



اُنْبُوْا سَبِيْلِيْ تَكُوْنُوْا مِمَّا ارَا
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FINAL YEAR PROJECT DESIGN REPORT
PROJECT TITLE: MACHINE TO FIGHT COVID-19
NAME OF PRODUCT: FRONTIER STAND

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1.0 Overview of the Project

Frontier Stand is a mechanism that facilitates its users. The way to use this product is by stepping on the pedal provided. Then the hand sanitizer will be ooze out. Apart from that, this product is also a tool for measuring human body temperature. The way to measure the human reading temperature is by stepping on the pedal, and the height of the reading temperature will move according to the level of height desired by the user.

1.1 Design Objective

The main objectives we create this Frontier Stand is because we want together to eradicate Corona Virus Disease -19 (COVID-19) which has hit our country. This Covid-19 not only disrupting people normal life, but also crippling the country's economy. As a more efficient early preventive measure, we came out with the ideas on produced Frontier Stand to the community.

Our *objective* of the product are:

- To produce the product that can ease the tall and short people to get scan their body temperature before entering any building or place.
- To create the product that can ease the owner of the store or shop from conducting the entrance.
- To make sure everyone can scan their body temperature easily.
- To create the product that can scan body temperature and ooze out the hand sanitizer without involved touch by hand.

1.2 Scope of Project

The scope of our project is divided into three parts. The first part is our product, Frontier Stand, which will be commercialized in the retail store, mosques, schools and restaurant. We are targeting this place because usually there, the method of taking the body temperature is by using a gun temperature measurement. Based on the survey that we have conducted, customers or respondents preferred to use non-contact infrared temperature measurement. The customer also agreed if we produce a new product like Frontier Stand. So, we came out with a new product that has an affordable price and uses infrared temperature measurement, which is our Frontier Stand.

Furthermore, the retail stores, mosques, schools, and restaurants are usually opened in residential areas with a large community. Indirectly, many people will come to that place. It will cause the owner or worker to operate at the entrance to ensure that all the customer or people take their body temperature and scan the MySejahtera barcode. This problem will slow down the process of entering the places. So if the owner used our Frontier Stand, the process of entering will become smoother and reduce touching.

The second part is that our products provide convenience to all sections of society from the elderly, adults and children. This is because, our products adopt customer friendly. The term of customer friendly is, our products has an adjusting height to change the height of the body temperature measurement.

The third part is that the Frontier Stand is a semi-automatic mechanism. The methods of using Frontier Stand are very simple, the user just needs to step on the pedal provided and then the movement of the body temperature height will move according to the height that the user wants. Where the semi-automatic mechanism is, the pedal is manual operated and temperature height is auto operated.

For conclusion, we can conclude that our product which is Frontier Stand is suitable and useful if placed at a retail store, mosques, schools and restaurant. Not only suitable and useful but able to fulfill the Standard Operating Procedure (SOP) that has been provided by the government and together can curb the spread of this