

# General User Manual

## Face attendance device



**Thank you for choosing our product. Before using this product,  
please carefully read this instructions manual.**

**This will help prevent unnecessary damage to the product Follow these instructions to  
ensure that your product functions properly and completes verifications in a timely manner.**





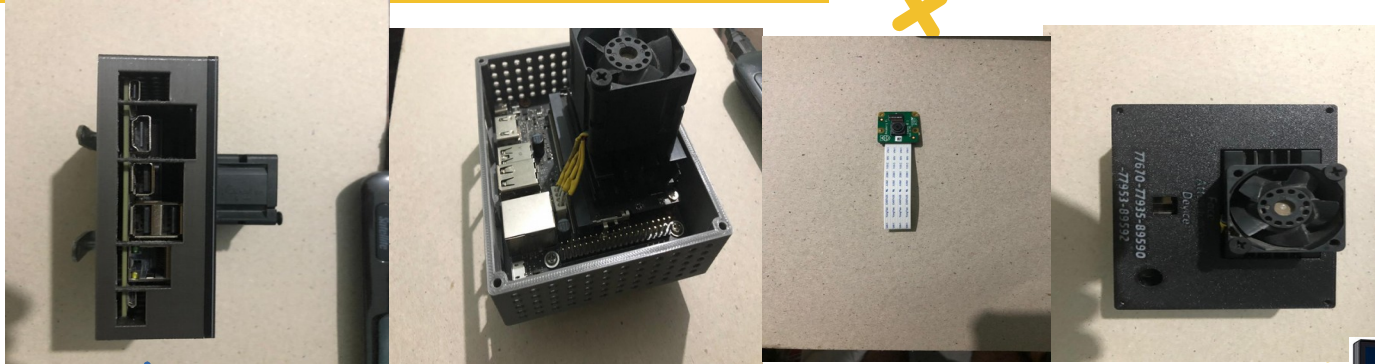
**face attendance works by verifying your face against the enrolled face to mark your daily attendance. All you need to do is stand in front of the camera and your face is verified instantly in milliseconds**



01 Plugin cables  
to turn on device



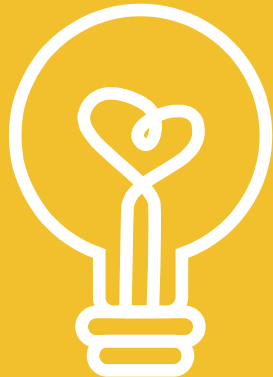
# - Plugin cables



you will plug in cables to device and to a screen to display everything in device and turn it on



