**Project Background**

COVID-19 is an infectious virus disease that was first recognized in Wuhan, China, in December 2019 and has since spread worldwide (Wikipedia, 2021). Globally, as of 23 February 2021, a total of 111,419,939 COVID-19 confirmed cases and 2,470, 772 deaths have reported to WHO (WHO, 2021). In Malaysia itself, 32,076 cases and 1,076 deaths have been reported as of 23 February 2021 (Malaysia MOH, 2021).

WHO has recommended robust diagnostic testing ever since the COVID 19 turned from an outbreak into a global pandemic. The testing is developed in order to differentiate the SARS-CoV-2 virus that causes COVID-19 disease from other respiratory infections as well as to develop a guidance of appropriate clinical management. In response to the WHO guidance, Malaysia has increased the capacity for weekly viral detection aside from intensive contract tracing and nationwide social distancing movement (Lim et al., 2020). This is an effort to enable Malaysia as a country to resume normal day-to-day activities as soon as possible.

The COVID-19 diagnostic test that are most commonly used in Malaysia are RT-PCR test, RTK-Antigen test, and antibody test. RT-PCR and RTK-Antigen are able to show whether a person has an active infection of COVID-19, while the antibody test shows if a person had a past infection of COVID-19. The public can get tested for COVID-19 in test centre registered at clinics or hospitals that was already approved by the Ministry of Health, Malaysia (MOH).

Joe Nollar stated that (Bonislawski, 2020), COVID-19 pandemic increases the demand for a direct-to-patient reporting of test results. The COVID-19 outbreak has accelerated the trend of developing an information system to have the capability of handling patient-initiated testing and reporting the result of the test directly to the patient. Suren Avunjian added (Bonislawski, 2020), an information system will enable the patient to provide all relevant information electronically instead of going through a cumbersome manual process.

Therefore, this project is initiated to develop a website information system to administer tests and keep track of the test result of COVID-19 patients under the name of HELP CTIS (Covid-19 Testing Information System). HELP CTIS is developed in hope to aid the health ministry by replacing the outdated and not thoroughly secured system that is used by the hospital and medical centre across the country.

Bibliography

Bonislawski, A. (2020, November 10). *COVID Driving Labs to Build Out Information Systems*. Modern Healthcare. <https://www.modernhealthcare.com/supply-chain/covid-driving-labs-build-out-information-systems>

DoctorOnCall. (2021a). *COVID-19 Drive-Thru, Clinic & Home Visit Screening Test Services*. DoctorOnCall. <https://www.doctoroncall.com.my/medicine/coronavirus-covid-19-test-kit>

Lim, K. L., Johari, N. A., Wong, S. T., Khaw, L. T., Tan, B. K., Chan, K. K., Wong, S. F., Chan, W. L. E., Ramzi, N. H., & Lim, P. K. C. (2020). A novel strategy for community screening of SARS-CoV-2 (COVID-19): Sample pooling method. *PLoS ONE*, *15*(8), e0238417. <https://doi.org/10.1371/journal.pone.0238417>

Malaysia MOH. (2021, February 24). *Situasi Terkini COVID-19 di Malaysia 23 Februari 2021*. COVID-19 MOH Malaysia. http://covid-19.moh.gov.my/terkini/2021/feb/situasi-terkini-covid-19-di-malaysia-23022021

Wikipedia. (2021, February 24). *Coronavirus disease 2019*. Wikipedia, The Free Encyclopedia.

WHO. (2021, February 24). *WHO Coronavirus Disease (COVID-19) Dashboard*. WHO (COVID-19) Homepage. https://covid19.who.int/