HYPERMEDIA PROTOTYPE IN SECONDARY SCHOOL:
CELL AS A BASIC UNIT OF LIFE

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UNIVERSITI UTARA MALAYSIA
2004
HYPERMEDIA PROTOTYPE IN SECONDARY SCHOOL: CELL AS A BASIC UNIT OF LIFE

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

by

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ABSTRAK

Projek ini bertujuan untuk merekBentuk dan membangunkan sebuah prototaip hypermedia yang bertajuk “Sel sebagai unit asas hidupan”. Prototaip ini bertujuan bagi memperkenal dan memperkukuhkan konsep yang dipelajari dalam tajuk berkenaan bagi pelajar sekolah menengah (Tingkatan Satu hingga Tingkatan Tiga). Sebagai tambahan, pengkaji telah membuat sedikit kajian penilaian mengenai usability perisian kursus berkenaan. Prototaip ini dibangunkan dengan menggunakan pendekatan berorientasikan perhubungan-entiti, dalam Relationship Management Methodology sebagai teknik permodelan.
ABSTRACT

The purpose of this project was to design and develop a hypermedia prototype on topic "Cell as a basic unit of life". The aim of the prototype was to introduce and consolidate the concept learnt on the topic for student in secondary school level (Form One until Form Three). Additionally, researcher have done some evaluation studies about the usability of the courseware. The prototype was develop using the entity-relationship (E-R) model in Relationship Management Methodology (RMM) as a design tool.
ACKNOWLEDGEMENTS

My deepest appreciation goes out to my advisor, Mr. Jasni bin Ahmad for his extraordinary level of support and patience. I will always remember those countless hours he spent with me in meetings and presentation. His leadership, expertise and advice has been a great motivation for me and has had a key role in making this a unique and rewarding Masters project.

On a more personal note, I wish to thank my husband, Mr. Zakaria bin Ibrahim and my children for their loving, support and encouragement throughout my education.
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CHAPTER 1
INTRODUCTION

1.1 Background of Study

Hypermedia systems have been readily accepted by educational computer assisted learning (CAL) developers largely because of the ease of program development, allows greater learner control, access to multimedia learning materials and a variety of modalities of interaction with the learning material and a general fascination with the possibilities offered by linking information in a non-sequential way (Quentin-Baxter & Dewhurst, 1992, Viau & Larivee, 1993, Ken Neo & Neo Mai, 1998). The dynamic nature of the Biology subject cannot be easily demonstrated in laboratory sessions and it is therefore a prime candidate for the development of interactive learning materials that include multimedia and hypermedia.

Indeed, this particular electronic learning aid may provide certain advantages over conventional tutorials: computer tutorials can be used by the student repeatedly, at their own convenience; dynamic biological phenomena (e.g. cell division and examples) can be explained using animations and digitized video, media which are not normally available in the conventional tutorial setting. Furthermore, computer tutorials could be of particular value to external students who do not have direct access to advice/feedback from academic staff outside of residential schools.

The computer's ability to manage and quickly respond to learner inputs, to represent information in multiple media forms, and to accommodate individual learner needs, among other things, makes it an effective delivery medium for tutorial courseware (Heinich, Molenda, Russell, & Smaldino, 1996). And computer-based hypermedia has
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BIBLIOGRAPHY


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