

Web Based Face Recognition System

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Why?



As online studies increase, so does online cheating.



Types of cheating

- ➡ • Access to information
- Denial-of-Service attacks
- Authentication fraud



How to stop cheating?

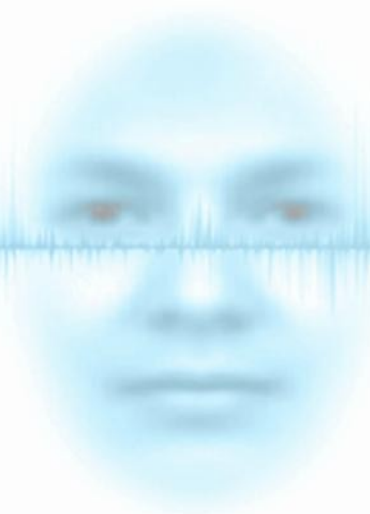
Authentication

- Personal questions
- Security token
- Software token
- Biometric authentication



Biometrics

- Fingerprint recognition
- Voice recognition
- Face recognition



What does this project propose?

To build an online face recognition system



Design

TRAINING

- Learn new faces
- Treat the photos
- Create database

RECOGNITION

- Detect face
- Recognize face

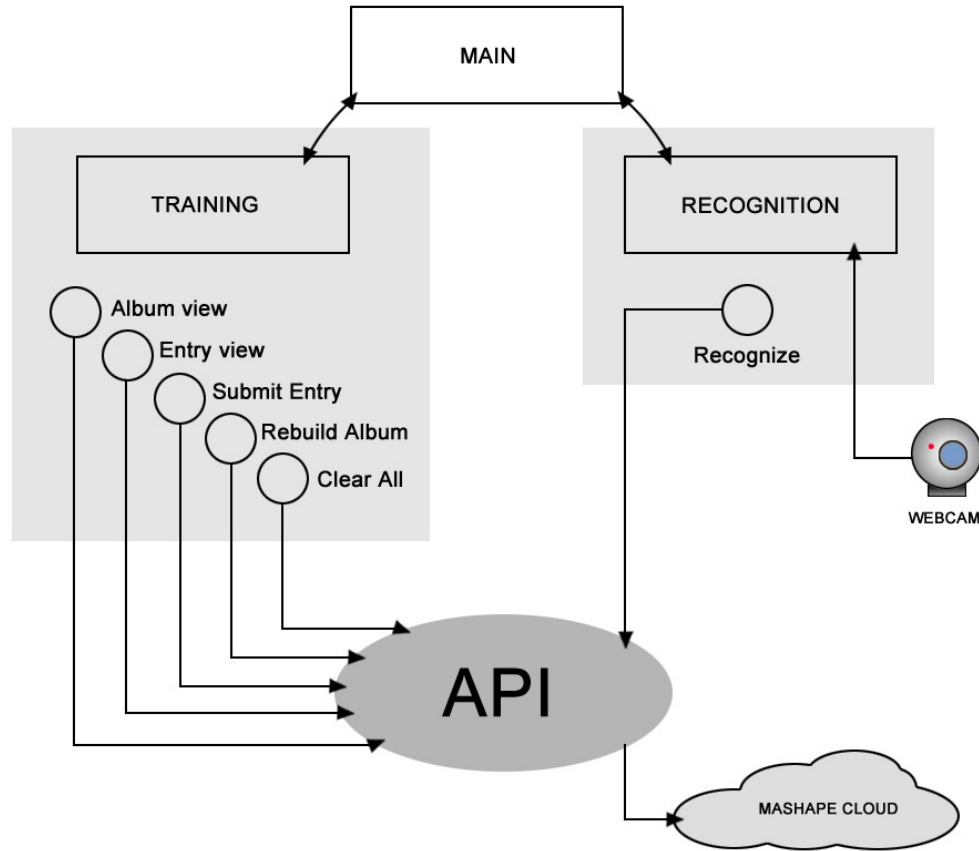


Choosing the framework

	OPEN CV API	LAMBA LABS API
Diversity of algorithms	Green	Red
More powerful image processing	Green	Red
Simplicity	Red	Green
Cloud services	Red	Green
Faster setup	Red	Green
Less Coding languages needed	Red	Green



