IOT BASED SMART ATTENDANCE SYSTEM

USING FACIAL RECOGNITION

GROUP-C

GROUP MEMBERS

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INTRODUCTION

- Biometric-based attendance monitoring system replaces the manual method of taking attendance and reduces the time to take attendance.
- There are many biometrical attendance system in the markets like Fingerprint Recognition, Iris Recognition and etc…
- Out of all those methods, Facial Recognition is proved to be the most accurate methods of taking the attendance.

ABSTRACT

Attendance is a compulsory requirement of every organisation. Maintaining attendance register daily is a difficult and time consuming task.So a Proper Attendance system,can be useful for avoiding proxies and other practices.

MOTIVATION

- The motivation behind making this project is making a touching biometric attendance systems as it is a hazard in the present circumstances.
- Touch-less Attendance system can create in automatic logging and boost in productivity.
- Real-time Attendance system can help in handling the systems with ease.
- Face-Recognition systems can be used in the specific needs of any industry.

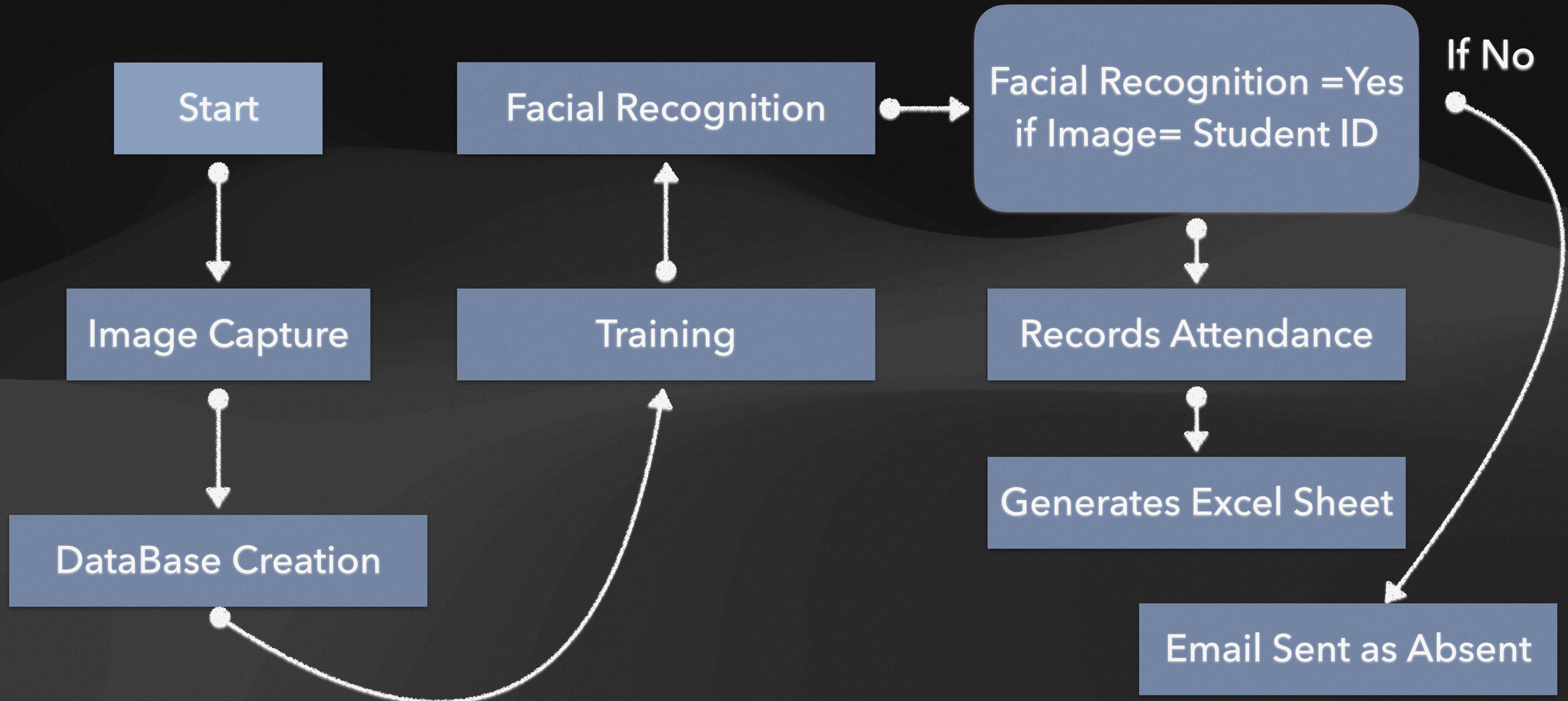
COMPONENTS USED

- RaspBerry Pi
- A Laptop for viewing the Raspi OS using VNC viewer
- Hdmi Cable
- A Desktop Monitor
- A Ethernet Cable
- Sd Card (For Installing Raspi OS)
- Power Cable
- A Webcam (For Image Acquisition)

