

1.1 Statement of the problem

A digital library is a collection of information that is stored and accessed electronically. The information stored in the library should have a topic common to all the data. ,a digital library is to provide a central location for accessing information on a particular topic. The user wants when he searches for information about Mathematic is to get information. A digital library must keep topics separate, otherwise it would be totally useless. A digital library should also have a user interface that is easy to use.

1.2 The Purpose of the Study

The purpose of this software development project is to create a new application called: A Digital Library System For Sudan University of Science & Technology (DLS) .The client for this project wishes to be internet environment. The Library Management System will be web base, allowing library users to search for books, seminars, and thesis and library staff members to manage the book inventory and user database. The application will provide the following capabilities:

The application will be access via a internet on a PC at any place.

Library staff will be able to manage the book inventory database including remove, change, and add. The application will generate reports for administrative purposes. The application will provide search function on books based on ISBN, subject, title, or author. The project's client has determined that this application will provide the following benefits:

- Provide additional flexibility and convenience to the library users.
- Provide better reliability and security of the library information.
- Provide a more productive environment for the library staff member.
- Reduce the cost of the library operations.

The availability of information at any time in any place.

1.3 The Objectives of the Study

The objective of the Project is to implement an electronic virtual library, providing full access to a collection of serial titles, a collection of issues from individual serial titles, as well as to the full text of articles. The access to both serial titles and articles is available via indexes and search forms.

Ensure that all library resources are accurately represented in the online catalog.

The library has adopted a vision of full electronic access to information about our library holdings. Because of the significant conversion effort from a card-based format to one that is online, records describing most of our extensive holdings are now available to our users via the online catalog. These strategies will enable us to process those relatively few remaining materials awaiting conversion and those that are based on new, rapidly changing technologies.

1.4 Thesis Layout:

The study is divided into five chapters. Chapter One is an introduction which contains the research perspectives. Chapter Two is aimed at reviewing the relevant literature. It includes Digital Library Definition, Materials of library, what is expected income. Chapter Three deals with methodology, it is tools and network design for library. Chapter four contains the analysis, and result of the project. The fifth chapter focuses on the concluding point, Summary and implications for future studies. The study includes appendix.