MPDV Shop floor Documentation

Project Scope

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

• Facial recognition to input ID number of worker

•Automation of adding Hydra system personnel into FaceSec device

Compare_shopfloor.py Compare_shopfloor_notification.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 Same code as Compare_shopfloor 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_shopfloor.py	Code to run to input ID number with number of workers into the hydra system when scanning face

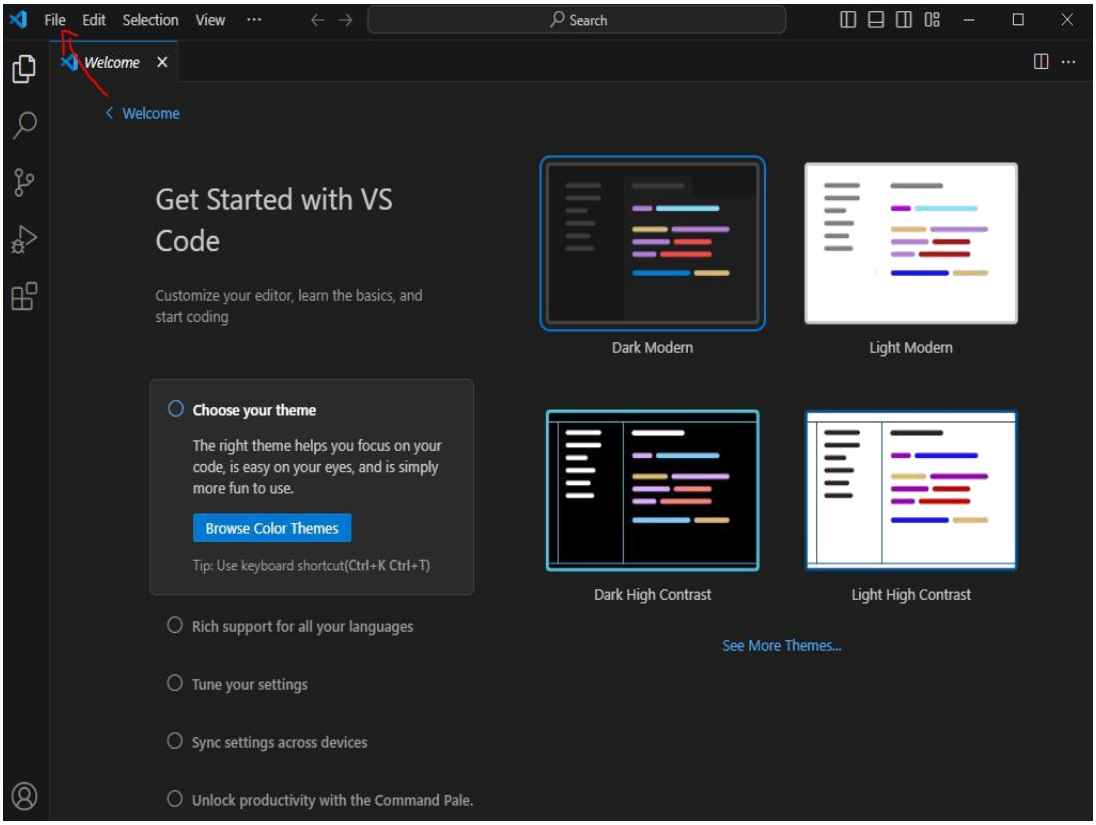
Prerequisites

- 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) so that you can run the code

