonsabag@MacBook-Air-s1-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/issues?created_after=2025-01-01T00:00:00Z&created_before=2025-12-01T00:00:00Z" | jq .
% Total    % Received % Xferd  Average Speed   Time   Time  Current
%          %          %       Download Upload  Total Spent  Left  Speed
100  6561  100  6561    0      0  14950  0 --:--:--:--:--:--:--:--: 14979
[ {
  "id": 167524843,
  "iid": 4,
  "project_id": 69905560,
  "title": "This is Test issue 4",
  "description": "This is Test issue 4",
  "state": "closed",
  "created_at": "2025-05-19T08:57:35.855Z",
  "updated_at": "2025-05-19T08:58:18.454Z",
  "closed_at": "2025-05-19T08:58:18.440Z",
  "closed_by": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  },
  "labels": [],
  "milestone": null,
  "assignees": [],
  "author": {
    "id": 27657982,
    "username": "ssabag",
    "public_email": "",
    "name": "Simon Sabag",
    "state": "active",
    "locked": false,
    "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
    "web_url": "https://gitlab.com/ssabag"
  }
},
```

```

main.py > ...
16 def manage_member_role(username: str, entity_name: str, role: str, entity_type: str = "project"):
17     headers = {'PRIVATE-TOKEN': gitlab_private_token}
18     role_mapping = {
19         'Guest': 10,
20         'Reporter': 20,
21         'Developer': 30,
22         'Maintainer': 40,
23         'Owner': 50
24     }
25
26     if role not in role_mapping:
27         print(f"Error: Invalid role '{role}'. Valid roles are: {', '.join(role_mapping.keys())}")
28         return
29     role_id = role_mapping[role]
30
31     try:
32         # First, try to get the user ID
33         user_search_url = f"{gitlab_base_url}/api/v4/users?username={username}"
34         user_response = requests.get(user_search_url, headers=headers)
35         user_response.raise_for_status()
36         users = user_response.json()
37         if not users:
38             print(f"Error: User '{username}' not found.")
39             return

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

— Main Menu —
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3): 2
Enter mr or issues: issues
Enter a 4-digit year number: 2025
This is the URL sent: https://gitlab.com/api/v4/issues?created_after=2025-01-01T00:00:00Z&created_before=2026-01-01T00:00:00Z Building this url API call
Found 4 issues created in 2025.

— Main Menu —
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3): 2
Enter mr or issues: mr
Enter a 4-digit year number: 2025
This is the URL sent: https://gitlab.com/api/v4/merge_requests?created_after=2025-01-01T00:00:00Z&created_before=2026-01-01T00:00:00Z
This is the URL sent: https://gitlab.com/api/v4/merge_requests?created_after=2025-01-01T00:00:00Z&created_before=2026-01-01T00:00:00Z
Building this url API call
Found 40 mr created in 2025.

— Main Menu —
1. Grant Access
2. return all issues/merge requests) created on the given year.
3. Exit
Enter your choice (1-3):

Ln 170, Col 16 Spaces: 4 UTF-8 LF ⚙ Python 3.13.2 64-bit

I have populated my GitLab account with four issues and are being compared against the code result output.

ssabag-group / my-gitlab-app / Issues 3 open issues and 1 closed sum of 4

Open 3 Closed 1 All 4 Bulk edit New issue ...

Search or filter results... Created date ↴ ↴

This is Test issue 3 #3 · created 10 hours ago by Simon Sabag

This is Test issue 2 #2 · created 10 hours ago by Simon Sabag

This is a test issue 1 #1 · created 10 hours ago by Simon Sabag

Email a new issue to this project Show 20 items ▾

- **Getting ALL MR for given year 2025 with projectID**
- **Example:** curl --header "PRIVATE-TOKEN: <your_access_token>" "https://gitlab.example.com/api/v4/projects/123/merge_requests?created_after=2024-01-01T00:00:00Z&created_before=2025-01-01T00:00:00Z"
- **curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx"**
https://gitlab.com/api/v4/projects/69905560/merge_requests?created_after=2024-01-01T00:00:00Z&created_before=2025-12-01T00:00:00Z

```
simonsabag@MacBook-Air-sl-Simon ~ % curl --header "PRIVATE-TOKEN: glpat-CjWZz8kf3r2GJLxiyUEx" "https://gitlab.com/api/v4/projects/69905560/merge_requests?created_after=2024-01-01T00:00:00Z&created_before=2025-12-01T00:00:00Z" | jq .
% Total    % Received % Xferd  Average Speed   Time     Time   Current
          Dload  Upload Total   Spent   Left  Speed
100 43867  100 43867    0     0  93727      0 --:--:--:--:--:-- 93732
[{"id": 384133796,
 "iid": 21,
 "project_id": 69905560,
 "title": "adding app version control and name",
 "description": "",
 "state": "merged",
 "created_at": "2025-05-17T15:27:36.711Z",
 "updated_at": "2025-05-17T15:30:07.474Z",
 "merged_by": {
   "id": 27657982,
   "username": "ssabag",
   "public_email": "",
   "name": "Simon Sabag",
   "state": "active",
   "locked": false,
   "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
   "web_url": "https://gitlab.com/ssabag"
 },
 "merge_user": {
   "id": 27657982,
   "username": "ssabag",
   "public_email": "",
   "name": "Simon Sabag",
   "state": "active",
   "locked": false,
   "avatar_url": "https://gitlab.com/uploads/-/system/user/avatar/27657982/avatar.png",
   "web_url": "https://gitlab.com/ssabag"
 },
 "merged_at": "2025-05-17T15:30:06.884Z",
 "closed_by": null}
```

