



**SMART INDIA
HACKATHON
2022**

Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:

Ministry of Skill Development and Entrepreneurship (MSDE).

PS Code: DB886

Problem Statement Title: Automatic sign and photo detection from the uploaded documents by trainees during admissions using Artificial Intelligence and Optical Character Recognition.

Team Name: Leaf One(VCE-SIH-S-37)

Team Leader Name: Hrudai Aditya

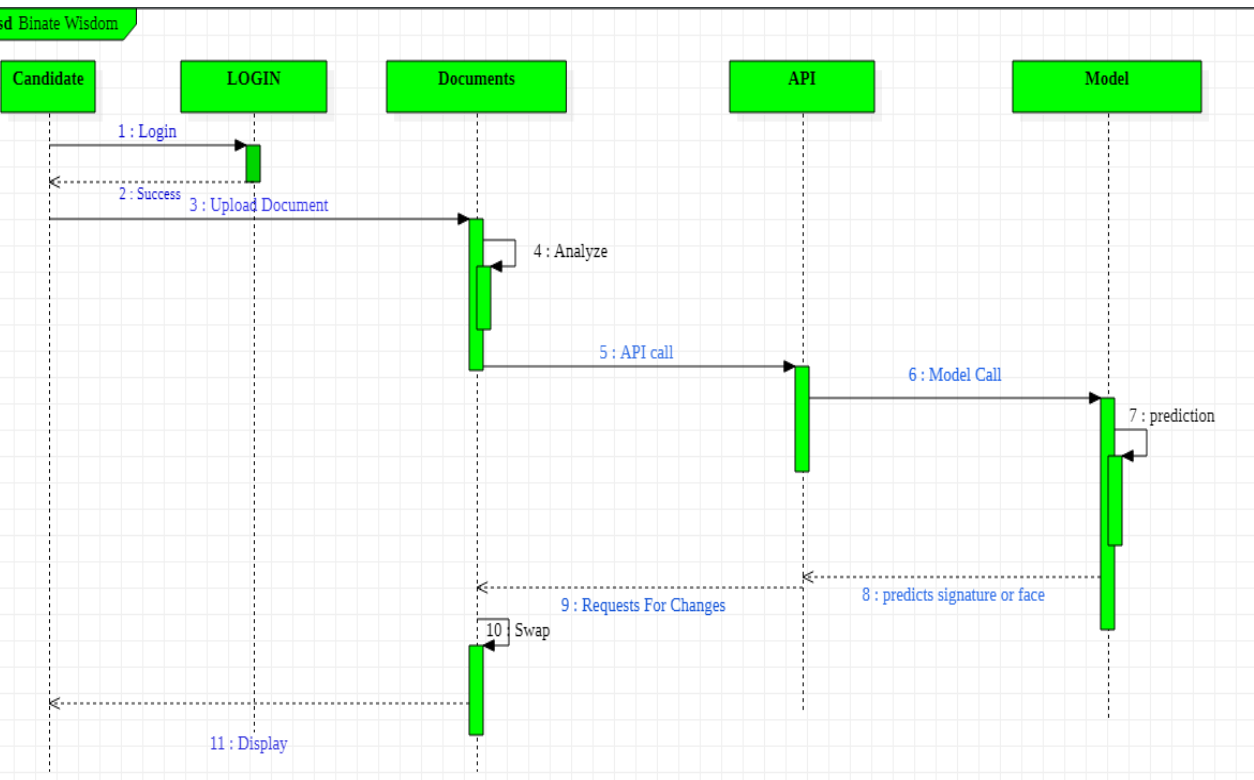
Institute Code (AISHE):C26162

Institute Name: Vasavi College of Engineering

Theme Name: Smart Automation

Idea/Approach Details

- It is Binary Custom Classifier script written in python which enables any system to implement automatic classification of uploaded image into either a face or signature. It is a fully connected neural network
- The model uses Convolutional Neural Networks algorithm to process the given images by using 9-19 layers of filters and Max-Pooling
- With the help of Firebase/FastAPI we are providing easy web based integration



