Auto Temperature And Mask Scanning Entry System

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Abstract: ***Now that many shops, offices and institutions are re-opening again after the Corona lockdown, many businesses are faced with the need to provide the best possible protection for their staff and customers. Face masks and body temperature checks play an important part in the protection effort. While this is already done routinely and at a large scale at airports or railway stations, many businesses and institutions are struggling to meet the challenge. Face mask monitoring often requires additional staff resources. At the same time, body temperature checks by staff come with certain risks in terms of hygiene and data privacy.***

Keywords: I R Temperature Sensor, Arduino, Power Supply, Jumper.

1. Introduction :

Since the last days of the previous year, the occurrence of novel infectious flu-alike respiratory disease COVID-19 caused by SARS-Cov-2 virus (also known as coronavirus) has affected almost every aspect of people's lives globally. First, it was discovered in China, but spread quickly to other continents in just few weeks. According to [1], until July 11th, 2020, the total number of identified cases was 12,653,451, while taking 563,517 lives worldwide. Common symptoms of coronavirus disease include fever, tiredness, sore throat, nasal congestion [2], loss of taste and smell [3]. In most cases, it is transmitted directly (person to person) through respiratory droplets, but also indirectly via surfaces [4, 5]. Incubation period could be quite long and varies (between 14 and 27 days in extreme cases) [6, 7]. Furthermore, even asymptomatic persons (almost 45% of cases) can spread the disease [7] making the situation even worse. Therefore, the usage of face masks and sanitizers has shown positive results when it comes to disease spread reduction [8]. However, the crucial problem is the lack of approved vaccine and medication [9]. Due to these facts, many protection and safety measures were taken by governments in order to reduce the disease spread, such as obligatory indoor mask wearing,

2. Literature Survey:

This website comprises of use of left-over stuff or item which can be used by poor one. this site comprises of the many required depressed from number of NGO which will acknowledge our client's gift. Client will have the full track of their file. Guidelines for Remedies Donations Revised 2010 World Health Organization Library Cataloguing in Publication Data Guidelines for remedies donations in revised 2010. 1. Pharmaceutical preparations for supply and distribution. 2. Essential drugs for supply and distribution. 3. Relief work. 4. Emergencies. 5. Inter institutional relations. 6. Guidelines World Health Organization ISBN 978 92 4 150198 9 rating: 330 First edition 1996, Second edition in 1999, Third edition in 2011 The World Health Organization (WHO) has developed this 3rd version of the Guidelines for Remedies Donations in collaboration with major international organizations involved in humanitarian relief and development assistance. The Guidelines objective to

3 Objectives: To solve these problems, we are working on that automates the process of Temperature Checkup by using Facial Land marking & Contactless IR Temperature Sensor and Mask Detection using Deep Learning Neural Network.

This system not only detects human temperature but also scans persons wearing face mask or not. When a passer without wearing face mask is approaching to the camera sensor, display shows the body temperature and sounds "ATTENTION, MASK NOT DETECTED" warning to remind the person detected at the same time. Of course the setting of "Wearing mask or not " can be based on officer's preference to make an adjustment. If a potential person is close to fever temperature and exceeds the specific temperature is detected, camera will make a quick response and will sound "WARNING, TEMPERATURE OUT OF RANGE" to inform officer by alarm message.

4 Tools and Technology:

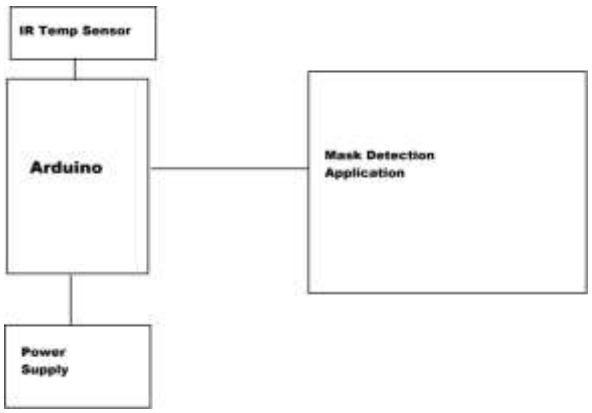
2.1 PHP :

PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. PHP stands for Hypertext Pre-processors. PHP is an interpreted language, i.e., there is no need for compilation. PHP is more rapidly than other scripting languages, for example, ASP and JSP.PHP is a server-side scripting language, which is used to manage the dynamic content of the website. PHP can be embedded into HTML.PHP is an object-oriented language. PHP is an open-source scripting language. PHP 7.4.0 is the latest version of PHP, which was released on **.** 28 November.

2.2 My Sql :

MySQL is currently the most general database management system software used for dealing the relational database. It is Open-source database software, which is maintained by Oracle Company. It is fast, accessible, and easy to use database management system in judgment with Microsoft SQL Server and

3. Block Diagram :



4. I R Temperature Sensor

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5. Working Diagram

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Advantages and Applications:

Advantages:

- It helps to stop the spread of virus among other.
- The mask detector helps the Department to find people without mask.
- Help to calculate the accurate temperature of people.
- Easy to use in Railways, Bus Stand, Airport where gathering of people is more
- Full Automatic Detection.

6.2 Applications:

It is applicable in Engineering sector for stop spreading of virus among other from people in India and provide the department to find people without mask and calculate there temperature and also find who are affected from virus .

4. Conclusion and Future Scope :

According to the achieved results, the proposed solution is usable for its purpose under certain performance limitations (such as number of processed frames or measurements per second). Moreover, it relies on both open hardware and free software, being definite and desirable advantage for such systems. In future, it is planned to experiment with various deep learning and computer vision frameworks for object detection on Computer in order to achieve higher frame rate.

Moreover, we would like to extend this solution with environment sensing mechanisms for adaptive building air conditioning and ventilation airborne protection in order to reduce the spread of coronavirus indoors, especially during summer. Finally, the ultimate goal is to integrate the system presented in this paper with our framework for efficient resource planning during pandemic crisis in order to enable efficient security personnel scheduling and mask allocation, together with risk assessment based on statistics about respecting the safety guidelines and air quality.

5. References:

Dawson et al., “Loss of Taste and Smell as Distinguishing Symptoms of COVID-19”, Clinical Infectious Diseases June 2020, pp. 1-4, 2020. https://doi.org/10.1093/cid/ciaa799[4] L. Morawska, “How can airborne transmission of COVID-19 indoors be minimized?”, Environment International vol. 142, September 2020, 105832, pp. 1-7,
2020. https://doi.org/10.1016/j.envint.2020.105832[1] Coronavirus Update (Live) [online]. Available on: https://www.worldometers.info/coronavirus/, last accessed: 11/07/2020.

[2] P. Zhai et al., “The epidemiology, diagnosis and treatment of COVID19”, International Journal of Antimicrobial Agents vol. 55 issue 5, May
2020, 105955, pp. 1-13, 2020.

https://doi.org/10.1016/j.ijantimicag.2020.105955

[3] P. Dawson et al., “Loss of Taste and Smell as Distinguishing Symptoms
of COVID-19”, Clinical Infectious Diseases June 2020, pp. 1-4, 2020.
https://doi.org/10.1093/cid/ciaa799