PROTOTYPE ZOO MALACCA VIRTUAL TOUR

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**BORANG PENGESAHAN STATUS TESIS**

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PROTOTYPE ZOO MALCCA VIRTUAL TOUR

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This is submitted in partial fulfillment of the requirements for the
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FACULTY OF INFORMATION AND COMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2014

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## PROTOTYPE ZOO MALCCA VIRTUAL TOUR

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# DEDICATION

I dedicate this thesis to my parents because without their patient, understanding, support and most of love, the completion of this work would not have been possible. Special thanks also that to all that contributes for completing this project and thesis.

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# ABSTRACT

This project on focus on users that mostly likely want to look the main attractions that provide by the Zoo Malacca and also know what the information of the attraction provided. This will help the tourism sector to improve the visitors came to Zoo Malacca by promoting the Zoo Malacca itself by creating a Virtual Tour. Generally, the purpose of the VR development for this project is considering to offers tourism many useful applications that deserve greater attention from tourism researchers and professionals. As VR technology continues to evolve, the number and significance of such applications undoubtedly will increase. Planning and management, marketing, entertainment, education, accessibility, and heritage preservation are six areas of tourism in which VR may prove particularly valuable. Part of VR's possible utility as a preservation tool derives from its potential to create virtual experiences that tourists may accept as substitutes for real visitation to threatened sites. However, the acceptance of such substitutes will be determined by a tourist's attitudes toward authenticity and his or her motivations and constraints. As VR is further integrated into the tourism sector new questions and challenges clearly will emerge. The sector will benefit from future research into the topics that are discussed and numerous suggestions for future research are presented.

# ABSTRAK

Projek ini di fokus pada pengguna bahawa kebanyakannya mungkin mahu lihat tarikan utama bahawa menyediakan dengan Zoo Melaka dan juga tahu apa maklumat tarikan menyediakan. Ini akan membantu sektor pelancongan meningkatkan pengunjung datang kepada Zoo Melaka dengan mempromosikan Zoo Melaka sendiri dengan mewujudkan Virtual Tour. Pada umumnya, tujuan pembangunan VR bagi projek ini menimbang kepada pelancongan tawaran banyak permohonan berguna yang berhak mendapat lebih banyak perhatian dari penyelidik-penyelidik pelancongan dan profesional. Sebagai teknologi VR terus untuk berevolusi, nombor dan kepentingan permohonan sedemikian nescaya akan meningkatkan. Merancang dan pengurusan, pemasaran, hiburan, pendidikan, kebolehcapaian , dan pengawetan warisan ialah enam kawasan pelancongan di mana VR boleh membuktikan sangat berharga. Sebahagian daripada kemungkinan utiliti VR apabila alat pengawetan berpunca dari potensinya mewujudkan maya mengalami bahawa pelancong boleh menerima sebagai menggantikan untuk lawatan sebenar diugut tapak. Bagaimanapun , penerimaan sedemikian menggantikan akan ditentukan oleh sikap seorang pelancong ke arah ketulenan dan motivasi dan kekangan masing-masing. Sebagai VR seterusnya diintegerasikan ke dalam persoalan baru sektor pelancongan dan cabaran dengan jelas akan muncul. Sektor akan mendapat faedah dari penyelidikan masa depan ke dalam topik yang diperbincangkan dan banyak cadangan untuk penyelidikan masa depan dibentangkan.

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## LIST OF OBSERVATION

CS4      --      Creative Suite 4

JPEG     --      Joint Photographic Expert Group

PC       --      Personal Computer

PSM     --      Projek Sarjana Muda

UTeM    --      Universiti Teknikal Malaysia Melaka

# CHAPTER I

# INTRODUCTION

## 1.1 Introduction

According to Wikimedia Foundation Inc. definition, virtual tour is a simulation of an existing location, usually composed of a sequence of video or still images. It may also use other multimedia elements such as sound effects, music, narration, and text. It is distinguished from the use of live television to effect tele-tourism. The phrase "virtual tour" is often used to describe a variety of video and photographic-based media. Panorama indicates an unbroken view, since a panorama can be either a series of photographs or panning video footage. However, the phrases "panoramic tour" and "virtual tour" have mostly been associated with virtual tours created using still cameras. Such virtual tours are made up of a number of shots taken from a single vantage point. The camera and lens are rotated around what is referred to as a no parallax point (the exact point at the back of the lens where the light converges). A video tour is a full motion video of a location. Unlike the virtual tour's static wrap-around feel, a video tour is as if you were walking through a location. Using a video camera, the location is filmed while moving from place to place. Video tours are continuous movement taken at a walking pace. (Wikimedia Foundation Inc. (April 2013) Virtual Tour [Online] Retrieve on April 2013 from http://en.wikipedia.org/wiki/Virtual_tour).

