Tribhuvan University

Faculty of Humanities and Social Sciences

"Barcob"- Course Selling System

A PROJECT REPORT

Submitted to

Department of Computer Application

Reliance College

In partial fulfillment of the requirements for the Bachelors in Computer Application

Submitted by

Sanskar Satyal

Reg No:- 6-2-522-193-2020

June, 2024

Under the Supervision of

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Tribhuvan University

Faculty of Humanities and Social Sciences

Reliance College

Supervisor's Recommendation

I hereby recommend that this project prepared under my supervision by Sanskar Satyal entitled **"Course Selling System"** in particular fulfillment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

…………………..

SIGNATURE

Abhijeet Kumar Sah

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Faculty of Humanities and Social Sciences

Reliance College

LETTER OF APPROVAL

This is to certify that this project prepared by Sanskar Satyal entitled **"Course Selling System"** in particular fulfillment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion It is satisfactory in the scope and quality as a project for the required degree.

…………………… **Abhijeet Kumar Sah** **Supervisor** Chabahil, Saraswatinagar, Kathmandu 44600	…………………… **Mr.Bal Ram Rai** **Coordinator** Chabahil, Saraswatinagar, Kathmandu 44600
    …………………… **Internal Examiner**	 …………………… **External Examiner**

Reliance College

Ref No:

Date:

Subject: Approval of Project Proposal

The project entitled **"Course Selling System"** proposed by Sanskar Satyal for the partial fulfillment of the requirement for Bachelor in Computer Application (BCA), sixth semester has been approved for further development.

<u>Proposal Evaluation Committee</u>

1. _____

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Mr.

Campus Chief (.)

Acknowledgment

Abstract

To be successful, Course Selling Systems need to feature a user-friendly interface, comprehensive course descriptions, competitive pricing, secure payment processing, and efficient delivery services for digital and physical products. Course Selling Systems can range from small, niche providers to large, multinational platforms, and can offer a variety of educational materials, including software, books, tutorials, and certification courses. Barcob a Course Selling System, aims to introduce a new online platform for purchasing educational resources across various disciplines.

Barcob will provide a user-friendly and intuitive interface, making it easy for customers to browse and purchase educational products. The website will focus on offering a curated selection of high-quality courses, software, and books at competitive prices, sourced from reputable publishers and authors. Additionally, Barcob will incorporate secure payment processing and efficient delivery of digital downloads and physical shipments to ensure a seamless customer experience. Overall, the Barcob Course Selling System aims to deliver a convenient and enriching shopping experience for learners while establishing a profitable and sustainable business.

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Chapter 1 Introduction

An e-commerce website that sells online courses, books, and software is a platform designed to deliver educational and professional resources digitally. The demand for online learning and digital products has grown exponentially, driven by the need for flexible, accessible, and efficient ways to acquire knowledge and tools. In today's digital era, having an online presence is essential for businesses offering educational content and software solutions to reach a broader audience and succeed.

Our proposal offers a comprehensive solution that will help you establish a successful e-commerce website to sell online courses, books, and software. As Laudon and Traver [1] describe, many companies employ online platforms to provide marketing channels, target micro-segments or small audiences, and ensure customer satisfaction through streamlined services. Chaffey [2] notes that a user-friendly interface and clear navigation are crucial in e-commerce to enhance user experience and drive sales. Moreover, Turban et al. [3] emphasize that trust and security are paramount in online transactions, and robust privacy measures are essential to build customer confidence.

Additionally, McGonagle and Vella [4] highlight the strategic importance of content marketing in e-commerce, using high-quality educational materials and software to attract and retain customers. Nielsen [5] further underscores the necessity of simplicity and clarity in website design to facilitate easy access to information and improve user engagement. These insights collectively form the foundation of our proposed e-commerce platform, aiming to provide a seamless and enriching experience for users seeking educational materials and software products.

The project aims at the following:

- Offering a wide variety of online courses across different fields.

- Providing access to a diverse selection of books, including textbooks, reference materials, and bestsellers.

- Selling software products that cater to various professional and educational needs.

- Ensuring a secure and user-friendly online shopping experience.

Problem Statement

As an educational resource provider, you may be facing challenges such as limited reach, low sales, and an overall lack of online presence. These challenges can be addressed by developing a robust Course Selling System that will help you reach a wider audience and increase sales. The purpose of any course selling website is to help customers narrow down their broad educational needs and enable them to finalize the courses or materials they want to purchase.

