WALCHAND INSTITUTE OF TECHNOLOGY, SOLAPUR
INFORMATION TECHNOLOGY
2021-22 SEMESTER –II

DevOps

Class: Final Year BTech.- IT (Sem-2)

Name: Siddhant Kudal Roll No: 27

Assignment: 4

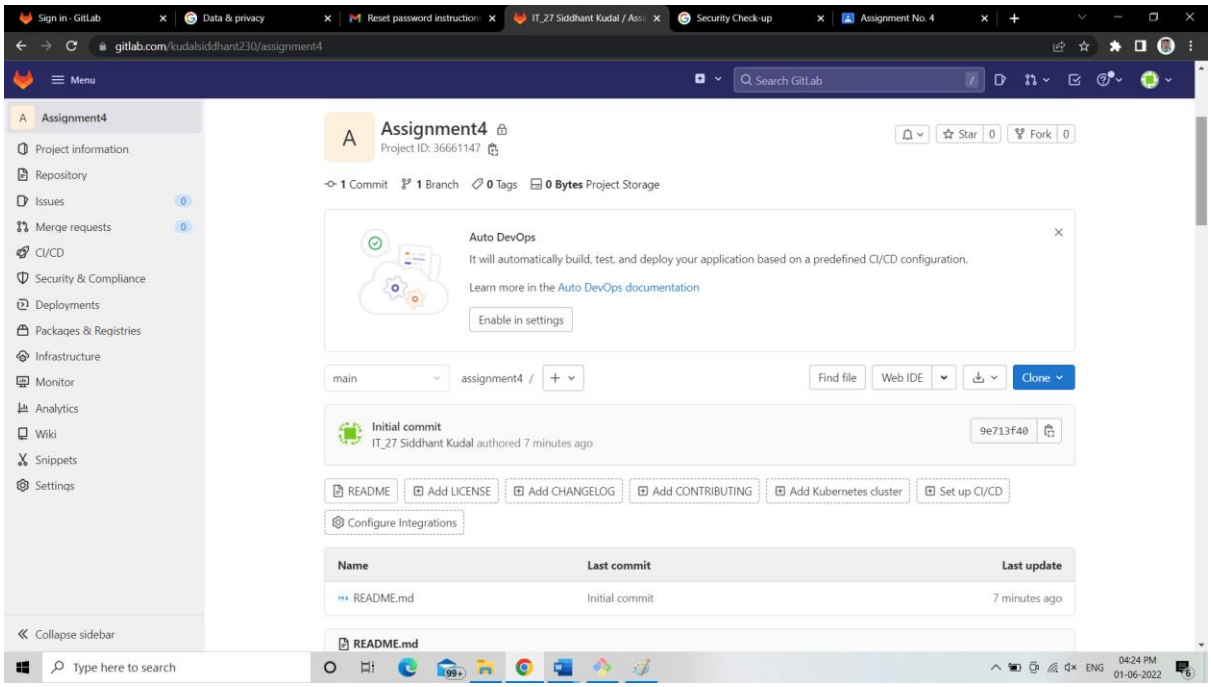
Title: GitLab CI/CD

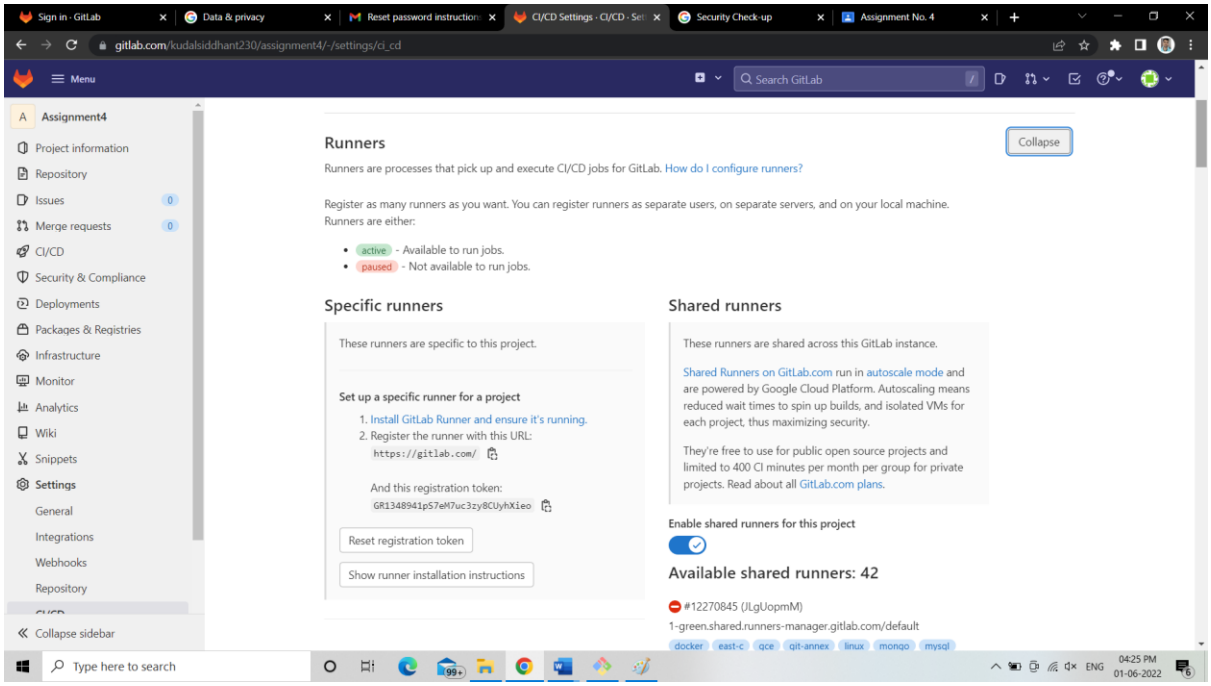
To use GitLab CI/CD:Ensure you have runners available to run your jobs. If you don't have a runner, install GitLab Runner and register a runner for your instance, project, or group.Create a .gitlab-ci.yml file at the root of your repository. This file is where you define your CI/CD jobs.

When you commit the file to your repository, the runner runs your jobs. The job results are displayed in a pipeline.

View the status of your pipeline and jobs.