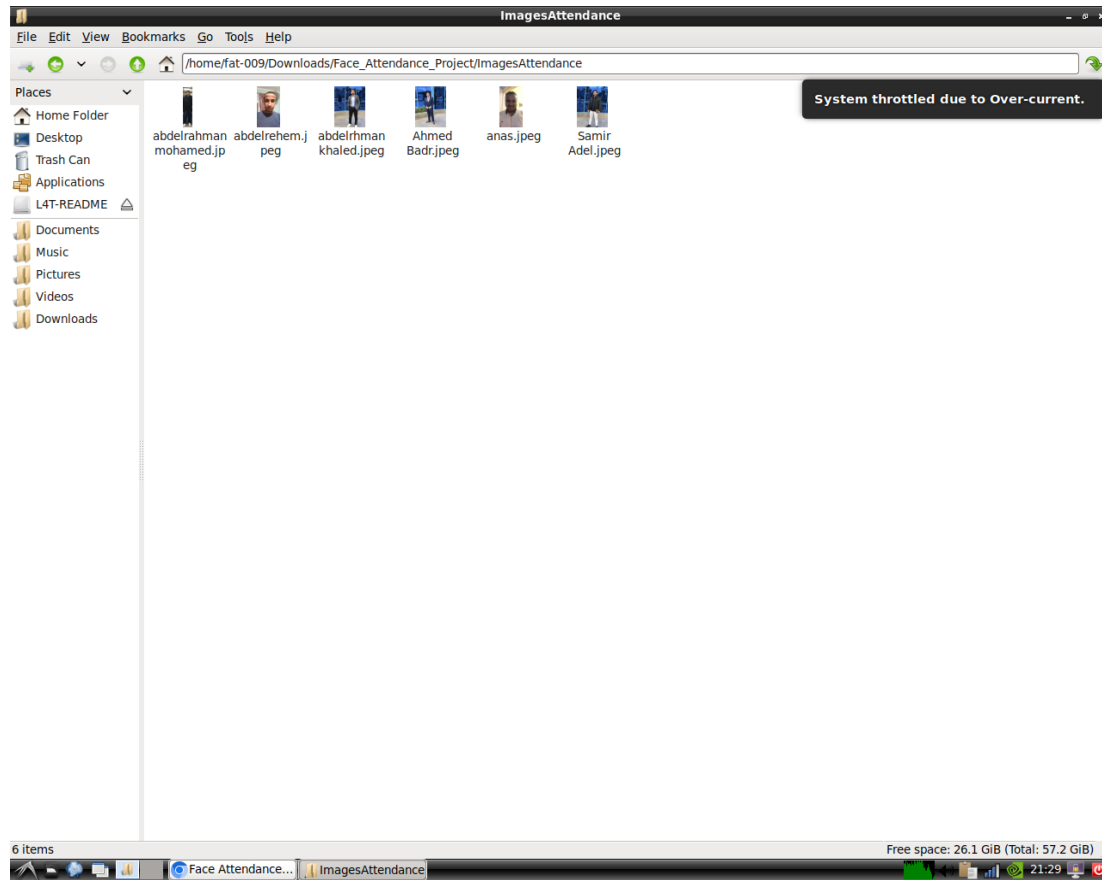
# 02 Insert dataset





## - Insert dataset

the admin will insert the images for each student in the dataset to make the device recognized them in a right way



# 03 Running the module







# - Running module

you will open visual studio code to run the module you will run the main code (Face attendance module) and the all modules will open automatically

```
FaceAttendance.py - Untitled (Workspace) - Visual Studio Code
File Edit Selection View Go Run Terminal Help
FaceAttendance.py x FaceRecognitionModule.py FaceRecognitionBasics.py Attendance.csv
Face_Attendance_Project > FaceAttendance.py > markAttendance
1 import cv2
2 import os
3 from datetime import datetime
4 import FaceRecognitionModule as frm
5 import FirebaseModule as fbm
6 import LedModule as lm
7 from time import sleep
8
9 frameWidth = 640
10 frameHeight = 480
11 ## for Raspberry Pi V2 Camera
12 flip = 0
13 camSet='nvarguscamerasrc ! video/x-faw(memory:NVMM), width=1280, height=960, format=NV12, framerate=21/1 ! nvvidconv flip
14 cap = cv2.VideoCapture(camSet)
15 encodeList, classNames = frm.findEncodings("ImagesAttendance")
16 myLed = lm.LedRGB(17,27,22)
17 myLed.color('off')
18
19
20 def markAttendance(name):
21     myLed.color('green')
22
23     with open('Attendance.csv','r+') as f:
24         myDataList = f.readlines()
25         nameList = []
26         for line in myDataList:
27             entry = line.split(',')
28             nameList.append(entry[0])
29             if name not in nameList:
30                 now = datetime.now()
31                 dtString = now.strftime('%H:%M:%S')
32                 f.writelines(f'({name}),{dtString}\n')
33                 fbm.postData(name,dtString)
34
35 while True:
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
[ WARN:0] global /home/nvidia/host/build_opencv/nv_opencv/modules/videoio/src/cap_gstreamer.cpp (933) open OpenCV | GStreamer warning:
Cannot query video position: status=0, value=-1, duration=-1
['anas.jpeg', 'abdelrahman mohamed.jpeg', 'Ahmed Shebl.jpeg', 'Ahmed Badr.jpeg', 'Samir Adel.jpeg', 'abdelrhman khaled.jpeg', 'abdelre
hem.jpeg']
Encoding Completed
^C^C
Session contents restored from 5/11/2022 at 1:02:12 PM
fat-009@faceatt009:~/Downloads/Face_Attendance_Project$
```

