



SHREE L.R.TIWARI COLLEGE OF ENGINEERING

SMART ATTENDANCE MANAGEMENT SOLUTION

# SELF-X

GUIDE:- MR.SAURABH SUMAN

# Introduction

- Prior to the advent of computers and mobile devices, using a pen and paper was the most typical way to take attendance in classrooms.
- Traditionally, the attendance system comprises calling out student's names or circulating an attendance sheet around the class
- In the industrial era, all activities can be connected to and accessed by utilising a smartphone and the internet, although technology is now evolving very rapidly.
- The attendance system is expanding as well to make it simpler for students to use and to enhance student monitoring.



Self-X

# SELF-X

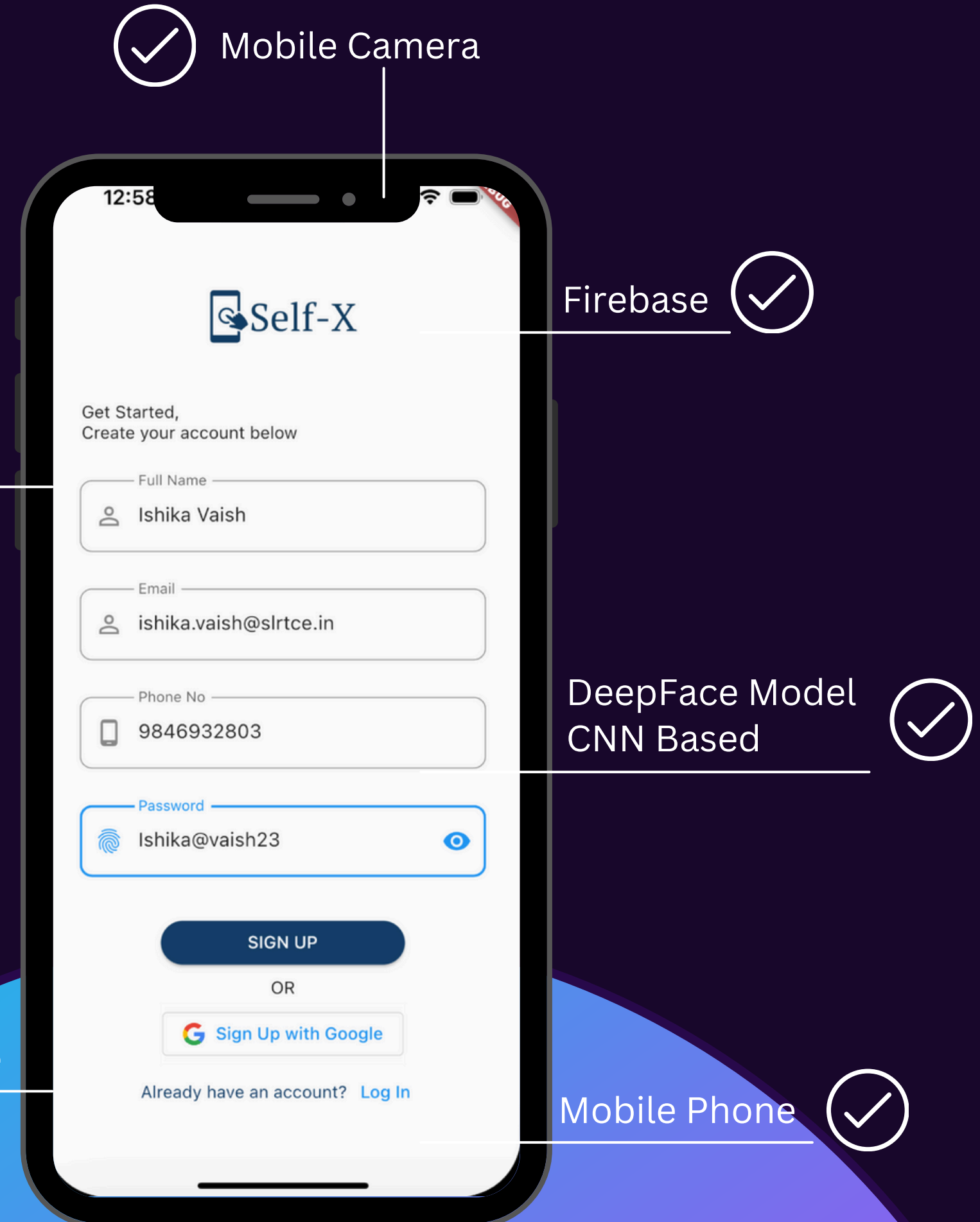
## Cost Effectiveness

- Product minimises cost of recording attendance by eliminating the need of biometric hardware to record Attendance.
- As a software Application, it can be easily downloaded by the students as it would be free of cost.

