## Universiti Teknologi MARA

# Student Motivation in Learning History Using Virtual Reality – Based Adventure Storytelling

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### **ABSTRACT**

There are 76.47 percent of students felt bored studies history subject during class. Therefore, a solution had been achieved by developing virtual reality courseware of History subject that based on adventure storytelling to motivate the students learning History subject. This project is developing a courseware for History subject known as "How it is in the Past" to motivate student studies History subject. This courseware contained a subtopic in chapter 6 of Form 3 book text. To motivate students study History subject without being bored, ARCS Model is being used in this project. The syllabus in the courseware are made based on ARCS Model to gain attention, relevance, confidence and satisfaction studying the subject. To make the subject more interesting, the combination of virtual reality and storytelling are made for the students' motivation to rose-up. The virtual environment is created using Unity and the platforms used to implement this project is a desktop-based application. The "Mountain" is the type of storytelling used to deliver a satisfying conclusion where it slowly shows on how to overcome the challenge and building a tension in the story. To evaluate this project, questionnaire that based on ARCS Model are given to the students after they used the courseware. The results of the motivation level of students is about 92 percent based on the questionnaire given to the students and teachers. Therefore, the objectives in this project are met because the problem is being solved by the solution provided.

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### **CHAPTER 1**

#### INTRODUCTION

### 1.1 Background of Study

Nowadays, students in secondary school felt bored when learning history subject during class. This is because of students set their minds that history subject is not playing any important roles in their life. But sometimes, during class, students cannot understand what their teacher trying to convey. Also, they need to remember a lot of facts on this subject.

In order to build an application that can motivate students, ARCS Motivational Model was used and known as attention, relevance, confidence and satisfaction. It created by John Keller in 1984 and was implemented in this project. According to ARCS Model, there are four general requirements to be met in order for people to be motivated to learn such as grabbing the attention of the audience, contain relevance information, boasting the audience confident and obtaining users satisfaction. Also, ARCS Model is used as reference to evaluate the motivation level of a person.

Virtual Reality (VR) is the use of computer technology to create the effect of a 3D environment that containing 3D objects which have a strong sense of spatial presence with respect to the user (Grigore & Philippe, 2003). In this project, the system uses a conventional computer monitor to display the visual world. This sometimes called Desktop VR or a Window on a World (WoW). Desktop VR is the simplest form of VR. It is used on desktop and involved hardware such as monitor and mouse.