Ln 26, Col 33 Spaces: 4 UTF-8 LF Python 3.6.9 64-bit

# 04 Student recognition





## - Student recognition



the student will be in front of the device and the device will automatically recognize that he exists in the lecture and the led in the device turn to green and if the led turned to red when the device don't recognize the person



05

Firestore access

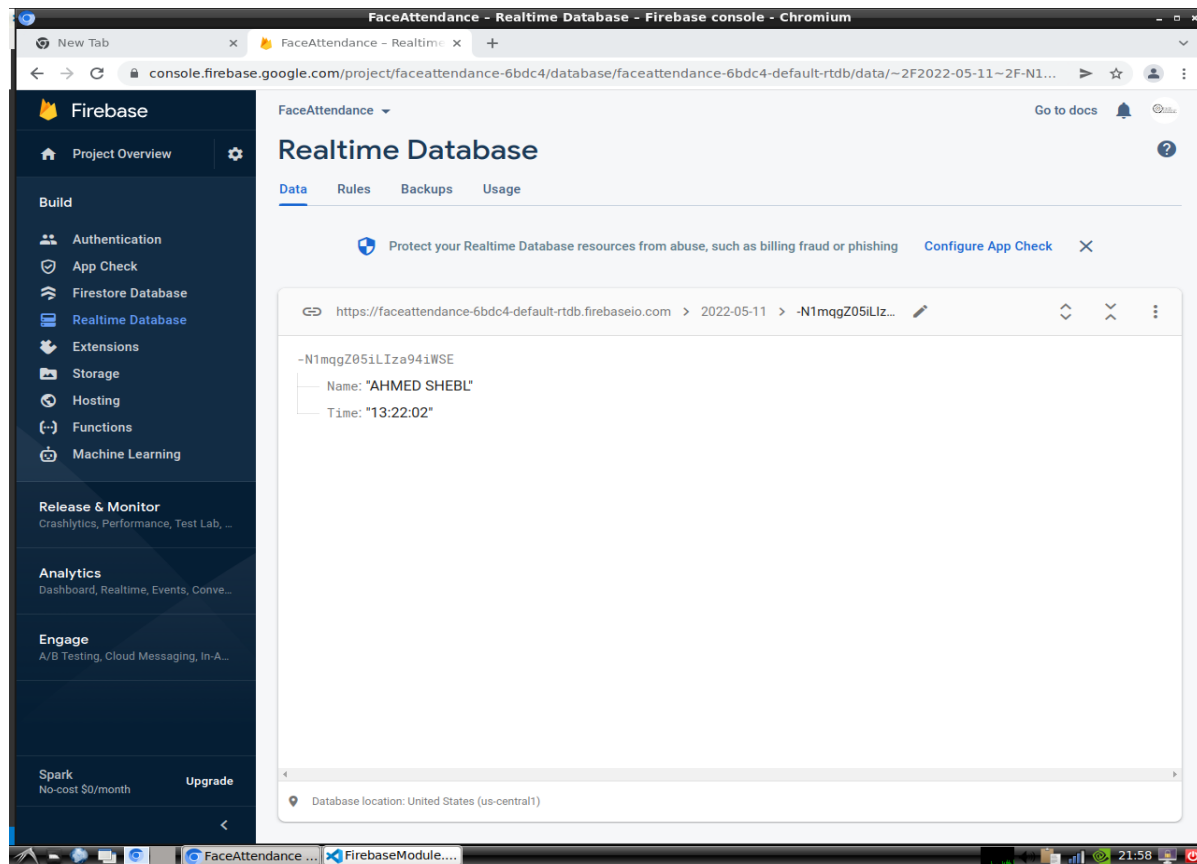




# - Firebase access



the data will automatically  
updated in the database we  
can create project for each  
lecture or each session



