


Task – 11


Creating a Simple pipeline project in Jenkins:


Dashboard >


Enter an item name


» Required field


 **Freestyle project**
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

 **Pipeline**
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

 **Multi-configuration project**
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

 **Folder**
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

 **Multibranch Pipeline**
Creates a set of Pipeline projects according to detected branches in one SCM repository.

 **Organization Folder**
Creates a set of multibranch project subfolders by scanning for repositories.

Dashboard > jenkins_job > Configuration

Configure

- General
- Advanced Project Options
- Pipeline**

▼ Pipeline

Advanced ▼

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

Add Branch

Repository browser ?

(Auto) ▼

Additional Behaviours

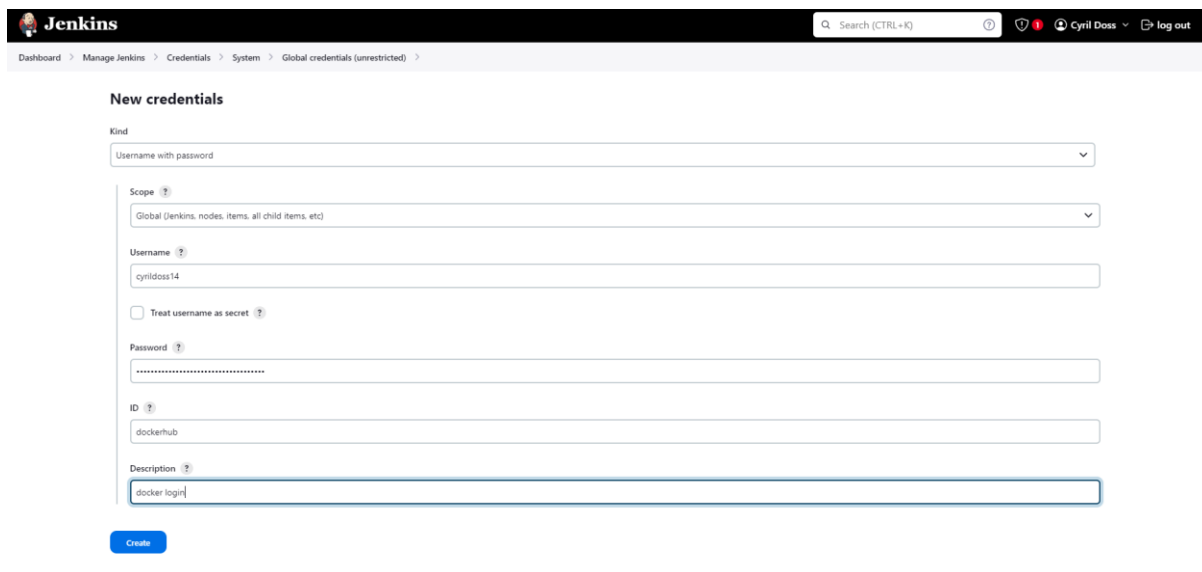
Add ▼

Script Path ?

☒ Lightweight checkout ?

[Pipeline Syntax](#)

Setting up Environmental Variable:



The screenshot shows the 'New credentials' form in Jenkins. The breadcrumb trail is 'Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted)'. The form fields are: Kind (Username with password), Scope (Global (Jenkins, nodes, items, all child items, etc)), Username (cyrildoss14), Password (masked with dots), ID (dockerhub), and Description (docker login). A 'Create' button is at the bottom.

New credentials

Kind: Username with password

Scope: Global (Jenkins, nodes, items, all child items, etc)

Username: cyrildoss14

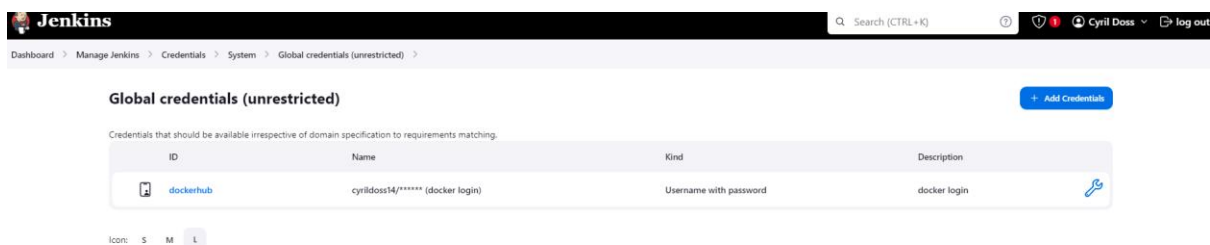
☐ Treat username as secret

Password:

