



Tribhuvan University
Faculty of Humanities and Social Sciences
Mahendra Morang Adarsha Multiple Campus

Supervisor's Recommendation

I hereby recommend that this project prepared under my supervision by **Rahul Agrawal and Ushal Koirala** entitled “**Laundry Management System**” in partial fulfillment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

.....

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LETTER OF APPROVAL

This is to certify that this project prepared by **Ushal Koirala and Rahul Agrawal** entitled “**Laundry Management System**” in partial 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.

.....

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Abstract

This project presents the automation of an online laundry management system (OLMS) for laundry organizations. Laundry firms usually have the challenges of keeping detailed records of customers clothing leading to disappointments on the side of customers. Issues arising include customer clothes mix-ups and untimely retrieval of clothes collected in relation to their owners. This system helps the users track progress on their clothing items. Also, customers' information remain available at all times as it is retained within the system. Each customer is assigned a unique ID on registration to avoid contrasting information. The implementation tools include PHP, JavaScript, HTML, MySQL, Visual Studio code, XAMPP server and a web browser. This solution brings ease to operating the business and controlling work flow; from managing customer information to managing service requests/orders as well as managing service rendition. The design also has a unique and user friendly interface. This affords the users and providers of the service an opportunity to enjoy seamless operations.

Acknowledgement

We would like to express our deepest appreciation and gratitude to all the people who supported for the completion of this project. We would like to express our special thanks to **Roshan Tandukar** for his wholehearted supervision, direction and constructive criticism which has proved to be invaluable support for completion of this report. We would like to express our sincere and enormous gratitude to our BCA coordinator **Dr. Chandra Upadhyay** for his valuable guidance, encouragement, and constant support in the completion of this project. We would also like to express our sincere thanks to our former co-ordinator **Dr. Achut Raj Kattel** for his encouragement, guidance and love for the completion of this project. We are thankful to them for all their support, helps, guidance, motivations, corrections, and encouragement. Their profound knowledge provided us with opportunity to broaden our knowledge and to make significant progress. Finally, we would like to give special thanks to our family and dear friends for their ever-present love and support throughout this Project.

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List of Abbreviations

HTML: HyperText Markup Language

CSS: Cascading Style Sheet

JS: Java Script

PHP: HypertText Pre-Processor

url: Unifrom Resource Locator

DBMS: Database Management System

ER Diagram: Entity Relationship Diagram

DFD: Data Flow Diagram

IDE: Integrated Development Environment

GUI: Graphical User Interface

Chapter 1: Introduction

1.1. Introduction

While digital automation allows countries and businesses to produce goods and services at alarming scale, increasing labour productivity and expanding operations at marginal cost, this could minimize the need for manual workers. Recent advances in automation thus have the potential to affect a radical reshaping of work.

The existing systems in our indigenous environment require numerous paper forms, with data stores spread all over the laundry management infrastructure. Information in this type of system is often incomplete, inaccurate, lost in transit during computation and sometimes duplicated. Therefore, the business workflow is at low ebb. As multiple copies of the same information exist in the laundry firm data, which would lead to data inconsistencies, problems such as mix-up with customer clothing, loss of customer clothing, late delivery, inability to account for certain customer items, inefficient organization methods, insufficient collation of reports for managerial or company use, lack of real-time data back-up in case of mishaps, tend to arise from the existing system and the manual approach to attend these issues, “Problems of Laundry Management System” [1] introduced a management system concept to laundry system. The aim of this study is to leverage on this to implement a version of the proposed management system to help tackle some of the main issues in laundry system domain.

Electronic management system aids easy retrieval and storage and manipulation of records. A significant part of any laundry operation involves the effective management and timely retrieval of data. This information could include but is not limited to; customer information, clothing records, user information, delivery fee and retrieval option, user scheduling as regards customer details and dealings in service rendered, also the products package waiting list. All of this information must be managed efficiently to minimize and maximize available resources in the organization. The use of technology goes a long way in speeding and easing up processes significantly, therefore, technology ought to be used where possible.

A laundry management system is a system that manages laundry related services for customers, providing ease of access through sign-up(s) and log-in(s). With this system, if managed properly, all cleaning services are readily available to

consumers at all times. A computerized system in managing laundry is one that is to serve the consumer and the service provider well. This online laundry management system is aimed to ease management of laundry firms, automating all operations in the process and making it more efficient. It largely aims at stabilizing, standardizing and consolidating data, ensuring data security, integrity, eliminating inconsistencies.

1.2. Problem Statement

Till date, most laundry firms in Nepal more precisely Biratnagar use the manual means or partial-automation to process their customer service and business information. Therefore, the data is inappropriately managed, and generally, management through manual methods is usually laborious and with many setbacks. In manual method or partial-automation, mode of operation is slow, there is also a needless task of taking and documenting customer record repeatedly which in the long run creates redundancy in the system. Other problems that arise from the use of this manual system include loss of customer clothing, inability to account for misplacements, customer mix-ups and late delivery from failed delivery prompts by employees and unavailability of secured back up in case of file or information loss. Hence, the reason for an online system to facilitate laundry management system.

1.3. Objectives

The proposed web-based system has the following features that will be included in the online Laundry system. With the proposed system, the achievable advantages are as follows:

- To develop an online system on which customer will be able to make booking for cleaning services.
- To facilitate laundry owners to manage the records of customer.

1.4. Scope and Limitation

1.4.1. Scope

Laundry Management System is a web-based system which is programmed mainly using JavaScript and PHP. Its main aim is to simplify and improve the efficiency of the laundry managing process for both customer and laundry business owners.

- To utilize resources in an efficient manner by increasing their productivity through automation.
- To assist the owner in capturing the effort spent on their respective working areas.

1.4.2. Limitations

- Online payment system is not integrated.
- Responsiveness of the website lacks in some of the web pages.
- System user must be digitally literate.

1.5. Report Organization

On completion of our project development, we have documented the milestones and the final document report has been organized under the following chapters:

Chapter 1 describes the overall view of the project i.e., the basic problem definition and the general overview of the problem which describes the problem in layman terms. It also specifies the software used and the proposed solution strategy.

Chapter 2 describes the fundamental theories, general concepts and all the terminologies that are related to the project. Whereas in literature review section we review the similar projects done by other and what conclusion they find out by the project. We collect the theories paper and review their documents.

Chapter 3 describes the functional and non-functional requirements for the smooth running of the application. It describes whether the system that is designed is feasible or not. It also contains technical diagrams like the Data Flow Diagram and the Entity Relationship diagram. It also describes the system designing methods like System Architecture Design, Database Schema Design and Physical DFD.

Chapter 4 describes the different technologies used for the entire development process of the Front-end as well as the Back-end development of the application. It

describes the tools that are used to develop the system. How modules are developed and testing for these modules and system. For testing, unit and system testing are described in this section.

Chapter 5 presents the conclusions of the project with future enhancements possible for the project.

Appendices has screenshots of all the implementation i.e., user interface and their description.