06

Home page button

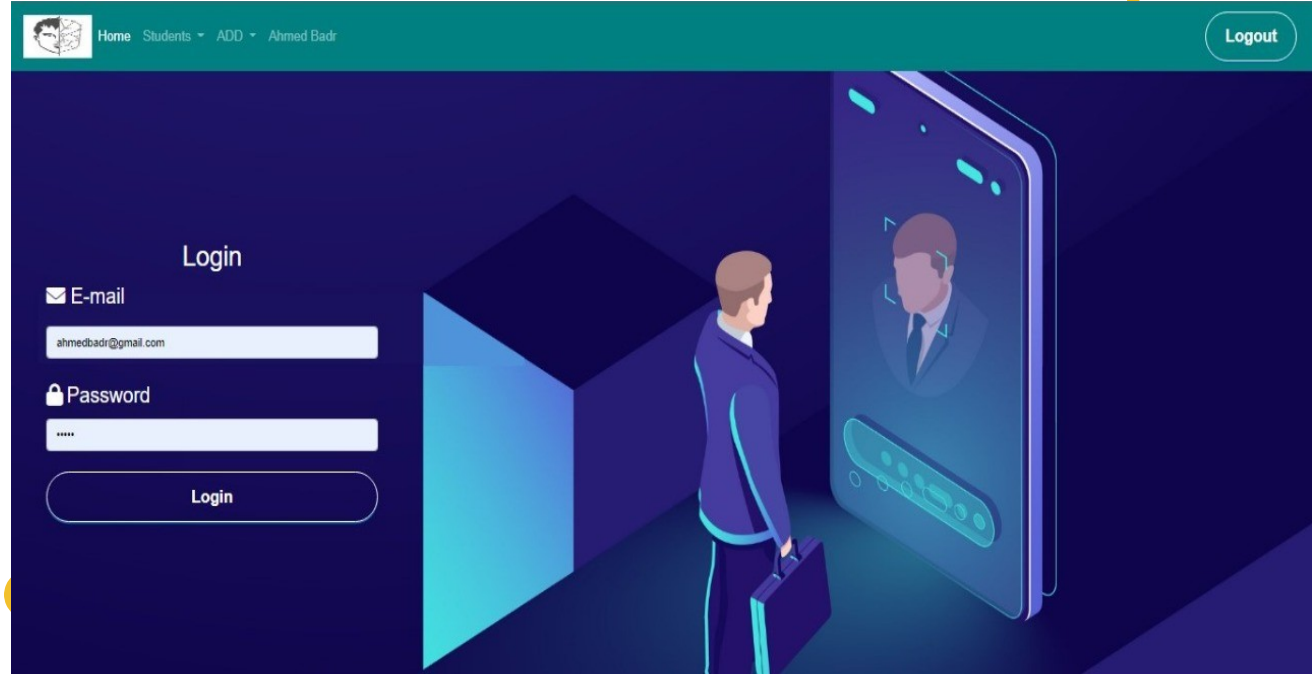




## Web page



when you press the button of Home page it will open and the admin or the doctor will login with their account and password and if the data is correct they will have access to the system but the admin is the only person who can access all features in the system



07

Home page button  
(make a new account)

