UNIVERSITI TEKNOLOGI MARA

The Saviour: The Development of Edutainment First Aid Training Application for Beginners

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ABSTRACT

First aid covers a broad range of techniques and tools in attending victims during emergency situations. The surge of technology helps in various things including education and trainings. The problem faced by individual who is having difficulties in dealing with emergency situations due to lack of knowledge and did not have proper trainings to aid victims. Therefore, this project aim to propose an alternative way to assist beginners by emphasizing first aid learning in fun and addictive ways. The objectives of this project are to identify the requirements for The Saviour edutainment mobile application, to design and develop the The Saviour mobile application by following the correct methodology. The scope for this project is for beginners to learn first aid techniques without attending official class or session. They will learn how to attend minor injuries that may occur around them. There are three categories included in The Saviour which are Cardiopulmonary Resuscitation (CPR) technique, Wound Dressing technique and Bone Fracture technique. However, the techniques are limited to basic first aid techniques only and not applicable for experts and professionals. There are various of technology that are able to increase experience in learning first aid which will attract more users from different backgrounds. This project embed education into mobile game environment. Methodology that has been used for this project are Mobile Application Development Lifecycle (MADLC) and Game-Based Learning (GBL) Design Model. MADLC is divided into five phases which are, identification, design, development, prototyping, and testing phases. GBL design model been implemented during development phase of MADLC. A Multiple Answer Quiz concept was used in this project to allow users to challenge themselves on Basic First Aid knowledges after learning. Testing has been conducted with five users to get their feedback while using The Saviour application. Based on the result from user testing, it shows positive responses from users which The Saviour application gives a better experience to participants. For future works, this project can be enhanced by developing a multi-platform version of The Saviour application such as on iOS, Android and Microsoft. Besides this application can be enhancing the knowledges and experiences not only for beginners but for experts and professionals too.

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CHAPTER 1

INTRODUCTION

This chapter provides discussion on early stages of project development which consists of project background, problem statement, project aim, objectives, scope and limitations, and project significance.

1.1 Project Background

Malaysia Emergency Response Services (MERS) 999 is an integrated system to provide effective emergency service assistance to the public. There are wide range of technologies that can help improving first responders' timeliness and effectiveness when treating patients for example, portable Automated External Defibrillators (AED) and Mechanical CPR. Wider adoption of these innovations will mean greater quality in services, which will result in better responses.

At any moment, someone could encounter an injury or illness thus, basic first aid may be able to help stopping minor accident or injuries from worsen. In some cases, first aid consists of initial support provided to someone in the middle of medical emergency (Hepler, 2018). First aid treatments can help the victims to survive until support medical team arrives. The first aid consists of the care provided to someone with a minor injury, in instance, treating light burns, cuts, and injuries cause by animals. Many organizations offer first aid training, such as Malaysian Red Crescent Society.

To become good responders, individuals must have enough knowledge and receive proper training regarding techniques and methods to treat a patient or victim in emergency cases. However, some Malaysians, especially, young adults are still unaware of this training. In other cases, several people who already attended first aid training not really focus in the