Chapter One

Introduction

1.1 Introduction

The present time, in which we live, is the era of information technology and telecommunication. Information technology has significantly contributed to solving most of problems and difficulties that face human being. It is evident from the wide prevalence of Information Technology in various activities and tasks, which give glad news for every one to live without printed paper society or information society. An important aspect of this society is knowledge reproduction in all fields of social activity (economic, civil ,political and special life). In this regards some countries, institutions, companies, organizations and universities have achieved a great progress in their use of computer to automate the manual systems to achieve high level systems, which is the best technology in our era. An example of manual systems in which Information Technology has presented a successful solution is research arbitration and publication. The merits of Information Technology solution in this regard are many folds. On one hand, it has a main and active role in developing researches and simplifying the professional's presentation and revision in easily high flexibility, which assist researcher when he face any problems in presentation and following up the research and also simplifying its correction if there mistakes without writing them a gain. On the other hand, this technology has positive consequences in researches presentation in terms of money and reduction of time and effort.

In this project we tackle a number of that problems which hamper the development process in the arbitration field and scientific researches management. Based on our review of scientific Journals, we have observed that some universities still depend on manual system that cause loss of time, effort and money . In other words , there aren't automatic system in the field of scientific researches arbitration.

Our vision in setting up specialized system in management and scientific researches arbitration is to meet the international standards, as these are implemented in the scientific publishing institutions like Springer and Elsevier. These institutions have well-known scientific journals in different fields. We have Found automatic systems for these system have solved many of the problems that face the researchers, during research presentation process, editors and reviewers as well.

1.2 Project problems

In setting up any system, there are problems and difficulties which the system designers try to find the suitable solution for them. With regards to E-journal it is essential step that the problems and difficulties must be named in order to find the suitable solutions for them and try to solve those ones that face the old scientific Journals (manual), which are specialized in management and researches arbitration, through finding systems work to solve those problems and difficulties. These problems are specified as follows:

- 1- Time and efforts wasted during the manual publication process.
- 2- Difficulty of archiving process and researches keeping process, specially published researches for a long time.
- 3- Difficulty of publishing reports that show arbitration process.

4- Difficulty of communication between the editors, reviewers and the researchers.

1.3 project objectives

The main aim of this project is to facilitate the communication and save time, effort and cost for all the Journal staff as reviewers, editors and authors.

There are many objectives develop the system of the scientific researches arbitration in scientific Journals. We reduce the gaps as far as possible till we have a new system better than the present systems, and we convert the manual system to computer system on web by replacing the weak points with the strong ones to improve technical processes and support the services of scientific Journals role. The proposed objectives are given as follows:-

- 1- To improve the utilization of computing facilities for scientific Journals and automate all the activities and procedures of scientific researches.
- 2- To facilitate the submission of research articles to the Journal editorship.
- 3- To enhance the archiving of scientific researches and maintain them.
- 4- To facilitate the tracking of articles via the web.
- 5- To improve the transparency of the arbitration procedures from the Journal management.
- 6- To improve the communication between all parties of the Journal (editors, reviewers, authors).
- 7- To improve the accessibility of published research articles.

1.4 Project scope

This project (E-journal) is a specialist system in the management and arbitration of scientific researches. The scope of the project can be specified by the following aspects:-

- Journal management task :- it is responsibilities for the management system and users management from prevention and giving the permissions from and to the users.
- Editors task:- they are responsible for taking the submitted Articles from Authors and taking consideration of them if they are belonged to the Journal specialization and then submit them to the Reviewers.
- Authors task :- they submit their researches to the Journal.
- Reviewers task :- they have reviewer role for the Article.
- The remote conferences, Books and publication this system is not support it.

1.5 methodology

The methodology, which has been followed, in this project consists of the following stages:-

1- Data collection:- in this stage the data, which relate to the project, has been collected from the specialized sites and peoples who have involved in research publication and management.

- 2- Data analysis: in this stage, we have analyzed data, which were collected in the previous stage, to have the functional requirements of the system. The requirements in this project are categorized into the categories:-
 - Author requirements.
 - Editor requirements.
 - Reviewer requirements.

After the process of eliciting for the system requirements, we have modeled the data and made planes for the entities and the relations to build complete perspective about the system.

- 3- Design stage:- in this stage, we do the actual design for the system which include the database design of the system and make data plans.
- 4- Implementation stage:- it is the stage of the system appearance, because we program and implement it. The implementation is considered as a result of the last processes (design and analysis process).and in this stage you know how to use this system in short.
- 5-Testing & evaluation stage:-This stage formalize the testing process by referring to two distinct goals: validation, verification and result of testing.

1.6 Assumptions

The E-journal project is based on the following assumptions:-

- 1- There must be a network for operating the system whether it is a special network or internet.
- 2- there must be enough storage space in the web for storage the submitted researches.

1.7 Organization of research

The project report has been organized as follows:-chapter one, in this chapter contains on a collection of concepts that were the starting in the preparation of research proposal and approved on it. such as general introduction about the project, the problems to be solved through this project and goals of project. In addition to that, the project scope, the used methodology in the project, and Assumptions.

Chapter two, this chapter involve introduction, research arbitration, basic concepts of the project, Similar systems project that support us for getting information and the necessary procedure in the process of presentation and research revision, the system benefits and the software development methods.

Chapter three , clarifies the study and the system analysis, the most important information that has been in the process of data collection and how it was analyzed the data and how to enable the formulation of our present system. It contains an introduction , problem definition, comparison between the present system and the proposed system , feasibility studied, new system selecting , time plan, and detailed study .

Chapter four , involves an introduction , general concept for design phase , general structure for the system , design system tables and algorithms .

In chapter five, the system implementation process has been clarified and Specifications for Work Stations to run the system and displayed the system windows and described briefly.

In chapter six, normally formalize the testing process by referring to two distinct goals: *validation*, *verification*, clarified the result of testing.

chapter seven, contains of summary of this research (project) to solve current problems in current system, and talking about conclusions that get it and achieved objective and non-achieves objectives and the positives and negatives of the achieved system. After that talked about the future suggest and recommendations to develop this system.