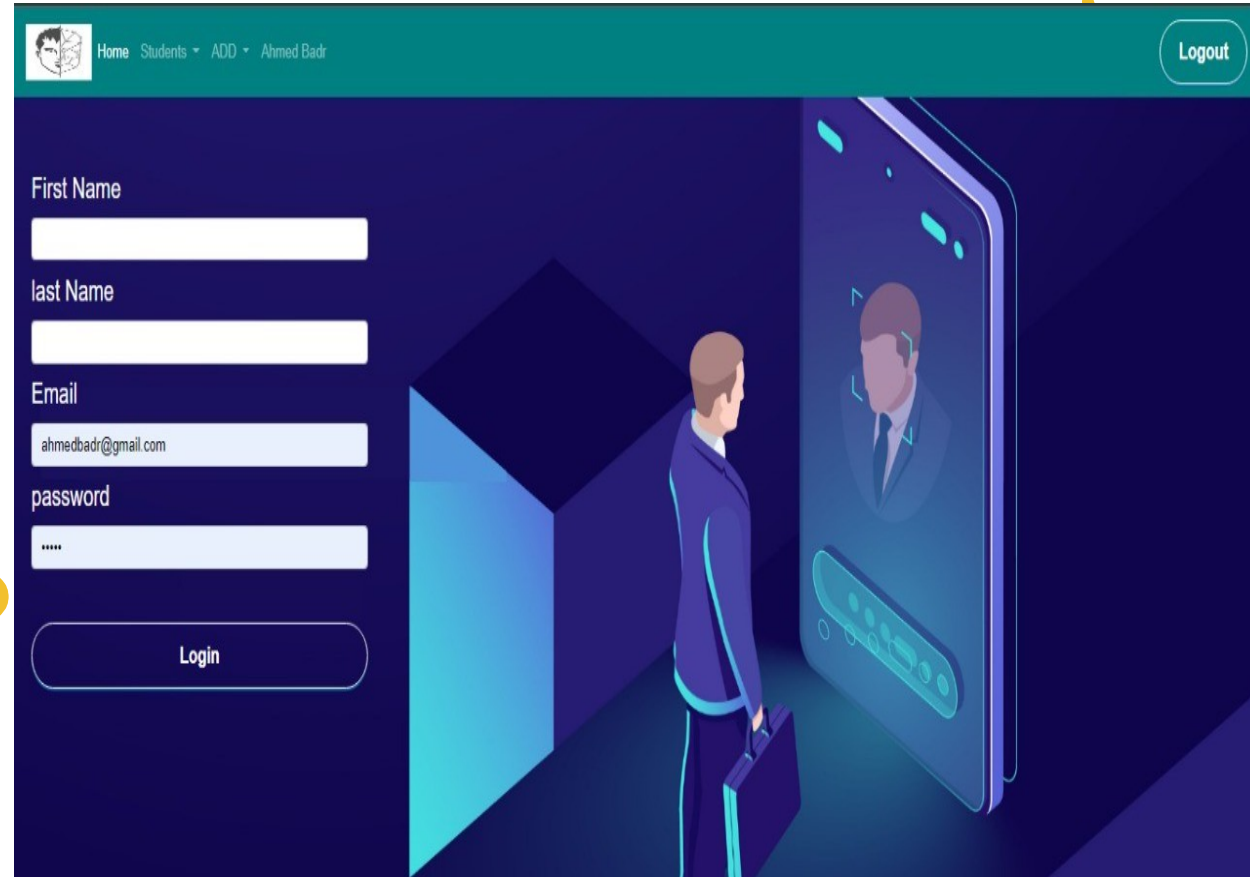




## Home page(new account)



we can add accounts for any doctor and admins that don't have accounts they will sign up through this page and make a new email with password



Home Students ▾ ADD ▾ Ahmed Badr Logout

First Name

Last Name

Email

password

Login



08

Add images button



# - Add images



we can add image for each new student will be in the lecture through add button with name and id



