# **MPDV Office Documentation**

## **Project Scope**

This project involves the development of efficient office automation system based on biometric authentication with the following features:

- · Login to dashboard based on personnel's identity
- •Automation of adding Hydra system personnel into FaceSec device

| Compare_office.py              | Code to sync the data of the hydra system and FaceSec device to add all personnel that is from the hydra system to FaceSec device  |
|--------------------------------|--|
| Compare_office_notification.py | Same code as Compare_office but it has a notification feature which sends out error messages in the form of SMS and Email messages when there are errors in synchronization. |
| Main_office.py                 | Main code to run so the Logon to the dashboard and synchronization of the hydra system and FaceSec device  |
| Client_office.py               | Code to run to enable to receive request to logon to the dashboard of the user who scan face   |

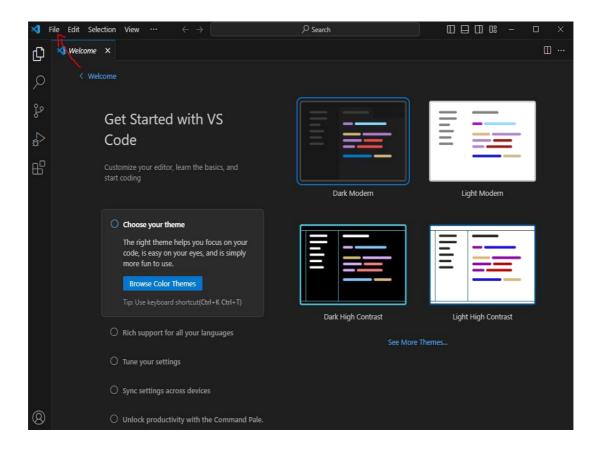
### **Prerequisites**

- Make sure time on FaceSec matches your laptop (NTP doesn't work on NYP Wi-Fi)
- Make sure that all the devices are connected to the ethernet hub of HYDRA server in Manufacturing lab (S.124) using Lan Cable
- Download VsCode (Visual Studio Code) or any python interpreter so that you can run the code

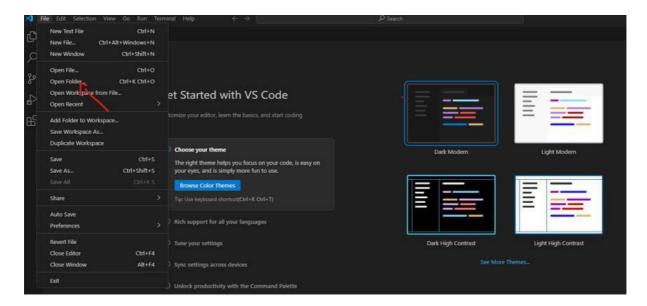
# **Running of scripts (Office)**

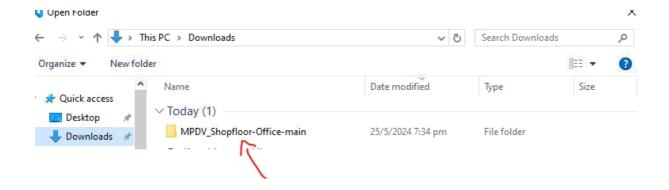
#### Importing and running code

 To import the codes, click the file button that is on the top of VsCode as show in the pictures below

