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IMPLEMENTING VR TECHNOLOGY IN POLIMAS WEBSITE

SARINA BINTI SARIFF

UNIVERSITI UTARA MALAYSIA 2003

IMPLEMENTING VR TECHNOLOGY IN POLIMAS WEBSITE

A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree Master of Science (Information Technology), Universiti Utara Malaysia

by
Sarina binti Sariff

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ABSTRAK

Teknologi realiti maya atau *virtual reality* (VR) telah dibangunkan untuk tujuan-tujuan tertentu dan berkembang dengan pesat di pelbagai bidang. Salah satu bidang realiti maya ini ialah laman web. Teknologi realiti maya ini membolehkan pengguna seolah-olah berada di tempat yang dipaparkan. Teknologi yang memaparkan gambar dalam 3-dimensi ini juga dapat memberi kesan yang lebih mendalam kepada pengguna berbanding gambar dalam 2-dimensi. Projek ini adalah bertujuan untuk menggabungkan teknologi realiti maya dengan laman web Politeknik Sultan Abdul Halim Mu'adzam Shah (Polimas). Metodologi yang digunakan ialah "Waterfall" metodologi dan teknik yang digunakan untuk membangunkan laman web ini ialah "Rapid Software Prototyping". Berbagai masalah timbul semasa membina "panoramic view" dan membangunkan laman web ini. Masalah-masalah ini dapat dibincangkan dan diselesaikan bagi menghasilkan laman web yang bermutu tinggi. Laman web ini menfokuskan kemudahan yang ditawarkan kepada pelajar-pelajar Polimas dan juga orang luar yang ingin menggunakan kemudahan-kemudahan ini. Dalam laman web yang dibina ini terdapat tiga "virtual tours" dan enam "panoramic views" telah dicipta. Dengan penghasilan projek ini diharap dapat memberi manafaat kepada Polimas dalam aktiviti-aktiviti harian samada untuk kegunaan pensyarah, pelajar ataupun staf pentadbiran dan juga orang luar yang akan berkunjung ke Polimas.

ABSTRACT

Nowadays the technology of Virtual Reality (VR) has been developed for many purposes and has expanded into many types of field. One of the fields in Virtual Reality is web page. Virtual Reality technology in web page enables users to immerse in the real world using 3-D images. This study proposed to integrate the Virtual Reality technology with the POLIMAS website. Methodology used to build the webpage is Waterfall methodology and Rapid Software Prototyping Methodology technique is used to develop the prototype. During the development some problems and limitation have been encountered. The problems arise have been discussed and solved in order to make the prototype more efficient. The webpage enhanced the services / facilities POLIMAS had offered to their students and to the outsiders. In this project, three virtual tour and six panoramic views have been created. This project is hoped to give benefits to Polimas staffs, students, and administration staffs to assist their daily activities and also hope that it will give more benefits to the outsiders during their visit to Polimas.

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CHAPTER 1

INTRODUCTION

CHAPTER 1 INTRODUCTION

Today, Virtual Reality (VR) technology plays an important role in information communication. Application of VR as a communication method not only makes the presentation more attractive but also gives more impact to users.

Application based on VR is suitable to apply in various sectors including education sector, telemedicine, commerce, tourism, advertisement, etc. VR disposed traditional barrier between users, provide connection or interaction with direct information. VR is the most effective method to use in computer.

The usage of VR technology in web site to enhance the presentation of information and services offered become very popular nowadays. It is obvious when VR panoramic view technique has been used for virtual tour from one location to another. The main strength of this technique is that it allows the users to view that place in 360° (three hundred and sixty degree) surrounding that location.

Politeknik Sultan Abdul Halim Mu'adzam Shah (POLIMAS) is one of the education institutions in Malaysia that offered engineering and commerce courses for SPM and SPMV holders. The mission of the polytechnic is to produce quality manpower at semi-professional level to meet the needs of public and private sectors in Malaysia.

The contents of the thesis is for internal user only

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