For example, suppose a customer is interested in purchasing a software course. His or her search for educational materials should list course categories, levels, languages, pricing, ratings, and other features as filters. As the customer selects more and more features or options from the filters provided, the search narrows down to a small list of courses or materials that suit his or her needs. If the list is small enough and the customer likes one of the options listed, he or she will make the purchase.

3. Objectives

1. To provide increase in booing and sales
2. To ensure secure transactions
3. To provide excellent customer service

Chapter 4 Methodology

For this project, agile methodology is determined to be used as:

- The project allows for evolving requirements, accommodating changes as needed.

- The project goals and scope can adapt to new insights and feedback.

- The project follows an iterative timeline.
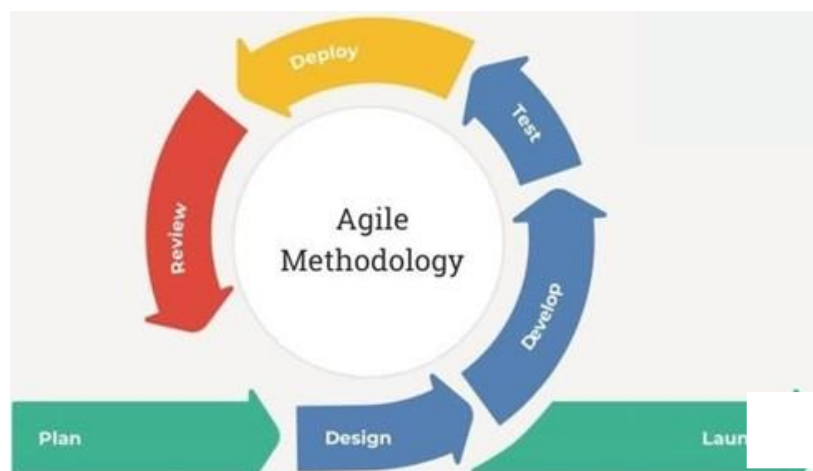
Fig:1 Agile model

i. Requirement Identification

To ensure that the software development project is successful, we have to identified and understood the requirements of the client that includes: The software must be cloud-based to enable remote access. The software must have a user-friendly interface that is easy to navigate and understand. The software must be customizable to meet the specific needs of the client's business processes. The software must have robust security measures to protect sensitive information. The software must have detailed reporting and analytics capabilities to help the client make informed decisions. The software must be scalable to accommodate future growth and changes in the client's business needs.

a. Study of Existing System

It helps to identify the current state of the system, its strengths and weaknesses, and areas for improvement. Its includes a brief description of the current system, its purpose, and its users. It involves an assessment of the requirements of the current system, including its functionality, performance, and usability. It includes a review of the current system's limitations, such as inefficiencies, bottlenecks, and vulnerabilities. It involves gathering feedback from users of the current system to identify areas for improvement. Based on the analysis of the current system, the proposal may outline proposed changes or upgrades to improve the system's performance, functionality, and user experience.

I. Issue and Limitation

A proposal sample may have some common issues and limitations. The proposal may not clearly communicate the purpose, goals, and objectives of the project, leading to confusion and misunderstanding. The proposal may not provide enough information about the problem or issue being addressed, the target audience, or the market demand, making it difficult to assess the feasibility and potential impact of the project. The proposal may not have a realistic or specific timeline for completing the project, leading to delays and cost overruns. The proposal may not have a sufficient budget or resources to achieve the desired outcomes, which can compromise the quality of the project. The proposal may not have a clear plan for evaluating the success of the project or measuring its impact, making it difficult to assess its effectiveness. The proposal may have grammatical errors, spelling mistakes, or poor formatting, which can detract from its credibility and professionalism.