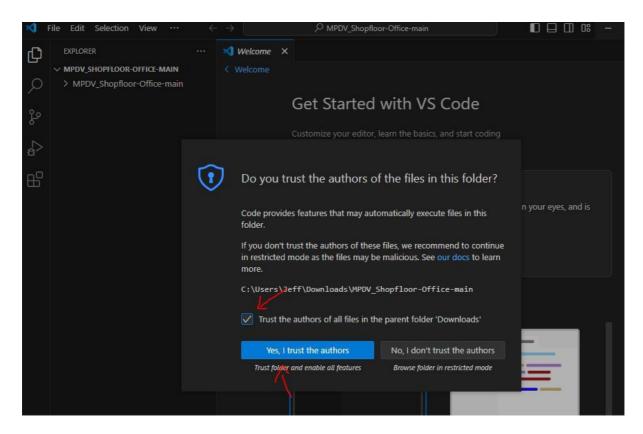


2. Click on open folder and find the file path of the folder and click on it to import the codes





3. Tick the trust the author of all files box and click "Yes, I trust the authors"



- 4. Click on Main office
- 5. Click on Terminal to download libraries needed to run
- 6. Pip install requests
- 7. Pip install websockets
- 8. Pip install time
- 9. Pip install json
- 10. Pip install asyncio
- 11. pip install socket
- 12.pip install flask

```
File Edit Selection View Go Run Terminal Help

∠ MPDV_Shopfloor-Office-main

                          ··· 🏓 main_office.py 🌘 🔮 compare_office.py
      ✓ MPDV_SHOPFLOOR-OFFIC... MPDV_office > Final Main Script (Run Main) > ♦ main_office.py > ...
                                    1 import asyncio

→ MPDV office

                                    import web
import time
import socket
import reques
compare
                                          import json
import websockets

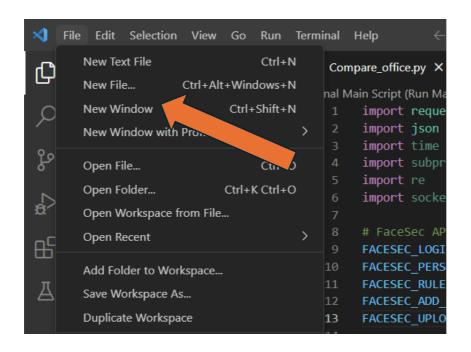
→ Client Script

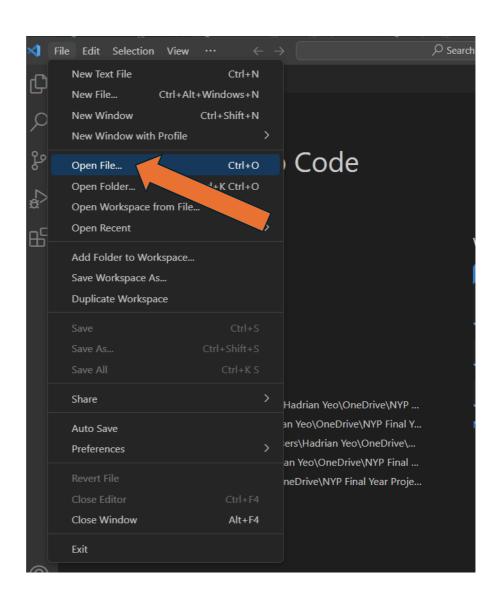
          dient.py
         ∨ Final Main Script (R...
          > _pycache_
                                        import requests
from compare_office import compare_and_sync
         compare_office.py
B
                                          script_start_time = int(time.time() * 1000)
         > testing
        > MPDV_shopfloor
                                          # Define sleep duration in seconds (24 hours = 86400 seconds)

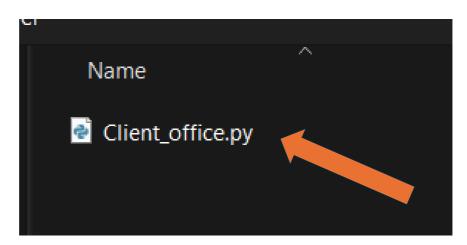
SLEEP_DURATION = 86400 # For how often you would like FaceSec & HYDRA to sync
                                           async def handler(websocket, path):
                                               print("New connection established")
                                                        message = await websocket.recv()
                                                         data = json.loads(message)
                                                         # Extract syncTime from the entity field
sync_time = data.get('entity', {}).get('syncTime', 0)
                                                         print("script start time:", script start time)
                                   PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
                                   PS C:\Users\Jeff\Downloads\MPDV_Shopfloor-Office-main\MPDV_Shopfloor-Office-main> pip install requests
```

13. Run main\_office.py by click on the arrow on top right

14. Open "File" and click on "New Window" and open the Client.py file in the new window







15. Run Client.py by click on the arrow on top right in the new window

```
MPDV_Shopfloor-Office-main
 Edit Selection View
                                                                                                   ▷ ~ □
EXPLORER.
                      main_office.py • elient.py •
MPDV_... 🖰 🛱 ひ 🗗 MPDV_office > Client Script > 🏓 client.py > 🕤 open_file

✓ MPDV_office

                           import os
                              from flask import Flask, request, jsonify

→ Client Script

                              import time
 client.py

→ Final Main Script (R....)

  > _pycache_
 compare_office.py
                             import socket
  main_office.py
                             app = Flask(__name_
 > Full Script Testing
                             base_url = 'https://mip-10741p.mpdv.cloud:50000/login?autoLoginClientId='
 > testing
                             last_sleep_time = time.time()
> MPDV_shopfloor
                             theme = '&theme=mpdv-dark-theme
```

