UNIVERSITI TEKNOLOGI MARA

MyCPR – LEARN CPR USING MOBILE APPLICATION

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ABSTRACT

The youth nowadays more likely spend their times on smartphones and smartphones capable to change the way of learning Cardiopulmonary resuscitation (CPR). The problem faced by the trainee in Kor Siswa Pertahanan Awam (SISPA) UiTM Shah Alam are students cannot do the practical because many times has been wasted on the slides because the current method in teaching CPR is taught by using PowerPoint slides. Therefore, this project is intended to use Augmented Reality (AR) as the cutting-edge technology in developing an interactive way in mobile learning and will be assistive tools to them. The objectives of this project are to identify the user requirements of MyCPR mobile application, to design and to develop MyCPR mobile application. The scope of this project is for trainee in Kor Siswa Pertahanan Awam (SISPA) UiTM Shah Alam. They will learn CPR because it is some basic techniques or knowledge that must have to become Civil Defence Officer. This project used the Mobile Application Development Lifecycle (MADLC) as the methodology approach to the development of MyCPR mobile application. As conclusion, MyCPR mobile application may assist and help the trainee and the coach in learning and teaching CPR in more interactive ways.

Keywords: Cardiopulmonary resuscitation, Augmented reality, Mobile Application Development Lifecycle (MADLC), learning, interactive

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CHAPTER 1

INTRODUCTION

In this chapter will provide some brief overview of background research of this project. Therefore, this chapter provides the project background, problem statement, objectives, scope and significance of the project.

1.1 Project Background

Cardiopulmonary resuscitation (CPR) can be defined as a medical procedure involving repeated cycles of compression of the chest and artificial respiration, performed to maintain blood circulation and oxygenation in a person who has suffered cardiac arrest. According the Star Online (2017), 92% of out-of-hospital cardiac arrest subjects lose their life owing to the lack of instant CPR. CPR is needed to keep someone live. Education on CPR is very important in our life and very serious need to be learn by all the people. According to the American Heart Association (AHA), CPR is a component of the "chain of survival. This chain could be a cycle of conduct that will aid donate an individual having cardiac capture the chance of survival.

The technology can be used to educate CPR. The Augmented Reality (AR) is the best examples and can be very useful by using it for education. AR can change the perception of people and can make them excited when learning it from 3D visualization (Amin & Govilkar, 2015). AR can provide one or more layers of virtual information to real objects and it is their objectives to expand the information so that we can access and interact with it. The static object can be interactive by scanning the image with the design at the paper and the 3D design or object will be displayed and presented in the smartphone (Wu, Lee, Chang, & Liang, 2013). It will provide a feeling of interest to the users when they learn CPR through Augmented reality and meaningful experiences once they use the application.