ID: dockerhub

Description: docker login

Create



The screenshot shows the 'Global credentials (unrestricted)' page. It has a table with one credential. The breadcrumb trail is 'Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted)'. There is an 'Add Credentials' button at the top right.

Global credentials (unrestricted) [+ Add Credentials](#)

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
dockerhub	cyrildoss14/***** (docker login)	Username with password	docker login

Icon: ☐ S ☐ M ☐ L



The screenshot shows the 'Global properties' form in Jenkins. The breadcrumb trail is 'Dashboard > Manage Jenkins > System'. The 'Environment variables' checkbox is checked. There are two variable entries: DOCKER_BFLASK_IMAGE with value cyrildoss14/imgname, and DOCKER_REGISTRY_CREDS with value dockerhub. 'Save' and 'Apply' buttons are at the bottom.

Global properties

☐ Disable deferred wipeout on this node

☐ Disk Space Monitoring Thresholds

☒ Environment variables

List of variables

Name: DOCKER_BFLASK_IMAGE

Value: cyrildoss14/imgname

Name: DOCKER_REGISTRY_CREDS

Value: dockerhub

Add

Save Apply

Setting up Email Notification:

Jenkins

Search (CTRL+K)

Cyril Doss

log

Dashboard > Manage Jenkins > Plugins

Plugins

Updates 1

Available plugins

Installed plugins

Advanced settings

Download progress

Warning: This Jenkins instance requires a restart. Changing the state of plugins at this time is strongly discouraged. Restart Jenkins before proceeding.

Name	Enabled
Email Extension Plugin 1814.v404722f34263 This plugin is a replacement for Jenkins's email publisher. It allows to configure every aspect of email notifications: when an email is sent, who should receive it and what the email says. Report an issue with this plugin	<input checked="" type="checkbox"/>
Email Extension Template Plugin 1.5 This plugin allows administrators to create global templates for the Extended Email Publisher. Report an issue with this plugin This plugin is up for adoption! We are looking for new maintainers. Visit our Adopt a Plugin initiative for more information.	<input checked="" type="checkbox"/>
Mailer Plugin 472.vf7c289a.4b.420 This plugin allows you to configure email notifications for build results. Report an issue with this plugin	<input checked="" type="checkbox"/>

Changes will take effect when you restart Jenkins [Restart Once No Jobs Are Running](#)

Dashboard > Manage Jenkins > System

E-mail Notification

SMTP server

smtp.gmail.com

Default user e-mail suffix ?

Advanced ^ Edited

☐ Use SMTP Authentication ?

☒ Use SSL ?

☐ Use TLS

SMTP Port ?

465

Reply-To Address

Charset

UTF-8

☐ Test configuration by sending test e-mail

Save Apply

← App passwords

App passwords help you sign in to your Google Account on older apps and services that don't support modern security standards.

App passwords are less secure than using up-to-date apps and services that use modern security standards. Before you create an app password, you should check to see if your app needs this in order to sign in.

[Learn more](#)

Your app passwords

bash scripting

Created at 8 Jun, last used at 8 Jun

To create a new app-specific password, type a name for it below...

App name

jenkins email

Create

Advanced ^

 Edited

☒ Use SMTP Authentication ?

User Name

cyrildoss007@gmail.com

Password

.....

☒ Use SSL ?

☐ Use TLS

SMTP Port ?

