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VIRTUAL REALITY APPLICATION IN TOURISM SECTOR: FASCINATING PENANG

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

Syahida binti Hassan

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Nama Fenyelia
(Name of Supervisor) : Encik Shahrul Azmi Mohd Yusof

Tandatangan
(Signature) :

SHAHRUL AZMI BIN MOHD YUSOF
Pensyarah
Sekolah Teknologi Maklumat
Universiti Utara Malaysia
06010 Sintok, Kedah

Tarikh
(Date) : 5/6/2005

ABSTRAK

Pada masa kini, Virtual Reality (VR) telah diterima sebagai salah satu cara untuk menyampaiksn maklumat dalam bentuk yang lebih mudah untuk difahami dan memainkan peranan yang penting dalam membantu aktiviti harian. Projek ini membincangkan potensi aplikasi VR berasaskan web untuk mempromosikan sector pelancongan di Pulau Pinang. Ia menekankan penggunanan aplikasi panorama menggunakan VR Worx V2.0 untuk menunjukkan tempat-tempat menarik di Pulau Pinang. Aplikasi VR berasaskan web ini direkabentuk untuk menjadikannya fleksibel dan membolehkannya untuk dikembangkan pada masa akan datang. Walaupun model panorama ini mempunyai kekangan dari segi imersif dan interaktif, ianya dipilih untuk projek ini kerana berbanding dengan model VR yang lain, ianya menyediakan kawalan pengguna yang lebih baik, tidak memerlukan lebar jalur yang tidak terlalu tinggi. Metodologi yang digunakan untuk projek ini ialah Kitar Hayat Pembangunan Aplikasi. Projek ini diharapkan dapat memberikan impak positif bagaimana penggunaan VR untuk membantu aktiviti harian kepada mereka yang baru mengenali VR. Aplikasi prototaip in boleh digunakan sebagai cara untuk rnenarik pelancong tempatan dan asing untuk melawat Malaysia, terutamanya Pulau Pinang di mana ia boleh memberikan gambaran terhadap apa yang boleh didapati semasa melawat Pulau Pinang

ABSTRACT

Nowadays, Virtual Reality (VR) has been accepted as one of methods in conveying information in easier to understand form and have played a significant role in assisting daily activities. This project discusses the potential of web based VR to promote tourism sector in Malaysia. It emphasizes the use of panoramic representation using VR Worx v2.0 to describe the places of interest in Penang. This web based VR application is designed to provide flexibility and offers the possibilities of extension for further development. Even though the panorama model may have limited attributes of immersion or interactivity, it is chosen for the project because compared to other VR models, it provides better user control, requires no high bandwidth demands and can be viewed on standard monitors. The methodology used for this project is Application Development Life Cycle (ADLC). This project is hoped to give a positive impact of what VR can do to assist our daily activities to those are not familiar with VR. The prototype application can be used as a way to attract local and foreign tourists to visit Malaysia, and especially Penang as it can give initial impression to tourist on what they can expect when visiting Penang.

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LIST OF ABBREVIATIONS

ADLC	– Application Development Life Cycle
ASEAN	– Association of South East Asian Nation
BOF	– Birds-of-a-Feather
KLIA	– Kuala Lumpur International Airport
MTPB	– Malaysian Tourism Promotion Board
QTVR	– QuickTime Virtual Reality
SDLC	– Software Development Life Cycle
VR	– Virtual Reality
VRML	– Virtual Reality Modelling Language

CHAPTER 1

INTRODUCTION

This chapter gives an overview of the project which includes the background of the project, the problem statement, objectives of the project, the scope of the project and the significant of the project.

1.1 Background

Tourism has become more than just another industry: it has developed into an important part of the economic foundation of many countries (Cook, Yale & Marqua, 1999). In the tourism industry, the tourism attractions are key factors in making a destination attractive and exciting. In any case, Seang (2001) said, tourism remains a serious business driven by market forces. He also stated that the dynamism and creativity of the tourism industry must prevail and shine through if we are to promote the industry.

The positive benefits of tourism activities in periods of economics stagnation or decline have gone unnoticed. As tourism-related activities have grown and changed, many

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