16. CHANGE all IP in the links below to match FaceSec IP (From Compare\_office.py)

```
# FaceSec API endpoints, PLEASE CHANGE IP in the links below to match FaceSec IP
FACESEC_LOGIN_URL = "http://172.17.171.70:8081/api/account/login?password=2580"
FACESEC_PERSONS_URL = "http://172.17.171.70:8081/api/persons?size=100&page=0"
FACESEC_RULES_URL = "http://172.17.171.70:8081/api/rules"
FACESEC_ADD_PERSONNEL_URL = "http://172.17.171.70:8081/api/person"
FACESEC_UPLOAD_IMAGE_URL = "http://172.17.171.70:8081/api/upload/image"
```

17. Change it to how often you would like FaceSec & HYDRA to sync (from Main\_office.py)

```
1
2  # Define sleep duration in seconds (24 hours = 86400 seconds)
3  SLEEP_DURATION = 86400 # For how often you would like FaceSec & HYDRA to sync
4
```

18. Change this part of the code from Main\_office.py, Ip Address to the Ip of the device running Client.py (Different Ip address)

```
if 'accessRecordId' in data:

entity = data.get('entity', {})

score = entity.get('score')

names = entity.get('personInfo', {}).get('name')

number = entity.get('personInfo', {}).get('no')

if score and float(score) > 0.8: # condition can be changed so as the 'score'

r = requests.get(f"http://172.17.171.69)5000/open-file", params={'number': number}) # Change IP address to client's

print('middle pc', r.text) # displays the result body.

print("success")

time.sleep(10)
```

19. This Ip address below is just an example it is different between Wi-Fi and devices

```
# diesty X

MVV Implication with NVV office Continue ( ) © continu
```

#### **FaceSec Device**

To configure Wi-Fi settings, follow the steps:

- Connect to the power plug and press the power button on the side to turn it on.
- It will connect to the Wi-Fi in the C4Al room if the router is turn on, if it is not, manually change the Wi-Fi to the C4Al\_5GHz (name of Wi-Fi) Wi-Fi
- The password of the device is 25802580
- To get to the web UI for FaceSec, click the 4th icon and type the URL into your computer to access the web browser

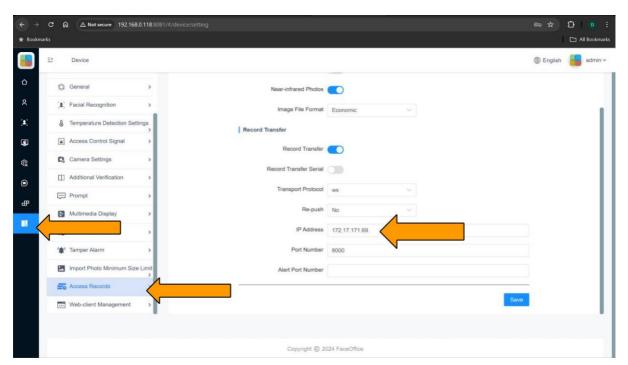




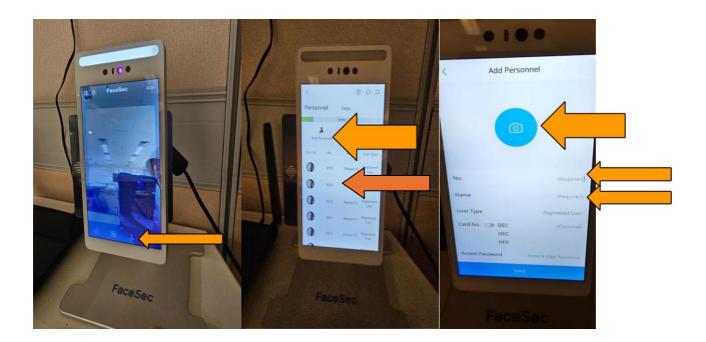
• The Account name is: admin and Password is: 25802580



• Go to 'Device' > 'Access Records' and change IP address to your laptop's



To add your face, press third icon & enter 25802580 > pick one
of the personnel with the stock face image > fill in required
fields (picture), name & no.



Finally, change the timing of the FaceSec Device into the same timing as your laptop's

To change the timing, press the second icon & enter 25802580 as the password > General > Date & Time > Fill in the current time in your laptop.