II. Solution

We propose a custom software solution that will address their pain points and provide them with a modern, efficient system. We will design and develop a user-friendly interface that is easy to navigate and understand, making it simple for the client's employees to use the software. Our solution will be customizable to meet the specific needs of the client's business processes, allowing them to tailor the software to their specific requirements. Our solution will have robust security measures to protect sensitive information, including

secure login and data encryption. Our solution will have detailed reporting and analytics capabilities, providing the client with valuable insights into their business operations and enabling them to make informed decisions. Our solution will be scalable, able to accommodate future growth and changes in the client's business needs.

b. Requirement Collection

The project may require certain collections of information to be included to provide a comprehensive understanding of the proposed project. It includes a list of specific requirements that the proposed project must meet, such as functional requirements, performance requirements, or user requirements. It includes a clear definition of the scope of the proposed project, including what is in and out of scope, to avoid misunderstandings and scope creep. It includes a proposed timeline for completing the project, including milestones and deliverables. It includes a detailed breakdown of the proposed budget for the project, including all costs associated with the project, such as personnel, equipment, and materials. It includes any additional documentation that supports the proposed project, such as market research, feasibility studies, or user feedback. Any process of requirement collection has two parts:

1. Functional Requirement:
   The requirement that has been used in Barcob as the functional requirements generally includes that function such as input, the processing and the final output. The functional requirement of Barcob are mentioned below:
   a) User Module:
      i. User login
      ii. Register
      iii. Buy product
      iv. Search product
      v. Rating product
      vi. Review product
      vii. Payment product
      viii. User Logout

    b) Admin Module:

        i.   Admin Login

        ii.   Add Product

        iii.   View Product

        iv.   Delete Product

        v.   Update Product

        vi.   Managing Orders

        vii. Managing Content

        viii. Managing User Date

        ix.   Admin Logout

    c) Purchase Module:

        i.   Can buy products

        ii.   Can buy service

2. Non-Functional Requirement:

Non-functional Requirement refers to the criteria that are not directly related to the system's functionality but are equally important for the system's success. Non-functional requirements are usually more technical in nature and define how the system should perform or behave. Some non-functional requirement of Barcob are:

    i.   Performance
    ii.   Security
    iii. Usability
    iv. Reliability
    v.   Scalability
    vi. Maintainability
    vii. Accessibility

ii. Feasibility Study

The feasibility study is an important component of a proposal, as it assesses the practicality and viability of the proposed project. A feasibility study may include a review of the current market conditions, including supply and demand, competition, and pricing, to determine the potential market for the proposed project .It involves an assessment of alternative approaches to achieving the goals of the proposed project, to determine the most feasible and cost-effective approach.

a. Technical Feasibility

This study is carried out to check the technical feasibility , that is the technical requirements of the system. It includes evaluation of the technical requirements of the proposed project assessment of the availability of necessary hardware, software, and other resources and identification of potential technical risks and challenges.

b. Operational Feasibility

The aspect of study is to check the level of acceptance of the system the user .It includes assessment of the ability of the organization to implement and maintain the proposed project, identification of potential operational risks and challenges and assessment of the compatibility of the proposed project with existing systems and processes.

c. Economic Feasibility

This study is carried out to check the economic impact that the project will have on the system and on the organization includes detailed financial analysis of the proposed project, identification of projected revenues, costs, and profits and analysis of the return on investment Identification of potential economic risks and challenges.

iii. High Level Design of System

The high-level design of a system is used in an e-commerce website to provide a blueprint for how the site will be organized and how it will function. This is a critical step in the development of an e-commerce website because it helps to ensure that the site meets the needs of its users, is easy to navigate, and is able to handle the volume of traffic and transactions that it is likely to receive.

