

CHAPTER 1

INTRODUCTION

1.1 Project Background

The *Covid-19 virus* is indeed a major scourge in the world, because everyone can be infected with the *Corona Virus*. All countries are battling the *Covid-19 Virus* which has damaged mobility in every country. Everyone should work hard to prevent the spread of the Virus and take care of their own health

At this time *Covid-19* greatly affects many aspects of life including the economy, health and population. This is due to the large number of *Covid-19* cases in various countries. Covid-19 cases are growing rapidly in almost all countries in the world. Asia is the holder of the most Covid cases in the world with more than 600,000 cases in a day. (**The Visual and Data Journalism Team, 2022. BBC**) Therefore, self-quarantine is very necessary to reduce the spread and recovery for people exposed to the Corona Virus.

Based on the problem above, this project provides a solution by presenting the Self-Quarantine App for Covid-19 Patient. Where this web or application has several main features including patient monitoring, health reports and alerts (reminders of the length of the self-quarantine period). With this, it is hoped that it can suppress the spread of the Covid-19 virus and help patients recover independently in the future

1.2 Problems Statement

With the high number of COVID-19 cases, several countries in the world have implemented physical distancing and quarantine. quarantine is important to flatten the curve. Flattening the curve refers to using protective practices to slow the rate of COVID-19 infection so that hospitals have space, supplies, and doctors for all patients who need care. very sick for several days can overwhelm a hospital or treatment facility. Too many people becoming seriously ill with COVID-19 at about the same time could result in a shortage of beds, equipment, or doctors in hospitals.

People who have been exposed to the new coronavirus and who are at risk of contracting COVID-19 can self-quarantine. Health experts recommend self-quarantine

lasting for 14 days. Two weeks gives them enough time to know whether or not they will get sick and infect others. (Lisa Lockerd Maragakis, 2020). but there are some patients who do not carry out self-quarantine according to procedures. such as running away or not using the recommended medical equipment.

1.3 Objectives

The project has the following objectives:

1. To monitoring the patient that can be tracking their daily health. Using health report feature.
2. To provide a notification for the patient that can be remind them take medicine and remind the quarantine period that has been passed so that users can quarantine properly
3. To prevent patient who commit fraud such as escaping from quarantine can also be identified using GPS. The runaway user can be detected immediately and will start his self-quarantine from the beginning

1.4 Scope

In this section, the author will explain the purpose of this research, in which the objectives will be divided into two, namely, system and user

A. System Scope

1. This application has a health report feature. user will enter some data per day so, user can track their daily health
2. This application has a notification to remind users to take medicine and to find out the quarantine period that has passed
3. There is also a feature that prevents users from escaping from their self-quarantine. using GPS as data so that it can be known whether the user is self-quarantining or not

B. User Scope

1. User are required to create an account to be able use main features
2. User must give permission to use GPS to run this app

1.5 Assumption and Limitations

1. Assumption

With this app, it is hoped that it can help people who are exposed to the *Covid-19* virus in terms of self-quarantine.

2. Limitations

This Project focuses are limited to this :

1. this app cannot detect body temperature, which is the most influential factor
2. This application is only for patients who are or want to self-quarantine