## Societal Impact

- As, it is time for digitalisation in all the areas, our solution can modernise the traditional way of recording attendance.
- Managing the attendance of students is time consuming, expensive and laborious,
- The system tracks student hours and can generate report automatically.

# Effective use of Skillset



✓ Mobile Camera

✓ Firebase

✓ Google ML Kit  
(Face Detection)

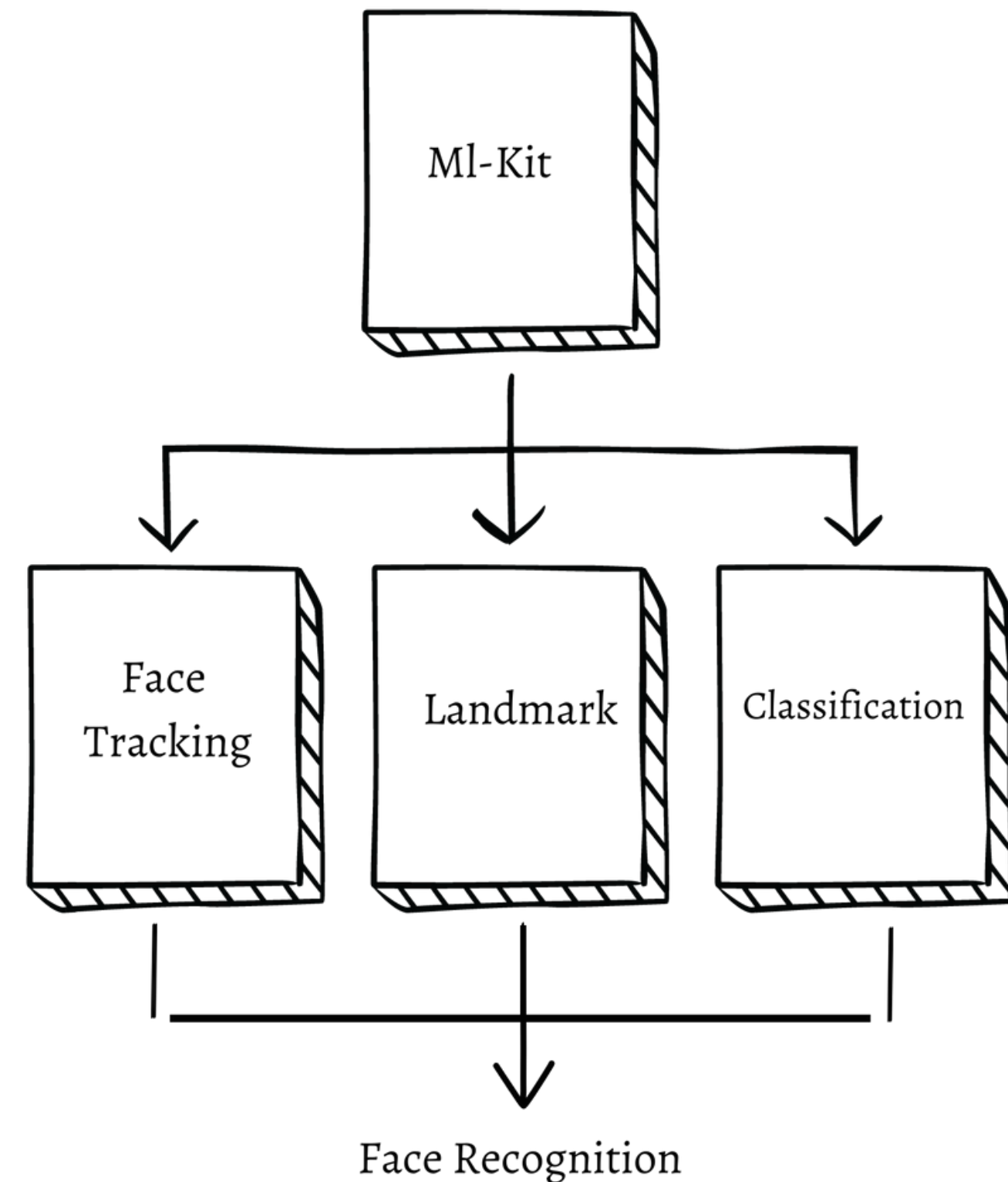
✓ DeepFace Model  
CNN Based

✓ Flutter Application  
Android and IOS Compatible

✓ Mobile Phone

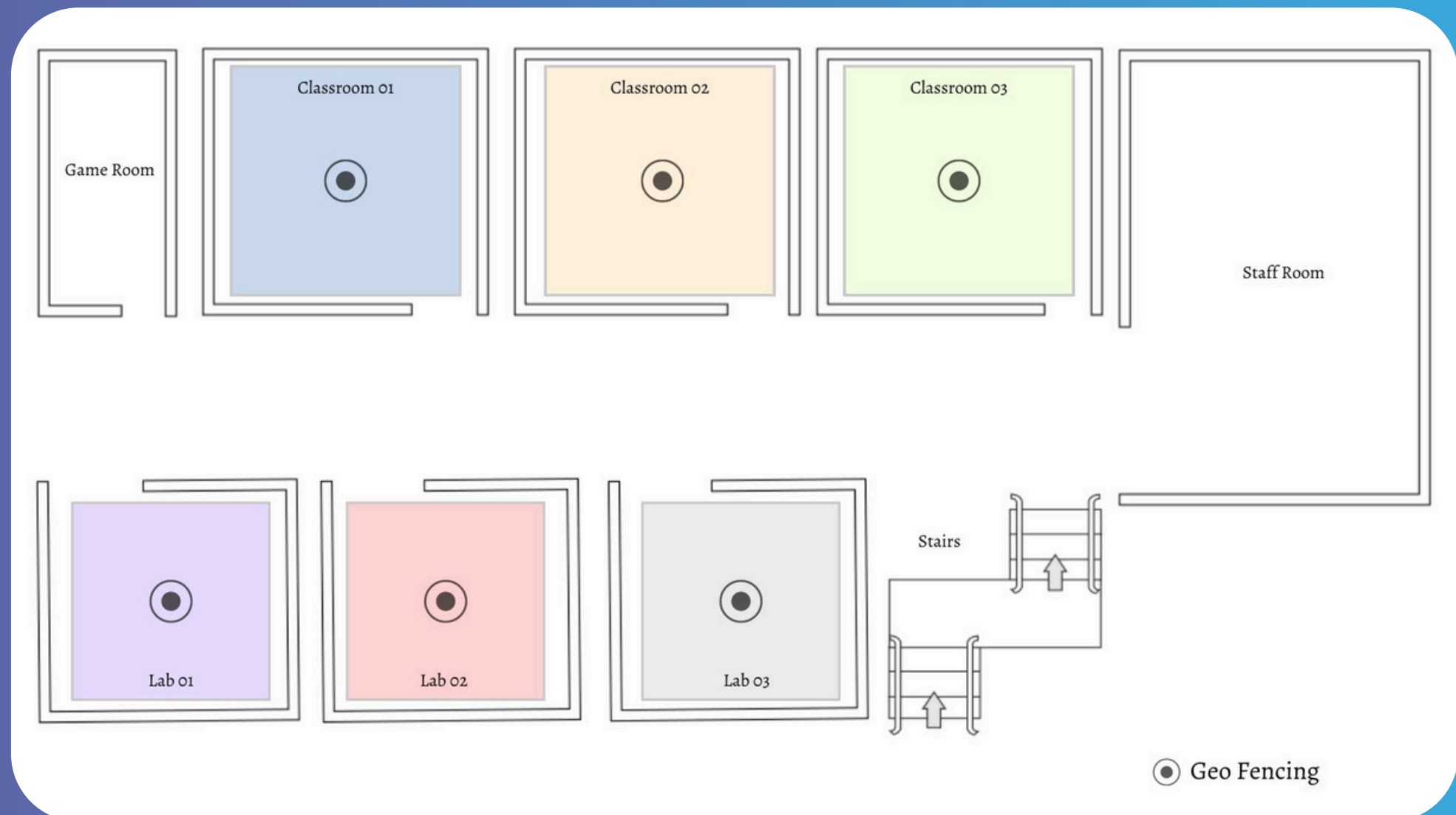
# TechStack

- Using face recognition in Firebase's ML Kit enables you to detect and recognise faces in an image, without providing additional data.
- The face detection algorithm returns rectangular bounding boxes that you can then plot on the detected faces.
- It's also able to detect key facial landmarks such as eyes, mouth, nose, etc.



# Geo Fence

- geofence\_service 3.5.0 - this plugin can provide more accurate and realtime geo-fencing by navigating your location while your app is alive.
- The library trust\_location 2.0.13 - Fake GPS users in order to prevent the GPS position in smartphones from being modified by an student a Fake GPS application.





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**THANK  
YOU**