Universiti Teknologi MARA

Pre-flood Disaster Coordination and Management Mobile App

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ABSTRACT

Smart phones have become essential items in our daily to keep us update including informing of news and disasters. One relevant example of the disaster in Malaysia is flood that brings damaged annually. However, preparation for flood management is still not efficient. Hence, we propose to overcome this problem by developing a mobile application that can assist the coordination and management of flood preparation. This real-time application can store the relevant parameters information that are requested such as shelters, foods, agencies and equipment. The project methodology is adapted from ADDIE, where from the phases, only four phases are executed: Analysis, Design, Develop and Testing. From the test, it shows that the system is update in real-time and it is secure since the user have to sign in first before they can update the database. The app was tested based on a survey of 10 users. Thus, by having a system can provide the management a better preparation could bring a better result in flood effect.

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CHAPTER 1

INTRODUCTION

This chapter will introduce the fundamentals of the final year project. Among the details that will be described are the project background, problem statement, project objectives, scope and limitation of the project, the importance of the project, focus elements and the expected outcome from the project.

1.1 Background

Mobile phone is pervasive nowadays throughout the world. The technology use in smartphones works as great as computer, but in a mobile ways (Geiger et al., 2014). Smartphones have technology features fortified with sophisticated sensors and advanced computing hardware (Pejovic, V., & Musolesi, M., 2015). For example, camera is among the key features that always get upgraded with latest technology. To keep people update with latest information, it is crucial for us to be connected with Internet. With smartphones, it is easier to monitor what has happened on earth and keeping us updated with latest information. This project is to use the mobile application and the features in the smartphones.

Malaysia face major annual disaster. However, natural disaster are beyond our control as a human being, and cannot be accurately predicted when it is going to be occur. The ajor annual disaster in Malaysia is flood, and it is categorized in two types which are monsoon flood and flash flood.

In December 2014, one of the most horrendous floods struck in Malaysia state such as Kelantan, Pahang and Johor, causing in numerous life lost, assets, and even homes (Aisha, Wok, Manaf, & Ismail, 2015). The rescue is not effectively efficient brings in some problems to the flood victims as they have to wait longer than they