Facial Recognition Project

Presented by: Team Silhouette

Why the name Silhouette ?

Silhouette is a measure of how well an object matches to its own cluster in the dataset

So how well does your image match to its own cluster on the database?

Aim and Ideology

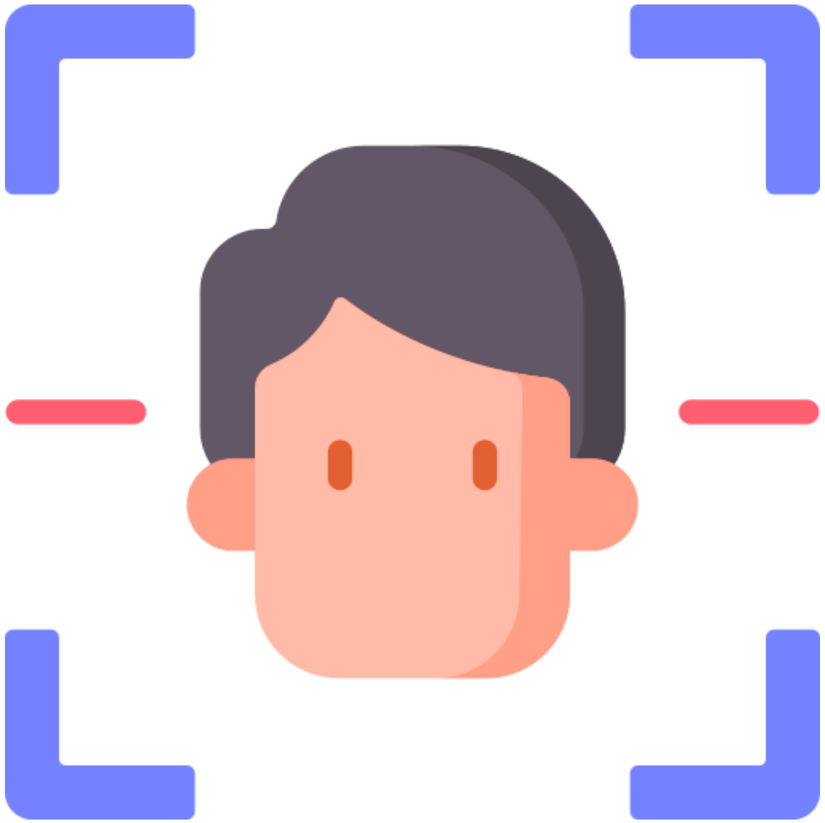
1. To automate the entry-exit system

2. To ensure that only accurate and precise information of in-out timings is stored

3. To make the entry-exit process super fast

4. To guarantee no false entries or details are entertained

5. To make the system absolutely clear at the admin's end as well the student's end



Use Cases

Who are the actual users?

We have 4 different users :

1. Students
2. Staff
3. Admin
4. Security

Structure of the Team

We are a team of 6 members and to ensure smooth functioning and coordination, we divided the team into sub-groups

1. Front end
2. Back end
3. Machine Learning

Who are our Potential Customers ?