Generally, the purpose of virtual tour development for this project is built for tourism in hope of promoting the Zoo Malacca itself by creating a Virtual Tour. Tourism was chosen as the starting point for the developer to achieve the goal of developing this project. By focusing on tourism the scope for this project has been minimize. This have gave the developer the opportunity to develop the project and in the same make a research on virtual reality application.

Malacca Zoo is a zoological park located besides Lebuh Ayer Keroh (Federal Route 143) in the town of Ayer Keroh in the state of Malacca, Malaysia. More than 1200 animals of 215 species can be found at the Malacca Zoo. It is the second-largest zoo in Malaysia behind the National Zoo of Malaysia (Zoo Negara). In 2007, along with the "Visit Malaysia" campaign, Malacca Zoo was visited by 619,194 visitors; the highest number ever recorded. Malacca Zoo was the first zoo in Malaysia to exhibit the critically endangered Sumatran Rhinoceros. It also houses overseas as well as local beauties such as the White Rhinoceros, Asian Elephants, Red Panda, Malaysian Gaur, the Serow, the Squirrel Monkey, the Molurus Python, the Grey Wolf, the Mongolian Wild Horse, the Green Tree Python, the Giraffe, the Blue-and-yellow Macaw and also the Indochinese Tiger as well as the Malayan Tiger.

This project will focus on users that mostly likely want to look the main attractions that provide by the Zoo Malacca and also know what the information of the attraction provided. This will help the tourism sector to improve the visitors came to Zoo Malacca by promoting the Zoo Malacca itself by creating a Virtual Tour.

## 1.2 Project Background

Virtual Reality (VR), sometimes referred to as immersive multimedia, is a computer-simulated environment that can simulate physical presence in places in the real world or imagined worlds. Most current virtual reality environments are primarily visual experiences, displayed either on a computer screen or through special stereoscopic displays, but some simulations include additional sensory information, such as sound through speakers or headphones. Furthermore, virtual reality covers remote communication environments which provide virtual presence of users. Input devices such as a keyboard and mouse, or through multimodal devices such as a wired glove, the Polhemus, and omnidirectional treadmills are being created in VR. The simulated environment can be similar to the real world in order to create a lifelike experience.

Generally, the purpose of the VR development for this project is considering to offers tourism many useful applications that deserve greater attention from tourism researchers and professionals. As VR technology continues to evolve, the number and significance of such applications undoubtedly will increase. Planning and management, marketing, entertainment, education, accessibility, and heritage preservation are six areas of tourism in which VR may prove particularly valuable. Part of VR's possible utility as a preservation tool derives from its potential to create virtual experiences that tourists may accept as substitutes for real visitation to threatened sites. However, the acceptance of such substitutes will be determined by a tourist's attitudes toward authenticity and his or her motivations and constraints. As VR is further integrated into the tourism sector new questions and challenges clearly will emerge. The sector will benefit from future research into the topics that are discussed and numerous suggestions for future research are presented.

According to *Daniel A. Guttentag*, the Virtual reality (VR) offers tourism many useful applications that deserve greater attention from tourism researchers and professionals. As VR technology continues to evolve, the number and significance of such applications undoubtedly will increase. Planning and management, marketing, entertainment, education, accessibility, and heritage preservation are six areas of tourism in which VR may prove particularly valuable. Part of VR's possible utility as a preservation tool derives from its potential to create virtual experiences that tourists may accept as substitutes for real visitation to threatened sites. However, the acceptance of such substitutes will be determined by a tourist's attitudes toward authenticity and his or her motivations and constraints. As VR is further integrated into the tourism sector new questions and challenges clearly will emerge. The sector will benefit from future research into the topics that are discussed and numerous suggestions for future research are presented.    (Scholar.Google. (April 2013) Virtual reality: Applications and implications for tourism [Online] Retrieve from    ( http://www.sciencedirect.com/science/ article/pii/S026151770900133 ).

