

ONLINE BOOKSHOP MANANGEMENT SYSTEM

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**Project proposal submitted to faculty of physical sciences, Engineering and Technology
in partial fulfilment of the requirements for the award of Diploma in information
Technology of Tharaka University.**

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DECLARATION

I hereby declare that this project is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for a degree or any other award in any other educational institution

Student Name:

Signature:

Date:

APPROVAL

This project was conducted under our supervision and is submitted with our approval as university supervisor

Supervisor's Name:

Signature:

Date:

DEDICATION

I dedicate this work to my family for their support and encouragement during this journey. Their belief in my ability has been pillar of strength, driving me to achieve my goals

To my mentors and lectures whose guidance and wisdom have been invaluable in shaping my understanding and approach to this project

ACKNOWLEDGEMENT

I would like to express our sincere gratitude to all those who contributed to the successful completion of this project proposal on the Online Bookshop Management System.

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ABSTRACT

The Online Bookstore Management System is a comprehensive platform designed to streamline the operations of online bookstores. This system provides an integrated solution for managing inventory, sales, customer relationships, and digital transactions, enhancing both the customer and administrative experience. Key features include a user-friendly interface for browsing and purchasing books, a robust inventory management system for tracking stock levels and book details, and a secure payment gateway for handling transactions. Additionally, the system incorporates tools for customer management, including personalized recommendations and order history tracking, to foster customer loyalty and improve satisfaction. By automating and centralizing the management processes, the Online Bookstore Management System reduces future operational costs and increases efficiency, allowing bookstores to focus on expanding their catalog and improving customer engagement. This system is adaptable to various sizes of bookstores and is scalable to accommodate growth and technological advancements.

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CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter address the background of the study, the problem statement, Objectives of the research project, its significance and the scope of the work

1.1 Background of the Study

In the world of software development there lots of improvement in the area of Architectural design and principles. The philosophies and implementation details are changing as the people guiding the development of the application. In this fantastic and yet sometimes complex world of software development there are some tried and true architecture patterns and software development guidelines employed by most architects. Also your design must have an ability to turn towards innovation instead of lending itself to common practices. Web services are one such area where architects must lean on their creative side and hope that their solutions are still successful. In this report we will explain an exciting voyage down the road of Web services application. From requirements to use cases, to database design, to component frameworks, to user interfaces, we will cover each and every aspect of system design required to build an application with collaborative Web services. The reason why we selected online Bookstore web service is everybody

y walking down the street has some idea about bookstores. The objective of this project is to develop an e- book store where books can be bought from the comfort of home through the Internet.

An online book store is a virtual store on the Internet where customers can browse the catalog and select books of interest. The selected books may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction.

Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e- mail notification is sent to the customer as soon as the order is placed.

1.2 Problem Statement

The process of buying books from the small scale business requires that the customers must move with cash in which may be dangerous to their life..

1.3 Objectives Of The Project

1.3.1 General Objective

The main objective of the project is to create an online book store that allows users to search and purchase a book online based on title, author and subject.

1.3.2 Specific Objectives

To design an online bookshop management system

To store customers details and book details

To reduce mistakes of records

To enable quick processing of searching books

1.4 Research Questions

i. How did online bookshop management system design an online bookshop management system

ii. How did online bookshop management system store customers details and books details.

iii. How did online bookshop management system reduce mistakes of records

iv. How did online bookshop management system enable quick processing of searching books.

1.5. Significance of the Study

This project will help in several ways, increasing importance of e-commerce is apparent in the study conducted by researchers at the GVU (Graphics, Visualization, and Usability) Center at Tharaka university.

In developer's summary of the findings from the eighth survey, the researchers report that "online shopping is taking off both in terms of the number of users shopping as well as the total amount people are spending via Internet based transactions".

As a part of the preliminary study, the scope of the system has to be clearly outlined. This is useful for estimating the amount of effort required, the cost involved etc.

During the purchase or billing procedure the bookshop will interact with the party or with the client as external entity and with other departments inside the environment of bookshop.

1.6 scope

The scope of the bookshop management system will facilitate people with the following

- fulfilling customer orders
- maintain books stock
- maintaining book category details

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter deals with the analysis of the existing relevant literature of online clearance systems used to clear, their benefits and limitations, it further stretches the development of web base clearance system.

2.1 Review Of Related Work

[1] S. Priya and R. Mala, "Design and implementation of Online Bookshop Management System," International Journal of computer.

