

ACM - W

5th National Level Hackathon (2020)

Theme: Tech to fight Corona

Problem statement: Single device that can perform body temperature detection, face mask recognition and hand sanitizer dispenser automatically

Team Name: Cyborg

College Name: IIT Kharagpur

Team Leader Name: Niranjana Madathil

Team Members: Keerti P. Charantimath & Pragya Asati

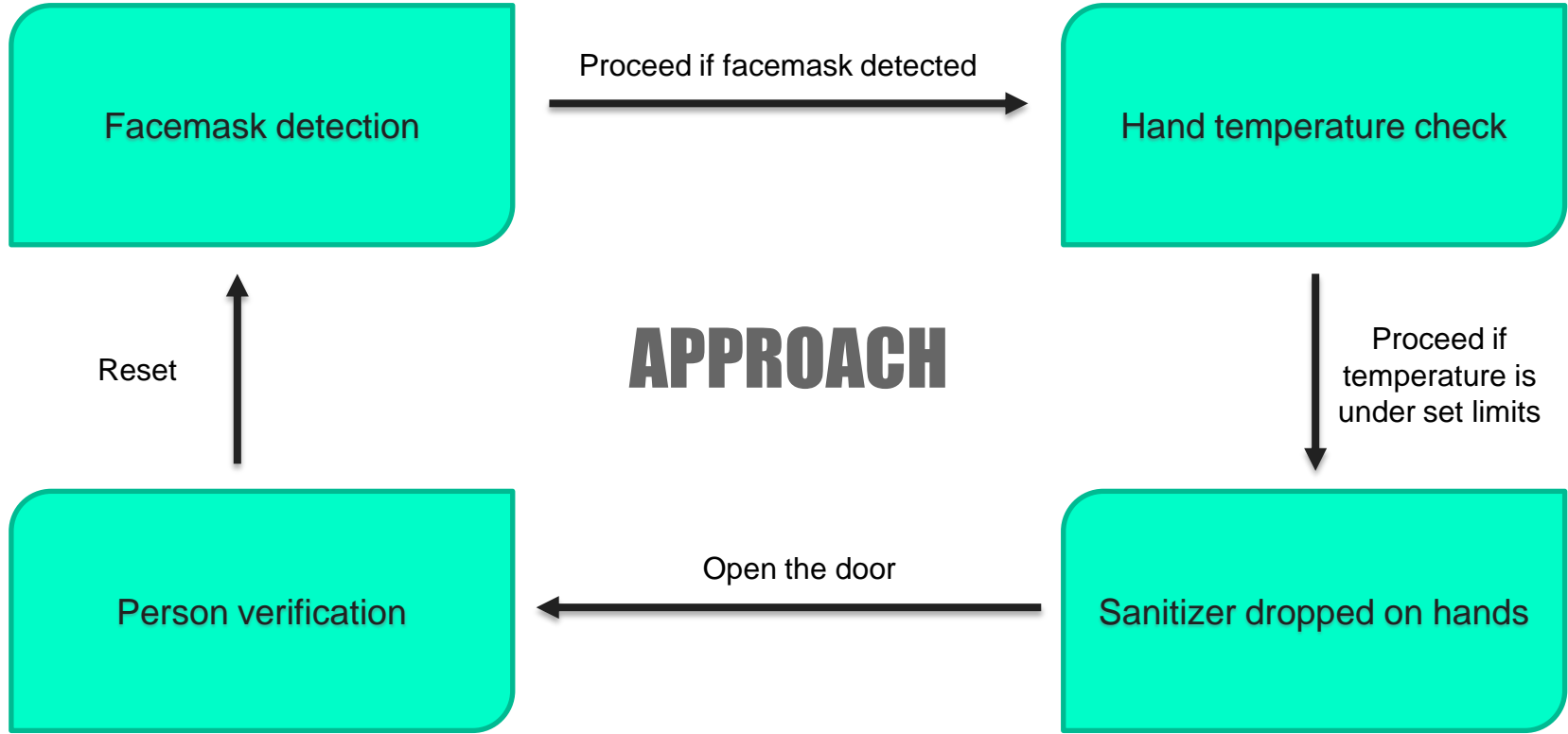
PROBLEM STATEMENT

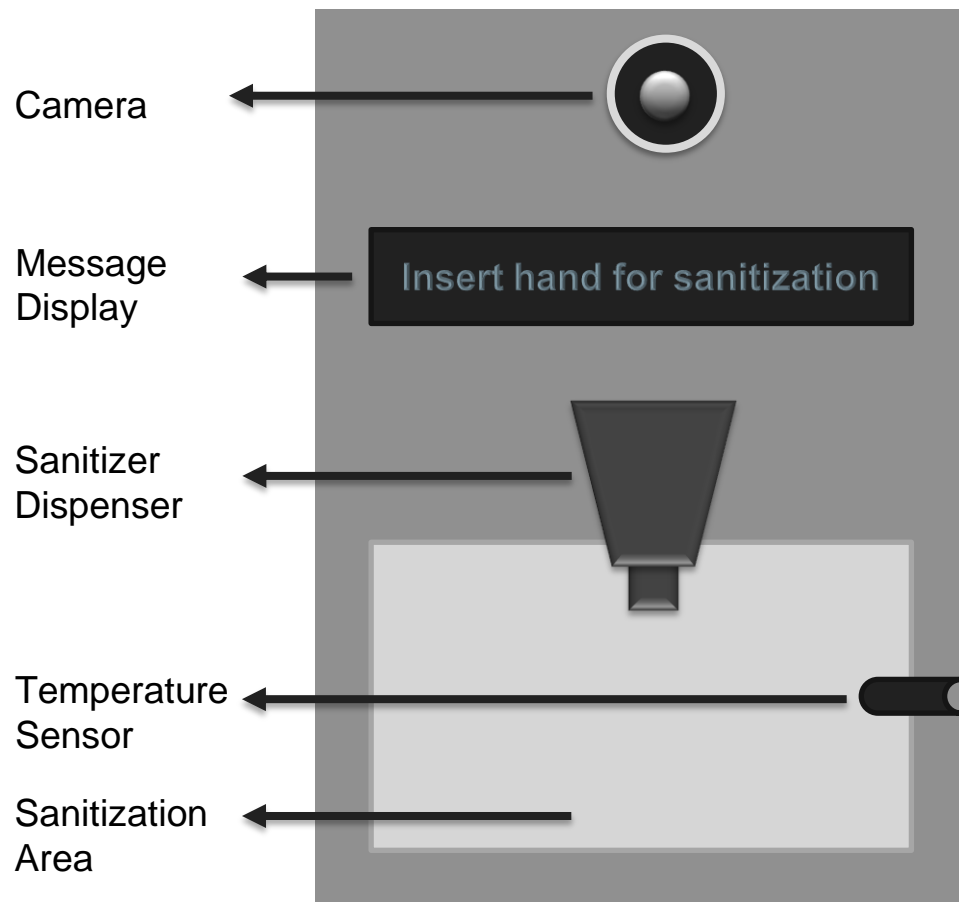
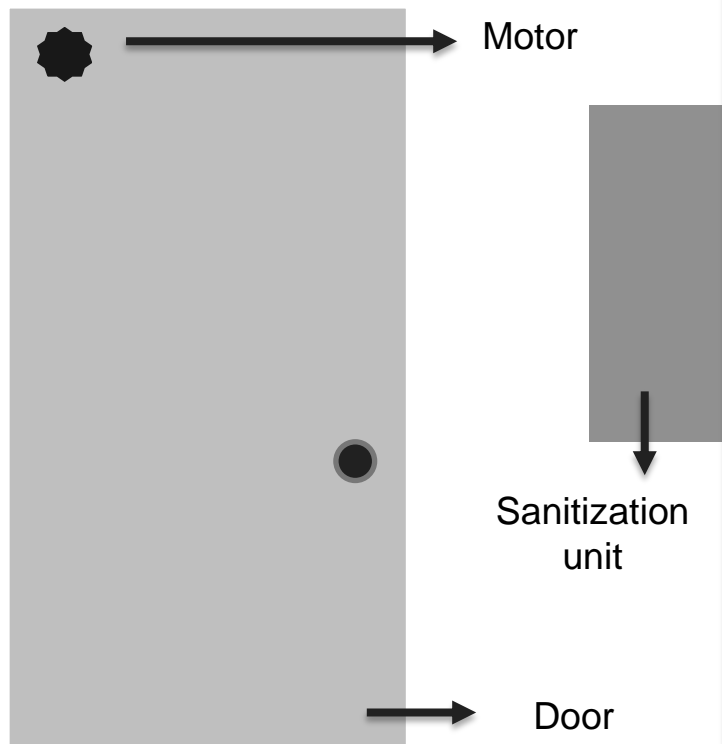
With Corona Virus pandemic all around the world and upliftment of lockdown, the following things have become essential while we are in public.

- **Testing temperature**
- **Wearing mask**
- **Using sanitizer**

For safety of public these have to be followed in all public places.

To check if people entering any public arena like shop or mall are abiding by these new norms, a cheap and automated approach is required.





TECHNOLOGY

- Face mask detection
- Person verification



- Image Processing
- Machine Learning
- Deep learning

- Temperature Check



- Infrared temperature sensors

- Dropping the sanitizer



- Arduino controller
- Ultrasonic Proximity sensor

DIFFERENCE FROM SIMILAR PRODUCTS

- **All these tasks are done by a single unit.**
- **Doesn't require human effort at any stage.**
- **Available at a cheaper range**
- **Can be installed in a range of places i.e from big malls to small grocery stores**