OBJECTIVES

- Installing the needed Requirements.
- Setting up the Prototype.
- Image Acquisition and storing it in the database(Locally).
- Training using the data given by the user and the photos.
- Facial Recognition and Processing.
- Recording the Attendances of the users present in an Excel sheet.

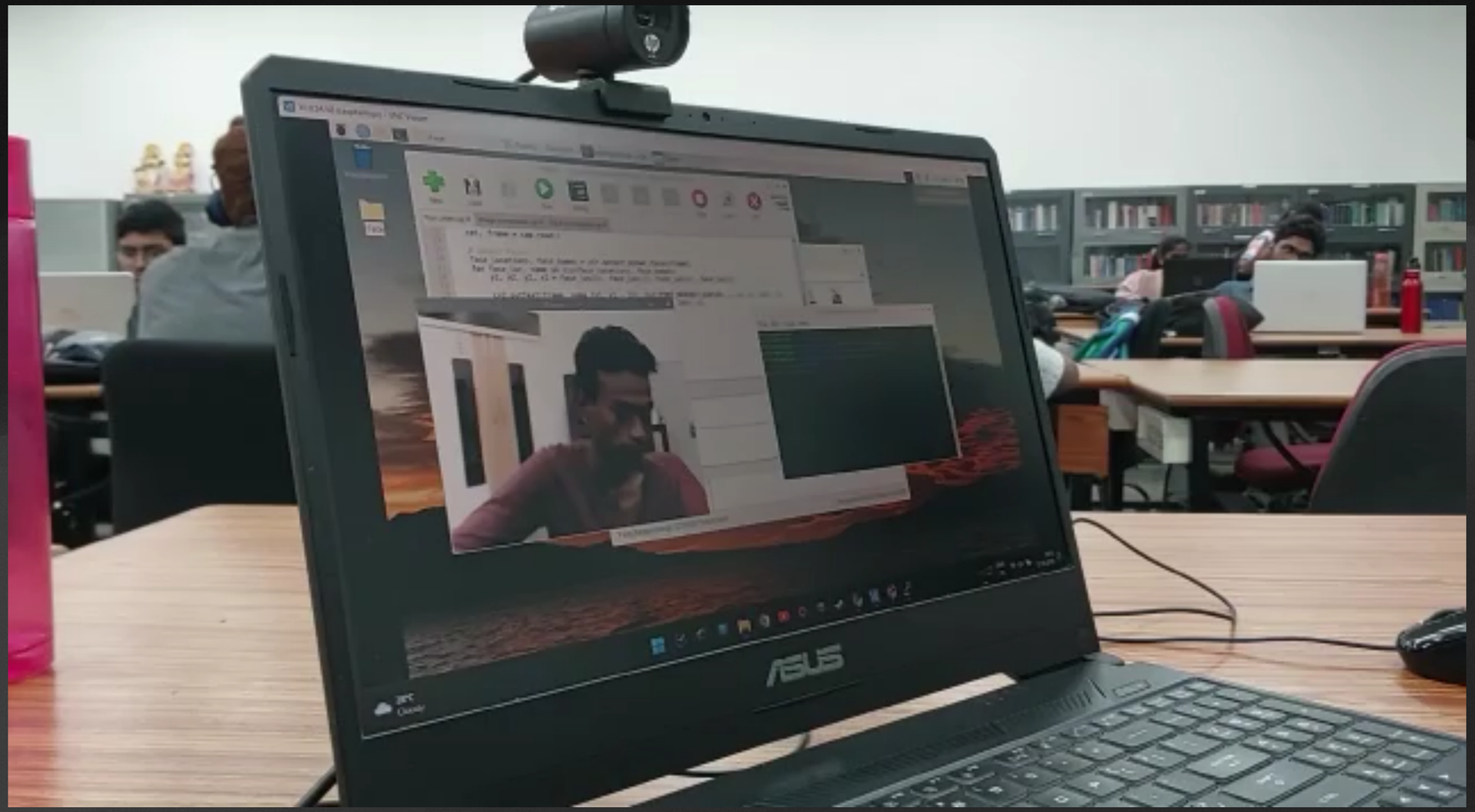
WORKING DIAGRAM



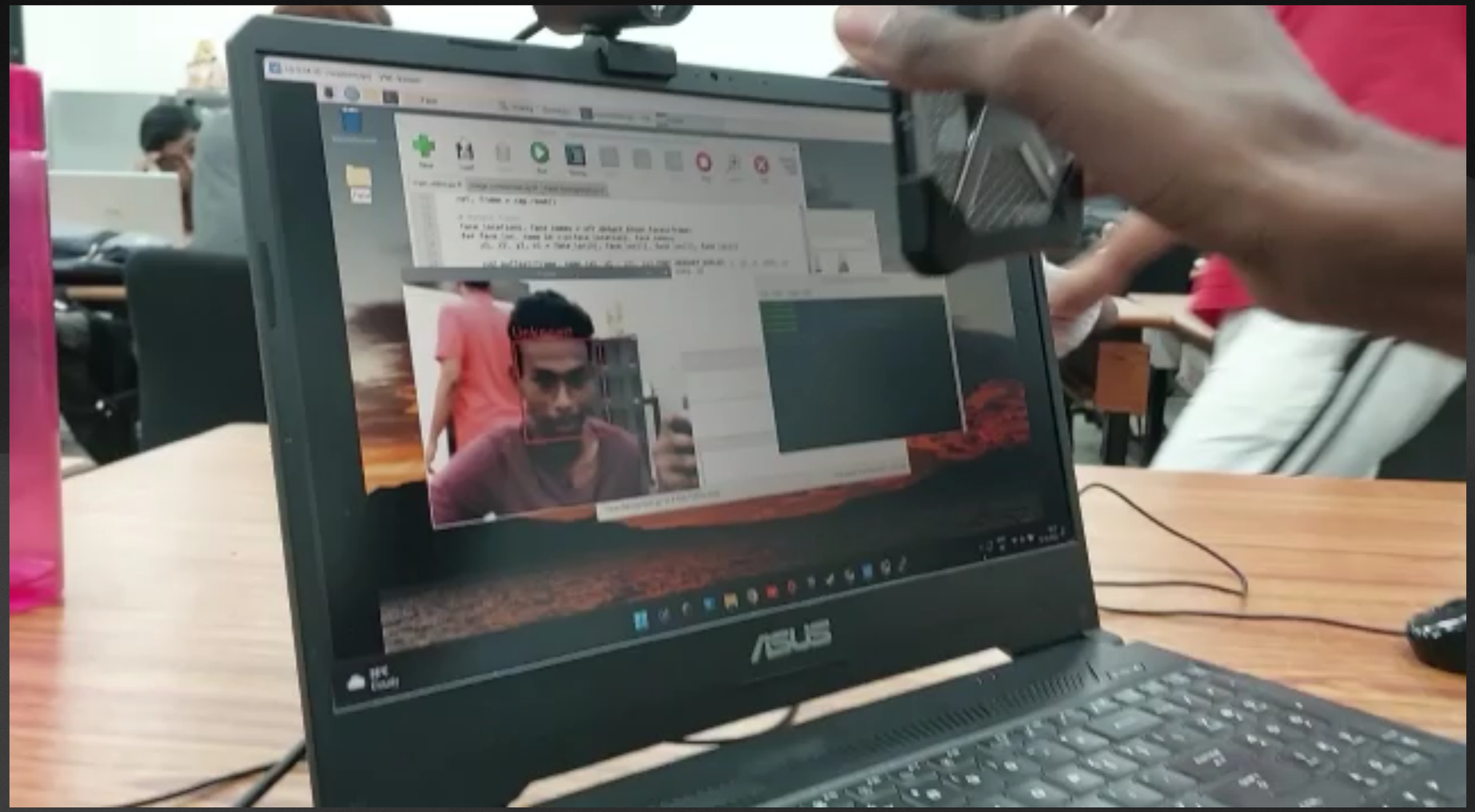
WORK DONE SO FAR

- Installed the needed dependencies for the raspberry pi like open cv, dlib, opencv compiling dependencies, Pillow, Face_Recognition utils etc..
- Register the student with roll no
- Stores the Images in the Database(locally)
- Stores Student Details in the CSV Format.
- Recognises the Face.
- Records the Attendance.
- Shows in the CSV File .
- Created the GUI App Interface for the Attendance System

PROTOTYPE DEMO



PROTOTYPE MODEL



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THANK YOU