FACE MASK DETECTOR (with hardware)

GROUP NUMBER: 10

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DESCTRIPTION:

Knowledge about transmission of the COVID-19 virus is accumulating every day. COVID-19 is primarily a respiratory disease and According to the current evidence, COVID-19 virus is primarily transmitted between people via respiratory droplets and contact routes. Droplet transmission occurs when a person is in close contact (within 1 metre) with an infected person and exposure to potentially infective respiratory droplets occurs, for example, through coughing and sneezing.

Thus, WHO has advised the use of masks as a part of a comprehensive package of the prevention and control measures that can limit the spread of certain respiratory viral diseases, including COVID-19. Masks can be used either for protection of healthy persons (worn to protect oneself when in contact with an

infected individual) or for source control (worn by an infected individual to prevent onward transmission).

However, shopping mall being a public place, anyone can walk inside a it, be it is wearing a mask or not. This may be dangerous for people as they will become vulnerable to diseases like COVID-19.

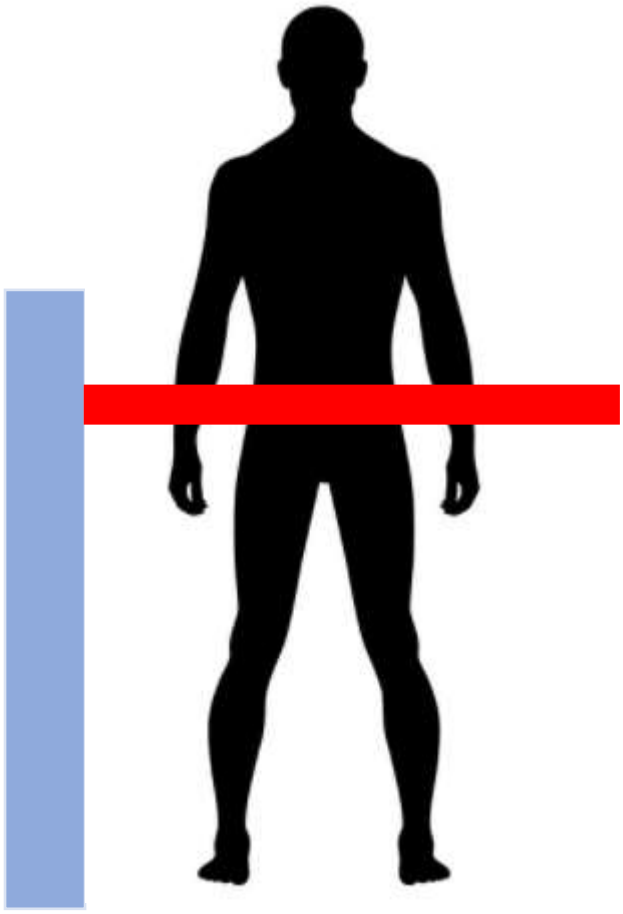
Thus, we decided to come up with a solution using Deep Learning and Computer Vision which will tell if a person is wearing a mask or not, and will stop the person from entering inside the mall.

This will help the spread of virus as everyone inside the mall will be wearing a mask and thus will lower the risk of spread of virus.

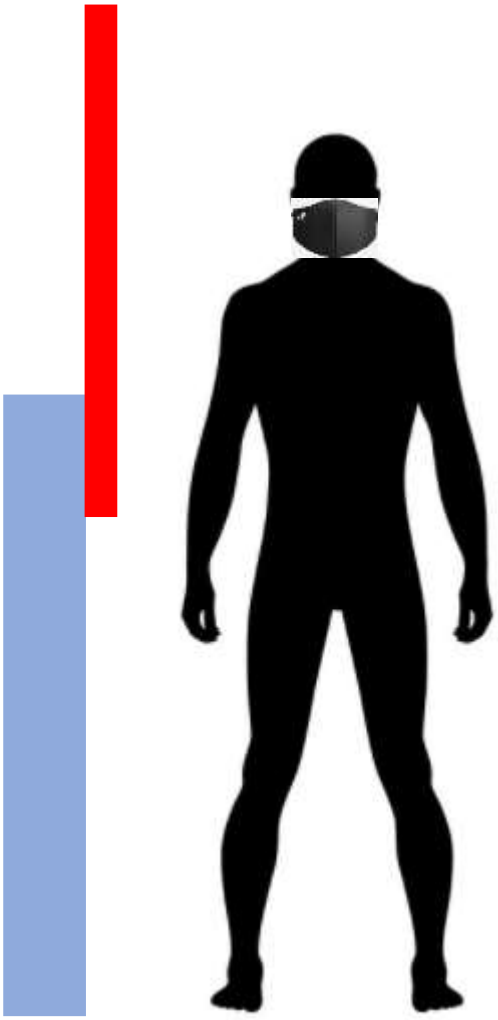
Technologies that will be used:

1. Deep Learning
2. Computer Vision
3. Arduino Concepts
4. Python

A pictorial description of our idea is given ahead:



Person NOT wearing mask will not be allowed inside the shopping mall!



Person wearing mask be allowed inside the shopping mall!