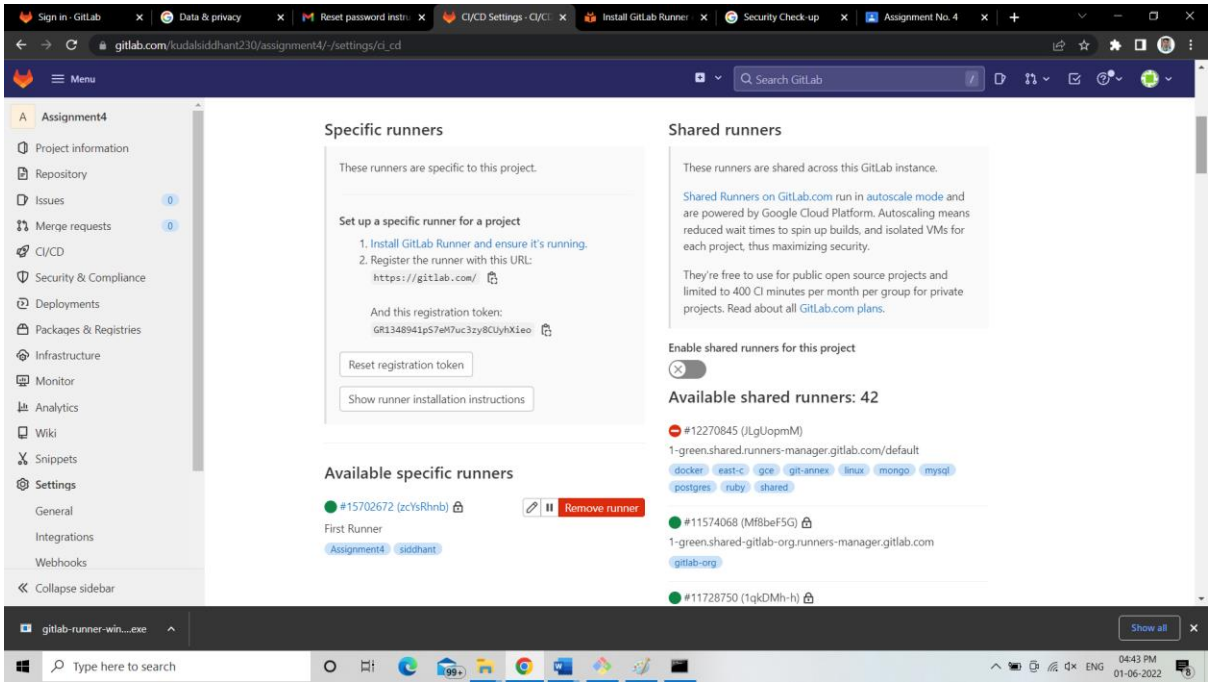
ScreenShot :





Administrator: Command Prompt

```
C:\>cd gitlab

C:\gitlab>cd gitlab-runner-windows-amd64.exe install
The system cannot find the path specified.

C:\gitlab>gitlab-runner-windows-amd64.exe install
Runtime platform                                    arch=amd64 os=windows pid=5740 revision=febb2a09 version=15.0.0

C:\gitlab>gitlab-runner-windows-amd64.exe register
Runtime platform                                    arch=amd64 os=windows pid=11348 revision=febb2a09 version=15.0.0
Enter the GitLab instance URL (for example, https://gitlab.com/):
https://gitlab.com/
Enter the registration token:
GR1348941pS7eM7uc3zy8CUyhXieo
Enter a description for the runner:
[DESKTOP-6NHJCNP]: First Runner
Enter tags for the runner (comma-separated):
Assignment4,siddhant
Enter optional maintenance note for the runner:

Registering runner... succeeded                     runner=GR1348941pS7eM7uc
Enter an executor: docker-windows, docker-ssh, shell, docker-ssh+machine, kubernetes, custom, parallels, ssh, virtualbox, docker+machine, docker:
shell
Runner registered successfully. Feel free to start it, but if it's running already the config should be automatically reloaded!

C:\gitlab>gitlab-runner-windows-amd64.exe start
Runtime platform                                    arch=amd64 os=windows pid=13460 revision=febb2a09 version=15.0.0

C:\gitlab>
```


Sign in · GitLab
Data & privacy
Reset password instru
CI/CD Settings · CI/CI
Install GitLab Runner
Security Check-up
Assignment No. 4
gitlab.com/kudalsiddhant230/assignment4/-/settings/ci_cd
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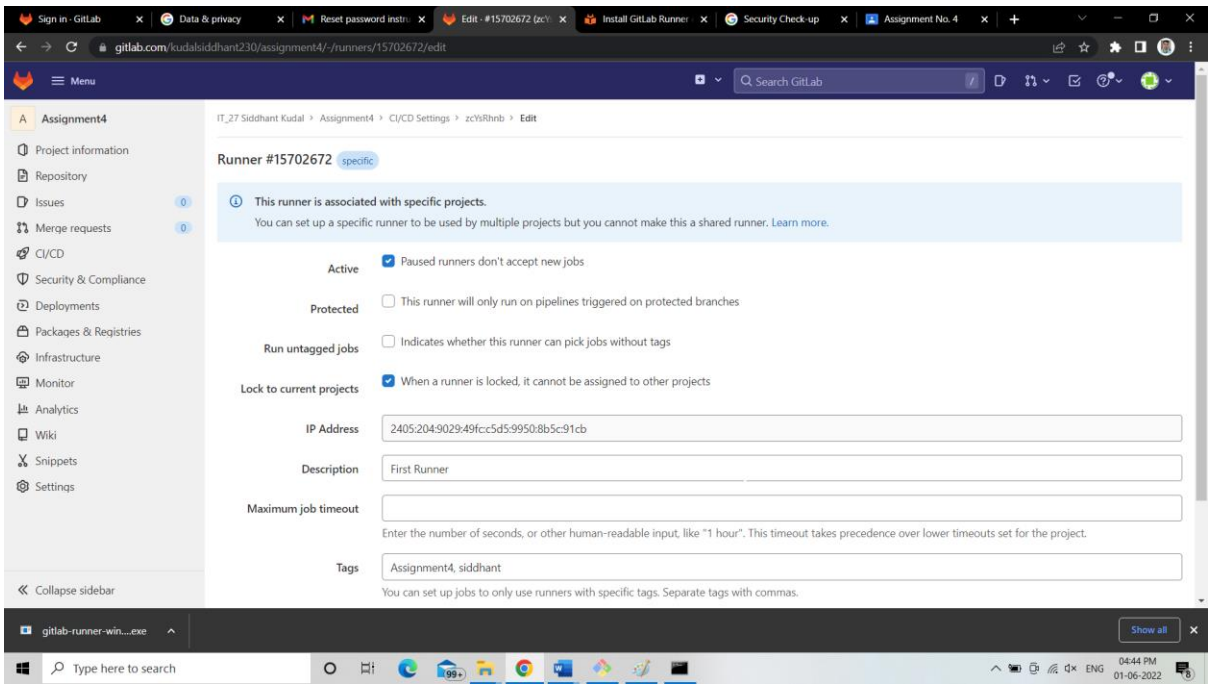
Specific runners
These runners are specific to this project.
Set up a specific runner for a project
1. Install GitLab Runner and ensure it's running.
2. Register the runner with this URL:
https://gitlab.com/
And this registration token:
GR1348941pS7eM7uc3zy8CUyhXieo
Reset registration token
Show runner installation instructions
Available specific runners
#15702672 (zcYsRhnb)
Remove runner
First Runner
Assignment4
siddhant
Shared runners
These runners are shared across this GitLab instance.
Shared Runners on GitLab.com run in autoscale mode and are powered by Google Cloud Platform. Autoscaling means reduced wait times to spin up builds, and isolated VMs for each project, thus maximizing security.
They're free to use for public open source projects and limited to 400 CI minutes per month per group for private projects. Read about all GitLab.com plans.
Enable shared runners for this project
Available shared runners: 42
#12270845 (JLgUopmM)
1-green.shared.runners-manager.gitlab.com/default
docker
east-c
gce
git-annex
linux
mongo
mysql
postgres
ruby
shared
#11574068 (Mf8beF5G)
1-green.shared-gitlab-org.runners-manager.gitlab.com
gitlab-org
#11728750 (1qkDMh-h)
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:43 PM
01-06-2022