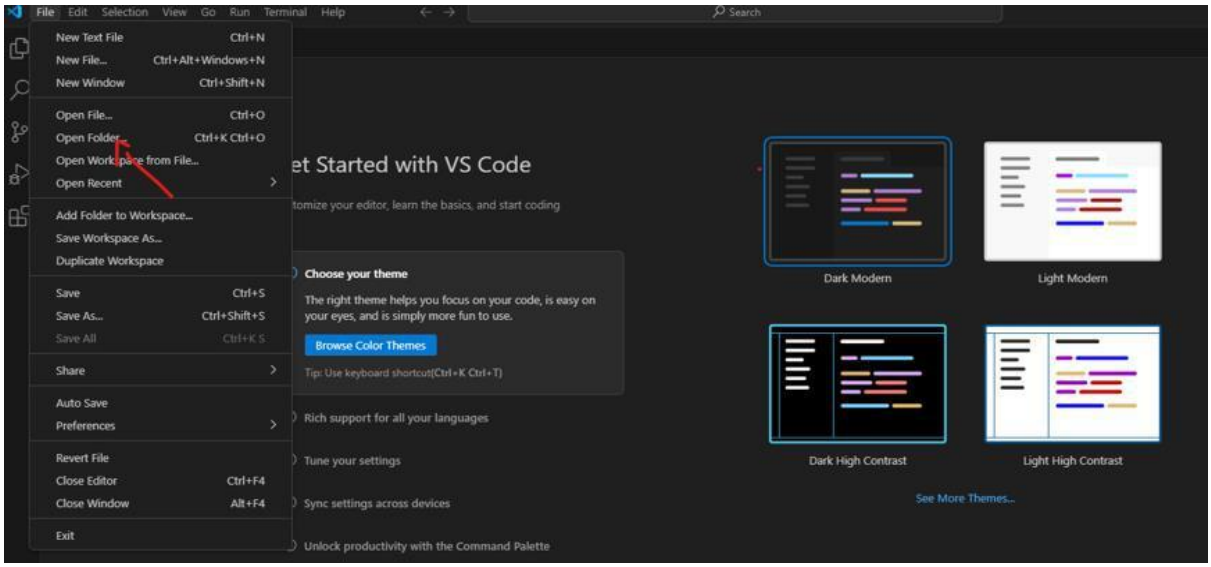
Running of script (Shop Floor)

Importing and running code

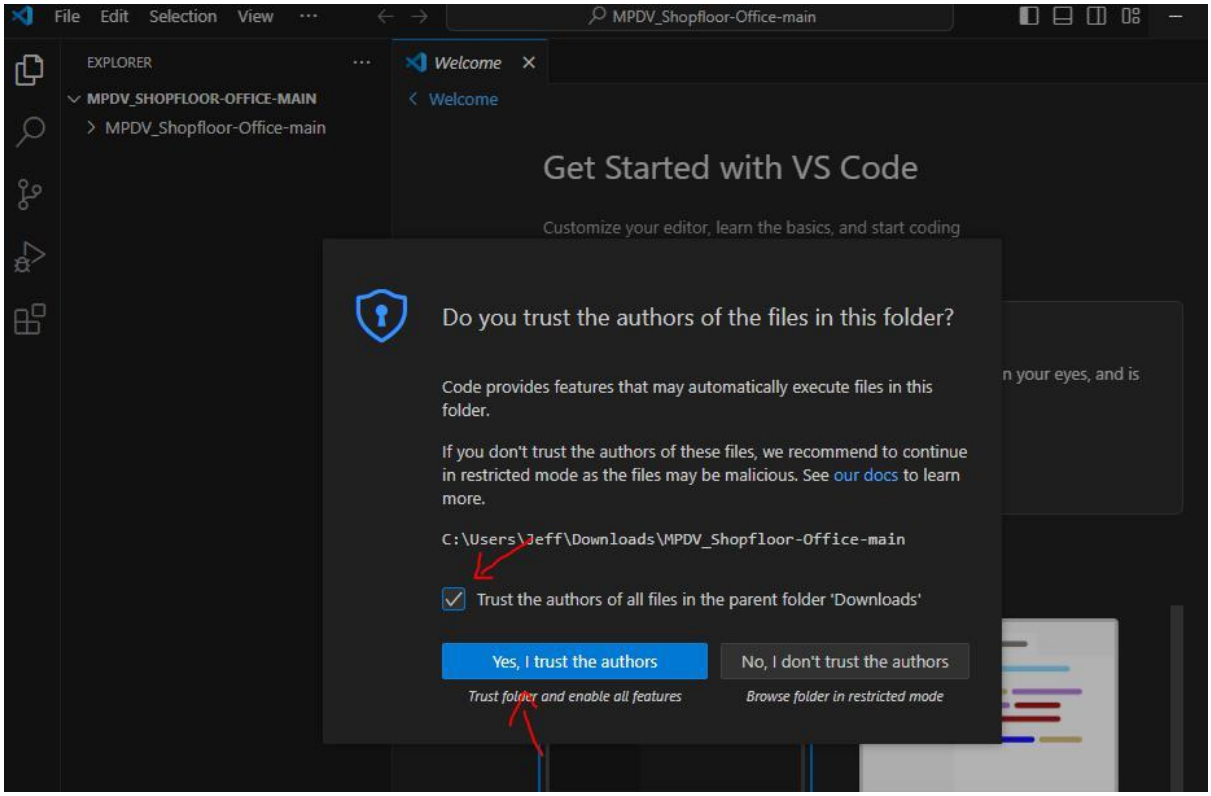
1. To import the codes, click the file button that is on the top of VsCode as show in the pictures below



