FACE DETECTION ATTENDANCE SYSTEM

Efficient attendance management solution. →

FACE DETECTION AND ATTENDANCE SYSTEM

A face recognition attendance system is a type of biometric technology that uses artificial intelligence to automatically identify and verify individuals based on their facial characteristics. These systems are commonly used to track attendance in workplaces, stores, and other organizations.

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"REVOLUTIONIZG ATTENDANCE MANAGEMENT"

COMPARING TWO STATISTICS: FACE DETECTION ATTENDANCE SYSTEM

Accuracy of detection system

Our face detection attendance system has an accuracy of 98.9%

Time to record attendance

Our face detection attendance system records attendance within 5 seconds

FACIAL RECOGNITION ATTENDANCE SYSTEM

01

Accurate attendance tracking from anywhere

Real-time attendance tracking for remote teams and offices

02

Secure data storage on the cloud

Eliminate errors from manual attendance tracking

03

Fast and easy to use

Integrates seamlessly with existing systems

04

No hardware required

Save money and reduce waste with a paperless system

LANGUAGE
BACKEND
- C++

FORNTEND
- HTML
- CSS
- JAVESCRIPT

BACKEND AND FORNTEND
- PYTHON
- JASON

LIBRARIES
- OPENCV2
- IOSTREAM

"

LIBRARIES
- OS
- PICKLE
- NUMPY
- CV2
- FACE_RECOGNITION
- CVZONE
- FIREBASE_ADMIN

-Modern Attendance System

Attendance System

For Teacher

Enter

For Student

Enter

Enter Qalam ID | Example: XYZ.bee22seecs

Enter Password | Example: XYZ!#^&

Submit

ATTENDANCE SYSTEM

ACTIVE

MARKED

ALREADY MARKED

Storage

🔗 gs://face-attendence-system-4e8cd.appspot.com > images

⬆ Upload file

	Name	Size	Type	Last modified
☐	🖼 407955.png	88.65 KB	image/png	25 Dec 2023
☐	🖼 407957.png	20.26 KB	image/png	25 Dec 2023

>

major: "Electrical Engineering"

name: "Muhammad Huzaifa"

standing: "G"   🗑

starting_year: 2022

total_attendance: 17

year: 2

```python
import firebase_admin
from firebase_admin import credentials
from firebase_admin import db
cred = credentials.Certificate("serviceAccountKey.json")
firebase_admin.initialize_app(cred, options: {
    'databaseURL': ""
})


ref = db.reference('Students')

data = {
    "407957":
        {
            "name": "Muhammad Huzaifa",
            "major": "Electrical Engineering",
            "starting_year": 2022,
            "total_attendance": 7,
            "standing": "G",
            "year": 2,
            "last_attendance_time": "2022-12-11 00:54:34"
        },
```

