USABILITY GUIDELINES FOR DESIGNING INTERACTIVE E-LEARNING PORTAL

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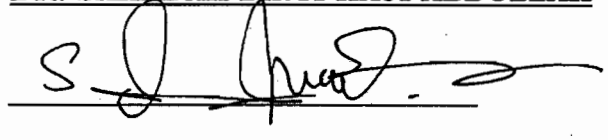
(Signature) : 

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ABSTRAK

Teknologi Maklumat dan Komunikasi (ICT) adalah satu hala baru dunia yang akan mengubah dunia seluruhnya. ICT akan mendominasi dunia pada alaf 21. Dalam segmen pendidikan, *webeducation* menawarkan pendidikan yang fleksibel melalui pembelajaran atas talian. *Webeducation* juga dikenali sebagai E-Pembelajaran membolehkan pelajar membuat pilihan untuk tidak menghadirkan diri ke kelas seperti kaedah pembelajaran tradisi yang diamalkan. E-Pembelajaran adalah satu fenomena seperti Pembelajaran Bergerak (*Mobile*). Untuk mendapatkan aplikasi seperti Portal E-Pembelajaran Interaktif memerlukan peralatan komputer sepenuhnya. Pengajian ini akan menyediakan satu garis panduan sebagai asas untuk membangunkan Portal E-Pembelajaran Interaktif. Pengajian ini juga akan menunjukkan garis panduan yang boleh digunakan didalam pembangunan Portal E-Pembelajaran Interaktif dengan pengenalpastian kepada masalah mendapatkan alat pembelajaran baru yang boleh menyokong proses pembelajaran. Kertas kerja ini akan membincangkan garis panduan didalam membangunkan rekabentuk antaramuka dan teknologi antaramuka sebagai objek pembelajaran didalam menyokong proses pembelajaran. Ia juga menunjukkan bagaimana menghasilkan antaramuka yang interaktif yang akan meninggikan kaedah pembelajaran tradisi dan berpotensi untuk melengkapi persekitaran pembelajaran virtual untuk penghantaran atas talian.

ABSTRACT

Information and Communication Technology (ICT) is a new world trend that will change the world forever. ICT will dominate the world in the 21st century. The emergence of the World Wide Web changed everything. In the education segment, webeducation promotes flexibility in getting education through online learning. Webeducation, also known as e-Learning provides the opportunity for students not to attend classes beyond the traditional on-class experience. E-Learning is a phenomenon as well as Mobile Learning. To have such an application like the Interactive e-Learning Portal, a computer device is mandatory. This study is to create guidelines as a basis to develop an Interactive e-Learning Portal. This study will present the guidelines to be used in the development of Interactive e-Learning Portal from the problem of identifying new learning tools that support the learning process. This project discusses the guidelines for developing the interface design and user interface technology as a learning object in supporting the learning process. It demonstrates how creating interactive interface can enhance traditional teaching methods and potentially provides virtual learning environments for online delivery.

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LIST OF ABBREVIATIONS

CD-Rom	Compact Disc - Read-Only Memory
CPU	Central Processing Unit
DFD	Data Flow Diagram
GIF	Graphics Interchange Format
GUI	Graphical User Interface
HTML	Hypertext Markup Language
ICT	Information and Communication of Technology
IE	Internet Explorer
IT	Information Technology
KI	Key Informant
MD8	Macromedia Dreamweaver 8
OS	Operating System
PC	Personal Computer
PHP	Personal Home Page
RAD	Rapid Application Development
RDBMS	Relational Database Management System
SAD	System Analysis and Design
SDLC	System Development Life Cycle
SPSS	Statistical Package for the Social Sciences
URL	Uniform Resource Locator
VCD	Versatile Compact Disc
WYSIWYG	What You See Is What You Get
XHTML	Extensible Hypertext Markup Language

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

The learning process means much to secondary school students. Parents assume that their children will experience the best education in schools. The quality of education can be improved in terms of knowledge sharing and delivery by using strategic advantages of ICT.

Today learning practices are more on face-to-face interaction between instructor and learner. E-Learning now is considered to be one of the significant and growing research and application area of multimedia computing (Huang et al., 2003). Interactive e-Learning provides an alternative way to a better learning process that can be accessible in real-time by remote viewers and retrospectively by archive viewers who can browse and search for what they want to see (Baecker et al., 2004).

The Interactive e-Learning Portal is another option to provide flexibility in the learning process environment. This flexibility is measured in term of time and geographical location. Basically, the content modules of the e-Learning application can be controlled by a talented and approved Smart Teacher. Therefore e-Learning applications should be easily usable as it can sustain the learning process.

The contents of the thesis is for internal user only

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