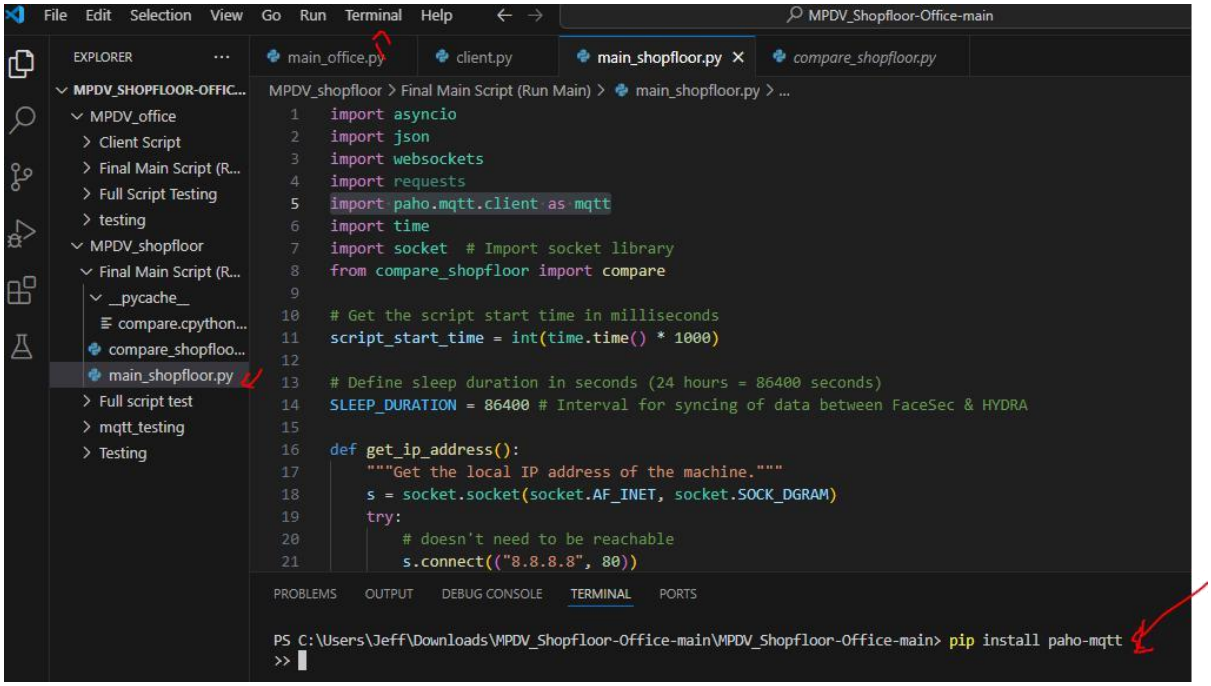
2. Click on open folder and find the file path of the folder and click on it to import the codes



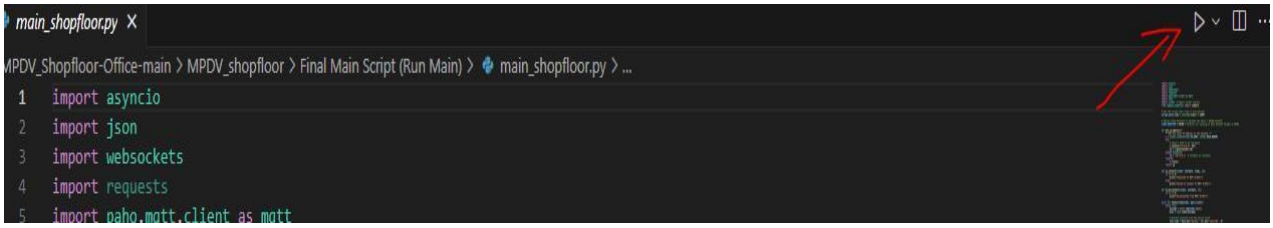
3. Tick the trust the author of all files and click on “Yes I trust the authors”