465

Reply-To Address

cyrildoss007@gmail.com

Charset

☒ Test configuration by sending test e-mail

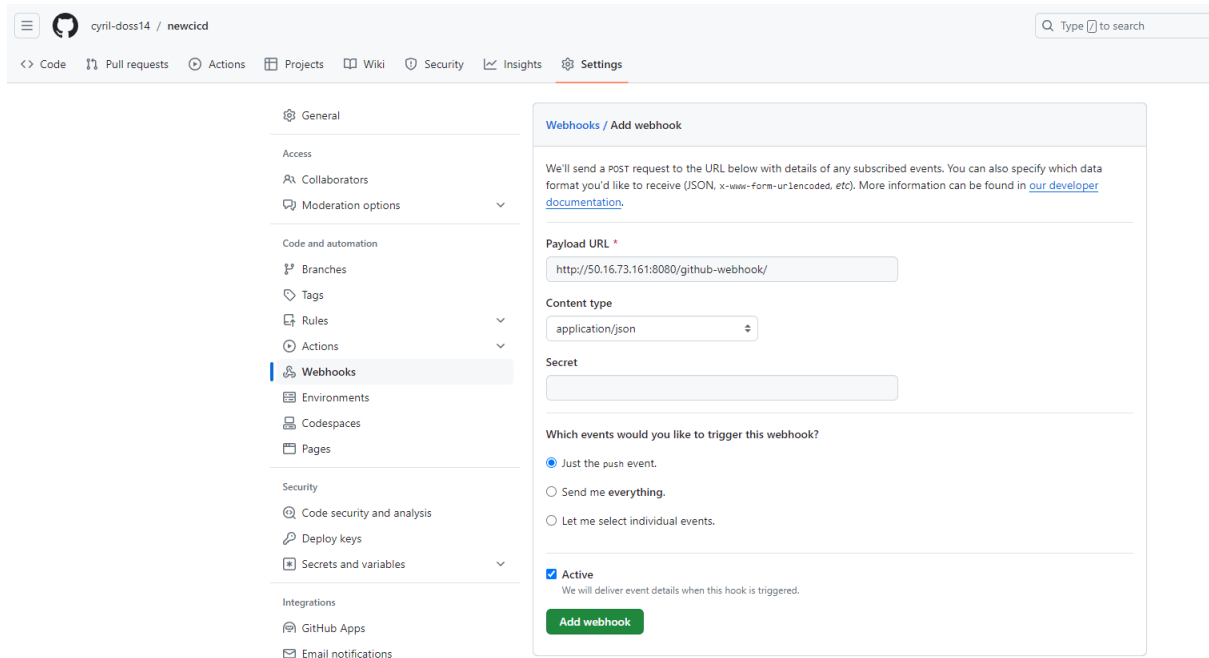
Test e-mail recipient

cyrilrodriguez007@gmail.com

Email was successfully sent

Test configuration

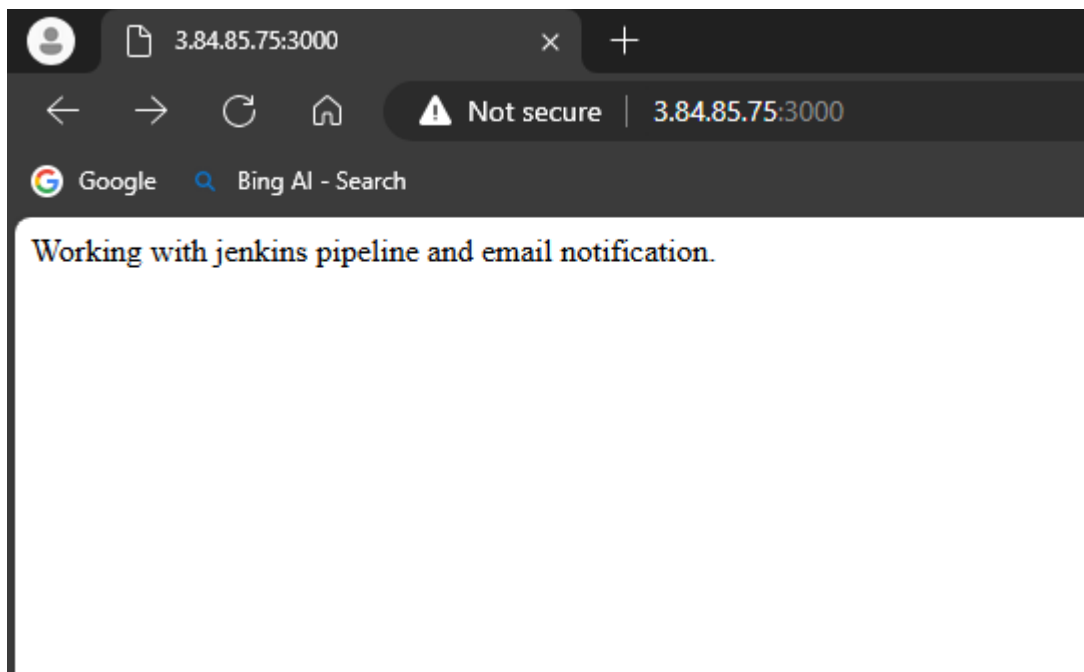
Webhook Configuration:



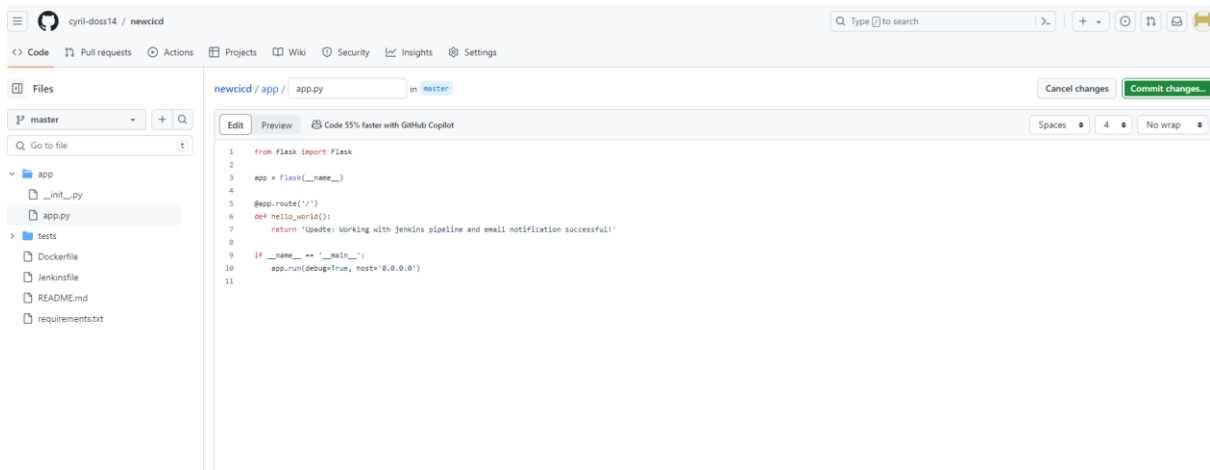
The screenshot shows the GitHub repository settings for 'cyril-doss14 / newcid'. The 'Webhooks' section is selected in the left sidebar. The main content area is titled 'Webhooks / Add webhook'. It contains the following fields and options:

- Payload URL ***: `http://50.16.73.161:8080/github-webhook/`
- Content type**: `application/json`
- Secret**: (Empty text input field)
- Which events would you like to trigger this webhook?**:
 - ☒ Just the push event.
 - ☐ Send me **everything**.
 - ☐ Let me select individual events.
- Active**: ☒ Active. Subtext: 'We will deliver event details when this hook is triggered.'
- Add webhook**: (Green button)

Output of original project:



Change in output when a commit is made:



The screenshot shows the GitHub web interface for a repository named 'newicid'. The file 'app.py' is open in the editor. The code is a Flask application with a single route. The left sidebar shows the file structure, and the right sidebar has buttons for 'Cancel changes' and 'Commit changes...'. The code in 'app.py' is as follows:

```
1 from flask import Flask
2
3 app = Flask(__name__)
4
5 @app.route('/')
6 def hello_world():
7     return 'Upadte: Working with Jenkins pipeline and email notification successful!'
8
9 if __name__ == '__main__':
10     app.run(debug=True, host='0.0.0.0')
11
```