[2] O. A. Adewumi, O.O. Folorunso, and E. O. Adebawale, "Online Bookstore Management System Using PHP and MySQL," Journal of software Engineering and Application, vol. 8, no.3, pp.121-127, Mar.2015

[3] J. Xiao and X. Liu," E-Commerce Bookstore Management System Design and Implimentation," proceedings of the International conference on software Engineering and Data Minning,pp.205-210, Jun2014

[4] M.T. Hassan, S.M. Sayed, and K.M. Kader," A Web-Based Online bookstore Application using Python Django Framework," International Journal of Computer science and Information Technology, vol.9 no.2, pp.65-72. Apr.2017

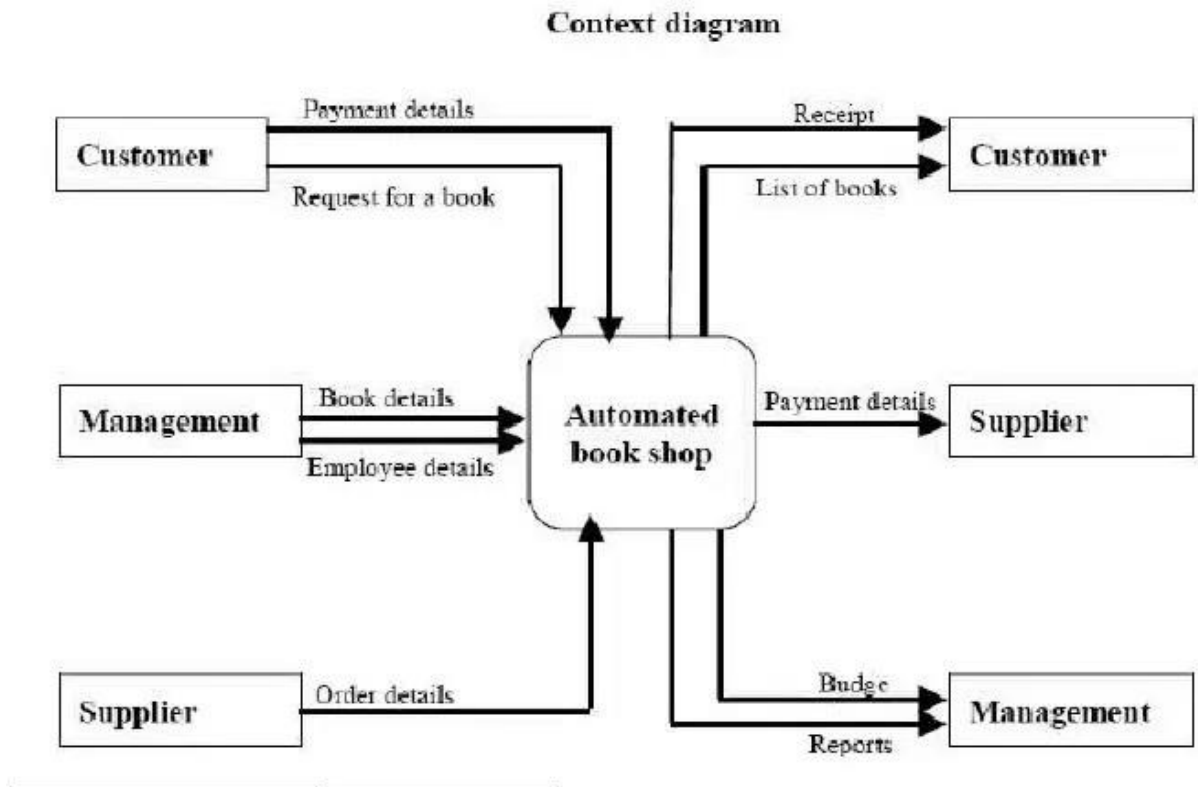
[5] N.A. Raza and M.A. Khan, "comparative Analysis of Online Bookstore Models," International Journal of Advanced Computer science and Application, vol.6,no.4,pp.33-39, Apr.2016.

[6] P. Kumar and A. Gupta," The Role of Mobile Applications in Online Bookstore System," International Journal of Mobile computing and multimedia communication, vol.10,no.1,pp.23-29.2019

2.2 Conclusion

This proposal will help in achieving higher sales , improve customer experience and greater operational efficiency. It will take bookshop in position to capitalize on emerging trends adapt to market changes and maintain a competitive edge in digital market place

2.3 Conceptual Frame Work.



CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter addresses the methodology that is employed during the research. It also presents the areas of research and explains the reasons why this research area was chosen. Detailed explanations on the system design, system approach, the target population and sampling design, data collection methods and tools and data analysis are also include.

3.1 Research Design

The researcher will use quantitative research design. Data in the quantitative design will collect through interviews and Study of Manual. This aim is mainly to acquire an in-depth understanding of exiting manual system. Quantitative design will also be used to gather information that is analysis of documents such as books, newspapers, magazines, internets.

3.2 Targeted Population

A population refers to an entire group of individuals, events or objects having a common observable characteristic. The population for the study was the management staff, customers and owners

Table 1: Showing the Number and Type of Respondents

| Category of respondent | Number of respondent | percentange |
|------------------------|----------------------|-------------|
| Manangement staff | 5 | 25 |
| customers | 10 | 50 |
| owners | 5 | 25 |
| total | 20 | 100 |

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3.3 System Design And Development Tools

The development tools are defined as the basic required devices that are used during the design of the computer based processing and publishing system to enable the programmer design an effective and efficient software.