Block diagram



Web design and functionality



Web Based Facial Recognition System

Training

Recognition



TRAINING



Enter entry ID

Enter photo URL

Album view

Entry view

Submit Entry

Rebuild Album

Clear All



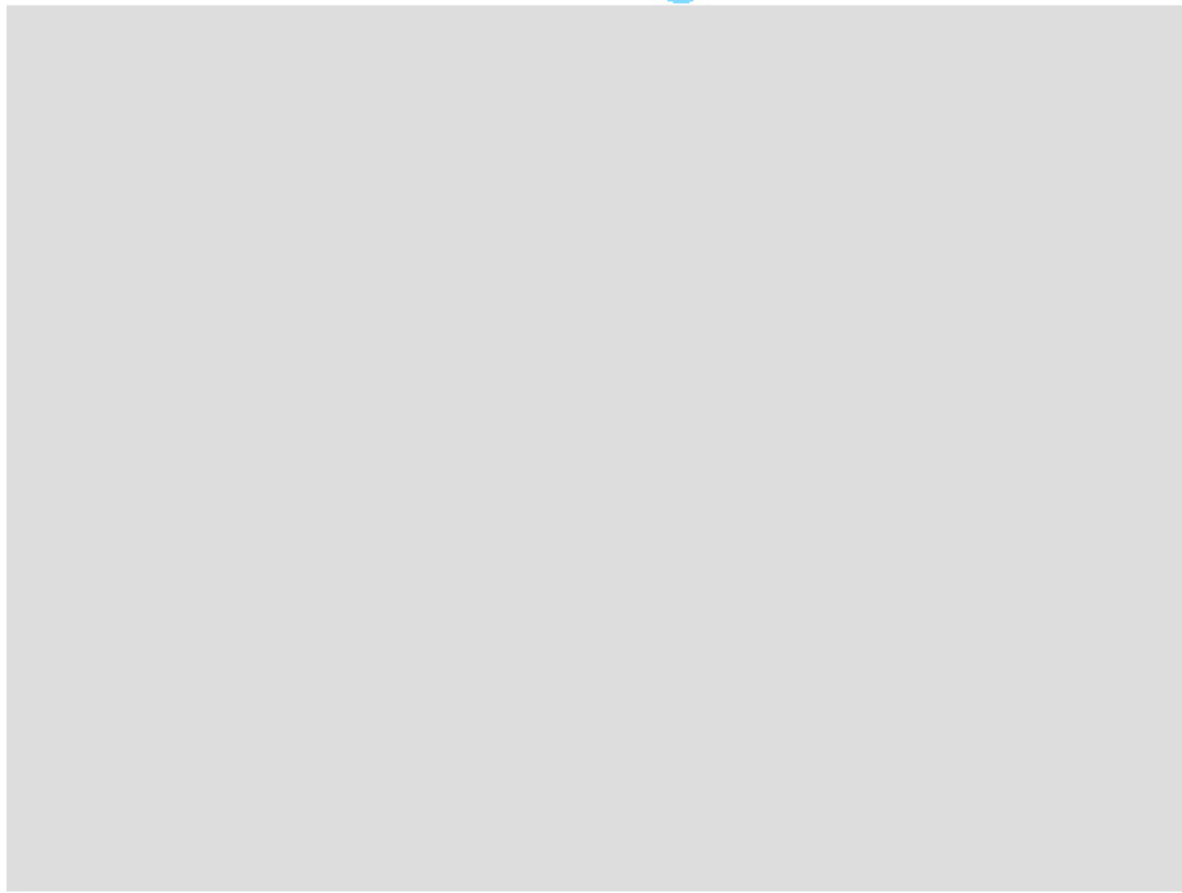
RESPONSE:



Example



Face Recognition



Recognize

USER ID:



Example



Image recommendations

When uploading

- One face per photo
- Frontal portraits
- Good lightning
- Focus
- Minimum five photos per entry

When recognizing

- Only one face in front of the camera
- Facing the camera
- Good lightning
- Both eyes visible



Conclusions

Future Improvements

- Continuous recognition
- Authentication
- Compatibility with other browsers
- File uploading

Goals achieved

- Functional face recognition



Thank you.