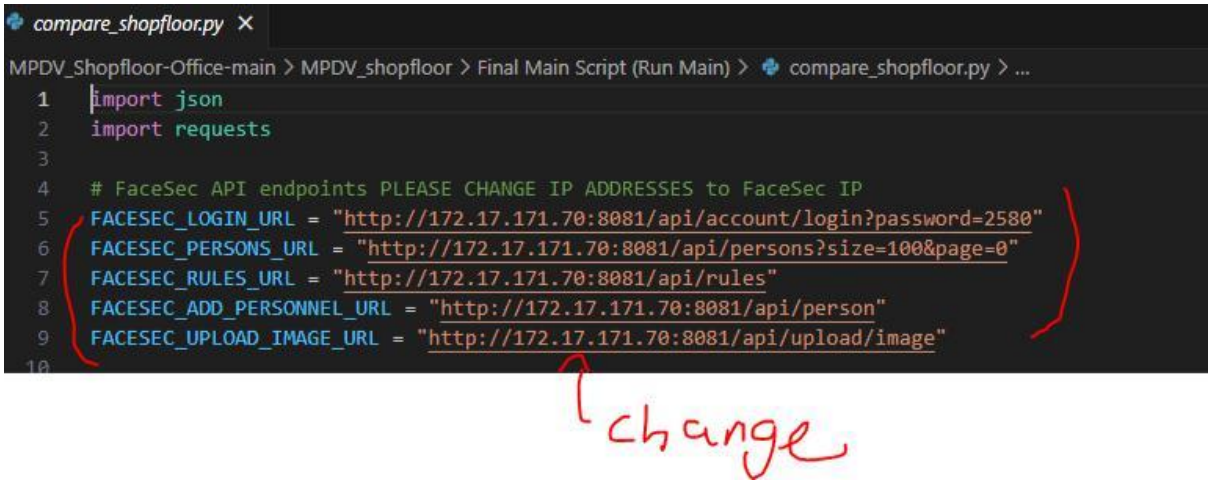
4. Click on Main_shopfloor
5. Click on Terminal to download libraries needed to run
6. Pip install requests
7. Pip install websockets
8. .Pip install time
9. Pip install json
10. Pip install asyncio
11. .pip install socket
12. pip install paho-mqtt



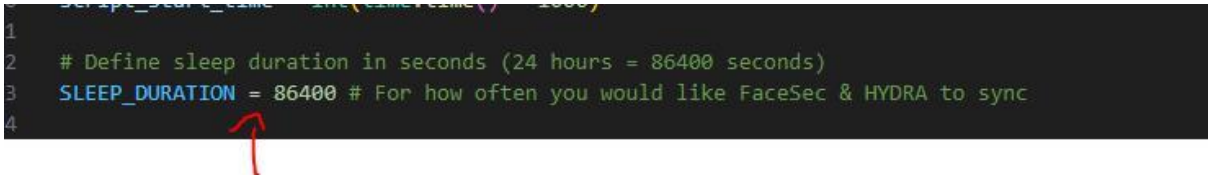
13. Run main_shoopfloor.py by click on the arrow on top right



14. CHANGE all IP in the links below to match the FaceSec's IP
    (From Compare_shopfloor.py)



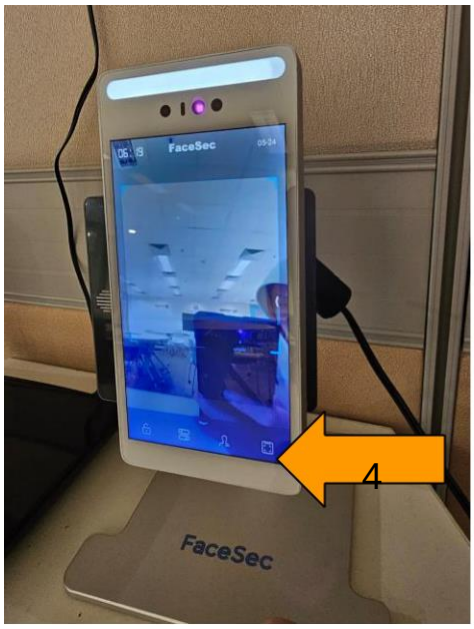
15. Change it to how often you would like FaceSec & HYDRA to sync (from Main_shopfloor.py)

