UNIVERSITI TEKNOLOGI MARA

COVID-19 PREMISE MONITORING SYSTEM

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ABSTRACT

Corona Virus Disease 2019 (COVID-19) is causing a global pandemic including in Malaysia. The government are doing what they can to be able to overcome this pandemic. The government created an app called the MySejahtera to be able to identify the area that are in high risk. However, the system lack of some feature that could help with the pandemic such as no monitoring system for premise owners, no immediate notification on covid risks, and lack of user data to determine the symptoms of covid. For this project, a notification system called COVID-19 Premise Monitoring System (COPREMS) has been developed. In this system, web dashboards are created for premise owners and authorized personnel to do monitoring, a notification system via email is created to notify the risk and a mobile application to fetch users' data entry when entering a premise. During the testing phase, several tests has been made such as making sure the hashed password for user password login is not dehashable and test the accuracy of the GPS location of the user when entering a premise. The end results of this project are that premise owners are able to monitor the customers who enters their premise whether the customers are infected by COVID-19 or not and also helps users to detect the premise risk level and able to see the log of their whereabouts.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

1.1. Background of Study

The usage of Internet of Things (IoT) is increasing rapidly every day. According to Mark Hung (2017), IoT will make a significant change on the economy by transitioning companies into digital businesses and predicting new business model which can improve efficiency of employee and customer engagement. IoT are also being used in healthcare sectors such as a Health Monitoring System that provides statistics and predictions of a disease. According to Bruce E. Johnson (2018), smart technology simplifies for both patients and doctors to identify diseases or symptoms quickly and efficiently so that immediate treatment can be perform.

Coronavirus disease (COVID-19) is a very infectious disease that causes a global pandemic including in Malaysia. Figure 1.1 shows the COVID-19 statistics as of 10th July 2021. According to Malaysia Ministry of Health, the total cases in Malaysia is 827,191. 737,103 has been recovered, 84,021 is still active and a total 6,067 of casualties.