Home Students ▾ ADD ▾ Ahmed Badr Logout

## Add Student

Upload Photo

Choose File No file chosen

Name

ID

Send



09

Student list button

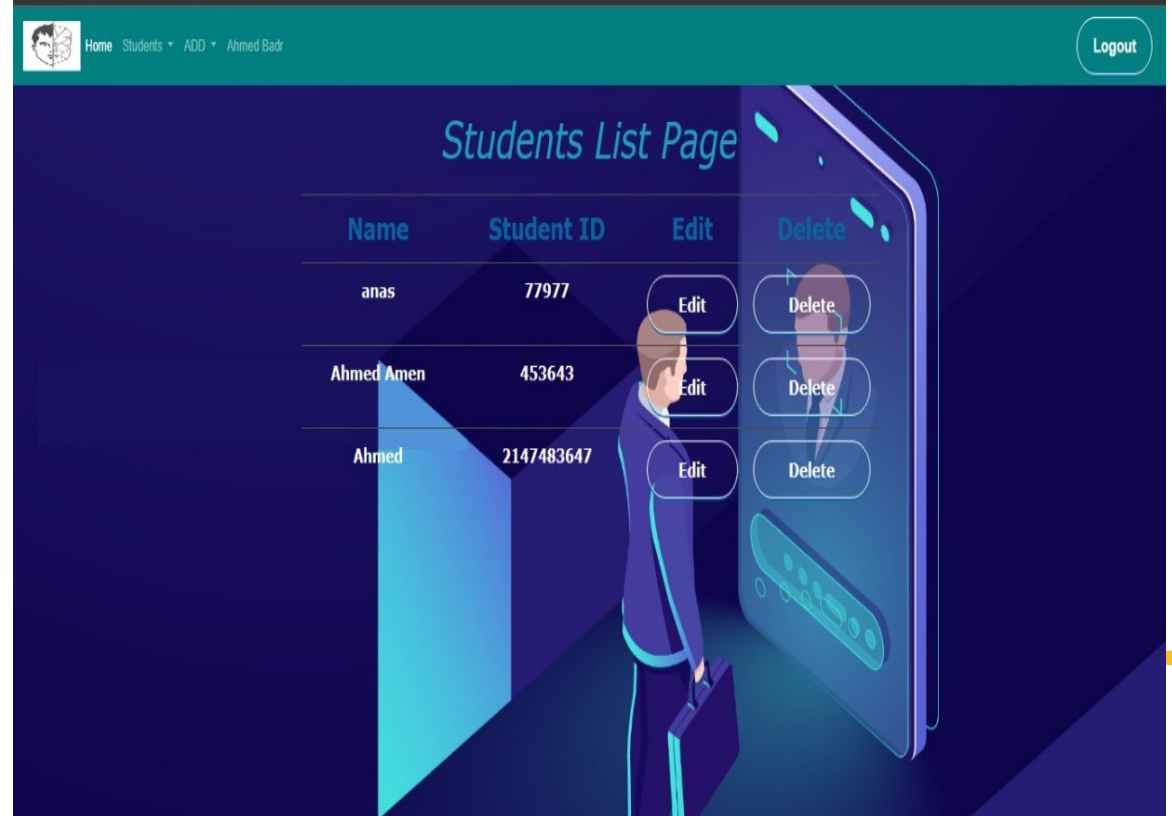




## - Student list



the doctor can edit the details about every student if it is no correct and this page contains all the students which are record by the device



# 10 Live face attendance page






## - Live face attendance



this page is connected to firebase which will automatically update each student which take the attendance through the device



Name	Time
AHMED SHEBL	11:18:56
ABDELRAHMAN MOHAMED	14:07:49
DR.ESMAT	14:08:25
SAMIR ADEL	14:08:34
AHMED BADR	14:08:36
AHMED SHEBL	15:36:41
ABDELRAHMAN KHALED	15:44:16
DR.MAGED	16:44:53



## Instructions

**01**

Admin make sure that the quality of picture is good

**02**

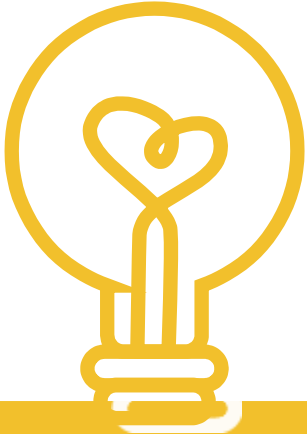
The student should be close to the device to take attendance and the led must turn green

**03**

The device can take attendance for more than one person

**04**

The device can't take attendance for a student that is already exists in the system







# Rules



you should have a good electricity to make the device turn on not too high not to make a shortcut circuits in device or to burn the device be careful



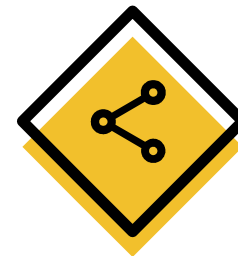
you should have a good internet connection to be connected to the firebase and the web page



The data must be accurate and the images should be clear



the device should be maintained every period by a technical to make it speed



every admin should not share his personal information due to security





## Note



this product is regularly updated, we cannot guarantee exact consistency between this product and the information provided in these instructions. We will hear no disputes that arise due to differences between the actual product and the contents of these instructions, and you may not be Informed of changes in advance.



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THANK YOU