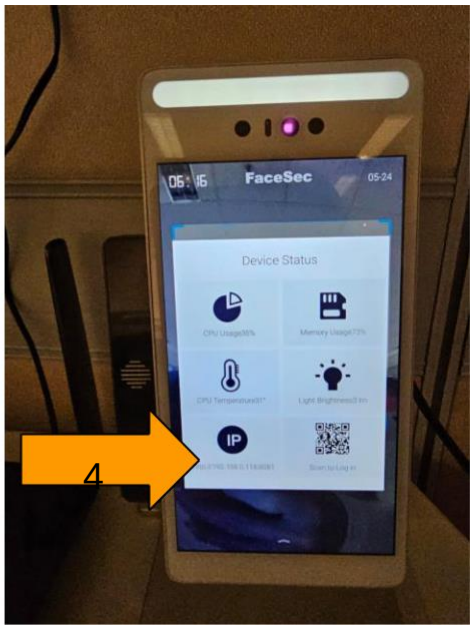


FaceSec Device

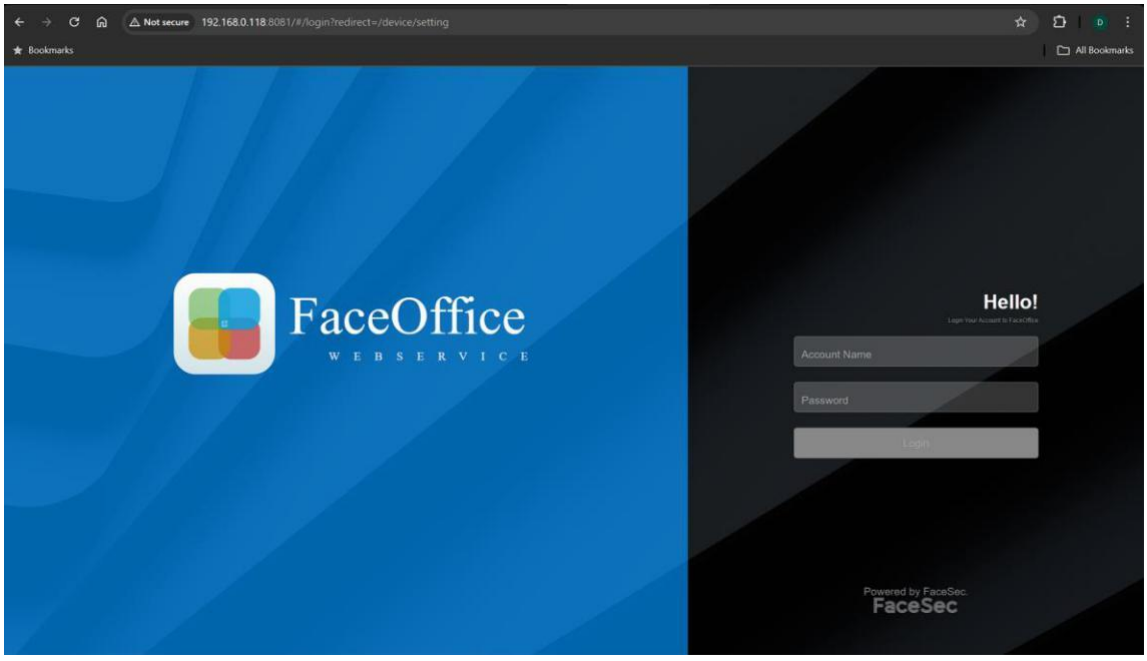
To configure Wi-Fi settings, follow the steps:

- 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 C4AI room if the router is turn on, if it is not, manually change the Wi-Fi to the C4AI_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