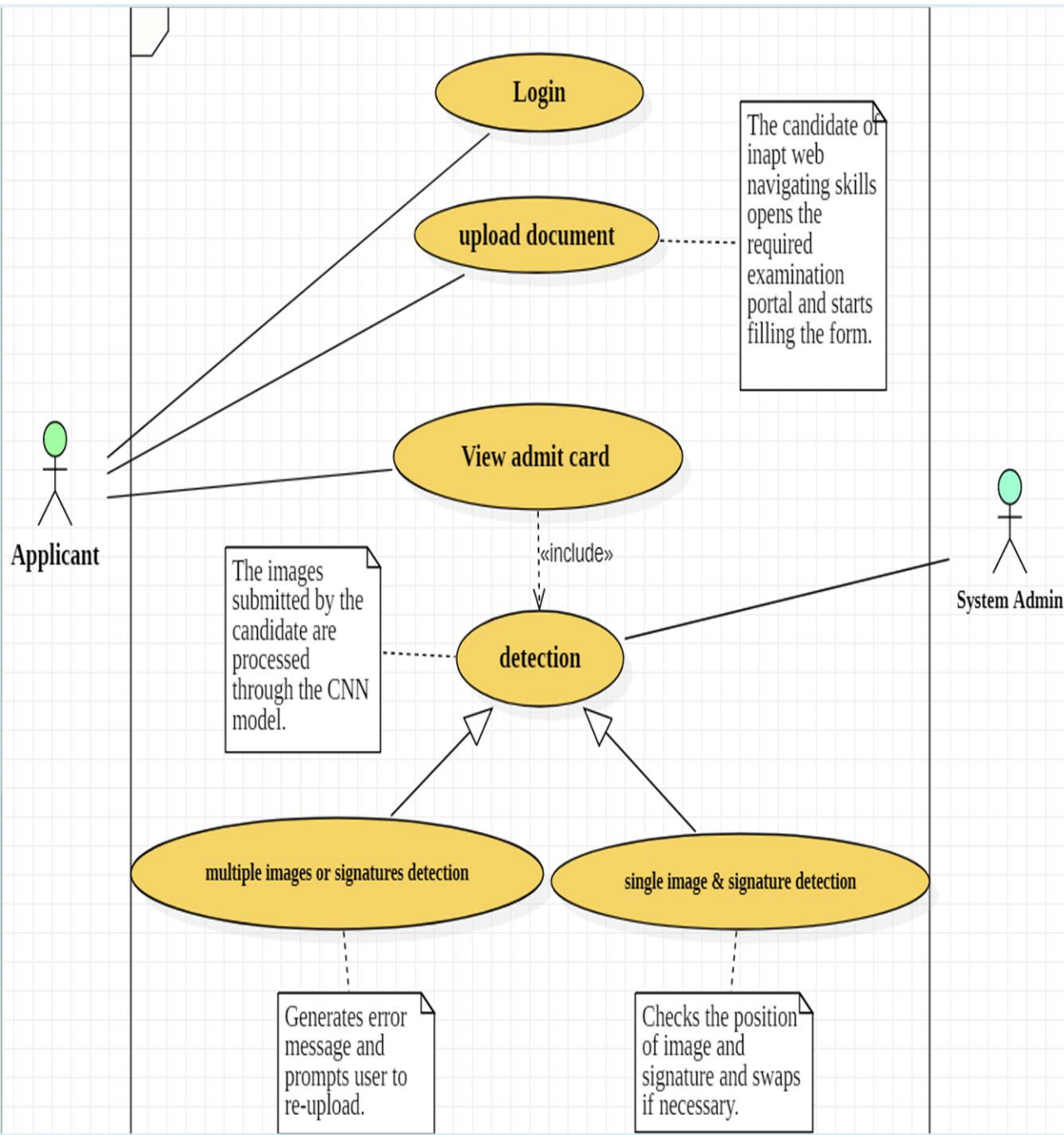
Technology stack

FRONTEND TECH STACK: Flask and Firebase to provide GUI based integration through web



BACKEND TECH STACK: The modules of python which are used for the development of image classification algorithm are Tensor flow, Keras, CNN and for API integration FireBase/Fast API

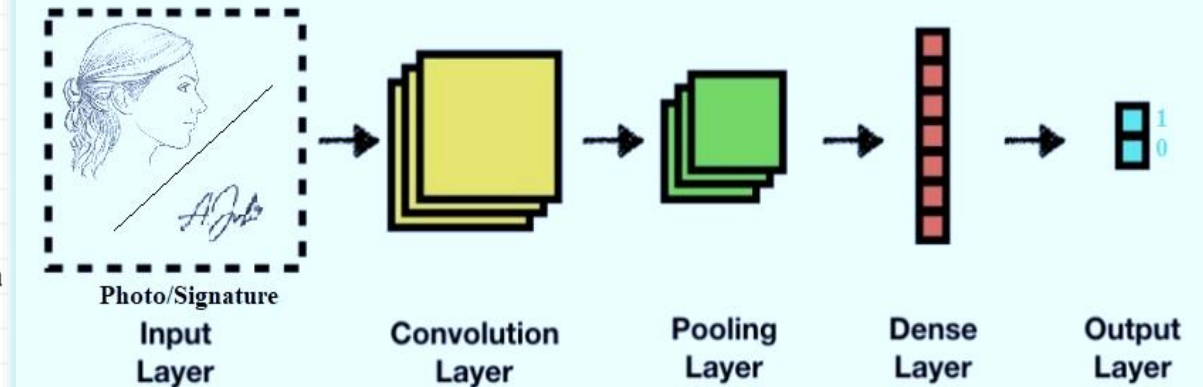
USE CASE:



SHOW STOPPERS:

➤ Fully Tailored application built without using any third party licensed detection software which provides the following edge

- High Accurate model prediction
- Provides both Realtime and offline detection
- Flexible and Fast



➤ Dependencies

Datasets: of faces and signatures to train model

