

# Group 5: Assignment 11

## Projects in Machine Learning - INFO8665

Applied Artificial Intelligence and Machine Learning Program, Conestoga College Sec2

Ashraf, Hamna Fernandez, Arcadio Chen, Kun (Kyle)

Professor David Espinosa, PhD, MBET

August, 14 2024

### 1. Docker secret

First of all we create docker secret like below

```
docker swarm init
echo "xapp-1-A074H8NQJ23-7181182531969-
ed57de8747a48f5b53253db1feb7d8af61c7ea65ef1d5773c959340e6ae73a74" | docker secret
create slack_app_token -
echo "xoxb-7151988919749-7191456940736-UfM4CI9M77fjaWxjs2dgrRHC" | docker secret
create slack_bot_token -
echo "https://onlyxool.atlassian.net" | docker secret create jira_url -
echo "ATATT3xFfGF0QE39cPvrUolx3dntf1ALh1FwXdrul4b-
cpgnzFDwphVoXBSKRBfMK0VgpPvWNK_n-ckesbuAtkT0e8dgS08tCGH-GC1EljHPnlEBObLBCZdk0q8-
OXG9XJn6BMvkytjplnw3pmFAeljgIpChtGta7_lyqQ50eu-AHG-04wGsjsns=E0E476F1" | docker
secret create api_token -
echo "onlyxool@gmail.com" | docker secret create email -
echo "pomzyppm" | docker secret create flask_secret_key -
```

```
Kyles-MacBook-Pro:AI-Scrum-Master onlyxool$ docker secret ls
ID                                NAME                DRIVER      CREATED             UPDATED
xwevidar24jem1zq307s4y06u        api_token            local        29 seconds ago     29 seconds ago
wgi9btaz5j9462t3tab6l4xgc        email                local        29 seconds ago     29 seconds ago
8lsle86evy8jcl078koggvsiv        flask_secret_key     local        27 seconds ago     29 seconds ago
aenejzfkwnpcpx8ka5toe57ve9        jira_url             local        29 seconds ago     29 seconds ago
uz2lthkfp57klkq5s4q93yvnr        slack_app_token      local        29 seconds ago     29 seconds ago
jrd1g84wmd5itby3bzh1uhday        slack_bot_token      local        29 seconds ago     29 seconds ago
```

Then we make sure read secret informat from /run/secrets/

```

1 import os
2
3 def read_secret(secret_name):
4     secret_path = f"/run/secrets/{secret_name}"
5     if os.path.exists(secret_path):
6         with open(secret_path, 'r') as file:
7             return file.read().strip()
8     else:
9         raise FileNotFoundError(f"Secret {secret_name} not found.")
10
11 # 替代原有的硬编码内容
12 SLACK_APP_TOKEN = read_secret('slack_app_token')
13 SLACK_BOT_TOKEN = read_secret('slack_bot_token')
14 JIRA_URL = read_secret('jira_url')
15 API_TOKEN = read_secret('api_token')
16 EMAIL = read_secret('email')
17 FLASK_SECRET_KEY = read_secret('flask_secret_key')

```

Finally we run docker container as service and mount the secrets to the container like below

```

docker service create -p 7804:80 --name AI_Scrum_Assistant \
  --secret slack_app_token \
  --secret slack_bot_token \
  --secret jira_url \
  --secret api_token \
  --secret email \
  --secret flask_secret_key \
  onlyxool/ai-scrum-assistant:latest

```

After docker service start, it will take about 2 mins to download language model(The actual time depends on internet speed). After download finish, everything will all set.

We can use below command to check if the language model download finish.

```

docker ps -a #display all docker container id
docker attach <container id>

```

## 2. Screenshots of the application running locally

Running locally:

```
(aiscrum) Kyles-MacBook-Pro:AI-Scrum-Master onlyxool$ python start.py
DEBUG:root:Start...
* Serving Flask app 'flaskapp.app'
* Debug mode: off
INFO:werkzeug:WARNING: This is a development server. Do not use it in a production
* Running on http://127.0.0.1:5000
INFO:werkzeug:Press CTRL+C to quit
Error sending message to U075QC694N4: time_in_past
Error sending message to U074ZR41109: time_in_past
Error sending message to U075E7VDC01: time_in_past
Error sending message to #project: time_in_past
⚡ Bolt app is running!
```