



University of Science and Technology

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Requirement of Degree of MSC In Information
Systems**

**Evaluation of an Educational Adaptive
Hypermedia Systems**

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Abstract

Adaptive Hypermedia Systems means all hypertext and hypermedia systems which reflected some features of the user in the user model and applied on this model to adapt various visible aspects of the system to the user.

Evaluation of adaptive hypermedia system is generally considered to be an important part of research and practical application of the adaptive hypermedia systems. It is important to know whether a particular adaptive technique work in this domain, the context where it is more potent, and the scale of the adaptation effect it produces.

In this research an adaptive Web-based educational hypermedia system, called SQLCourse (Structure Query Language) is evaluated. The evaluation focused on the adaptivity feature of the system.

The questionnaire and checklist is used to evaluate different adaptivity features. An analysis a queried survey data showed in chapter four.

مستخلص البحث

النظم الفائقة علي التكيف تعني كل الانظمة الخاصة بالنصوص التشعبية والوسائط الفائقة التي عكست بعض المميزات في نموذج المستخدم وطبقت عليه عدة سمات

تقييم النظم الفائقة علي التكيف تعتبر اهم جزء في البحوث والتطبيقات بالنسبة للوسائط والنصوص الفائقة علي التكيف ومن المهم جدا معرفة بعض التقنيات التي تعمل في هذ المجال .

في هذا البحث قمنا بعمل تقييم للموقع التعليمي المتكيف الخاص بقواعد البيانات الذي يسمي (SQLCourse) وركز التقييم علي بعض مميزات النظام

واستخدم قوائم الاختيار والاستبيان لتقييم الموقع التعليمي المتكيف وحصلنا علي نتيجة موضحة في الفصل الرابع من هذ البحث.



1.1 Introduction

Adaptive hypermedia systems are those systems that change their context according to their behavior. Adaptive refers to the ability of the system to change its responses in reaction to runtime environment, users, and other parameters, and it is one of the most popular approaches of personalized information access.

When the field started to emerge; the expectation was that soon nearly all published hypermedia content could be adapted to the user's needs.

The evaluation of adaptive hypermedia systems is a new research direction in the field of adaptive hypermedia systems. In general the evaluation is considered to be an essential part of research and practical application of the adaptive technologies, and it is important to know whether a particular adaptive technique works, the context where it is stronger, and the scale of the adaptation effect it produces.

In this research an adaptive Web-based educational hypermedia system, called SQLCourse (Structure Query Language) is evaluated. The evaluation focused on the adaptivity of the system.

A designed questionnaire and checklist is used to evaluating different adaptivity features.

An analysis a queried survey data showed that.

1.2 Research problem

The evaluation of adaptive hypermedia systems is one of the most important research domains in adaptivity systems, the main problem in this research is what to evaluate? And how to evaluate? Are two major research questions in evaluating Adaptive Hypermedia Systems?

1.3 Research Tools

To achieve the goal of this study a checklist and a questionnaire contained 27 close questions(Appendix 1), with A four point Like (1=strongly agree 2=agree 3= strongly disagree 4=disagree) are used .

1.4 Research Objectives

The objectives of this research are.

1. To determine what factors or features to be evaluated in Educational Adaptive hypermedia Systems
2. To develop an adequate techniques to evaluate the specified features.

1.5 Research organization

This research consists of five chapters. Chapter two discuss the adaptive hypermedia systems concepts such as how adaptive systems works, classification of adaptive hypermedia systems, methods and techniques for developing adaptive hypermedia systems and challenges of adaptive hypermedia system.

Chapter three focus on the evaluation of adaptive hypermedia systems. Chapter four was dedicated of real educational evaluation of adaptive hypermedia systems called SQLCourse using a checklist technique and a questionnaire. Chapter five includes conclusions and recommendation for future work