Universiti Teknologi MARA

The Development of Accident Emergency System via Mobile Phone (ACCES)

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ABSTRACT

Accidents can happen anytime and anywhere unexpectedly. Sometime it can happen when they were just passing through the road to somewhere else that far away from the hospital. Usually the witness will straightly call 999 to report the accident. MERS 999 is a helpful system but it takes longer time to reach the victim/accident location. In the current system, if there are reports about accident, the call center will report it first to the police station and to the government's hospital and not to the private hospital. Due to these weaknesses, Accident Emergency System via Android (ACCES) is proposed. The aim of this application is to develop an emergency application that can be used by people when accident occurs. The main objective of this project is to develop an application that is easily used by anyone when ambulance is required at accident location immediately and to design a system that can give address and phone number of the nearest hospital in a short time when victims require immediate assistance. This work is focusing on user side which they are provided with four services that is "Request Ambulance", "Location Finder", "Request Address Nearest Hospital" and "List of Hospital or Police Station" services. "Request Ambulance" service is for the witness to request the nearest ambulance to the accident location and "Location Finder" is a service which the user sends the requests to know the current location of mobile phone. "Request Address Nearest Hospital" service is to request the nearest hospital address. For "List of Hospital or Police Station" service, it allows the user to display all the list of Hospital or Police Station. Methodology that is used in this project is Agile methodology, which is organized according to four phases which are design, development, testing and documentation phase. As the result, hopefully this application will improved performance of the existing emergency system and can help the accident victim to get an ambulance immediately.

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RESEARCH REVIEW

1.0 Introduction

Today, road is one of the medium mode of transportation that are used by many people in Malaysia. Believe it or not, over than one million of Malaysians are using the road for their own personal reasons and destination. The number of vehicles moving on the road keeps increasing yearly that means the number of the accident happen also keeps increasing every day. Based on the research finding, there are several cases shows the cause of the road accident. One of the causes of road accident is road condition whereby road in Malaysia are narrow and sharp bends due to our earth surface which is mountainous and no flat. Second is weather condition such as drive in raining cats and dogs, hot day and haze. Third is circumstance of Malaysia which is mountainous and forested and the road lamps are placed at specific places only. Last causes are the driver's attitude.

The road accident cannot be to prevent but may cancan cut down the number of accidents by having a stricter laws. A stricter laws is impossible prevented an accident from be occurred because the accident can be happen at anywhere and anytime without unexpected. Imagine that an accident occurred on the highway in the middle of the night and on that moment there are no car crossing the highway except you. You do not know where the nearest hospital and the victim required an immediate treatment. In this situation, the witness is urgently needs a medium or an application which can help the accident victim because sometimes in critical situations people cannot think rationally.