a) System Flow Chart

A system flowchart for an e-commerce website can help to provide a visual representation of how the various components of the website interact with each other to provide a seamless user experience. Here is an example of a system flowchart for an e-commerce website:
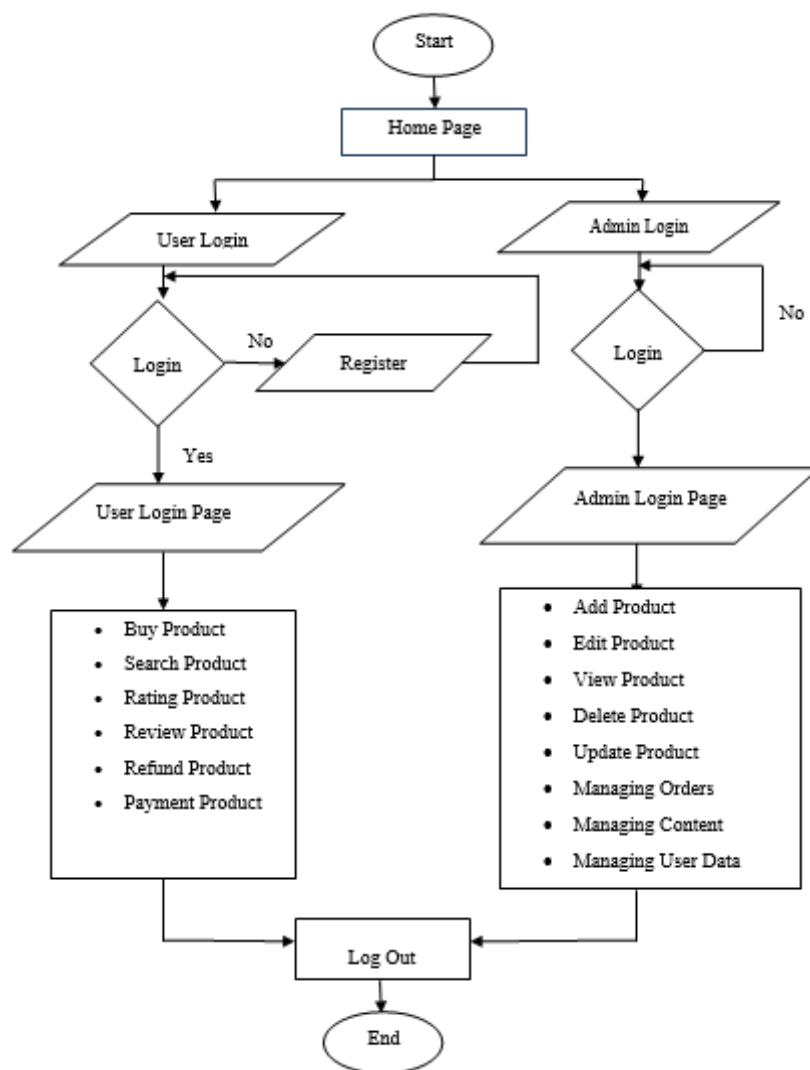

Fig: 2. System Flow Chart

b) Data Flow Diagram

Data Flow Diagram, is a visual representation of the flow of data through a system or process. In the context of an e-commerce website, a DFD can be used to illustrate the processes and data flows involved in the website's operation. DFD of an e-commerce website is a useful tool for understanding and communicating the system's processes and data flows. It can aid in the development and design of an efficient, effective, and user-friendly website.

The primary use of a DFD for an e-commerce website is to provide a clear and concise overview of the system's processes, inputs, outputs, and data flows. By using a DFD, stakeholders, including developers, designers, and project managers, can better understand the system's architecture and functionality. This understanding can aid in the planning, design, and implementation of the website
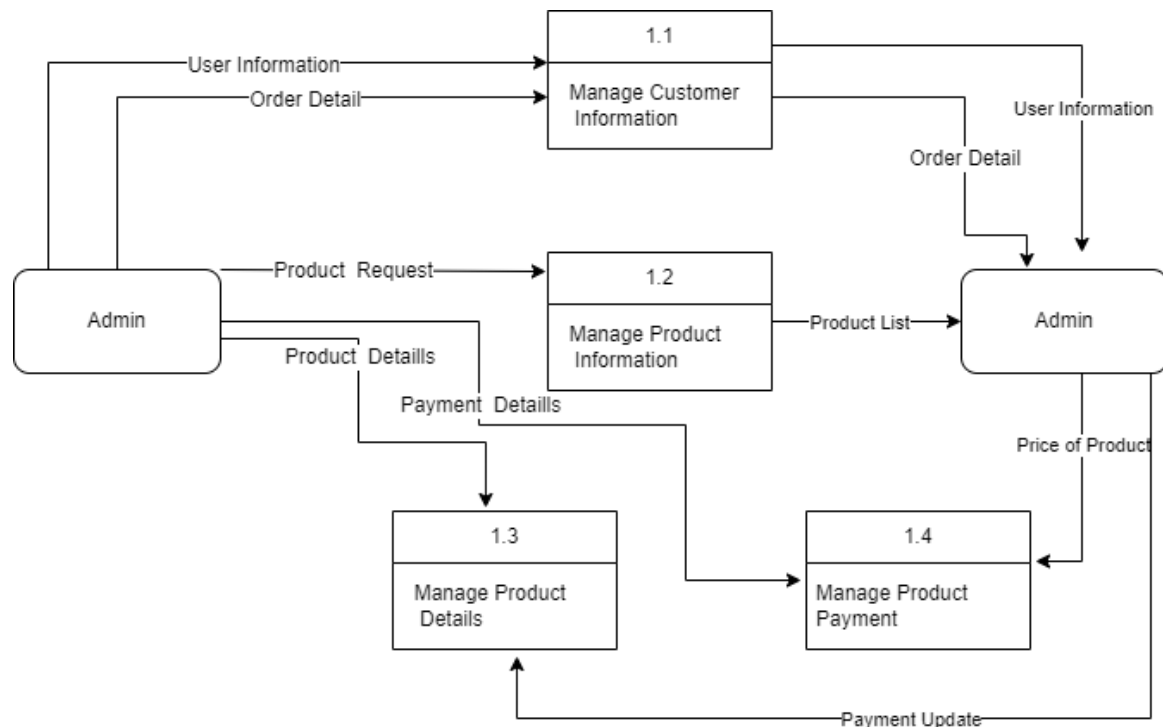

