UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF ENGINEERING

SCHOOL OF COMPUTING

SESSION 2020/2021 SEMESTER 1

SCSJ 3553: ARTIFICIAL INTELLIGENCE

SECTION 07

Proposal

COVID Multi Scanner(CMS)

Name of Lecturer: Dr Aida Binti Ali

Group member: Savvy Tech

1. **MOHD ANAS BIN ADNAN (B19EC0043)**

2. **YAP XIN YIN (A18CS0276)**

3. **NURAMYRA NATASHA BINTI ISMALLUDIN (B19EC0035)**

4. **NUR HASANAH BINTI SARIDDON (B19EC0033)**

TABLE OF CONTENT

1.0 AI Solution

Our current situation is where the pandemic Covid-19 has taken place worldwide. Majority countries all around the world have suffered from this pandemic Covid-19. The statistics shown by the World Health Organization (WHO) where the total number of people that are infected all around the world are 53.6 million people. The United States is the country where many people have been infected with the 11 million people. Based on the statistic given by the World Health Organization (WHO) Malaysia is in 85 number of countries with 46 thousand people have been infected. Many ways Malaysia government have done to flatten the graf curve of the covid-19 such as lockdown and physical distance. The government of Malaysia also has developed an application to trace risk of people and the place that citizens have visited. This application is called mySejahtera. The citizens need to have smartphone and internet access to scan the Qr code. This will be a struggle for the person who does not have any smartphone. The government gives an option to those that do not have any smartphone to write down the information through the books that have been provided by any shop. Covid-19 is infected by the contact. In this case, it will make contact with the pen that has been used to complete the information at the shop.

Our focus is to reduce the risk of those contacts of people when come to Covid-19. Our government is having a struggle in the process to flatten the graft of Covid-19. We have identified the most effective way to trace by face recognition. By having this it also can get the current body temperature which is one of the most symptoms if the person has Covid-19. This device can detect the face of the individual and can get the information like name and phone contact. The citizens need to open their face masks to detect their face. The device also will get the current body temperature and it will display the information of the individual and the current body temperature. After that the device will show whether the person can enter the shop or cannot enter. This device will help the people that do not have any smart phones. This also can lead to more effectiveness in terms of the more people can scan and can get the information.

2.0 Goal of AI Solution

1. To create an AI that will build features in this device that can easily detect the users face and come out with their name and phone number.
2. This device also will detect the user temperature that can notify users about their condition, if the temperature is higher than the healthy conditions range this device will produce the warning sound.
3. Applied mask by the user also will be detected by the device after the temperature scanning to make sure they was follow the SOP
4. This device will keep in this data and notify the users incase if anything happen in that place

3.0 PROCESS OF EMPHASIZE IN DT

Our target users are all the citizens in Malaysia especially for the senior citizens. Since some of the citizens violate the rules such as not scanning the attendance and not wearing masks when hanging out. Hence, an epidemic happening right now has high probability to recur and become serious. Epidemics which are out of control often result in economic crisis and increasing mortality rate. Therefore, all citizens in Malaysia play an important role to save each other's life and redirect to normal.

The users said that it is inconvenient when their phone is in an insufficient power situation or no phone especially for senior citizens. They need to record the name and time by handwriting and using the sharing pen. This is unsanitary even though with hand sanitizer provided. For users who are illiterate will be a trouble if they don't have a phone, especially senior citizens.

The users have responded that they are confused because some of the information stated the users only need to finish the attendance recording step either write by hand or use Mysejahtera app. But the things happened when some of the users only scan the attendance by using Mysejahtera app and receive a violation ticket from the police.

The users have responded that the take attendance action is good but this is a time-consuming action. Before the users go into a shop, they need to line up for attendance scanning and take body temperature. This is inconvenient when someone is laden with bags or something. The users said that it is wasting time because they need to wait in a queue.

The users who as an owner have responded that something the users will forget to scan their attendance thus they need to hire an employee to ensure the users have finished the process by following the rules stated. This causes a burden to the users who are owners and they cannot afford the cost of hiring. Sometimes the users will miss scanning the attendance even though they have hired an employee.

4.0 Process of Defined in DT

There are a number of individuals who do not have a smartphone or senior citizens who do not know how to use the smartphone or any phone app. For the senior citizens, they say they often forget to carry their cell phones, or maybe some of them have very poor eyes so the screen can be dangerous for them. Besides that, bad eyesight can also make it difficult for them to write in books that have been prepared in public. In addition, some of them do not know how to register in the application or scan the QR code given in the public centre. Among the problems is that touch must be avoided, any contact can endanger a person, especially the senior citizen, since the infection in them is more likely to occur because of the weak immune system.

Moreover, waiting for a turn to scan a QR code makes individuals not only furious for waiting but also wasting precious time. This does not include the internet connectivity being down because their phone has issues, so other people in the back have to wait for their connection to get better or maybe they need to queue again to scan the QR code. It may be that the QR code cannot be identified by the phone camera and may have several consequences, such as running out of the phone batter, technical failures, etc.

We came up with the concept of developing mechanisms that makes it easy for them to enter public locations, including shopping centres, offices or supermarkets, and places needed to record the details of a person visiting a given area. After all the issues that happen to users as mentioned, this concept comes after a few observations have been made. With the same concept as MySejahtera, where automated registration of visitors through QR code, and the data store in their history then only the Ministry of Health (MOH) can view the data collected and it would be used only for the purpose of handling and reducing the COVID-19 epidemic.

We wanted to build features and functions called "face detection" through the help of artificial intelligence technologies, where they will scan their faces and still hold records in public centres. This would make it easy to monitor who is visiting and call them to do a swab test if the COVID-19 case can be traced somewhere. They may lie if they store the data on their own, and may not perform a swab test and these symptoms can spread even more.

Evidence of Collaboration