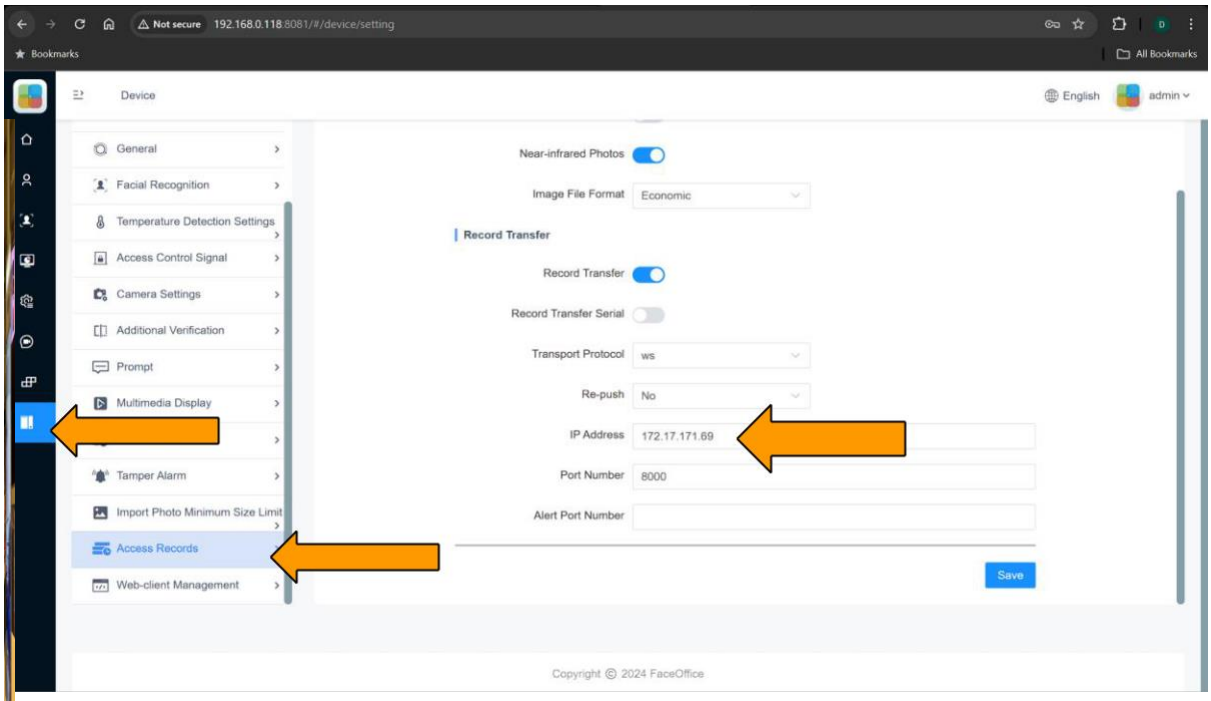




- The Account name is: **admin** and Password is: **25802580**

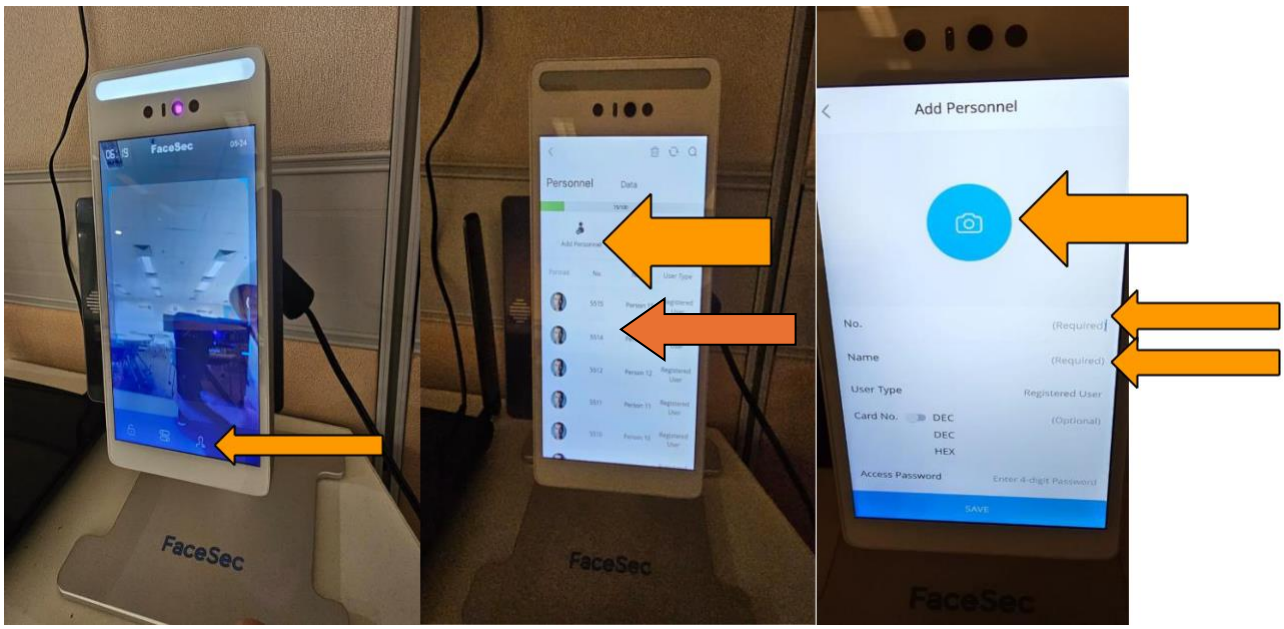


Go to ‘Device’ > ‘Access Records’ and change IP address to your laptop’s



To add your face, press third icon & enter 25802580 as the password> pick one of he personnel with the stock face image > fill in

equired 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