This Product will focuses on the development of Zoo Malacca Virtual Tour of virtual reality. As mention earlier, it is well know that Virtual Reality become trending to attract most of people in new technology. This Kind of trend we realized by many developer to creating more virtual tour to attract users. Virtual reality can be simplify define as the virtual tour to the user that involved or using any computer technology as part of its medium. Basically, it will combine few technique uses of graphics, 3D models, music, sound and some animations where needed. This technique will be included appropriately in the product respectively.

**1.3 Problem Statement**

As mentioned in the last paper of project background above, an visitor who came to the Zoo Malacca that the Zoo just provide a brochure and banner to promote the attraction to their Zoo. This project will help the Zoo Malacca to facilitate the visitors who come to visit the zoo. Before this zoo map and in paper form which is very boring in this technological age. The map is not to have the attention of visitors and sometimes discarded or used as a hand fan. With its virtual reality there will be a lot of help visitors to identify the location of each station there are animals in the Zoo.

There are few problems that arise from those types mentioned above on how to promote the Tourism in Zoo Malacca are conducted. For the formal promotion by pamphlet, the factor that is critical for visitors are not interactive. This type of promotion needed visitor to read the information on the old pamphlet. Definitely such as pamphlet or brooches are not more suitable in this technology era.

**1.4 Objective**

*This project aimed to achieve following objectives:*

i.  To explore virtual tour technique for tourism.

ii. To implement virtual tour using interactive interaction using multimedia as a supplementary tool for the purpose of user-friendly facilities.

iii. To develop a prototype virtual tour application.

**1.5 Research Overview**

*This project research is:*

i.   How the virtual tour technique are apply in tourism field.

ii.  What implementation will be using to virtual tour.

iii. What application/software are use to develop this project.

**1.6 Scope**

The scope for this project focuses on Zoo Malacca Map. It can be used by the Zoo staff, developers and also visitor. The target users for this product are visitor/tourist that they want to visit at Zoo Malacca. The product will show a part of the attraction that are located in the Zoo, that might interactive way with virtual tour technique that being use in this project. The product does not specify on which range of user's age that should use this product. For the aim of this product is the level of users that intend to use it, that the made for visitors. The product will become a kind of electronic map of the zoo.

It will develop based on application in order to archive the objective of the project. Although the scope is not too big, , the task of creating the walk-through is not as easy as it see. A good walkthrough is where the users can navigate easily and in the same time the user can immerse with the environment.

**1.7 Project Significant**

The project is important as it will become another choice for visitor to use at Zoo Malacca. It is a type of interactive way to show the attraction in the Zoo other than printed map that not being attract the visitors more. What is the important that the product is specially design for the visitor Zoo Malacca only that shows the attraction are there. They can use this product to know the attraction in the Zoo that pointed to the visitor.

The user targeted by the product without emphasis of their ages and level of education. Thus each user wills using the product to see what attraction is being highlighted in the product that have in the Zoo. Zoo Malacca Virtual Tour is aimed to help in tourism to promote the Zoo Malacca to outside the world, to attract the tourist who visits Malaysia to come to the Zoo. This product is hoped to deliver the virtual tour in an efficient way.

**1.8 Expected Output**

A final output of this project is commercial value for the Tourism Zoo Malacca, especially the Zoo Malacca itself. Nowadays, most of tourism place have already created its own Virtual Tour. The Zoo Malacca Virtual Tour was developing for purpose of creating a virtual reality tour environment for the Zoo Malacca. This will also give the chance for the developer to contribute some idea toward the promotion of Tourism Zoo Malacca.

## 1.9 Conclusion

Overall, this chapter one of introduction has covers a few topic of the project such as introduction, project background, problem statement, objective, research overview, scope and project significant of the product. The next chapter will cover the literature review and project methodology of the project with few topic in it such as domain, existing system and comparison of it, project methodology, instructional design and project requirements.