Fig: 3. Data Flow Diagram(Level 1)

c) Use Case Diagram
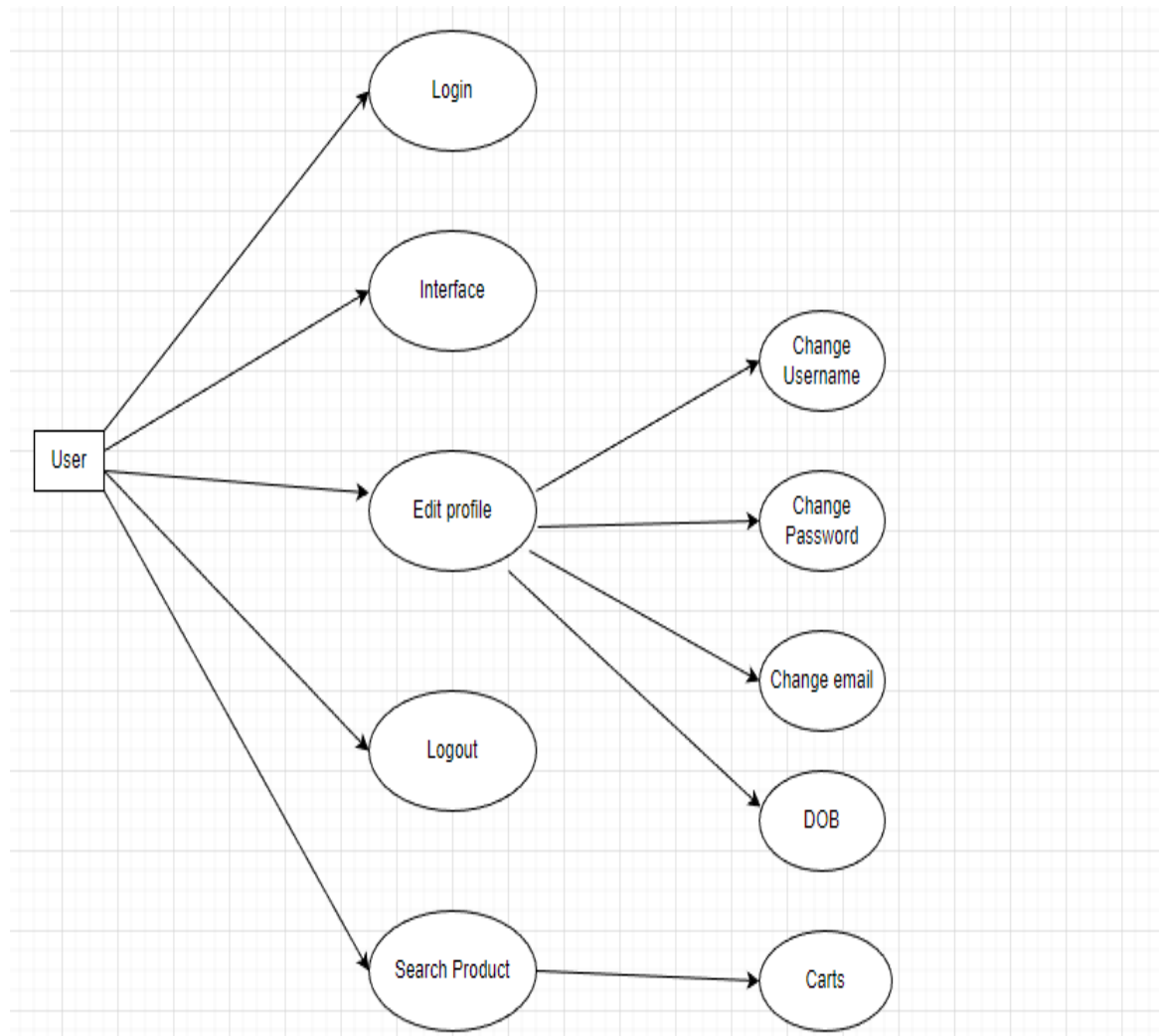
- Admin :