Chapter 2: Background Study and Literature Review

2.1. Background Study

The innovation flow of the world has witnessed incredible change in standard of living of people. Laundry management system is a system that handles service of customer, particularly those customer who register with the system. The laundry management system is a system that will ensure a good cleaning service has been done successfully for customer's satisfaction. Due to the part that many laundry in Biratnagar are currently using manual system which is more difficult to handle and has a lot of issue. The problem with the manual system which involve improper data incorrectness, errors recurrent so the writer tries to computerized clean service process in the hope of providing data or information fast, precise, correct and efficient.

Modernized system in managing laundry has been very much acknowledged particularly in developed nations. This service is all around acknowledged in light of the fact that it gives adaptability regarding time for laundry and cleaning to utilize it and this truly encourages them with their time. All the data about the client and staff are kept independently by using manual recording method. It will cause the way toward looking through data take additional time and very difficult. Laundry management is a new system that succeeded the manual system which the majority of laundry and cleaning service used. Laundry management will be created to facilitate the management in the laundry business and to change the manual business cycle to the orderly business measure. The laundry business right now utilize a manual system for the administrative and support of basic data. The current system requires various paper structures, with information stores spread all through the laundry have administrators' groundwork. Frequently data is inadequate or doesn't keep the board principles. Records are frequently lost on the way during calculation required a thorough inspecting cycle to guarantee that no fundamental data is lost. Numerous duplicates of a similar data exist in the laundry and cleaning business data and may prompt irregularities in data in different data stores.

2.2. Literature Review

Romans were the first civilization recorded to have employ dry cleaning [2]. Till now, most day-to-day dry-cleaning business still rely heavily on manual labour,

especially the manual tagging, cataloging and searching of hundreds of customers' clothing. A typical cleaner's business process consists of tagging the clothes, cleaning the clothes, cataloging and grouping the clean clothes based on the tags assigned to the clothes and the customer, and searching for customer's clothes, recording customer information over and over again [3]. These manual methods work but are prone to errors such as mix-ups, loss of customer items and delay in delivery. Thus is the reason to automate laundry system for coordination and control so as to improve job delivery. The laundry management system permits business owners to trail large amounts of specific laundry items faster with high efficiency. By automating the business procedures, one can deal with one's time better and make enlightened business decisions [4]. By using the laundry management system, it is easy to automatically keep tabs on clothing, linens, rags, and other resources, automating the inventory process and accounting.

Chamkilo is the company to bring the revolution in 2017 by taking initiative of establishing an online laundry firm in Nepal. It is the first online laundry firm in Nepal. It is established with vision to provide laundry & dry cleaning services quicker, efficiently and cost effectively to the clients. They wash and dry every clothes with commercial machines and they are able to handle 250kg+ clothes per day. Primarily, their motive was to bring practice of using machines in laundry firms by eliminating hand washing and taking orders using internet [5].

Washmandu provides the smart laundry solution to all our laundry woes. They provide washing, steam ironing and other value added services to make our life free of laundry hassles. On their websites user don't have to login for accessing the services however as if they subscribe to their services they can get or enjoy the perks available or provided by the firm. Also unsubscribed users/customers can place orders for their laundries to be washed/cleaned. They have user friendly user-interface where a customer having less technological habit of using such systems can easily navigate through their websites. A customer can easily view the price list of different types of laundry available. They offer free pickup and delivery [6].

HobyClean a product of Appleton Group LLC, is the world's first and largest Online On-Demand Laundry E-commerce system providing access to a global network of cost effective, efficient and high-quality laundry services through their Online On-Demand platform and mobile apps (iOS and Android). Appleton Group

LLC, a "Global Technology Corporation (Group)" is a Delaware (US) registered Limited Liability Company (LLC), established with the vision of "**Leading globally sustainable digital consumption**" and a Mission of "**Driving sustainable human transformation and superior consumer flexible consumption success through digital transformation, technology and innovation**". Appleton Group LLC is a group leader in the Digital Consumption Section of the Technology Industry. HobbyClean is managed by a global cohort of industry experts [7].

LaundroKart is an **On-Demand Laundry** and Dry-Cleaning Service Company, presently operating in Bengaluru. They provide an affordable and convenient way of getting our laundry done right at our finger-tips. They offer the best online laundry service in Bengaluru (India) and help clients get rid of those extra pile of dirty clothes and deliver them fresh clothes [8].

Pick My Laundry provides premium washing and dry cleaning service leveraging mobile based technology. They pick up our dirty duds from our doorstep and deliver fresh, clean clothes back at our doorstep. Pick My Laundry provides affordable and convenient way of getting our wash, laundry and dry-clean done with prime quality. Their instant pickup at a slot chosen by us with a turnaround time of 48 hours provides us laundry and dry cleaning with best quality. The processing of washing, laundry and dry cleaning is done in best-class setups with Italian equipment and German chemicals. They also do laundry with antiseptic wash, fabric softener and hygienic detergents [9].

Klin Laundromart is a pioneering laundry service in Kathmandu, Nepal. They provide quality, clean and affordable laundry services to customers. Their mission is to provide quality, quick, and clean laundry service at affordable price. They have also chat-bot features with which a customer can easily communicate with. Their service is clear regarding the terms and conditions. We can read service terms and conditions in the about page of the website [10].

Desi Laundry is the first ever online laundry service in North Bengal, India. Apart from providing Dry Cleaning & Laundry Services, **Desi Laundry** offers various other services like Wash & Iron in KG, Carpets Cleaning, Curtain Cleaning, Sofa Cleaning, Shoe Spa, etc. They provide door-to-door service which means they pick

up the clothes for washing and deliver the clothes after washing. The client only has to do is to schedule a pickup using their application for washing and after the clothes are being washed an intimation can be seen sent by firm user has to choose cash on delivery or any other media for payment. This is how **desi laundry** works [11].

In “Design and Implementation of a Laundry Management System” an automated laundry system was developed to improve the efficiency of laundry firms. It provides a friendly GUI which provides to be better when compared to existing system. In this project HTML, CSS and JS is used in front-end and ASP.net is used for back-end programming and MYSQL database was used [12].

In “Smart Laundry Management System” smart laundry system is proposed which will automate the laundry firms. This study helped to enhance the recording system by computerization of the operation of laundry firms in Uganda. In this project HTML, CSS and JS is used in front-end and ASP.net is used for back-end programming and MS-SQL server database was used [13].

“Online Laundry Management System” Presents the automation of an online laundry management system for laundry organizations. This study helps the users track progress on their clothing items, fixes date for collection or arranges drop-offs and communicates directly with business operators. Also, customers’ information remain available at all times as it is retained within the system. Each customer is assigned a unique ID on registration to avoid contrasting information. The implementation tools include PHP, JavaScript, HTML, MySQL, visual studio, WAMP server and a web browser. This solution brings ease to operating the business and controlling work flow; from managing customer information to managing service requests/orders as well as managing service rendition. The design also has a unique and user friendly interface. This affords the users and providers of the service an opportunity to enjoy seamless operations. [4]

Chapter 3: System Analysis and Design

3.1. System Analysis

It is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. System analysis is conducted for the purpose of studying a system or its parts in order to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose.

3.1.1. Requirement Analysis

This system needs to fulfill following functional and non-functional requirements.