Sign in · GitLab
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Edit · #15702672 (zcY
Install GitLab Runner
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gitlab.com/kudalsiddhant230/assignment4/-/runners/15702672/edit
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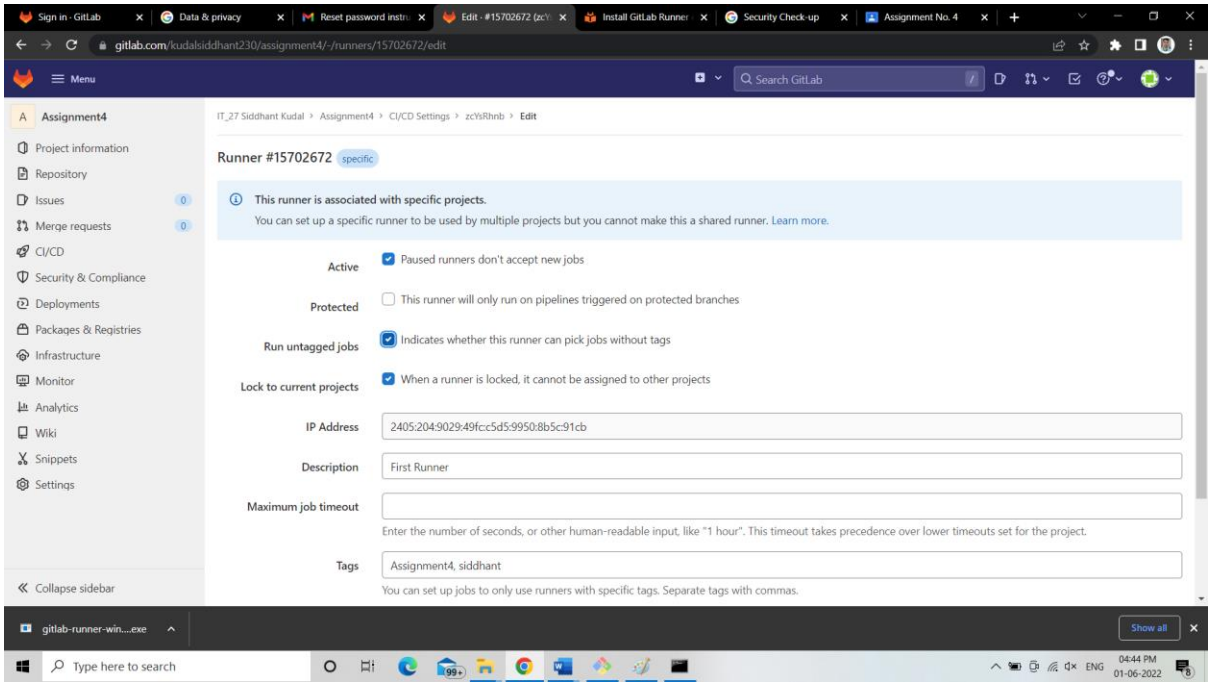
Collapse sidebar
IT_27 Siddhant Kudal › Assignment4 › CI/CD Settings › zcYsRhnb › Edit
Runner #15702672 specific
This runner is associated with specific projects.
You can set up a specific runner to be used by multiple projects but you cannot make this a shared runner. Learn more.
Active
Paused runners don't accept new jobs
Protected
This runner will only run on pipelines triggered on protected branches
Run untagged jobs
Indicates whether this runner can pick jobs without tags
Lock to current projects
When a runner is locked, it cannot be assigned to other projects
IP Address
2405:204:9029:49fc:c5d5:9950:8b5c:91cb
Description
First Runner
Maximum job timeout
Enter the number of seconds, or other human-readable input, like "1 hour". This timeout takes precedence over lower timeouts set for the project.
Tags
Assignment4, siddhant
You can set up jobs to only use runners with specific tags. Separate tags with commas.
