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ISG17ISO27

Real Time Face mask Detection using  
Deep Learning

## Introduction

Covid-19 has affected world seriously and is causing a global health crisis. The major protection method for people is to wear mask in public areas.

## Problem statement

The people are not taking covid 19 seriously and roaming in regions without mask making them as corona virus carriers. To avoid this spreading a new method need to be found.

## Objective

To build an object detection model to detect whether is a person is wearing mask or not from the images and video streams with the help of image processing, computer vision and deep learning algorithms. Using streamlit module for the frontend framework and providing results for face mask detection. The accuracy of model is expected to be more than 90%.

- \* Review results through a web browser and give percentage
- \* Alert systems, popups, voice systems are integrated.
- \* Digital outputs as a Covid-19 analysis risk.

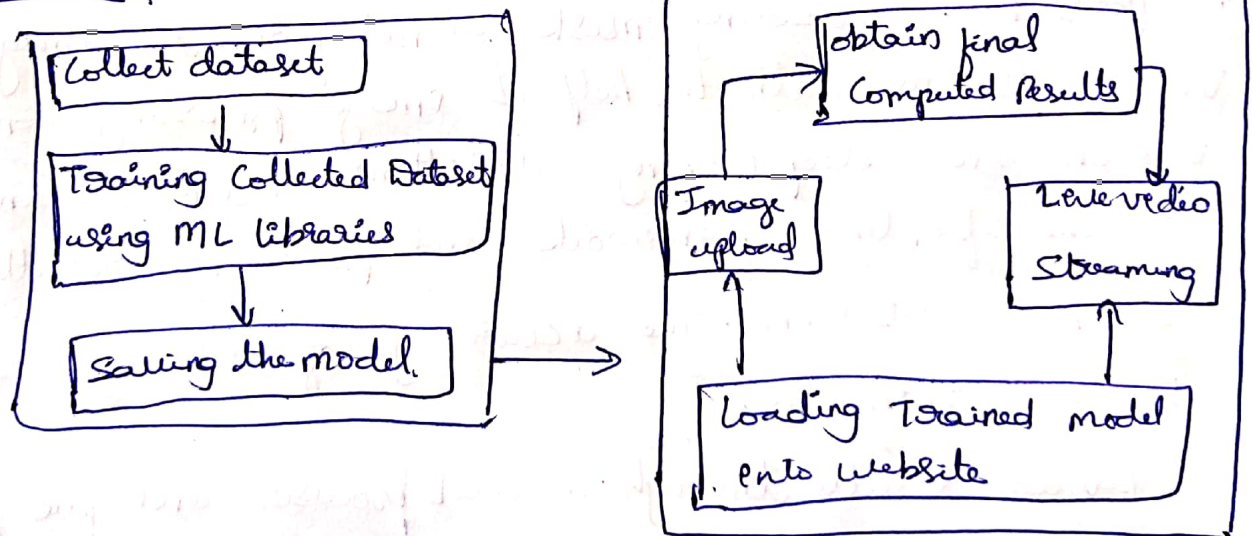
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## Methodology

Face mask detection of person is wearing a mask or not by browsing of photos, live video streams and addition features like Voice Alert and Covid situation around the world by using Streamlit as interface gives as accurate results.

- 1) Streamlit :- User interface streamlit is used
- 2) Image/video Input :- Using streamlit to capture image/video as input and check if its wearing mask or not.
- 3) Validation :- The entered input is validated using algorithm built model wearing mask or not.
- 4) Voice Alert :- It gives information about Covid19 Precautions.
- 5) Covid Status :- Realtime status of Covid cases are displayed.

## System architecture



Type of Project :- Social Cause