

Exercise 3: Freestyle Job - Flask Application Deployment

1. Objective: Automate the deployment of a Flask application.
2. Steps:
 - a. Create a Freestyle Job.
 - b. Configure the job to:
 - Pull the Flask application repository from GitHub.
 - Set up a virtual environment using Python:

```
python -m venv venv
.\venv\Scripts\activate
pip install -r requirements.txt
```
 - Start the Flask development server.
 - c. Add a post-build action to verify the server is running (e.g., using curl or a similar tool to hit a test endpoint).
3. Task: Test the application deployment by accessing it via localhost

Configurations

Source Code Management :

Source Code Management

☐ None

☒ Git ?

Repositories ?

Repository URL ?

https://github.com/AdityaSharma2003/FlaskPythonAzureApp.git

Credentials ?

- none -

+ Add

Advanced ▾

Add Repository

Branches to build ?

Branches to build ?

Branch Specifier (blank for 'any') ?

*/main

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add

Windows Batch Command :

Build Steps

Execute Windows batch command ?

Command

See [the list of available environment variables](#)

```
python -m venv venv
.\venv\Scripts\activate && pip install -r requirements.txt && python app.py && curl http://127.0.0.1:5000/message
```

Advanced

Add build step

Console Ouput :

Dashboard > JE-3 > #3 > Console Output

Status

Changes

Console Output

Edit Build Information

Delete build '#3'