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:44 PM
01-06-2022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IT_27 Siddhant Kudal › Assignment4 › CI/CD Settings › zcYsRhnb › Edit
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IP Address
2405:204:9029:49fc:c5d5:9950:8b5c:91cb
Description
First Runner
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Tags
Assignment4, siddhant
You can set up jobs to only use runners with specific tags. Separate tags with commas.
gitlab-runner-win....exe
Show all
Type here to search
ENG
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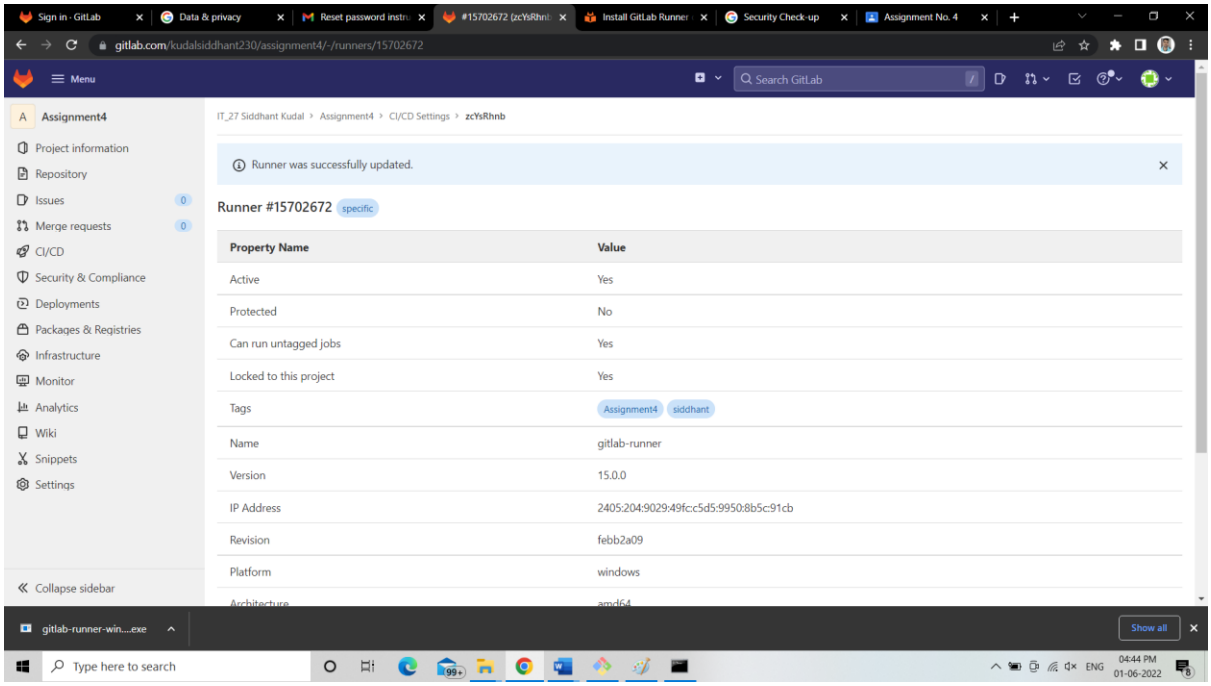
01-06-2022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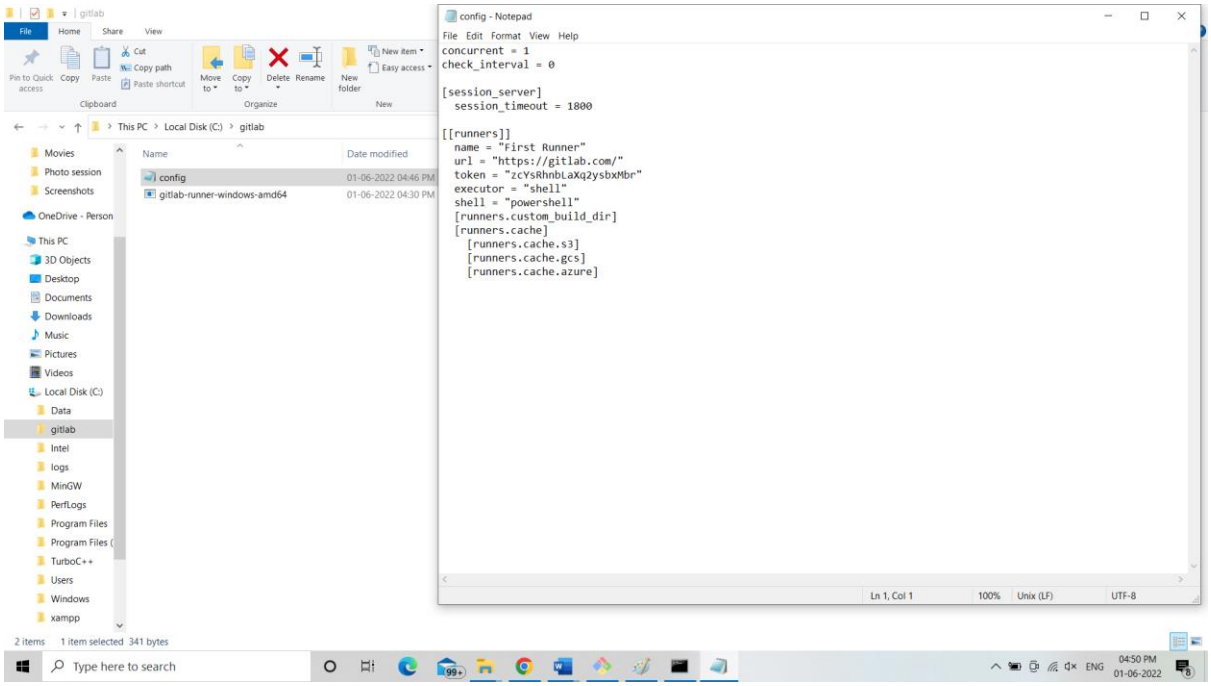
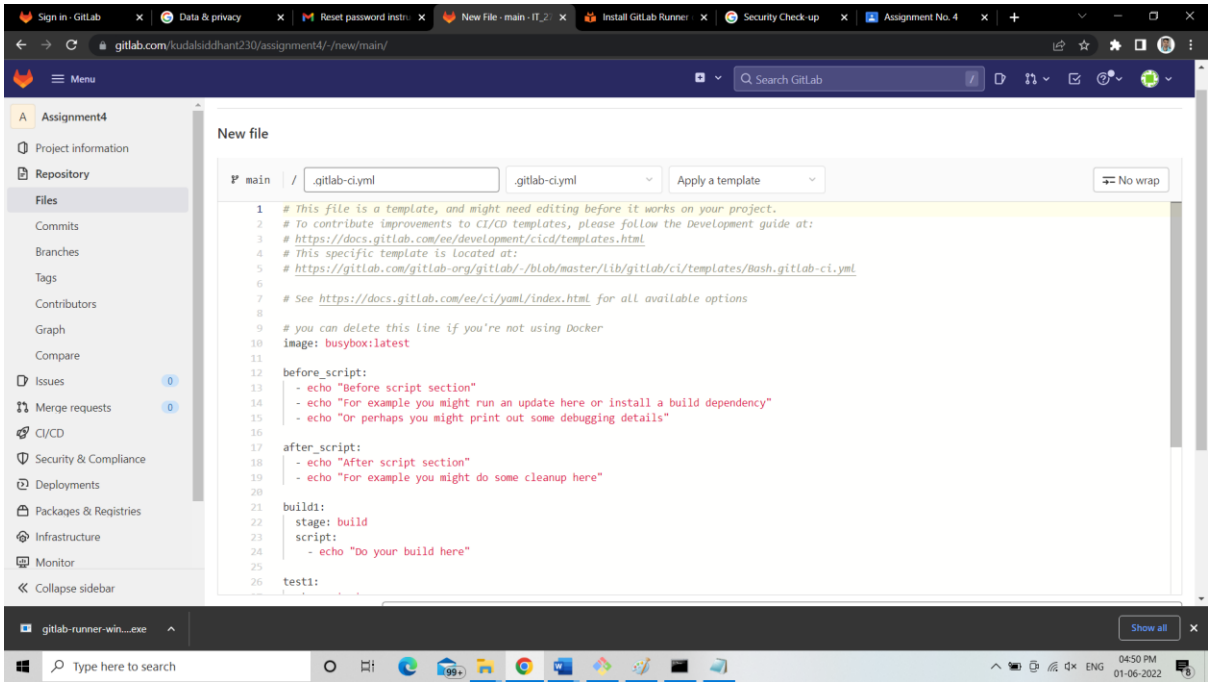
IT_27 Siddhant Kudal › Assignment4 › CI/CD Settings › zcYsRhnb
Runner was successfully updated.
Runner #15702672 specific
Property Name
Value
Active
Yes
Protected
No
Can run untagged jobs
Yes
Locked to this project
Yes
Tags
Assignment4
siddhant
Name
gitlab-runner
Version
15.0.0
IP Address
2405:204:9029:49fc:c5d5:9950:8b5c:91cb
Revision
febb2a09
Platform
windows
Architecture
amd64
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:44 PM
01-06-2022


