

Ammar Syahmi Mohd Mustafa Al Bakri
 Mohd Izzul Fawwaz Mohd Zul Fauzi
 Adam Sufi Mohd Mustafa Al Bakri
 Eryssa Nur Iman Mohamad Ezral
 Ezz Eilman Mohamad Ezral

Advisor
 Sharifah Noraziah Syed Ali
 Azizah Hamzah
 SEKOLAH KEBANGSAAN SENA, PERLIS

PROBLEM STATEMENT

- ❑ The more the virus spreads, the **Covid-19** cases in Malaysia and also others countries have touched a very high number.
- ❑ Of course, this can lead to a reduction in the human population, not only humans, but with the presence of **Covid-19**, this has a huge impact on the Malaysia economy.
- ❑ Therefore, **SOCIAL DISTANCING** is very important to **REDUCE THE SPREAD** of the Covid-19 virus.
- ❑ The distance needed to carry out social distancing activities is **1 METER**, and of course many people don't know how long **1 METER** is.

PRODUCT DESCRIPTION

- ❑ Here We want to make a breakthrough with a new idea, namely the **SMART SOCIAL DISTANCING VEST**.
- ❑ This vest is not only to allow the **wearer to be seen and to alert all that a person is present, especially in a low visibility situation**, it is also useful as a reminder of the distance between humans and other humans so that they can do **Social Distancing Properly**.
- ❑ With this vest, a proximity **SENSOR** will be attached which will be equipped with an **ALARM & MONITOR**, so that when this sensor detects that the distance determined by the sensor is over the limit, the sensor will work, and the alarm will sound as a reminder that the distance between humans is too close.
- ❑ So that it can cause the spread of the virus, and it must be avoided.

BASIC MATERIALS AND TOOLS

 Reflective Safety Vest Wearer To Be Seen Easily And To Alert	 Control Box To Detect Signal Or Changes In Its Distance And Send The Information To Monitor
 Monitor and Buzzer Device Used To Display Video Output From A Computer & To Produce Alert Sound	 Ultrasonic Sensors Instrument That Measures The Distance To An Object Using Ultrasonic Sound Waves

01
 Reflective Safety Vest

02
 Control Box

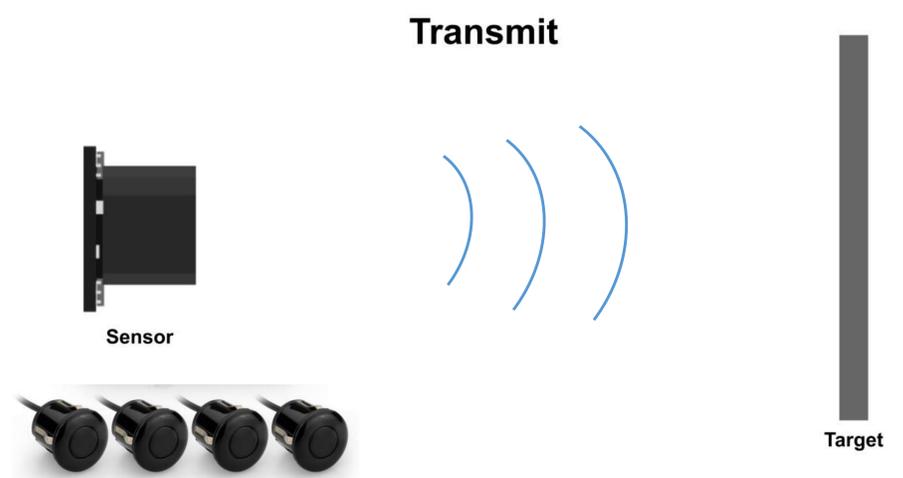


03
 Monitor and Buzzer

04
 Ultrasonic Sensors

HOW ULTRASONIC SENSORS WORK

- ❑ Ultrasonic sensors work by sending out a sound wave at a frequency above the range of human hearing.
- ❑ The transducer of the sensor acts as a microphone to receive and send the ultrasonic sound.
- ❑ Ultrasonic sensors use a single transducer to send a pulse and to receive the echo.
- ❑ The sensor determines the distance to a target by measuring time lapses between the sending and receiving of the ultrasonic pulse



ADVANTAGES OF THE PRODUCT

AWARENESS

Provide awareness of the importance of maintaining social distancing

SAFETY

When a person sneezes, the speed of a liquid droplet or droplet is estimated at 150km/h and can spread between one to two meters. Therefore distance care is important for safety

REDUCE

Could Reduce the risk of infection with socially distancing care

INVENTORS



AMMAR



ERYSSA



IZZUL



ADAM



EILMAN

