**Team Name:** Techiee hackers

**Team Members:** Sanjai L

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**Problem statement:**

Artificial Intelligent-Face Identification API which can detect the face of missing person by scanning through databases, Social media platforms and matches the missing person image provided by department.

**Brief about the Idea:**

It involves capturing an image of a person's face, extracting facial features, and comparing them to a database of known faces to identify a match.

**STEPS:**

**Step 1:**

- **Detection--** the process of finding a face in an image. This can be done by training an algorithm, usually a **deep neural network (CNN)**, on a vast number of photos that have faces in known positions.

**STEPS:**

**Step 2:**

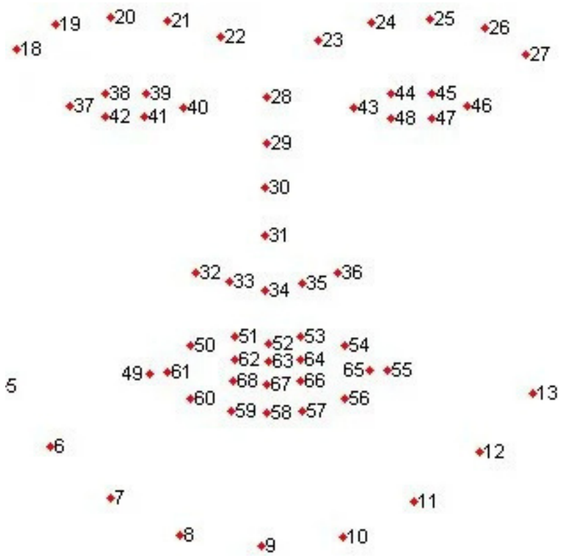
- **Analysis--**is the step that maps faces often by measuring the distance between **nodal points** which includes the **relationship between the eyes, nose, eyebrows,** and the rest of the facial features.

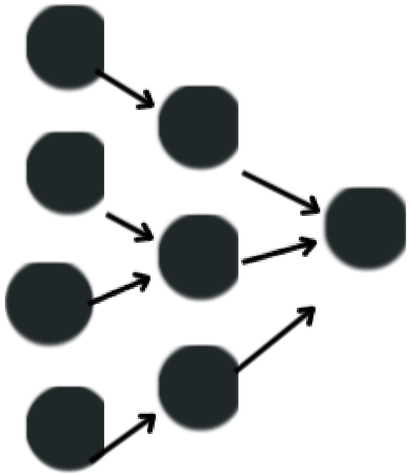
**Step 3:**

- **Recognition** is the attempt to **confirm the identity** of a person in a photo. It is the last step that has the goal to **give the final answer to the question — Who is in this picture?**

# Visual Representation of Architecture:

Image feed



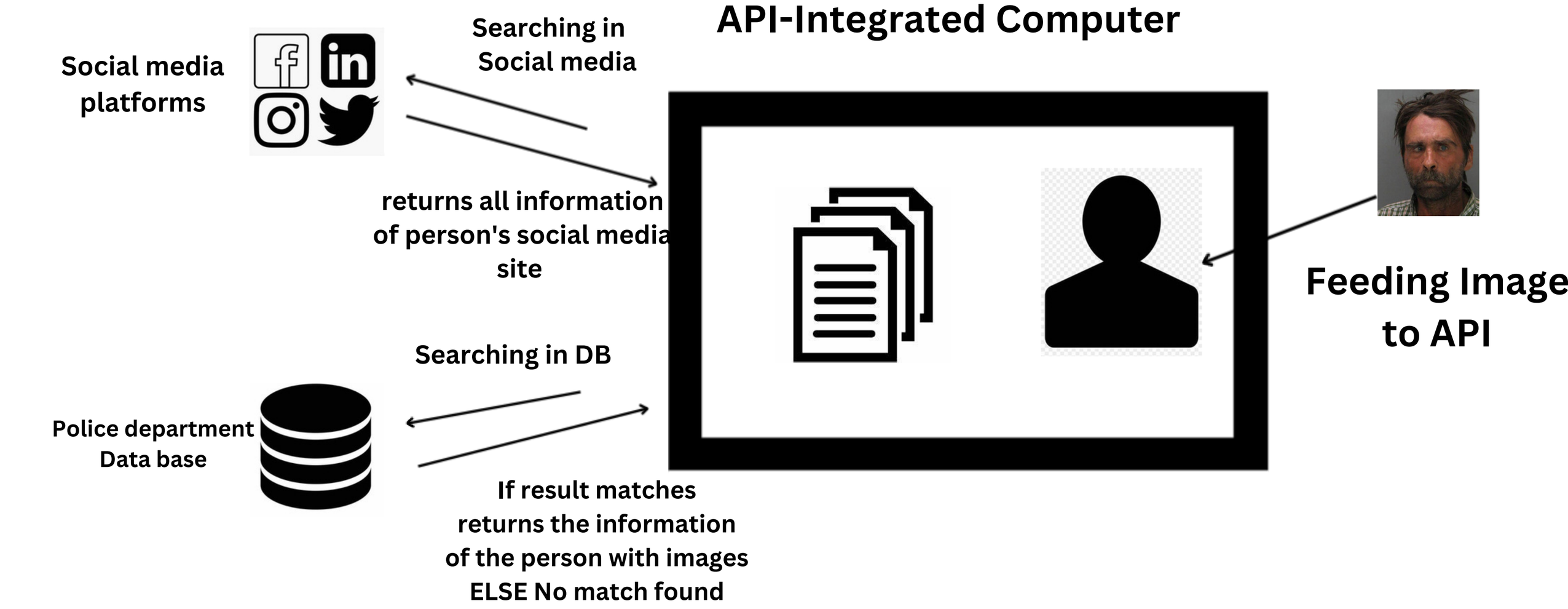
Recognizes the face and gives desired result

