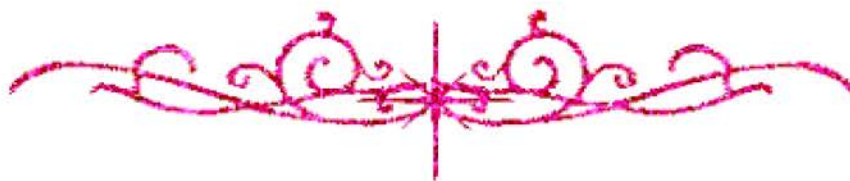


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# بسم الله الرحمن الرحيم



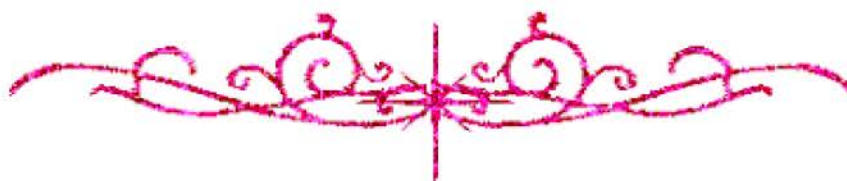
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شبكة المعلومات الجامعية



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم





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شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

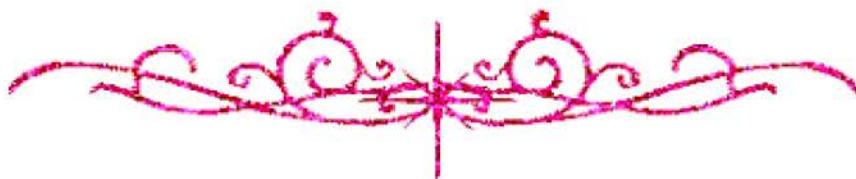
## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



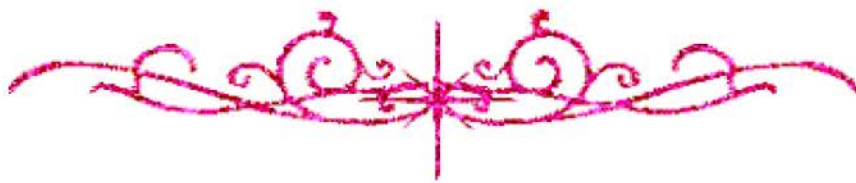
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# بعض الوثائق الأصلية تالفة





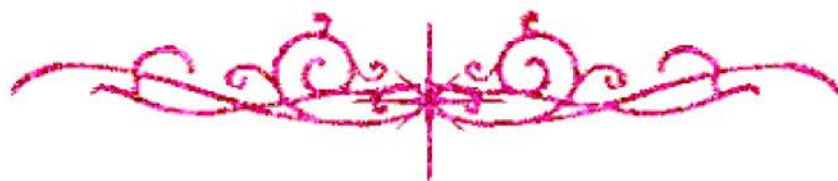
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شبكة المعلومات الجامعية



بالرسالة صفحات  
لم ترد بالأصل



# **Quality Assurance in Developing an Information System**

**Thesis Submitted to  
Institute of graduate studies and research  
University of Alexandria**

**In Partial Fulfillment for the  
Degree of Master  
In  
Information Technology**

**By  
Shahenda Mahmoud Shalaby**

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**2004**

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## **ABSTRACT**

The wide spread usage of computer applications in all fields and activities, being Industrial, scientific, commercial, general service and in communication lead to the increased importance to measure the software quality in order to justify the competition and to make sure that the application software will achieve all the users' requirements.

This thesis objectives are to design and implement a software tool to measure the quality of the software products by calculating the total and detailed quality value to be presented. The tool produces reports that present the reasons of bad quality results and the points that should be reviewed to get high quality values and estimate the quality factors weights to guide the user on their priorities.

Five software quality models have been selected to study, analyze and compare to reveal the differences between them and to suggest the recommended solution to calculate software quality element weights and values from different points of view. Finally implementation has been achieved using the designed software program to measure the software quality with the suggested methods using a predefined data sample for testing.

The important results and conclusions illustrate that the quality factors and criteria weights are not of the same importance. For instance, The functionality, reliability, efficiency and maintainability are very important quality factors. The total quality measurement shown as a percentage is a fake result and means nothing without the detailed measurement results.

Software Quality Assurance measurement is still fuzzy and should not be expected to measure software quality exactly, for that; the software quality assurance is still a major and very important field for further research.

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# **Chapter 1.**

## **INTRODUCTION**