UTILISING VIRTUAL REALITY IN DEVELOPING USER MANUAL FOR PRINTER

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

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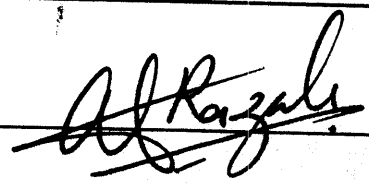
(Signature) : 

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ABSTRAK

Kertas kerja ini mengillustrasikan potensi penggunaan virtual realiti sebagai suatu kelebihan dari segi fungsi tambahan di dalam panduan pengguna dengan menggunakan pelbagai alatan untuk membangunkan suatu simulasi. Secara amnya, projek ini bertujuan membangunkan model-model untuk menjalankan suatu animasi terhadap fungsi pencetak dengan fungsi tambahan seperti fotostat, faks dan mengimbas supaya dapat dijadikan sebagai sumber rujukan yang lebih baik.

Kertas kajian ini juga menggambarkan kaedah yang digunakan untuk membangunkan model-model dan juga memberikan pendedahan kepada pembaca tentang alatan yang digunakan untuk membangunkan model. Secara praktikal, AUTOCAD dan 3D Studio Max merupakan perisian –perisian yang yang canggih tetapi penggunaan perisian ini secara menyeluruh memerlukan pengalaman lepas dan juga kreativiti. Walaupun kedua-dua perisian ini mempunyai antaramuka pengguna yang mudah tetapi fungsinya lebih kompleks dan canggih.

Walaupun projek ini menyingkap kelebihan virtual realiti tetapi teknologi ini tidak semestiny akan menggantikan kaedah konvensional dalam menyediakan panduan pengguna. Selain itu, ia juga memberi pendedahan kepada pembaca bahawa aplikasi virtual realiti ini boleh dilanjutkan penggunaanya sehingga ke tahap latihan terutamanya latihan berbentuk teknikal perlu lebih kreatif bergantung kepada keadaan.

Walaupun projek ini hanya bertumpu kepada operasi alatan pejabat yang berskala kecil tetapi diharap pembaca kertas kerja ini akan mendapat manfaat dari model-model dan kandungan yang dibentangkan serta dijadikan sebagai rujukan. Ini sudah tentu akan memberi pendedahan dan keyakinan kepada pembaca tentang potensi exploitasi virtual realiti dalam bidang lain terutamanya dari perspektif latihan.

ABSTRACT

This paper illustrates the potential of virtual reality to provide value added function to user manual using various tools available to develop the simulation. Generally, this project aims at developing models for animating the functions of a printer, with extended capability of faxing, photocopying and scanning in hopes of becoming a better material source for the references.

The paper also describes the method used to develop the models, as well as giving reader an insight of using the tools to develop the models. Practically, AutoCAD and 3D Studio Max are very powerful pieces of software, however, to be able to fully utilize the potential of the software, it will be purely based on one past experience and creativity. Although both software yield simply interface, yet the functions remain in this software are complicated and advanced

This project tends reveal the advantage of virtual reality but by no means virtual reality will be serve to replace the conventional method used in designing user manual. Rather, it gives insight to readers the application of virtual reality can be extended to cover training (particularly technical training) needs to be more creative, due to certain circumstances.

Even though this project only concentrates on operating small scale office peripheral, however, the author hopes the paper and the models will serve as a reference, providing insights and confidence to the readers to exploit the potential of virtual reality in other fields, from the training perspectives.

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DEDICATION

This thesis is dedicated to my beloved aunt, father, mother, sisters and brother.

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LIST OF ABBREVIATIONS

2D	-	2 Dimension
3D	-	3 Dimension
6D	-	6 Dimension
CAVE	-	CAVE Automation Virtual Environment
CD-ROM	-	Compact Disc Read Only Media
GUI	-	Graphical User Interface
HMD	-	Head Mounted Display
QTVR	-	QuickTime VR
VR	-	Virtual Reality
VRML	-	Virtual Reality Modeling Language
WoW	-	Window on World

CHAPTER 1

INTRODUCTION TO THE RESEARCH

The contents of the thesis is for internal user only

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