Creating the Dockerfile

This stage involves leveraging the GitLab project, specifically the "**Test**" project I have created, as a repository for all the essential files required to build the Docker image for my application. The process includes the following steps

Creating a New Project: A new GitLab project named "**Test**" has been created

Uploading Files: The relevant files, such as the Dockerfile, application code, and any configuration files, will be uploaded to the "**Test**" project repository. These files will then be used by the Docker build process

Name	Last commit	Last update
ci Contain the dockerfile	test7	1 day ago
.gitlab-ci.yml The gitlab CICD pipeline file	adding env	15 hours ago
README.md	Initial commit	3 days ago
main.py The python script	test image	15 hours ago
requirements.txt File dependency need it define the image		1 day ago
README.md		

Creating the CI Pipeline:

- A pipeline created by committing the necessary configuration files, including the **Dockerfile** provided below, directly to the main branch of the GitLab repository using the GitLab Web IDE. (files will share in the repo)

```
Dockerfile
FROM python:3.9-slim-buster
WORKDIR /app
COPY requirements.txt .
RUN pip install --no-cache-dir -r requirements.txt
COPY main.py .
EXPOSE 5000
CMD ["python", "main.py"]
```

Creating the Pipeline in GitLab Project:

Building the ready Image

Running Simon Sabag created pipeline for commit d67d18fc 16 seconds ago

For main

latest branch 2 jobs In progress, queued for 1 seconds

Pipeline Jobs 2 Tests 0

```

graph LR
    subgraph pre [".pre"]
        build_docker_image[build_docker_image]
    end
    build[build]
    build_docker_image --> build
    build_web[build_web]
    
```


Building the ready Image

Passed Simon Sabag created pipeline for commit d67d18fc 1 minute ago, finished just now

For main

latest branch 2 jobs 1.25 1 minute 15 seconds, queued for 1 seconds

Pipeline Jobs 2 Tests 0

```

graph LR
    subgraph pre [".pre"]
        build_docker_image[build_docker_image]
    end
    build[build]
    build_docker_image --> build
    build_web[build_web]
    
```


Status	Pipeline	Created by	Stages	Actions
Passed	Building the ready Image #1824698921	Simon Sabag	.pre, build	Download

Below is the a screen of the worker creating the build:

ssabag-group / test / Jobs / #10075753345

Search visible log output

```

210 $ docker image ls
211 REPOSITORY TAG IMAGE ID CREATED SIZE
212 registry.gitlab.com/ssabag-group/test/mypyimage latest 98a36db7c233 1 second ago 144MB
213 $ docker push $CI_REGISTRY_IMAGE/mypyimage
214 Using default tag: latest
215 The push refers to repository [registry.gitlab.com:ssabag-group/test/mypyimage]
216 007f49f88bf3: Preparing
217 454fc194a341: Preparing
218 30f41508e707: Preparing
219 e875821f4023: Preparing
220 067ea27560c1: Preparing
221 7fb1037e6bb3: Preparing
222 14cbbe0e8d6e: Preparing
223 ae2d55769c5e: Preparing
224 e2ef8a51359d: Preparing
225 7fb1037e6bb3: Waiting
226 14cbbe0e8d6e: Waiting
227 ae2d55769c5e: Waiting
228 e2ef8a51359d: Waiting
229 067ea27560c1: Layer already exists
230 7fb1037e6bb3: Layer already exists
231 14cbbe0e8d6e: Layer already exists
232 ae2d55769c5e: Layer already exists
233 e2ef8a51359d: Layer already exists
234 007f49f88bf3: Pushed
235 e875821f4023: Pushed
236 30f41508e707: Pushed
237 454fc194a341: Pushed
238 latest: digest: sha256:561aa9fd4ab589bfff8d80a0c91bf1a906c6d5919e7eddcf5a611aedac8c18edb size: 220
239 Cleaning up project directory and file based variables
240 Job succeeded

```

Duration: 1 minute 0 seconds
 Finished: 4 minutes ago
 Queued: 0 seconds
 Timeout: 1h (from project)
 Runner: #12270807 (jia-DgxS) 1-blue.saas-linux-small-amd64.runners-manager.gitlab.com/default
 Source: Push

Commit d67d18fc Building the ready Image

Pipeline #1824698921 Passed for main

.pre

Related jobs

→ ✓ build_docker_image

The image has been pushed to my GitLab container registry:

The screenshot shows the GitLab interface for a project named 'ssabag-group / test'. In the 'Container registry' section, there is a single repository named 'mypyimage'. It contains one tag, 'latest', which is highlighted with a red box. The tag was published 15 minutes ago and has a size of 52.02 MB. Other tags listed include '1.0' and '5.0'. The interface includes a sidebar with project management options like Manage, Plan, Code, Build, Secure, Deploy, Releases, Feature flags, Package registry, and Container registry.