There were five components that were needed to be added in the system when the development of the systemwas yet at an initial stage. These components can be referred to as the software development tool. The underlisted tools were chosen

and used because of their features and ease of accessibility. These tools are briefly discussed below:

MySQL

It's a database management system that enables development of databases and tables. It supports a large amount of information storage, allows concurrency control services, quick data retrieval, easy data manipulations (updating, deleting, insertion, sum, difference, multiplication, division), it stores alphanumerical data, therefore with those enhanced features it had to be our best choice for designing the back end of the system.

3.4 Data Collection Methods and Tools

Data collection tools that will be used during research are printed questionnaire papers, interviews.

Interviews

This is a method of data collection through oral or verbal communication between the researcher and the respondents. The system developer will ask few questions and the management staff and customers will be able to give their views and opinions concerning the implementation of the new system.

QUESTIONNAIRES

This is a research instrument that will consists of a mix of close-ended questions and open-ended questions. The purpose of the questionnaires is to compare the respondents' views with the researcher's views on the impact of the system. They will also focus on meeting the objectives and the research questions.

3.5 Data Analysis

Conducting a detailed data analysis on an online bookshop management system will involve several steps to uncover insights about sales, customers, inventory, and overall business performance. The process will begin with **data collection**, which will involve gathering datasets such as sales data, customer data, supplier data, and review data.

The next step is **data cleaning**, which will ensure the data is accurate and consistent. This will involve removing duplicate entries, handling missing values, standardizing formats (such as dates and currency), and correcting any inaccuracies in data entries.

After cleaning, the analysis will proceed to **descriptive analysis**. This step will summarize the data, providing an overview of patterns and trends. Analysts calculate total sales and revenue, identify top-selling books and genres, analyze customer demographics and purchase behavior, and will assess inventory status by examining current stock levels and turnover rates. Supplier performance is also evaluated based on reliability and delivery times.

The **sales trends analysis** will identify patterns over time, helping to uncover seasonal trends and sales growth.

Customer segmentation will involve categorizing customers based on their behavior and demographics.

Sentiment analysis of customer reviews, will provide insights into customer satisfaction and product perception. Natural language processing techniques will be used to calculate sentiment scores, analyze the tone of reviews, and identifying common themes or issues customers frequently mention.

Predictive analysis will use machine learning models to forecast future trends and behaviors, such as predicting future sales, foresee customers risk of churning.

data visualization will play a crucial role in communicating insights effectively. Visualization tools like Tableau and Power BI are used to create interactive dashboards, while libraries like Matplotlib and Seaborn in Python will help to generate detailed charts and graphs.

Reference

- P.Kumar and A. Gupta, "The Role of Mobile Applications in Online Bookstore Systems," International Journal of Mobile Computing and Multimedia Communication, vol.10, no.1, pp.23-29, Jan.2019
- N.A. Rasa and M.A. Khan, "Comparative Analysis of Online Bookstore Models," International Journal of Advanced Computer Science and Applications, vol.6, no.4, pp.33-39, Apr.2016
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APPENDICES

APPENDIX I: QUESTIONNAIRES

I am a student of tharaka university pursuing diploma in information technology request you to answer these questions in utmost faith as a partial fulfillment of the award. I therefore affirm that this information is purely for the academic purpose

SECTION A: PROFILE OF RESPONDENTS

1)Sex

A) male ☐

b) female ☐

2) Age

(a) 20-25 ☐ (b) 25-30 ☐

(c) 30-40 ☐ (d) 41-50 ☐

(e) 50-60 ☐ (f) 61-70 ☐

3) Educational Level

(a) None ☐ (b) Primary ☐

(c) Secondary ☐ (d) Post Secondary ☐

SECTION B: Challenges of Current clearance management information system

4. in your analysis, what are the challenges of the current information system?

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.....
.....

5. What problems hinder you from implementing the current system?

.....
.....
.....

6. What are some of the infrastructural problems that may make you fail to engage in system implementation .

APPENDIX II:TIME SCHEDULE

| s/no | Task/Date | May week1 and week2 | May week 3 and week4 | June | July |
|------|-----------------------------------|------------------------------|-------------------------------|------|------|
| 1 | Data collection | | | | |
| 2 | Reviewing on other proposal | | | | |
| 3 | Proposal writing | | | | |
| 4 | Presentation | | | | |

APPENDIX III:BUDGET

| Item description | Cost(shs) |
|---------------------|-----------|
| Transport services | 10000 |
| stationaries | 10000 |
| Typing and printing | 150000 |
| binding | 10000 |
| communication | 50000 |
| total | 230000 |