

**E-Learning System For
Advanced Data Structures Course**

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**E-Learning System For
Advanced Data Structures Course**

**A Dissertation submitted to college Arts & Sciences in partial
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By

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ABSTRACT

Over the last years, E-learning has gained significant popularity, and it's expected to continue in the future. Learning is a multi-dimensional activity where each dimension should be adequately supported by a learning system to provide a fruitful learning experience to its users. Many problems facing the students during attended the class, which may be not effective and efficient to students and lectures for advanced data structure. Therefore this study focus on development of an E-learning system as a learn material for advanced data structures course, the proposed system designed using Pascal and Delphi language, furthermore the aim of this study is to provides interactive E-learning system for advance data structure and saving the time on the students to attended the classes. Furthermore, the proposed system has been evaluated in terms of interface design and contents by distribute the questionnaire to 40 students and measuring the usability of the proposed system, the result shown the high agreements that proposed system has clear presentation of information (Mean = 7.6) which indicate that the new users agreed with the proposed system.

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CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter briefly elaborates the main idea of this study, providing answer of the question why the study was conducted and what is the main element involved in the study. The first sub-topic describes the overall idea in this study through the scenario and the introduction that lead to the implementation of the whole project. This is followed by the problem statement, objectives, scope, and significance of the study. The last sub-topic elaborates the way this project is organized.

1.2 Background

Nowadays E-learning involves the acquisition, generation and transfer of knowledge using the various methods and techniques that apply to develop and enhance the learning system for different topics which can be much more effective, and cheaper than more traditional learning methods, (Jeffrey, 2002); (Jorge, 2006). With the rapid progress of the communication tools in the many fields, the teacher should to have a mastery of the medium, in other words, a correct handling of new technologies (Michael, 2007), which implies not so much a perfect knowledge of all the mediums, but rather mastery of those which are going to prove basic and strategic for the processes of e-training (E-Learning Advantages and Disadvantages, 2008). However, in many departments of learning the

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