Group Member's Name:-

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```python
app_that_doesnt_follow_best_practices >  main.py > ...
1   import json
2   import logging
3   import threading
4   import time
5   import os
6   import sys
7
8   from flask import Flask, render_template, request
9
10  app = Flask(__name__)
11  app.debug = True
12
13  logging.basicConfig(
14      stream=sys.stdout,
15      level=logging.INFO,
16      format="%(asctime)s,%(msecs)d %(name)s %(levelname)s %(message)s",
17      datefmt="%H:%M:%S",
18  )
19
20  TODO_FILE_NAME = "/app/data/todo.json"
21  if os.path.exists(TODO_FILE_NAME):
22      with open(TODO_FILE_NAME) as f:
23          TODO_ITEMS = json.load(f)
24  else:
25      TODO_ITEMS = []
26
27
28  def periodically_save_todo_items():
29      time.sleep(10)
30      with open(TODO_FILE_NAME, "w") as f:
31          json.dump(TODO_ITEMS, f)
32
33
34  saving_thread = threading.Thread(target=periodically_save_todo_items)
35  saving_thread.start()
36
37
38  @app.route("/", methods=["GET", "POST"])
39  def main():
40      if request.method == "POST":
41          content = request.form["content"]
42          TODO_ITEMS.append(content)
43
44      return render_template("index.html", todo_items=TODO_ITEMS)
45
46  if __name__ == "__main__":
47      if os.environ.get("DEBUG") == "true":
48          app.debug = True
49          os.environ["FLASK_ENV"] = "development"
50      else:
51          os.environ["FLASK_ENV"] = "production"
52
53      app.run(host="0.0.0.0")
```

```yaml
version: '3'

services:
  app:
    build: .
    ports:
      - "5000:5000"
    volumes:
      - todo:/app/todo
    environment:
      - FLASK_ENV=development
      - FLASK_APP=main.py
      - FLASK_DEBUG=1
    command: flask run --host=0.0.0.0

volumes:
  todo:
```

127.0.0.1:5000

Add TODO item

Please provide the TODO item content

Submit

TODO items

asdas
asd
asdas
Muhammad Arsalan

Containers

Give feedback

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more

Search | | Only show running containers

		Name	Image	Status	Port(s)	Last started	Actions
☐	>	app_that_doesnt_follow_be	-	Running (1/1)		17 minutes ago	■ ⋮ 🗑

Images

Give feedback

An image is a read-only template with instructions for creating a Docker container. Learn more

Local | Hub | Artifactory EARLY ACCESS

129.44 MB / 1.46 GB in use 4 images

Last refresh: about 5 hours ago ⟳

Search

|	Name ↑	Tag	Status	Created	Size	Actions
☐	app_that_doesnt_follow_best_practices-app ea2a9e240cc3 📋	latest	In use	less than a minute a	129.44 MB	▶ ⋮ 🗑

Containers

Images

Volumes

Dev Environments BETA

Learning Center

Extensions

Add Extensions

< 385de966e1a3b7ad9ba3df79cc4
● In use by 1 container

In Use   Data

Name ↑

todo.json

PROBLEMS 1   OUTPUT   DEBUG CONSOLE   TERMINAL   docker - app_that_doesnt_follow_best_practices

app_that_doesnt_follow_best_practices-app-1 | * Debug mode: on
app_that_doesnt_follow_best_practices-app-1 | 08:18:06,737 werkzeug INFO WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
app_that_doesnt_follow_best_practices-app-1 | * Running on all addresses (0.0.0.0)
app_that_doesnt_follow_best_practices-app-1 | * Running on http://127.0.0.1:5000
app_that_doesnt_follow_best_practices-app-1 | * Running on http://172.18.0.2:5000
app_that_doesnt_follow_best_practices-app-1 | 08:18:06,737 werkzeug INFO Press CTRL+C to quit
app_that_doesnt_follow_best_practices-app-1 | 08:18:06,738 werkzeug INFO * Restarting with stat
app_that_doesnt_follow_best_practices-app-1 | 08:18:06,962 werkzeug WARNING * Debugger is active!
app_that_doesnt_follow_best_practices-app-1 | 08:18:06,963 werkzeug INFO * Debugger PIN: 104-867-988
app_that_doesnt_follow_best_practices-app-1 | 08:18:12,118 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:12] "GET / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:18:12,154 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:12] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:18:14,549 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:14] "POST / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:18:14,566 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:14] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:18:16,414 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:16] "POST / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:18:16,433 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:18:16] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
^CGracefully stopping... (press Ctrl+C again to force)
Aborting on container exit...
[+] Running 1/1
 ✓ Container app_that_doesnt_follow_best_practices-app-1 Stopped   0.3s
cancelled
(base) muhammadarsalan@all-MS-7D35:~/Desktop/Class_repo/data_engineering_bootcamp_2303/tasks/4_microservices_development/day_4_best_practices_tools_common_pitfalls/app_that_doesnt_follow_best_practices$ docker compose up
[+] Running 1/0
 ✓ Container app_that_doesnt_follow_best_practices-app-1 Created   0.0s
Attaching to app_that_doesnt_follow_best_practices-app-1
app_that_doesnt_follow_best_practices-app-1 | * Serving Flask app 'main.py'
app_that_doesnt_follow_best_practices-app-1 | * Debug mode: on
app_that_doesnt_follow_best_practices-app-1 | 08:19:01,423 werkzeug INFO WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
app_that_doesnt_follow_best_practices-app-1 | * Running on all addresses (0.0.0.0)
app_that_doesnt_follow_best_practices-app-1 | * Running on http://127.0.0.1:5000
app_that_doesnt_follow_best_practices-app-1 | * Running on http://172.18.0.2:5000
app_that_doesnt_follow_best_practices-app-1 | 08:19:01,423 werkzeug INFO Press CTRL+C to quit
app_that_doesnt_follow_best_practices-app-1 | 08:19:01,424 werkzeug INFO * Restarting with stat
app_that_doesnt_follow_best_practices-app-1 | 08:19:01,636 werkzeug WARNING * Debugger is active!
app_that_doesnt_follow_best_practices-app-1 | 08:19:01,636 werkzeug INFO * Debugger PIN: 104-867-988
app_that_doesnt_follow_best_practices-app-1 | 08:19:09,902 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:19:09] "GET / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:19:09,932 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:19:09] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:36,631 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:36] "GET / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:36,656 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:36] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:37,811 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:37] "POST / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:37,835 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:37] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:39,499 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:39] "POST / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:39,516 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:39] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:47,22 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:47] "POST / HTTP/1.1" 200 -
app_that_doesnt_follow_best_practices-app-1 | 08:28:47,38 werkzeug INFO 172.18.0.1 - - [15/May/2023 08:28:47] "GET /static/styles/bulma.min.css HTTP/1.1" 304 -

```
1 ["asdas", "asd"]
```