FD 1

- ▷ □-□ References
- ▷ 📁 External Dependencies
- 📁 Header Files
- 📁 Resource Files
- ◢ 📁 Source Files
  - 📊 Attendence sheet1.csv
  - 📊 Attendence sheet2.csv
  - ▷ ➕ Face Detection.cpp
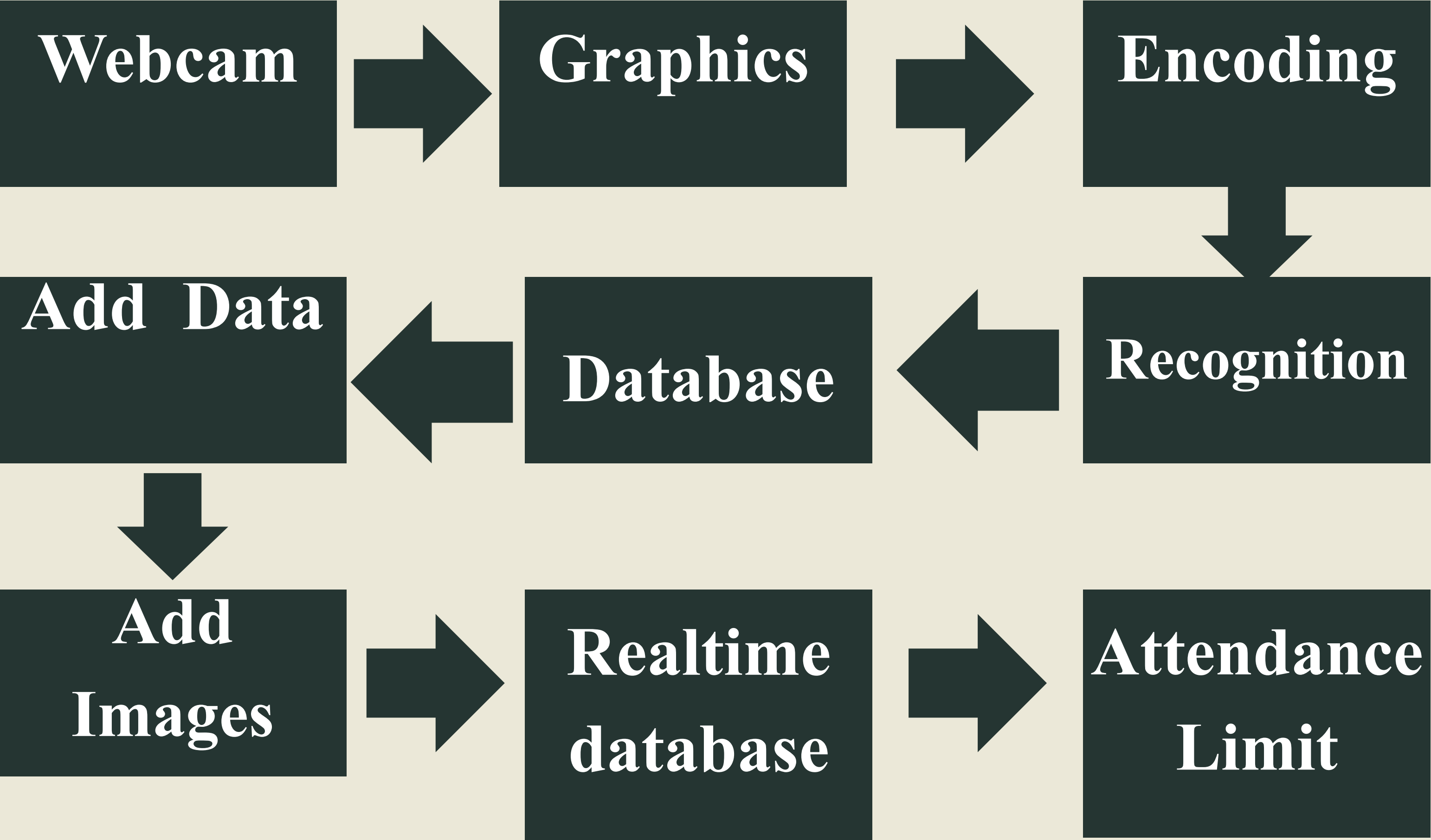 - 📄 Form1.html
  - 📄 Form2.html
  - 📄 GUI.html
- 📄 Style.css

- ∨ 📁 **Face Detection** C:\Users\M Huzaifa
  - > 📁 .venv library root
  - ∨ 📁 images
    - 🖼 407955.png
    - 🖼 407957.png
  - ∨ 📁 Resources
    - ∨ 📁 Modes
      - 🖼 1.png
      - 🖼 3.png
      - 🖼 4.png
    - 🖼 background.png
  - > 📁 tutorial_env
  - 🐍 AddDatatoDatabase.py
  - ❓ EncodeFile.p
  - 🐍 EncodeGenerator.py
  - 🐍 Main.py
  - {} serviceAccountKey.json
  - > 📁 External Libraries

```python
import cv2
import face_recognition
import pickle
import os
import firebase_admin
from firebase_admin import db, credentials, storage


cred = credentials.Certificate("serviceAccountKey.json")
firebase_admin.initialize_app(cred, options: {
    'databaseURL': "",
    'storageBucket': ""
})


# Importing student images
folderPath = 'images'
pathList = os.listdir(folderPath)
print(pathList)
imgList = []
studentIds = []

for path in pathList:
    image_path = os.path.join(folderPath, path)
    print(f"Processing image: {image_path}")
    img = cv2.imread(image_path)
```

```
Webcam → Graphics → Encoding
                         ↓
Add Data ← Database ← Recognition
    ↓
Add Images → Realtime database → Attendance Limit
```

GITHUB REPOS.

Efficient attendance management solution. →

Resourese
- images
  - 407955.png
  - 407957.png
  - Text2
- 1.png
- 3.png
- 4.png
- background.png

AddDatatoDatabase.py
EncodeGenerator.py
Main.py
README.md
resourse

THANKS FOR LISTENING........ (NO QUESTION)