- **Functional Requirements**

Some of such requirements needed for our laundry management system are:

- Customer must be able to place the order for washing their clothes.
- Customer must be able to view the business details and the services provided.
- The laundry owner/admin must be able to view the customer details.
- Admin is allowed to add, delete, edit and view the items available to be washed in the business.
- Customer must get message after he/she gets registered into the system successfully.
- Only authentic customer/admin must have access to the system.

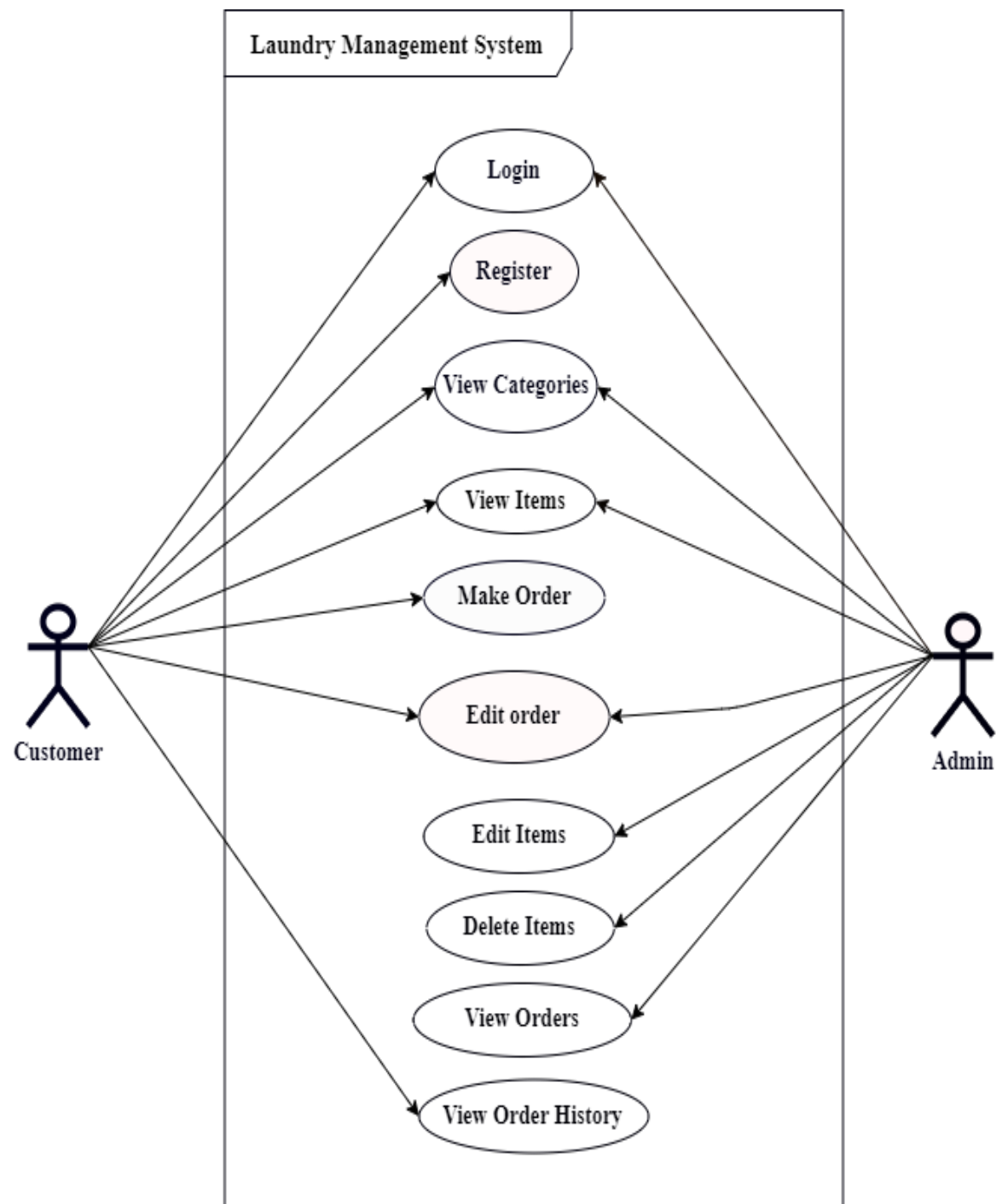


Figure 1: Use case Diagram of Laundry Management System

- **Non-Functional Requirements:**

Non-functional requirements are the requirements that specifies how the system performs a certain function. In other words, a non-functional requirement will describe how a system should behave and what limits there are on its functionality. The non-functional requirements are:

- The data must be stored securely that means an unwanted user must not be allowed to exploit the data.
- The response must not be greater than 1.5 seconds when the active user is less than 5000.
- The data must be backed up so that even after the system gets down it can be re retrieved.
- The user must be able to navigate through the website easily.
- The system must be flexible so that the new requirement can easily be dealt with.
- The maintenance cost of the system must not be very high.

3.1.2. Feasibility Analysis

A feasibility study is an assessment of the practicality of the proposed plan or project. According to its workability, impacts on the organization, ability to meet user needs and effective use of the resources. The main tasks done during feasibility study are:

- **Technical Feasibility**

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The system is the fact that it will be developed on windows 10 platform and a high configuration of 8GB RAM on Intel Core i5-10th Gen processor. The technology or tools used are HTML, CSS, JS, PHP, MYSQL and XAMPP Server. The Google Chrome web browser is used for the testing. So, the system is technically feasible.

- **Economic Feasibility**

Economic analysis could also be referred to as cost/benefit analysis. It is the most frequently used method for evaluating the effectiveness of a new system. The system which is going to be developed does not require any

additional hardware or software as the interface of this system is developed using the existing resources and technologies available more closely.

- **Operational Feasibility**

This project is operationally feasible because

- As to execute the system we need a laptop or an android and a browser which is common to all and used by everyone in today's world.
- The potential users of this system are laundry shop owners and their staffs, who are generally familiar with site navigations and management which is the result of advancement of technology in present world, so little or moderate training level would be required

The system will provide a simple interface for the users to operate.

- **Schedule Feasibility**

This assessment is the most important for project success; after all, a project will fail if not completed on time. In scheduling feasibility, an organization estimates how much time the project will take to complete.