Pulling the Image into my Docker Hub account:

running the following commands:

- `docker images`
- `docker login registry.gitlab.com` (use my personal user name account)
- `docker pull registry.gitlab.com/ssabag-group/test/mypyimage`
- `docker images`

```
|simonsabag@MacBook-Air-sl-Simon ~ % docker images
REPOSITORY          TAG      IMAGE ID   CREATED        SIZE
gitlab/gitlab-ee    latest   4d7a2f20d77d  4 days ago   6.23GB
node-app            1.0     5faaa0ecec374  5 days ago   259MB
ssabag/simon-repo  latest   5faaa0ecec374  5 days ago   259MB
mongo              latest   2e018e386e89  2 weeks ago  1.17GB
nginx              latest   c15da6c91de8  4 weeks ago  281MB
gcr.io/k8s-minikube/kicbase  v0.0.46  46b5a68d8b74f  4 months ago  1.72GB
gcr.io/k8s-minikube/kicbase <none>   fd2d445ddcc3  4 months ago  1.72GB
dockercrcloud/hello-world  latest   c6739be46772  7 years ago  43.3MB
|simonsabag@MacBook-Air-sl-Simon ~ % docker login registry.gitlab.com
Username: ssabag
| Info → A Personal Access Token (PAT) can be used instead.
To create a PAT, visit https://app.docker.com/settings

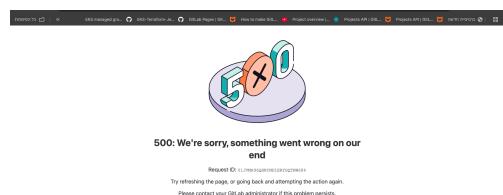
>Password: Used my access Token
Login Succeeded
|simonsabag@MacBook-Air-sl-Simon ~ % docker pull registry.gitlab.com/ssabag-group/test/mypyimage
Using default tag: latest
latest: Pulling from ssabag-group/test/mypyimage
fb1996ae966f: Pull complete
84c8c79126f6: Pull complete
54e576c6d0afe: Pull complete
a46466cf5d7c: Pull complete
2e1c130fa3ec: Pull complete
8d53da268408: Pull complete
71b2622b2f32: Pull complete
824416e23423: Pull complete
8b91b88d577: Pull complete
Digest: sha256:561a9fd4a4b589bfff8d80a0c91bf1a906c6d5919e7eddcf5a611aedac8c18edb
Status: Downloaded newer image for registry.gitlab.com:ssabag-group/test/mypyimage:latest
|registry.gitlab.com:ssabag-group/test/mypyimage:latest
|simonsabag@MacBook-Air-sl-Simon ~ % docker images
REPOSITORY          TAG      IMAGE ID   CREATED        SIZE
registry.gitlab.com:ssabag-group/test/mypyimage  latest   561a9fd4a4b5  36 minutes ago  221MB
gitlab/gitlab-ee    latest   4d7a2f20d77d  4 days ago   6.23GB
node-app            1.0     5faaa0ecec374  5 days ago   259MB
ssabag/simon-repo  latest   5faaa0ecec374  5 days ago   259MB
mongo              latest   2e018e386e89  2 weeks ago  1.17GB
nginx              latest   c15da6c91de8  4 weeks ago  281MB
gcr.io/k8s-minikube/kicbase  v0.0.46  46b5a68d8b74f  4 months ago  1.72GB
gcr.io/k8s-minikube/kicbase <none>   fd2d445ddcc3  4 months ago  1.72GB
dockercrcloud/hello-world  latest   c6739be46772  7 years ago  43.3MB
|simonsabag@MacBook-Air-sl-Simon ~ %
```

Several issues were identified during this work:

- the **Dockerfile** was modified to use a different base image
- GitLab experienced outages resulting in 500 errors.
- a new image was created to reduce potential vulnerabilities and is currently under review in my Docker Desktop.
- second function back with timeout http error 408 that need to be investigate the retry setup and number of pages in the Url back in the response using the function so while I'm debugging it the menu return the count

The code and file will be share on public GitHub repo

Thank you for the opportunity and this work assignment. 😊



CVE ID	Severity	Fixable	Present in	Affected by
.. CVE-2022-42969	8.7 🚨	✓	pypi / py /	
.. CVE-2023-30861	8.7 🚨	✓	pypi / fsls	
.. CVE-2024-1135	8.2 🚨	✓	pypi / gun	
.. CVE-2024-6827	7.5 🚨	✓	pypi / gun	
.. CVE-2024-35195	5.6 🚨	✓	pypi / requ	
.. CVE-2024-21503	5.3 🚨	✓	pypi / blac	

