# CREATING AN INTERACTIVE ONLINE MUSEUM FOR THE INTERNET

A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree of Masters of Science (Information Technology)

Universiti Utara Malaysia

by

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# ABSTRACT (BAHASA MALAYSIA)

Tujuan kajian ini dijalankan ialah untuk memupuk kesedaran tentang kepentingan penggunaan Teknologi Maklumat kepada institusi-institusi seperti muzium, arkib, galeri dan lain-lain. Teknologi Maklumat membolehkan muzium menarik perhatian dan mendidik orang tentang peninggalan koleksi muzium lalu menyelesaikan masalah geografi and kekurangan masa. Konsep "online museum" dipromosikan dalam projek ini dan perpustakaan digital digunakan sebagai alat pengumpul untuk menyediakan satu lokasi di mana seseorang boleh mendapat maklumat koleksi digital pelbagai institusi-institusi. "Online museum" boleh menyediakan satu tempat di Internet untuk muzium dan mempermosikan applikasi e-dagang untuk muzium-muzium. Sistem tersebut telah dibangunkan dengan menggunakan metodologi "Web Page Development". Projek ini juga membincangkan pelbagai masalah yang dihadapi semasa membangunkan sistem ini dan cadangan-cadangan untuk membangunkan lagi sistem itu pada masa depan.

# **ABSTRACT (ENGLISH)**

The purpose of this project is to create an awareness of the importance of Information Technology to institutions such as museums, archives, galleries and others. Information Technology enables museums to better reach out and educate people of the museum collection's heritage overcoming time and geographical limitations. The online museum concept is promoted here and digital library is used as a collective tool to create in one location information about the digital collections of many institutions. The online museum also creates a web-site presence for the museum and promote e-commerce facilities for the museums. The system was developed using the Web Page Development Methodology. The project also discusses the limitations and recommendations for the system.

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### CHAPTER ONE

### INTRODUCTION

### 1.1 Introduction

Museums have two main functions of protection and education. The first function refer to the protection of the national heritage of the country's treasures in all types of fields such as archeology, ethnography, fine arts, natural history, history, science and technology thus creating a collection of knowledge that would have disappeared if not stored and recorded by the museum. The museum's collection has to be managed in the aspects of conservation, documentation and exhibition of the museum items. It should preserve the country's past and future national heritage for the present and future generation who are eager for knowledge. The second function is educating the people creating generations to appreciate the national heritage of the country and playing a unifying role in a multicultural country.

Utilisation of technology in the museum focuses on the main considerations of enhancing the visitor experience and providing interactive global access to the museum's collection of knowledge. The technology has to achieve the purpose of information provision, education and entertainment. People can go to the computer systems and find out about an artifact or theme of interest through a touch screen or set of buttons in the museum of on-site systems or the point and click of the mouse on the web-site. A 3d representation and display of a museum artifact through the system is the wave of the future which would take display of artifacts to a new dimension and solve the problem of the non-

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