The scheduling feasibility of our system is displayed below:

Table 1: Gantt chart for Laundry Management System

Weeks →	1	2	3	4	5	6	7	8	9	10	11
Activities ↓											
Planning											
Analysis											
Designing											
Implementation											
Testing											
Documentation											

3.1.3. Data Modeling (E-R Diagram)

ER diagram of our system (Laundry Management System) is drawn below:

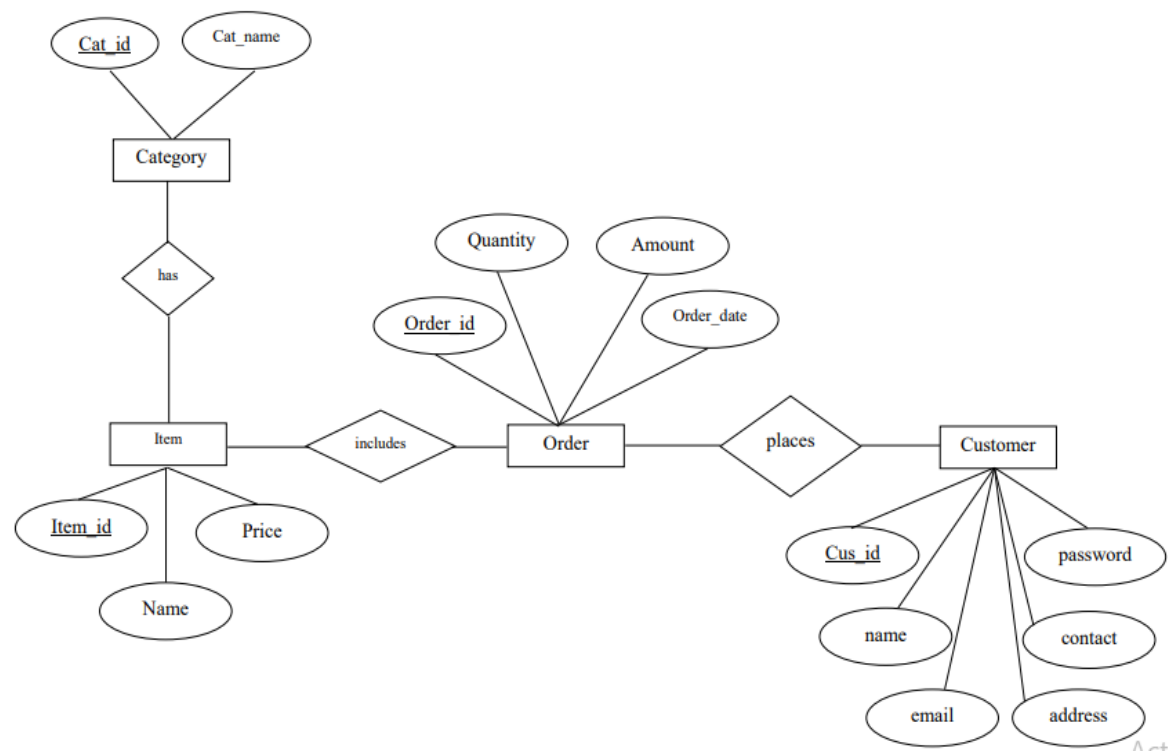


Figure 2: ER- diagram of Laundry Management System

3.1.4. Process Modeling (DFD)

DFD of our system (Laundry Management System) is drawn below:

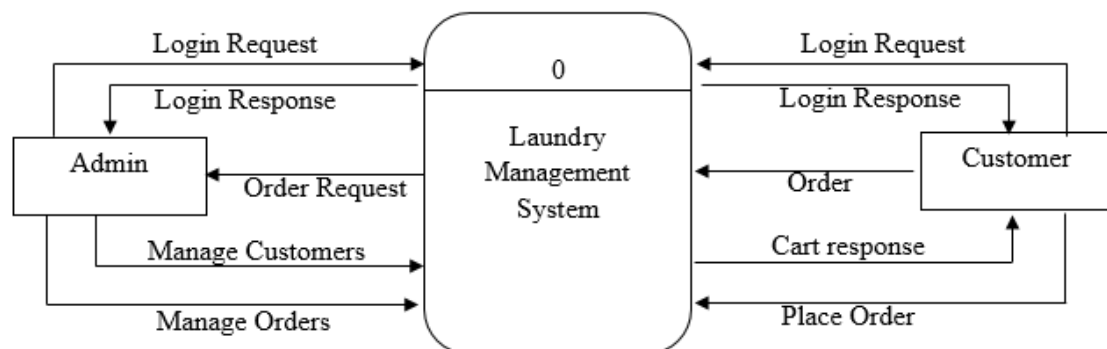


Figure 3: Context Diagram of Laundry Management System

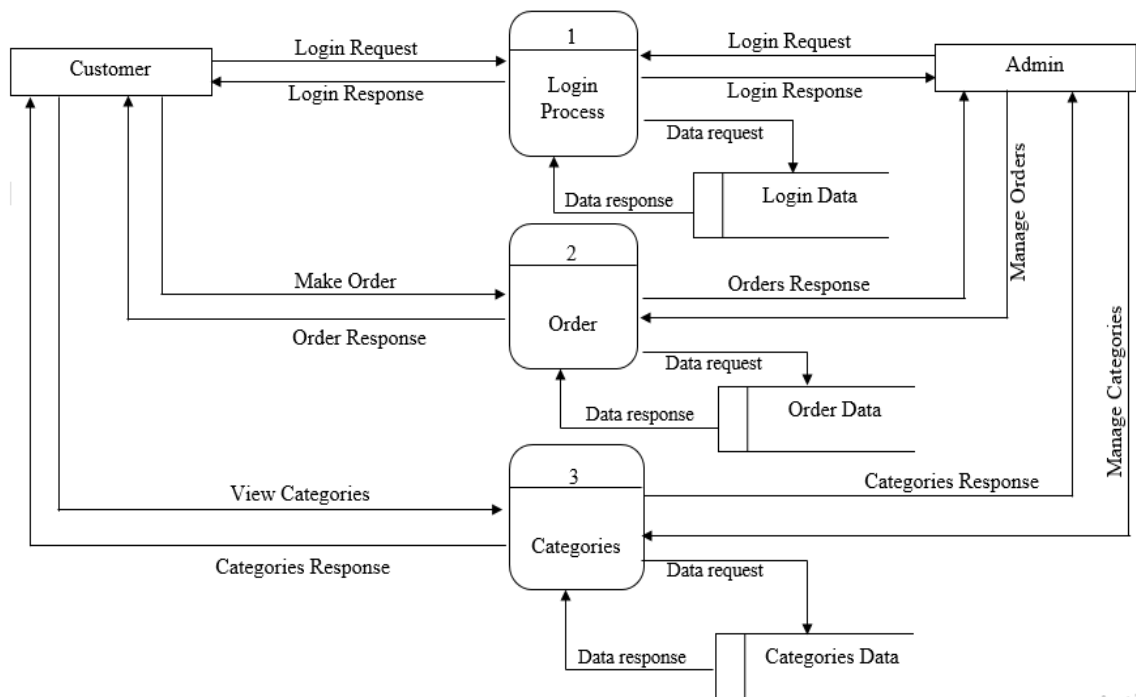


Figure 4: Level 1 DFD of Laundry Management System

3.2. System Design

3.2.1. Architectural Design

The architectural design of our laundry management system is given below:

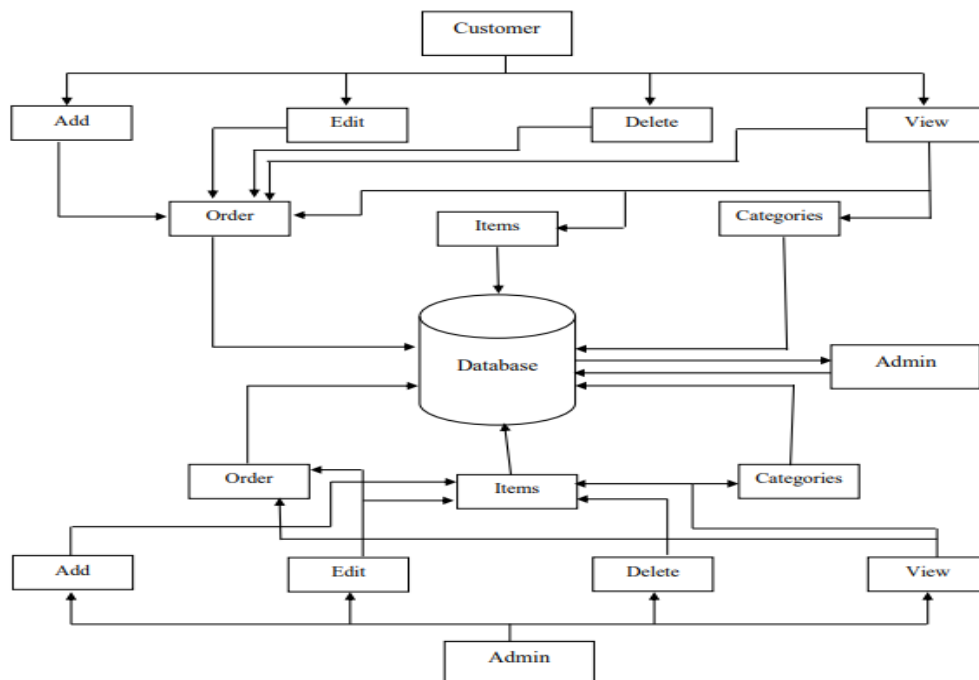


Figure 5: Architectural Design of Laundry Management System

3.2.2. Database Schema Design

The database schema of our laundry management system is given below:

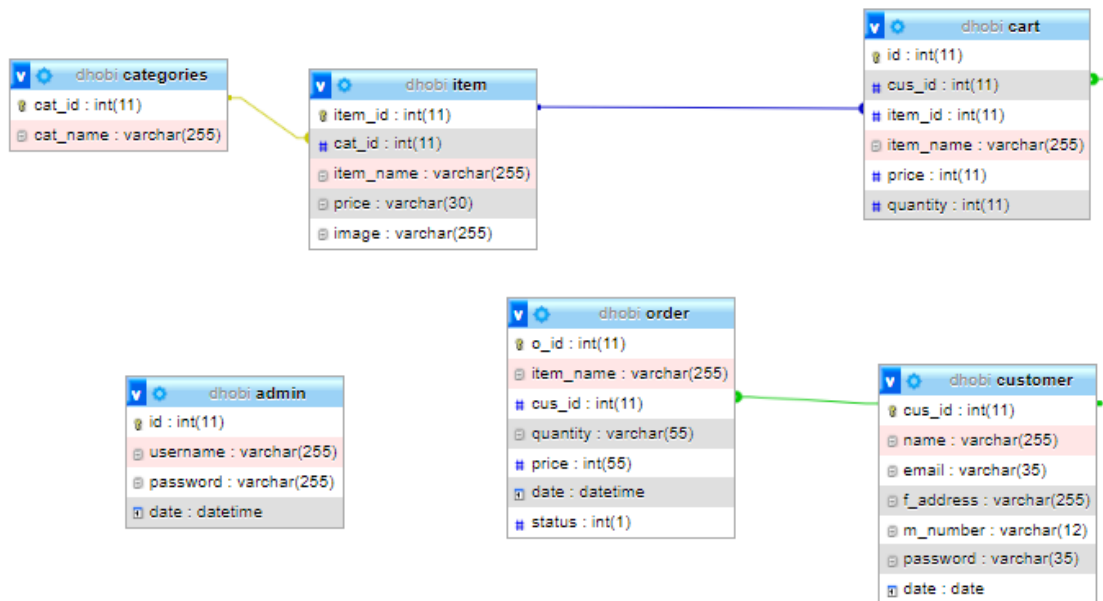


Figure 6: Database Schema Design of Laundry Management System

3.2.3. Interface Design

The interface structure diagrams of our laundry management system is given below:

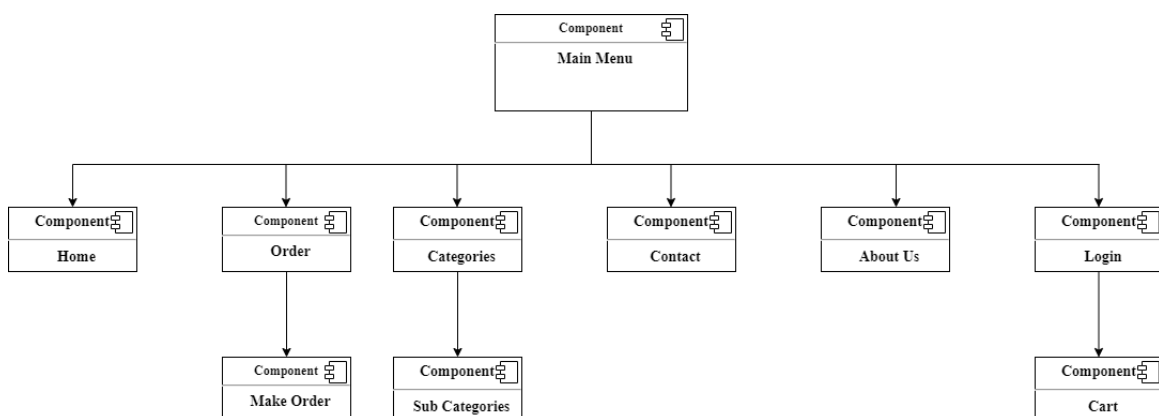


Figure 7: Interface Structure Diagram for Customers

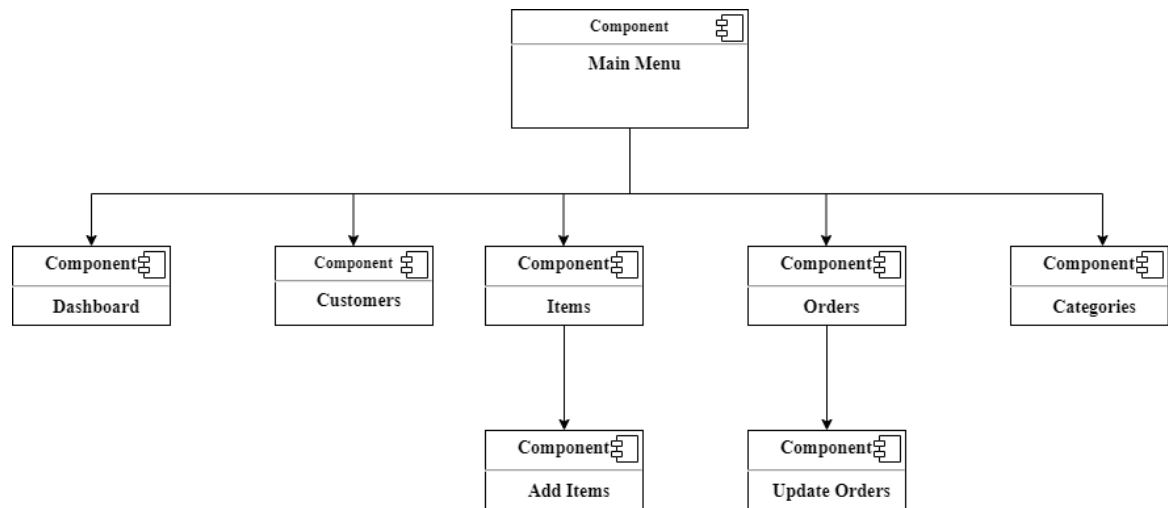


Figure 8: Interface Structure Diagram for Admins

Chapter 4: Implementation and Testing

4.1. Implementation

4.1.1. Tools Used

- **Front End**

- **HTML:** HTML is a markup language use for creating web pages. A structure document like heading, paragraph, list, link, and other items using html have done for this project.
- **CSS:** This CSS helps us to make our documentation attractive using different tools, using colors.
- **JavaScript:** The operations like webpage customization, dynamic change in web content, Users response generation etc. is done using javascript.