config - Notepad
File Edit Format View Help
concurrent = 1
check_interval = 0
[session_server]
session_timeout = 1800
[[runners]]
name = "First Runner"
url = "https://gitlab.com/"
token = "zcYsRhnbLaXq2ysbxMbr"
executor = "shell"
shell = "powershell"
[runners.custom_build_dir]
[runners.cache]
[runners.cache.s3]
[runners.cache.gcs]
[runners.cache.azure]
Ln 1, Col 1
100%
Unix (LF)
UTF-8
config
gitlab-runner-windows-amd64
2 items
1 item selected 341 bytes
Type here to search


gitlab.com/kudalsiddhant230/assignment4/-/new/main/
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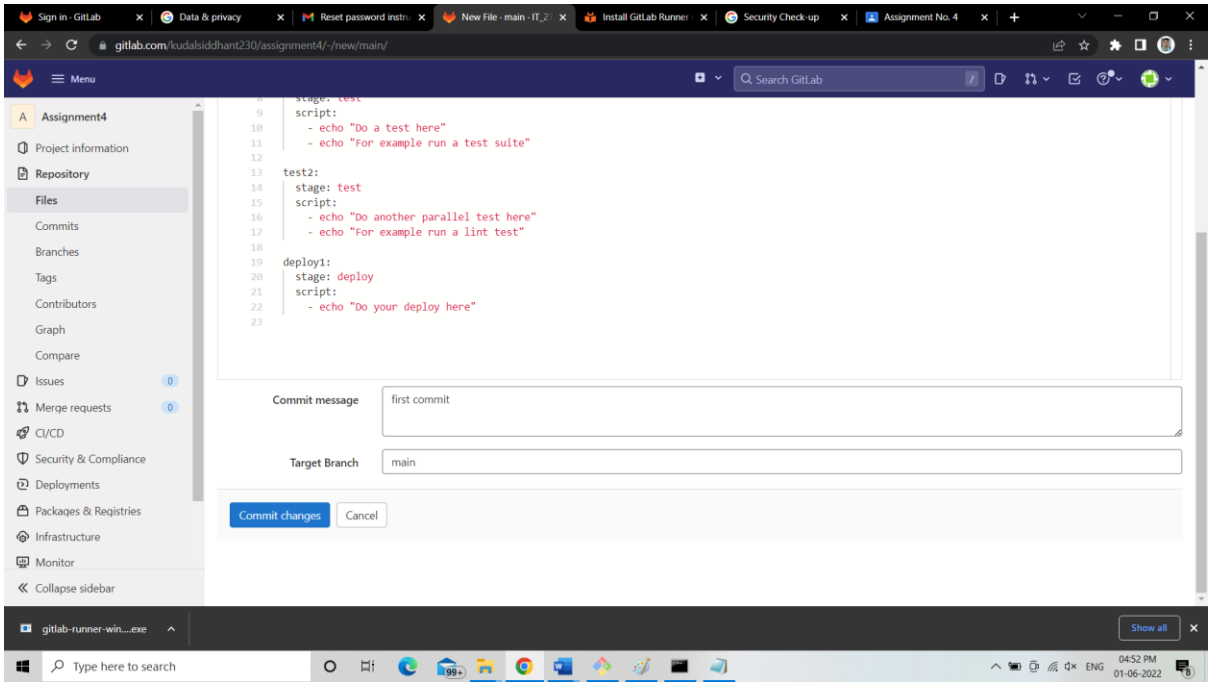
New file
main / .gitlab-ci.yml
.gitlab-ci.yml
Apply a template
No wrap
This file is a template, and might need editing before it works on your project.
To contribute improvements to CI/CD templates, please follow the Development guide at:
https://docs.gitlab.com/ee/development/cicd/templates.html
This specific template is located at:
https://gitlab.com/gitlab-org/gitlab/-/blob/master/lib/gitlab/ci/templates/Bash.gitlab-ci.yml
See https://docs.gitlab.com/ee/ci/yaml/index.html for all available options
you can delete this line if you're not using Docker
image: busybox:latest
before_script:
- echo "Before script section"
- echo "For example you might run an update here or install a build dependency"
- echo "Or perhaps you might print out some debugging details"
after_script:
- echo "After script section"
- echo "For example you might do some cleanup here"
build1:
stage: build
script:
- echo "Do your build here"
test1:
gitlab-runner-win....exe
Show all
Type here to search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New File · main · IT_2
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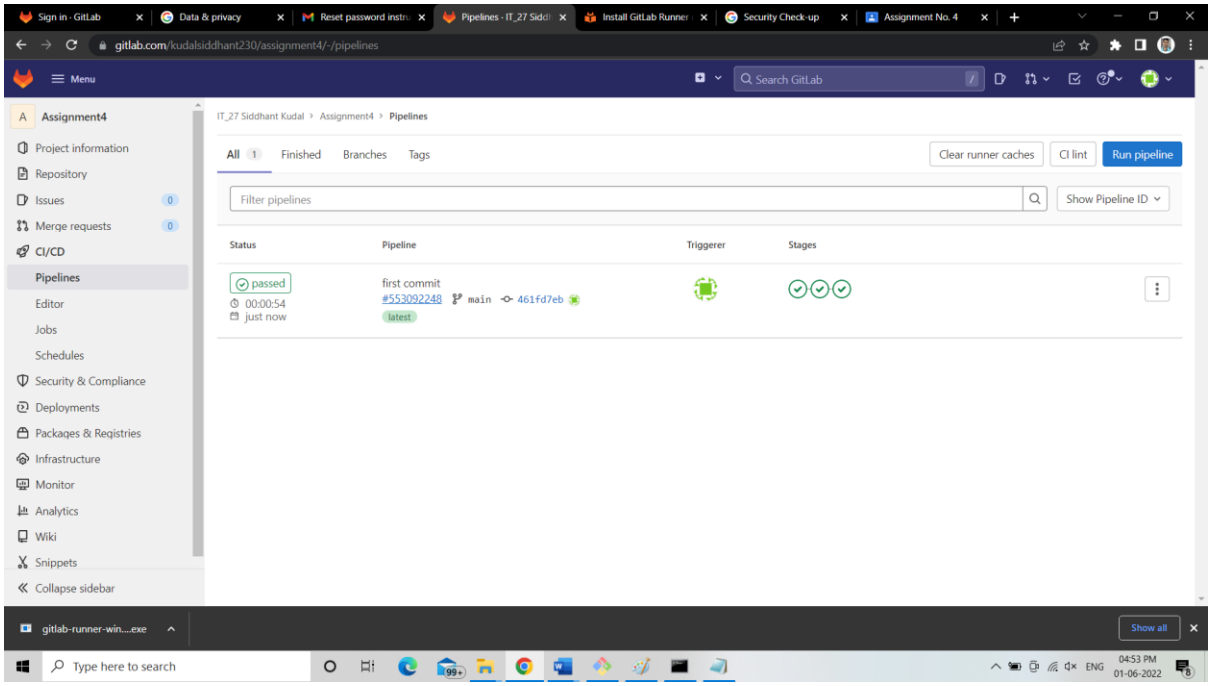
stage: test
script:
- echo "Do a test here"
- echo "For example run a test suite"
test2:
stage: test
script:
- echo "Do another parallel test here"
- echo "For example run a lint test"
deploy1:
stage: deploy
script:
- echo "Do your deploy here"
Commit message
first commit
Target Branch
main
Commit changes
Cancel
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:52 PM
01-06-2022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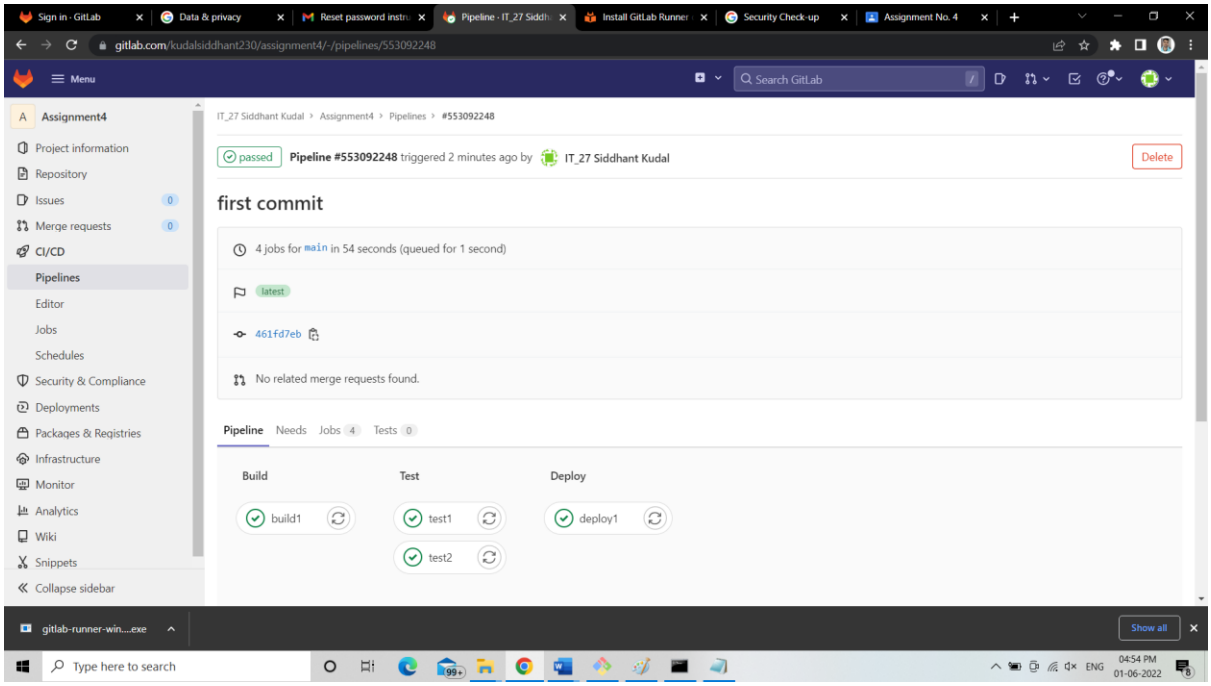
Clear runner caches
CI lint
Run pipeline
Filter pipelines
Show Pipeline ID
Status
Pipeline
Triggerer
Stages
passed
00:00:54
just now
first commit
#553092248
main
461fd7eb
latest
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:53 PM
01-06-2022