- Colleges
- Universities
- Housing Societies
- Offices
- High Security needs

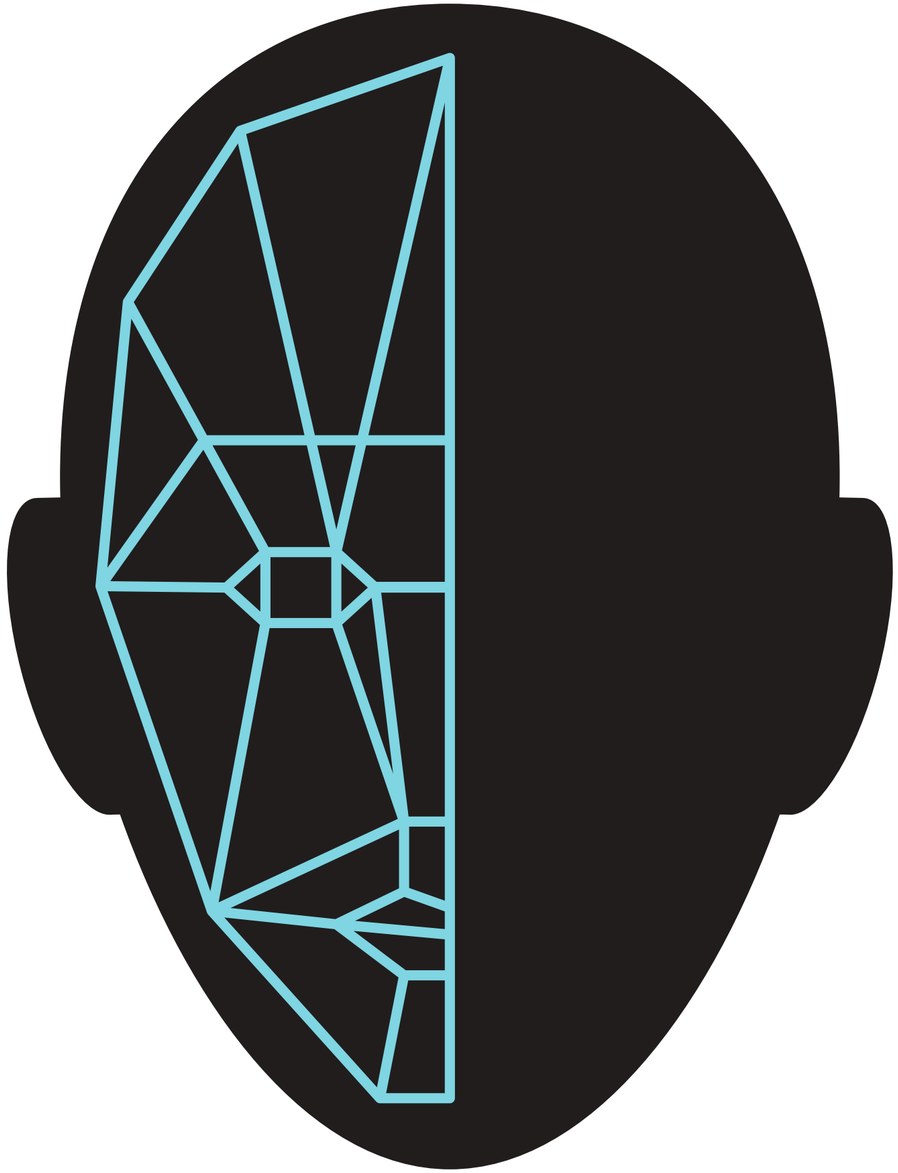
Feasibility Study Overview

Technical Feasibility	Economic Feasibility	Operational Feasibility	Risk Assessment
Website used to identity individuals based on Machin Learning concepts	Hardware cost: Camera : Rs.2000 (upper bound) System : server cost (institute)	The website is operationally feasible, with resources and personnel required for successful implementation	As of now, there is no automated facial recognition system for students in the campus

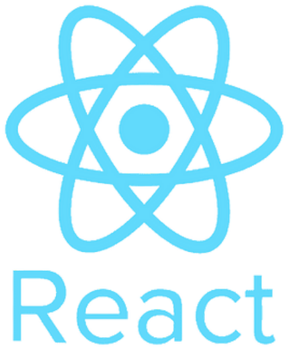
Demonstration

Are you excited?

Cause we definitely are!



Technologies Used



What to expect next?

1. Integrating more robust liveness detection system.

2. Extending the website to an application.

3. With high resolution cameras, we can achieve picture resolution close to 2778 x 1284 pixels.

4. Constant discussions with potential users and integrating their requirements.

5. Integrating visitors management system with the existing one.

6. Tuning hyperparameters of a classifier can improve its performance if a larger dataset is available.

Thank you for showing up today

We are open to any questions or queries that you may have