Timings

Git Build Data

Previous Build

Console Output

Download

Copy

View as plain text

```
Started by user aditya sharma
Running as SYSTEM
Building in workspace C:\AdityaPersonal\nexTurn\new_jenkins\workspace\JE-3
The recommended git tool is: NONE
No credentials specified
> git.exe rev-parse --resolve-git-dir C:\AdityaPersonal\nexTurn\new_jenkins\workspace\JE-3\.git # timeout=10
Fetching changes from the remote Git repository
> git.exe config remote.origin.url https://github.com/AdityaSharma2003/FlaskPythonAzureApp.git # timeout=10
Fetching upstream changes from https://github.com/AdityaSharma2003/FlaskPythonAzureApp.git
> git.exe --version # timeout=10
> git --version # 'git version 2.41.0.windows.3'
> git.exe fetch --tags --force --progress -- https://github.com/AdityaSharma2003/FlaskPythonAzureApp.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git.exe rev-parse "refs/remotes/origin/main^[commit]" # timeout=10
Checking out Revision 80ef264f1d221a9c608bfb1389cb4514af5de455 (refs/remotes/origin/main)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 80ef264f1d221a9c608bfb1389cb4514af5de455 # timeout=10
Commit message: "Merge branch 'main' of https://github.com/AdityaSharma2003/FlaskPythonAzureApp"
> git.exe rev-list --no-walk 80ef264f1d221a9c608bfb1389cb4514af5de455 # timeout=10
[JE-3] $ cmd /c call C:\Users\ADITYA-1\AppData\Local\Temp\jenkins11756319192607434928.bat
```

```
C:\AdityaPersonal\nextTurn\new_jenkins\workspace\JE-3>python -m venv venv

C:\AdityaPersonal\nextTurn\new_jenkins\workspace\JE-3>.\venv\scripts\activate  && pip install -r requirements.txt  && python app.py  && curl
http://127.0.0.1:5000/message
Collecting blinker==1.9.0 (from -r requirements.txt (line 1))
  Obtaining dependency information for blinker==1.9.0 from
https://files.pythonhosted.org/packages/10/cb/f2ad4230dc2eb1a74edf38f1a38b9b52277f75bef262d8908e60d957e13c/blinker-1.9.0-py3-none-
any.whl.metadata
  Using cached blinker-1.9.0-py3-none-any.whl.metadata (1.6 kB)
Collecting click==8.1.8 (from -r requirements.txt (line 2))
  Obtaining dependency information for click==8.1.8 from
https://files.pythonhosted.org/packages/7e/d4/7ebdbd03970677812aac39c869717059dbb71a4cfc033cae5221787892c/click-8.1.8-py3-none-
any.whl.metadata
  Using cached click-8.1.8-py3-none-any.whl.metadata (2.3 kB)
Collecting colorama==0.4.6 (from -r requirements.txt (line 3))
  Obtaining dependency information for colorama==0.4.6 from
https://files.pythonhosted.org/packages/d1/d6/3965ed04c63042e047cb6a3e6ed1a63a35087b6a609aa3a15ed8ac56c221/colorama-0.4.6-py2.py3-none-
any.whl.metadata
  Using cached colorama-0.4.6-py2.py3-none-any.whl.metadata (17 kB)
Collecting Flask==3.1.0 (from -r requirements.txt (line 4))
  Obtaining dependency information for Flask==3.1.0 from
https://files.pythonhosted.org/packages/af/47/93213ee6ef8fae3b93b3e29206f6b251e65c97bd91d8e1c5596ef15af0a/flask-3.1.0-py3-none-
any.whl.metadata
  Using cached flask-3.1.0-py3-none-any.whl.metadata (2.7 kB)
Collecting itsdangerous==2.2.0 (from -r requirements.txt (line 5))
  Obtaining dependency information for itsdangerous==2.2.0 from
https://files.pythonhosted.org/packages/04/96/92447566d16df59b2a776c0fb82dbc4d9e07cd95062562af01e408583fc4/itsdangerous-2.2.0-py3-none-
```

```
any.whl.metadata
  Using cached itsdangerous-2.2.0-py3-none-any.whl.metadata (1.9 kB)
Collecting Jinja2==3.1.5 (from -r requirements.txt (line 6))
  Obtaining dependency information for Jinja2==3.1.5 from
https://files.pythonhosted.org/packages/bd/0f/2ba5fbc631e3e88689309dbe978c5769e883e4b84ebfe7da30b43275c5a/jinja2-3.1.5-py3-none-
any.whl.metadata
  Using cached Jinja2-3.1.5-py3-none-any.whl.metadata (2.6 kB)
Collecting MarkupSafe==3.0.2 (from -r requirements.txt (line 7))
  Obtaining dependency information for MarkupSafe==3.0.2 from
https://files.pythonhosted.org/packages/da/b9/3a3bd761922d416f3dc5d00bfbed11f66b1ab89a0c2b6e887240a30b0f6b/MarkupSafe-3.0.2-cp311-cp311-
win_amd64.whl.metadata
  Using cached MarkupSafe-3.0.2-cp311-cp311-win_amd64.whl.metadata (4.1 kB)
Collecting Werkzeug==3.1.3 (from -r requirements.txt (line 8))
  Obtaining dependency information for Werkzeug==3.1.3 from
https://files.pythonhosted.org/packages/52/24/ab44c871bf07f491e5d2ad12c9bd7358e527510618cb1b803a88e986db1/werkzeug-3.1.3-py3-none-
any.whl.metadata
  Using cached werkzeug-3.1.3-py3-none-any.whl.metadata (3.7 kB)
Using cached blinker-1.9.0-py3-none-any.whl (8.5 kB)
Using cached click-8.1.8-py3-none-any.whl (98 kB)
Using cached colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Using cached flask-3.1.0-py3-none-any.whl (102 kB)
Using cached itsdangerous-2.2.0-py3-none-any.whl (16 kB)
Using cached Jinja2-3.1.5-py3-none-any.whl (134 kB)
Using cached MarkupSafe-3.0.2-cp311-cp311-win_amd64.whl (15 kB)
Using cached werkzeug-3.1.3-py3-none-any.whl (224 kB)
Installing collected packages: MarkupSafe, itsdangerous, colorama, blinker, Werkzeug, Jinja2, click, Flask
Successfully installed Flask-3.1.0 Jinja2-3.1.5 MarkupSafe-3.0.2 Werkzeug-3.1.3 blinker-1.9.0 click-8.1.8 colorama-0.4.6 itsdangerous-2.2.0
```

```
[notice] A new release of pip is available: 23.2.1 -> 24.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://192.168.0.104:5000
Press CTRL+C to quit
127.0.0.1 - - [16/Jan/2025 20:19:17] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [16/Jan/2025 20:19:17] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [16/Jan/2025 20:19:27] "GET /message HTTP/1.1" 200 -

 % Total    % Received % Xferd  Average Speed   Time    Time     Time
      Dload  Upload    Total   Spent    Left   Speed

  0   0   0    0    0    0     0      0  --:--:--  --:--:--  --:--:--    0
  0   0   0    0    0    0     0      0  --:--:--  0:00:01  --:--:--    0
  0   0   0    0    0    0     0      0  --:--:--  0:00:02  --:--:--    0
  0   0   0    0    0    0     0      0  --:--:--  0:00:02  --:--:--    0

curl: (7) Failed to connect to 127.0.0.1 port 5000 after 2046 ms: Could not connect to server
Build was aborted
Aborted by aditya sharma
Finished: ABORTED
```