Sign in · GitLab
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Pipeline · IT_27 Siddh
Install GitLab Runner
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gitlab.com/kudalsiddhant230/assignment4/-/pipelines/553092248
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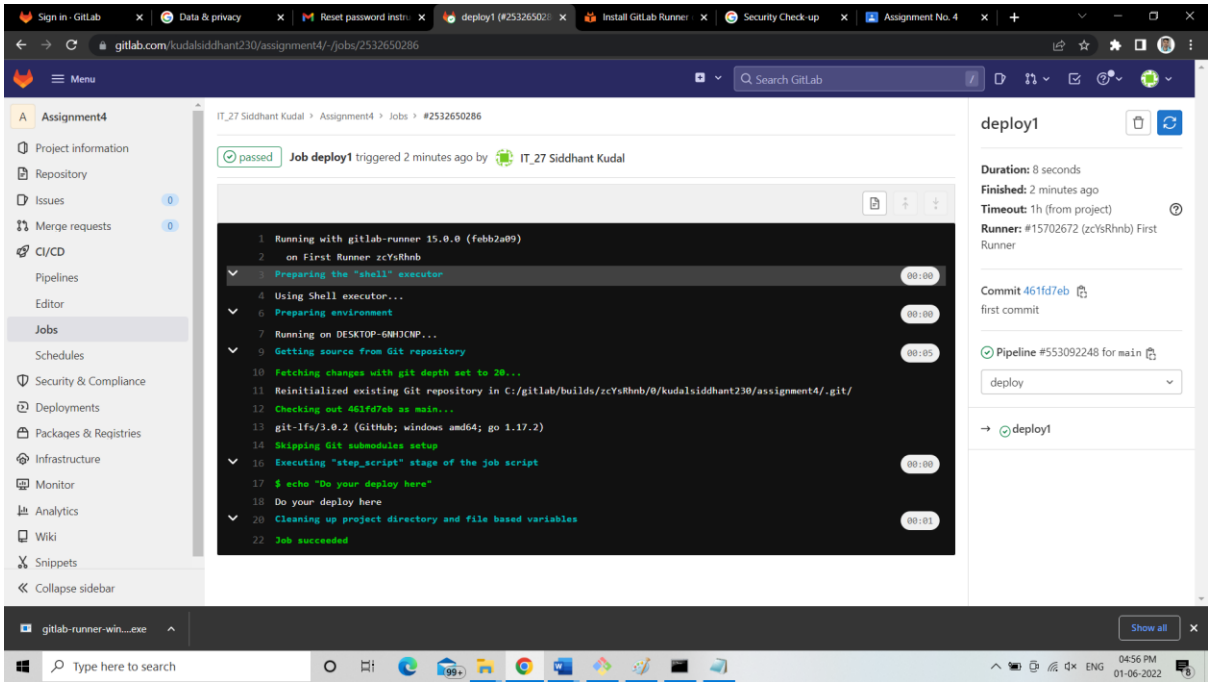
IT_27 Siddhant Kudal › Assignment4 › Pipelines › #553092248
passed Pipeline #553092248 triggered 2 minutes ago by IT_27 Siddhant Kudal
Delete
first commit
4 jobs for main in 54 seconds (queued for 1 second)
latest
461fd7eb
No related merge requests found.
Pipeline Needs Jobs 4 Tests 0
Build
Test
Deploy
build1
test1
test2
deploy1
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:54 PM
01-06-2022