- **Back End**

- **PHP:** Over all backend programming has been done with PHP.
- **MySQL:** All data storing in database, order details, price calculation is all related with MySQL.

- **Documentation Tools**

- **Microsoft Word:** Microsoft Word or MS Word (often called Word) is a graphical word processing program that users can type with.

- **Code Editor**

- **VS Code**

Visual Studio Code is an Integrated Development Environment (IDE) developed by Microsoft to develop GUI (Graphical User Interface), console, Web applications, web apps, mobile apps, cloud, and web services, etc.

4.1.2. Implementation Details of Modules

Module Description

The Laundry Management System consists of two modules. Each module of the system is complete module and part of the entire system. The modules given below are the modules which are implemented in our system:

Customer Module

This is the home page for the customer who visits to our website. Whenever a customer requests the page via a browser using correct url this page will display in his/her device. With the help of this interface/module a customer can easily navigate through our website. On this interface a customer can carry out following task:

- He/she can navigate to order page by clicking on the order menu item.
- He/she can view about our website at a glance like:
 - i. A short description
 - ii. Services the business provides

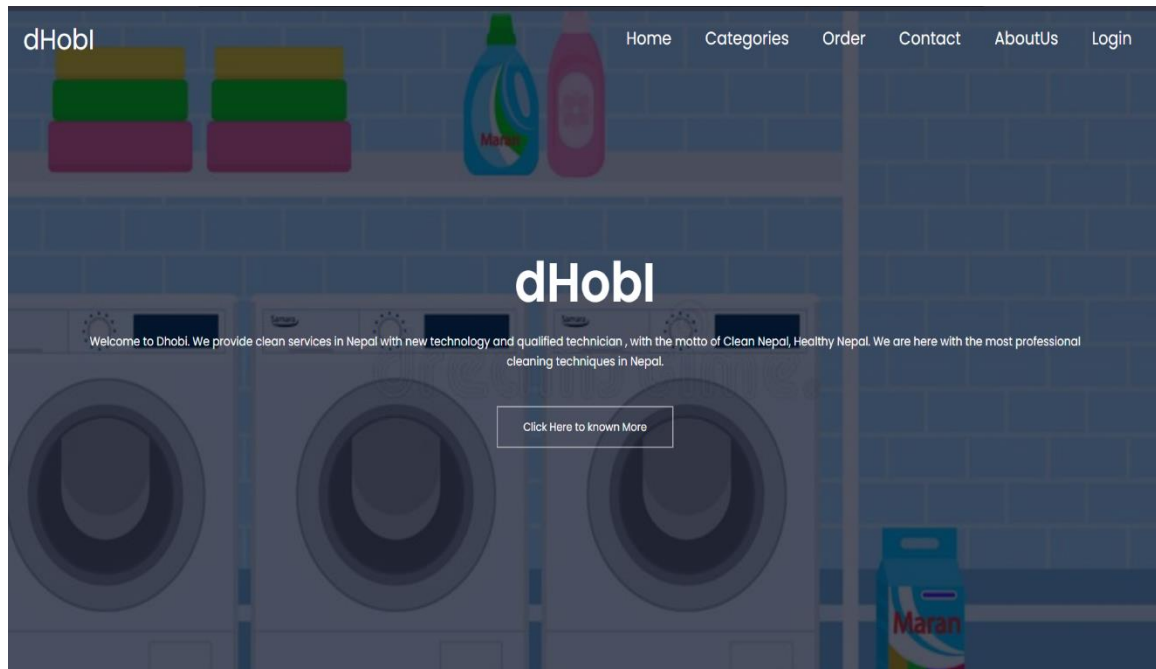


Figure 9: Customer Module of Laundry Management System

Admin Module

This is the module of admin of our system. Admin can easily view the side navbar where all the menu relating to his works lies. The below given interface is the dashboard of admin module. By clicking on the top-right corner button named “Welcome Admin” he/she can logout from the system. He/she can view the order details and also edit its status by clicking on the orders. He/she can edit, delete and view the items available in the system and can also add new items to the system as

per the need. By clicking on the categories, he/she can view the categories details of clothing.

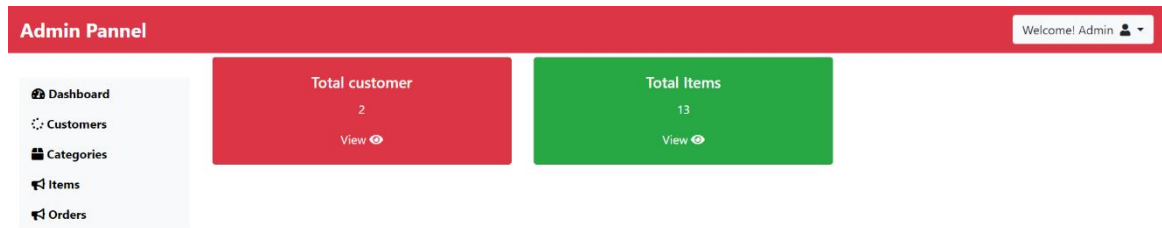


Figure 10: Admin Module of Laundry Management System

4.2. Testing

4.2.1. Test cases for Unit Testing

A unit is the smallest testable part of software. It usually has one or a few inputs and usually a single output. Unit testing is a software development process in which the smallest testable parts of an application, called units, are individually and independently checked for proper operation. Unit testing increases confidence in changing/maintaining code. We have tested module in an attempt to discover any error in the code.