Fig 4: Admin. Use case
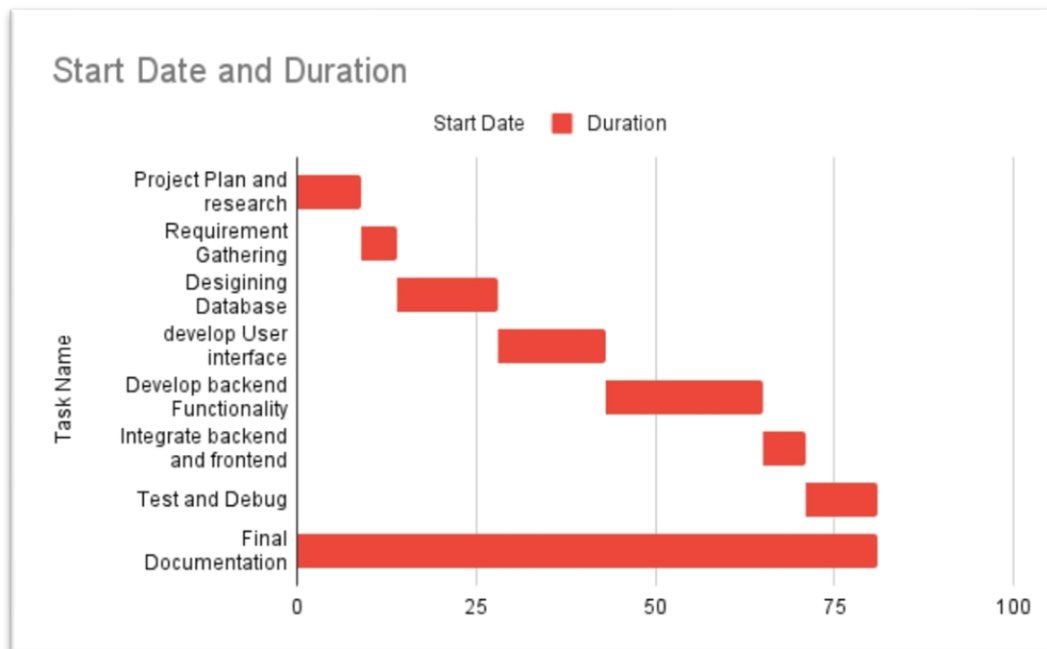
- User

Fig 5: User Use case

Chapter 5 Gantt Chart

Fig: 6 Gantt Chart

Chapter 6 Expected Outcome

It is important provide a clear understanding of the benefits that the business hopes to achieve through the website. By outlining the expected outcomes, the proposal can communicate the value of the website to stakeholders, such as investors, partners, or clients. It can help to evaluate the success of the e-commerce website and measure its return on investment. By establishing benchmarks for performance, businesses can track progress over time and make adjustments as needed to optimize the website for maximum impact. The following section will provide an example of expected outcomes-

1. Increased sales and revenue by providing customers with a convenient way to purchase products online.

2. Expanded market reach by targeting customers beyond the local geographic area, potentially leading to increased brand recognition and growth in new markets.

3. Enhanced Customer Loyalty and Retention through personalized learning experiences, efficient purchasing processes, and loyalty programs

4. Enhanced data collection and analysis, allowing businesses to make data-driven decisions regarding fleet management, pricing strategies, and customer preferences.

5. The website will enable the collection of valuable data on customer preferences, purchasing behavior, and learning trends. This data can be used to make informed, data-driven decisions regarding product offerings, pricing strategies, and marketing efforts.

6. Access to valuable customer feedback and insights through reviews and analytics, enabling continuous improvement and optimization of services.

Chapter 7 Bibliography

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