Sign in · GitLab
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deploy1 (#25326502
Install GitLab Runner
Security Check-up
Assignment No. 4
gitlab.com/kudalsiddhant230/assignment4/-/jobs/2532650286
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IT_27 Siddhant Kudal › Assignment4 › Jobs › #2532650286
passed Job deploy1 triggered 2 minutes ago by IT_27 Siddhant Kudal
1 Running with gitlab-runner 15.0.0 (febb2a09)
2 on First Runner zcYsRhnb
3 Preparing the "shell" executor 00:00
4 Using Shell executor...
6 Preparing environment 00:00
7 Running on DESKTOP-6NHJCNP...
9 Getting source from Git repository 00:05
10 Fetching changes with git depth set to 20...
11 Reinitialized existing Git repository in C:/gitlab/builds/zcYsRhnb/0/kudalsiddhant230/assignment4/.git/
12 Checking out 461fd7eb as main...
13 git-lfs/3.0.2 (GitHub; windows amd64; go 1.17.2)
14 Skipping Git submodules setup
16 Executing "step_script" stage of the job script 00:00
17 $ echo "Do your deploy here"
18 Do your deploy here
20 Cleaning up project directory and file based variables 00:01
22 Job succeeded
deploy1
Duration: 8 seconds
Finished: 2 minutes ago
Timeout: 1h (from project)
Runner: #15702672 (zcYsRhnb) First Runner
Commit 461fd7eb
first commit
Pipeline #553092248 for main
deploy
deploy1
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:56 PM
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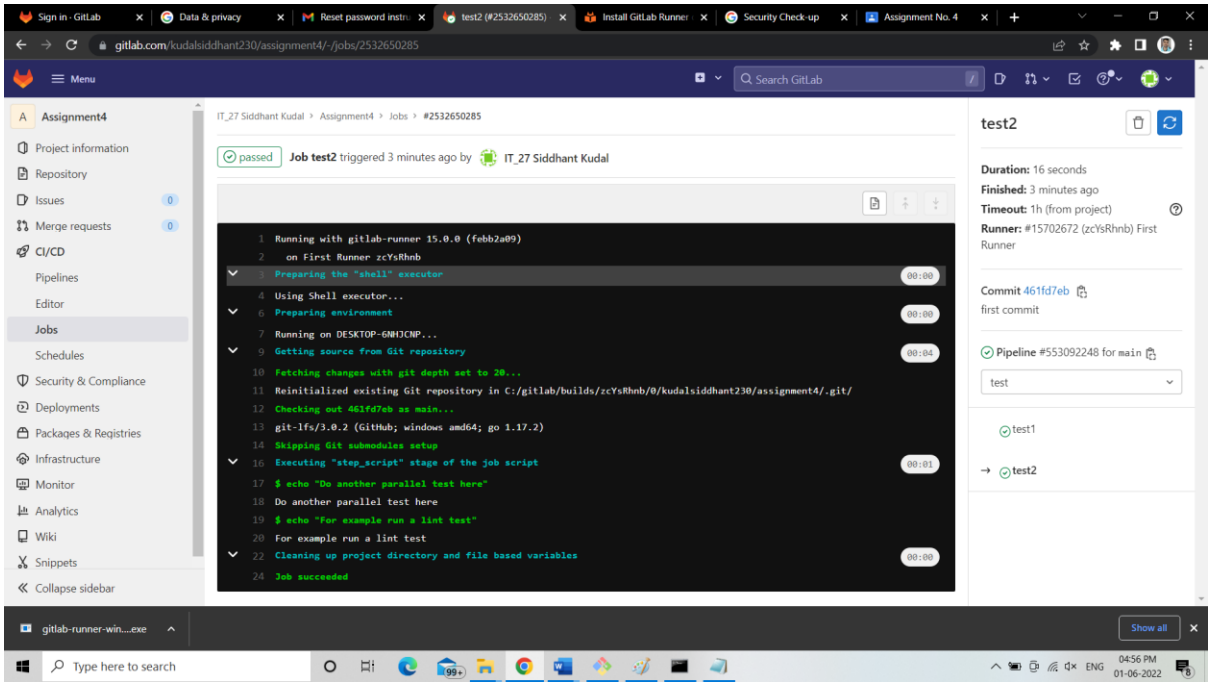
Sign in · GitLab
Data & privacy
Reset password instru
test2 (#2532650285)
Install GitLab Runner
Security Check-up
Assignment No. 4
gitlab.com/kudalsiddhant230/assignment4/-/jobs/2532650285
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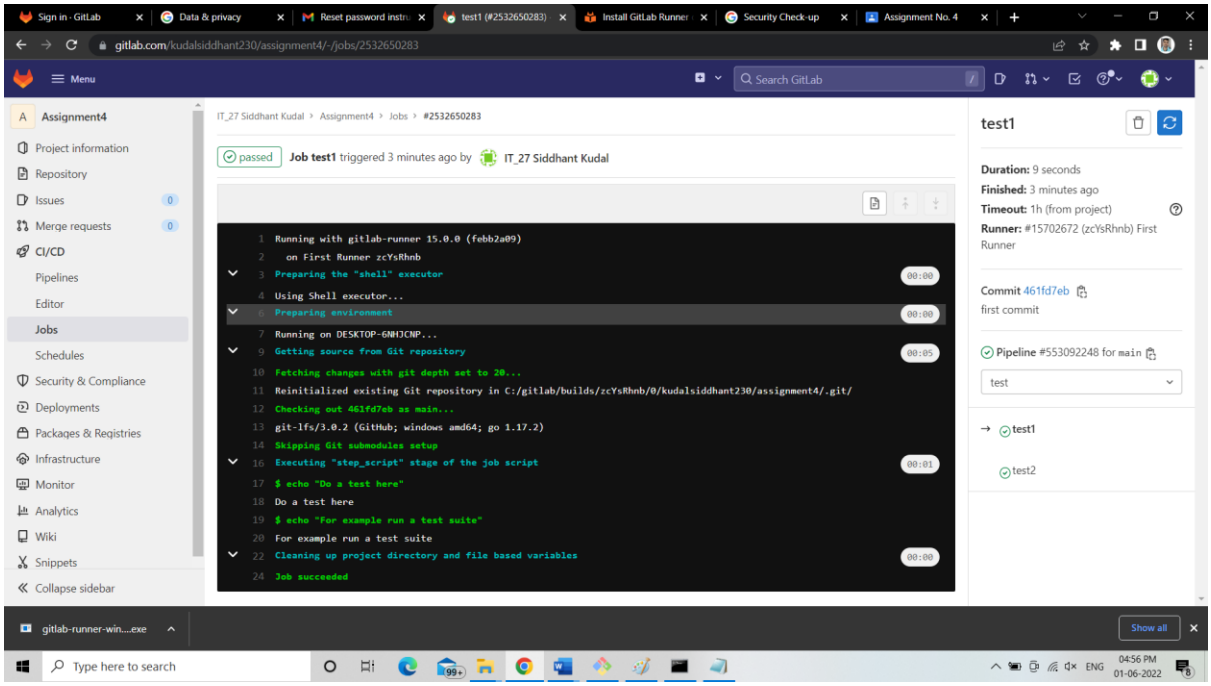
IT_27 Siddhant Kudal › Assignment4 › Jobs › #2532650285
passed Job test2 triggered 3 minutes ago by IT_27 Siddhant Kudal
1 Running with gitlab-runner 15.0.0 (febb2a09)
2 on First Runner zcYsRhnb
3 Preparing the "shell" executor 00:00
4 Using Shell executor...
6 Preparing environment 00:00
7 Running on DESKTOP-6NHJCNP...
9 Getting source from Git repository 00:04
10 Fetching changes with git depth set to 20...
11 Reinitialized existing Git repository in C:/gitlab/builds/zcYsRhnb/0/kudalsiddhant230/assignment4/.git/
12 Checking out 461fd7eb as main...
13 git-lfs/3.0.2 (GitHub; windows amd64; go 1.17.2)
14 Skipping Git submodules setup
16 Executing "step_script" stage of the job script 00:01
17 $ echo "Do another parallel test here"
18 Do another parallel test here
19 $ echo "For example run a lint test"
20 For example run a lint test
22 Cleaning up project directory and file based variables 00:00
24 Job succeeded
test2
Duration: 16 seconds
Finished: 3 minutes ago
Timeout: 1h (from project)
Runner: #15702672 (zcYsRhnb) First Runner
Commit 461fd7eb
first commit
Pipeline #553092248 for main
test
test1
test2
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:56 PM
01-06-2022