Neural network

Extracting Nodal point of Face

Network calculates the nodal points and matches the Face

# Flow Diagram



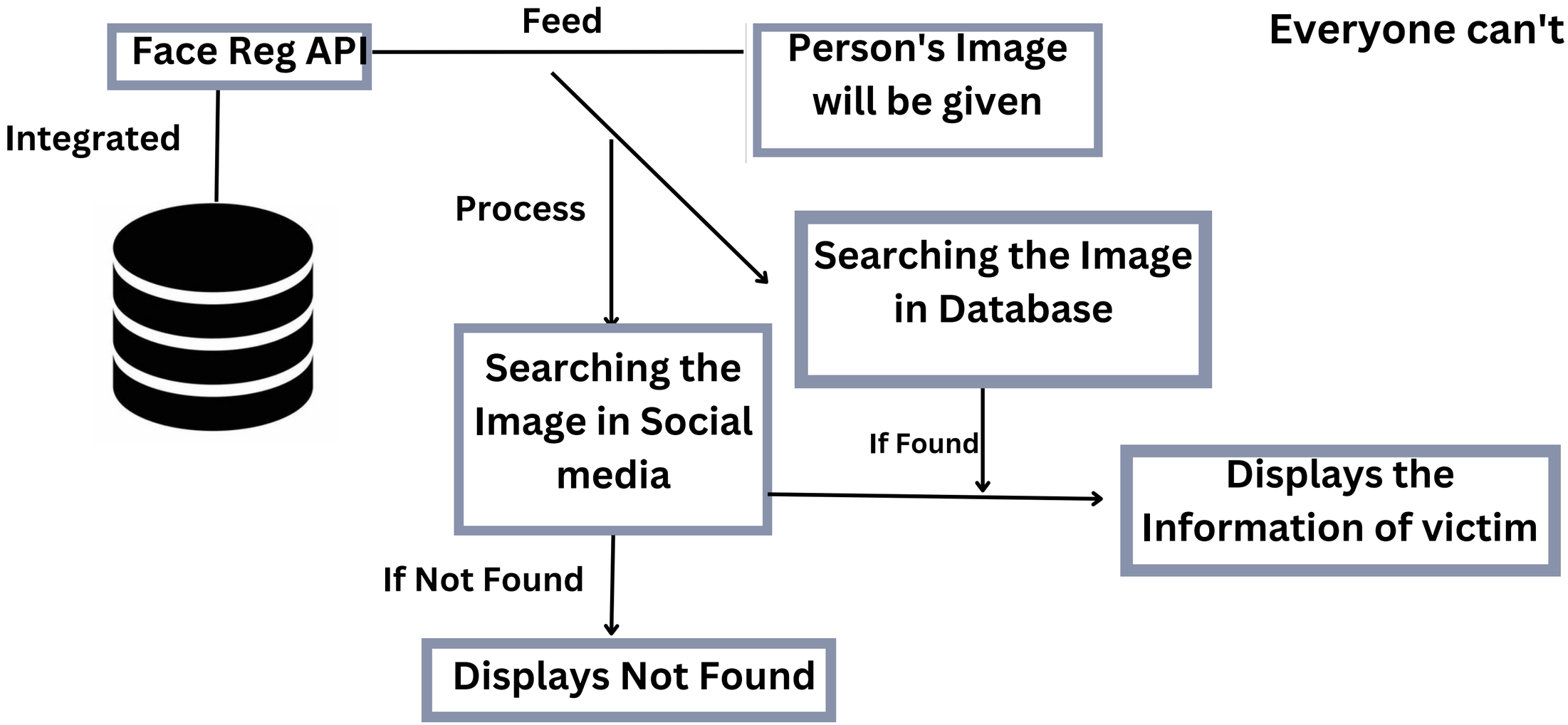
## Opportunity :

- The opportunity for an Artificial Intelligence-based Face Identification API that can detect missing persons by scanning through databases and social media platforms is significant.

- This technology can be utilized by **law enforcement agencies**, other industries such as **security, surveillance, and marketing to identify individuals** and **track their behavior.**

## Business Logic of the solution :

Authenticated API
Everyone can't use



## Technology used :

- Programming Language-Python
- Machine Learning Library - Tensorflow,Pytorch
- Image Reconition - OpenCV,DeepFace,Facenet
- Socialmedia Integration - Social Mapper
- Database Management- MySQL
- API Framework - FastAPI
- Cloud Framework - Google cloud Platform
- Deploymemt-Heroku

## Estimated cost of/after implementing the solution :

| Expenditure | Cost |
|---|---|
| Database development | 10000 INR - 17200INR per Data base |
| Database Maintanace | 20000 INR-25000 INR per month |
| API Maintanace | 1000 INR - 1500 INR per month |

# THANK YOU