Sign in · GitLab
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test1 (#2532650283)
Install GitLab Runner
Security Check-up
Assignment No. 4
gitlab.com/kudalsiddhant230/assignment4/-/jobs/2532650283
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IT_27 Siddhant Kudal › Assignment4 › Jobs › #2532650283
passed Job test1 triggered 3 minutes ago by IT_27 Siddhant Kudal
1 Running with gitlab-runner 15.0.0 (febb2a09)
2 on First Runner zcYsRhnb
3 Preparing the "shell" executor 00:00
4 Using Shell executor...
6 Preparing environment 00:00
7 Running on DESKTOP-6NHJCNP...
9 Getting source from Git repository 00:05
10 Fetching changes with git depth set to 20...
11 Reinitialized existing Git repository in C:/gitlab/builds/zcYsRhnb/0/kudalsiddhant230/assignment4/.git/
12 Checking out 461fd7eb as main...
13 git-lfs/3.0.2 (GitHub; windows amd64; go 1.17.2)
14 Skipping Git submodules setup
16 Executing "step_script" stage of the job script 00:01
17 $ echo "Do a test here"
18 Do a test here
19 $ echo "For example run a test suite"
20 For example run a test suite
22 Cleaning up project directory and file based variables 00:00
24 Job succeeded
test1
Duration: 9 seconds
Finished: 3 minutes ago
Timeout: 1h (from project)
Runner: #15702672 (zcYsRhnb) First Runner
Commit 461fd7eb
first commit
Pipeline #553092248 for main
test
test1
test2
gitlab-runner-win....exe
Show all
Type here to search
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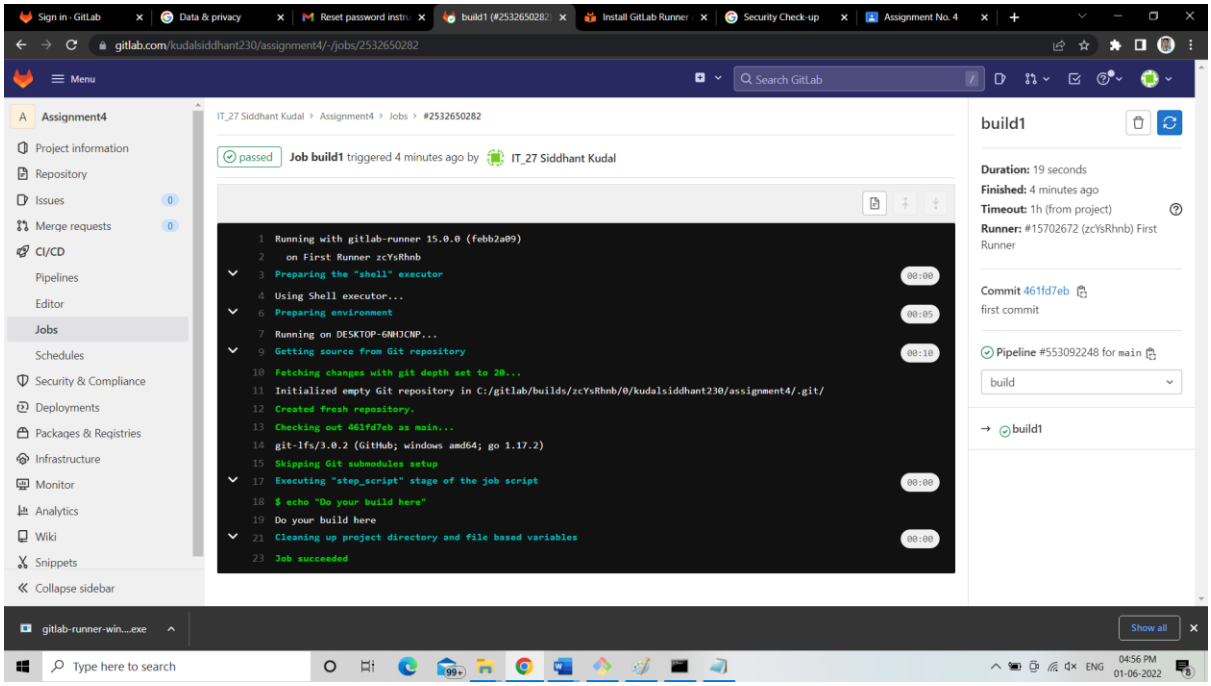
Sign in · GitLab
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build1 (#2532650282
Install GitLab Runner
Security Check-up
Assignment No. 4
gitlab.com/kudalsiddhant230/assignment4/-/jobs/2532650282
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IT_27 Siddhant Kudal › Assignment4 › Jobs › #2532650282
passed Job build1 triggered 4 minutes ago by IT_27 Siddhant Kudal
1 Running with gitlab-runner 15.0.0 (febb2a09)
2 on First Runner zcYsRhnb
3 Preparing the "shell" executor 00:00
4 Using Shell executor...
6 Preparing environment 00:05
7 Running on DESKTOP-6NHJCNP...
9 Getting source from Git repository 00:10
10 Fetching changes with git depth set to 20...
11 Initialized empty Git repository in C:/gitlab/builds/zcYsRhnb/0/kudalsiddhant230/assignment4/.git/
12 Created fresh repository.
13 Checking out 461fd7eb as main...
14 git-lfs/3.0.2 (GitHub; windows amd64; go 1.17.2)
15 Skipping Git submodules setup
17 Executing "step_script" stage of the job script 00:00
18 $ echo "Do your build here"
19 Do your build here
21 Cleaning up project directory and file based variables 00:00
23 Job succeeded
build1
Duration: 19 seconds
Finished: 4 minutes ago
Timeout: 1h (from project)
Runner: #15702672 (zcYsRhnb) First Runner
Commit 461fd7eb
first commit
Pipeline #553092248 for main
build
build1
gitlab-runner-win....exe
Show all
Type here to search
ENG
04:56 PM
01-06-2022