Table 2: Test Cases for unit testing

S.N	Objective	Test Cases	Expected Outcomes	Result	Remarks
1	To check the customer registration process	Filling the following details in the customer's registration form: Username = "Rahul1025" Email = " rahul@gmail.com " Address= "Biratnagar" Mobile number= "9876543210" Password= "Rahul1234@0"	Customer's account is created and customer data is stored inside database successfully	Successful	

2	To check the customer login process	Filling the following details in the login form: Username= “Rahul1025” Password= “Rahul1234@0”	User must logged into his account successfully	Successful	
3	To check the add item process by admin	Filling the following details in the add item form page: Item name= “Lehenga” Choose category= “Garments” Upload image= “lehenga.gif” Price= “75”	Data must be inserted in the item table of the database and customer can see the newly added item	Successful	
4	To check the login process of admin	Filling the following details in the login form: Username= “admin” Password= “root”	Admin must be logged into system successfully	Unsuccessful	Invalid Password
5	To check the process of customer	Following details in the cart of customer: Chosen items = null	Customer must get message order successful and Order data must be stored in the order table of database	Unsuccessful	No item is added to the cart
6	To check the delete item	Items having following details: Item name = “Shirt” Category = “Garments”	Admin must get message item deleted	Successful	

	process by Admin	Image = "shirt.gif" Price = "25" Admin clicks on the delete icon in the items showing page	successfully and the item must also be removed from the database.		
7	To check the edit item process by admin	Items having following details: Item name = "Shirt" Category = "Garments" Image = "shirt.gif" Price = "25" Updated data: Price = "30"	Updated item must be reflected in the database with the updated data and admin must get message item updated.	Successful	

4.2.2. Test Cases for System Testing

System Testing is testing on a complete, integrated system to evaluate the system's compliance with its specific requirements. This testing is done to ensure that the system meet the requirement. System testing involves testing the software code for following:

- Testing the fully integrated applications including external peripherals.
- Verifying through testing every input in the application to check for desired outputs.
- Testing of the user's experience with the application.

We have performed the system testing of my system and achieved the following result.

Table 3: Test Cases for System Testing

S.N	Objectives	Test cases	Expected Outcome	Result
1	To check the ordering process by customer	<p>i. Customer logs in into the website using following credentials: Username= “Rahul1025” Password=“Rahul1234@0”</p> <p>ii. He/she clicks on the order menu item from navbar</p> <p>iii. He/she chooses the items required and it is added into the cart Items included: ➤ Bedsheets ➤ Pants ➤ Shirts</p> <p>iv. He/she clicks onto the “hello Rahul1025” from navbar</p> <p>v. After then he/she follows the navigations provided for checking out</p>	<p>a. Customer must get message order successful.</p> <p>b. Order data must be stored in the order table of database</p>	Successful
2	To add item by the admin	<p>i. Admin logs in into the website filling all the required credentials. Username= “admin” Password= “root”</p> <p>ii. Then, he clicks on the item from the sidebar</p> <p>iii. He clicks on the add sign for adding product</p> <p>iv. He fills in all the required details: Item name = “Shorts” Choose Category = “Garments” Upload image = “shorts.png” Price = “75”</p> <p>v. Then he clicks on the submit button for adding the item</p>	<p>a. Admin gets the alert giving message item added successfully.</p> <p>b. Item is stored inside the database</p>	Successful

Chapter 5: Conclusion and Recommendation

5.1. Outcome and Lesson Learnt

It has been an immense pleasure, honor, and challenge to have this opportunity to take on and complete this project successfully. The project is intended to address the needs that our country's people face as a result of the lack of an online laundry platform. To meet the aforementioned requirements, software was created using HTML, CSS, PHP, and mySQL as a database.

We learnt the following skills throughout the process of developing this project:

- We learned how to analyze a problem from the user's perspective and how to make it more user-friendly by concealing its complexities behind the transaction.
- It was a big help for us to understand and analyze our own skills and interests, which will help us choose our field in the future.
- We investigated how a group effort can cut a problem in half.

5.2. Conclusion

In conclusion, Laundry Management System has to do with making appropriate effort to stop the rising problem to all manual laundry operation in order to enhance the operation of such laundry. In this project, the software or system that can be used to aid all laundries that is still operating manually have been successfully developed. The software can be implementing in all types of laundry as mentioned in the second chapter. The software has a large memory of storing all the services in the laundries and also keeping record it is highly effective and accurate.

5.3. Recommendations

In the development of this laundry management system, I will recommend that if there is going to be any modification the new writer should endeavor to improve on the limitations such as changing the graphical user interface of the system to further increase the system architecture and to satisfy users need. There are some limitations during the development of this laundry management system that will require improvement as stated in previous chapters, writer should put them in mind and face it as a challenge and not a problem.

Appendices

Screenshots

We have included some of the screen shots of our system here:

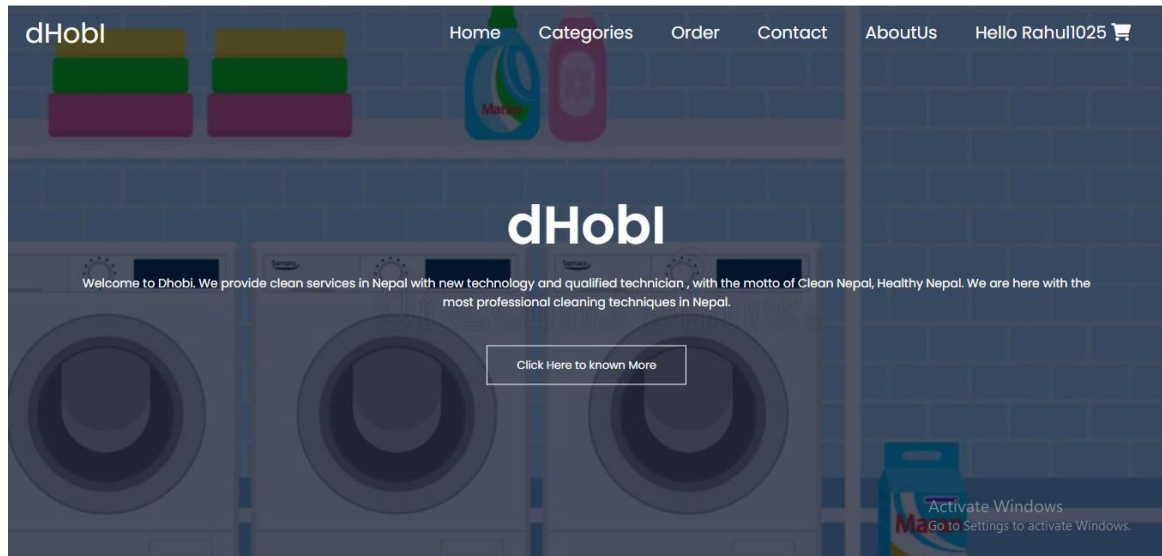


Figure 11: Home Page for Customer

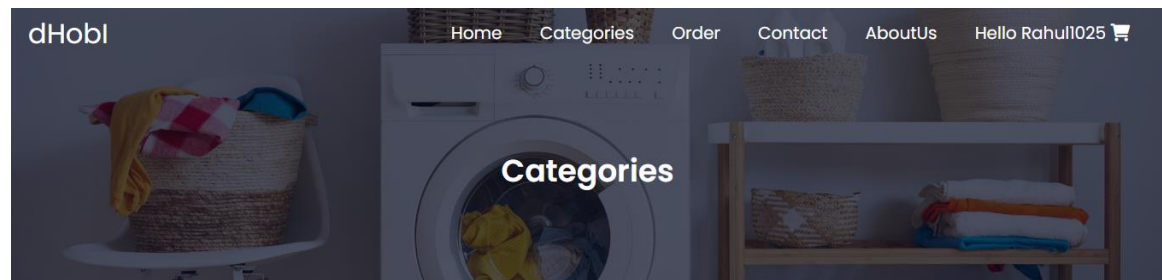


Figure 12: Categories Page for Customer

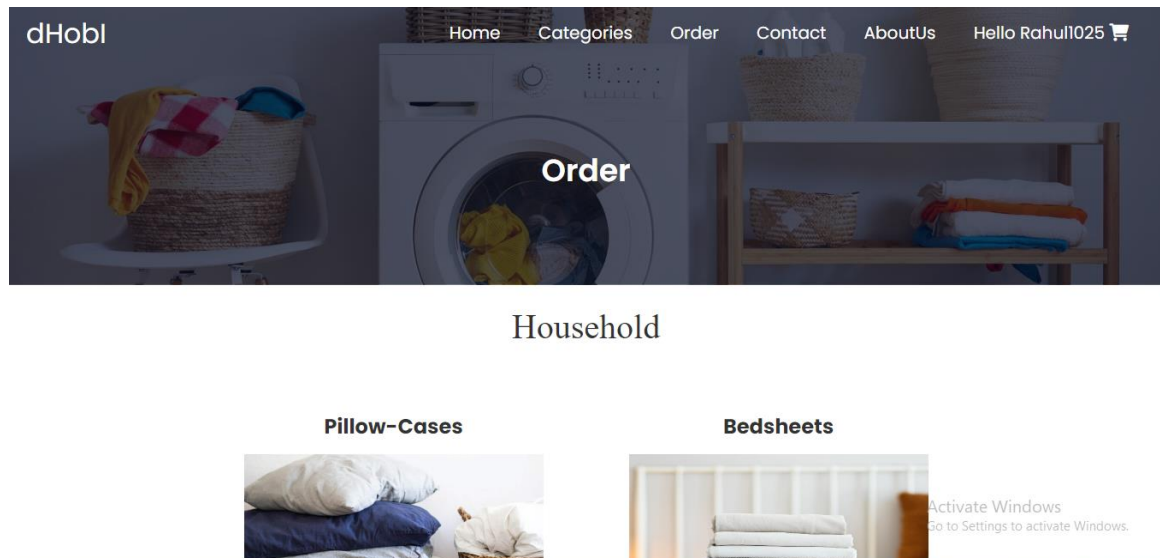


Figure 13: Order Page for Customer

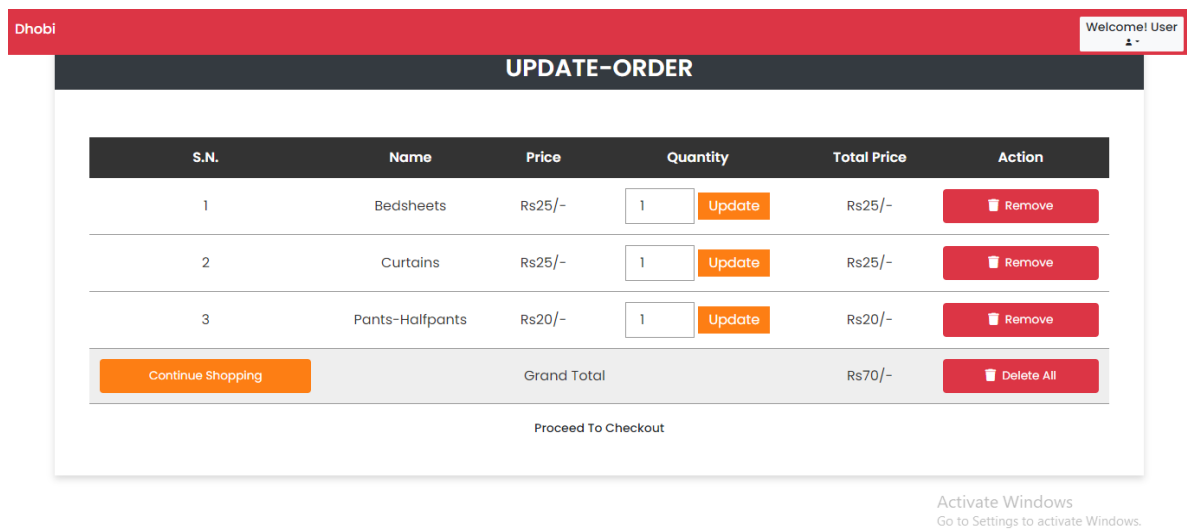


Figure 14: Cart Page

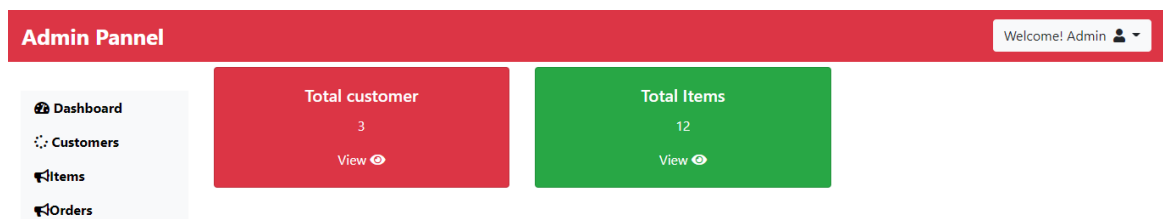


Figure 15: Admin's Dashboard

Admin Pannel

Welcome! Admin

Dashboard
Customers
Items
Orders

Customers

ID	Name	Email	Address	Number	Action
1	user	user@gmail.com	Biratnagar	9812345698	
2	Niraj	niraj@gmail.com	Biratnagar	9874561230	
3	Rahul1025	agrawal.rahul.1025@gmail.com	Chaudandigadhi-06, Udayapur	9862915029	

Figure 16: Customer's Page

Admin Pannel

Welcome! Admin

Dashboard
Customers
Items
Orders

ITEMS

SN	Item Name	Category	Item Price	Action	
1	Pillow-Cases	Household	15		
2	Bedsheets	Household	25		
3	Pants-Halfpants	Garments	20		
4	Jackets	Garments	25		
5	Curtains	Household	25		
6	Blankets	Household	40		

Figure 17: Items' Page

Admin Pannel

Welcome! Admin

Dashboard
Customers
Items
Orders

Orders

SN	Item Name	Customer	Total Price	Date ordered	Status
1	Pillow-Cases, Pants-Halfpants	Niraj	50	2022-08-05 07:12:43	Pending
2	Curtains	Niraj	25	2022-08-05 07:13:12	Completed
3	Carpets	Niraj	160	2022-08-05 07:18:49	Pending
4	Bedsheets, Curtains, Pants-Halfpants	Rahul1025	70	2022-08-06 01:03:27	Completed

Activate Windows
Go to Settings to activate Windows.

Figure 18: Orders' Page

Source Codes:

Code written by a programmer in a high-level language and readable by people but not computers. Source code must be converted to object code or machine language before a computer can read or execute the program.

Some of the source code of laundry management system are pasted below. First of all let's see the source code of order.php which is used for placing the order by the user.

```
<?php
include('../dbconn.php');
include('../include/header.php');
?>
<?php
if (isset($_SESSION['user_id'])) {
    if (isset($_POST['submit'])) {
        $item_id = $_POST["item_id"];
        $item_name = $_POST["item_name"];
        $price = $_POST["price"];
        $quantity = 1;
        $user = $_SESSION["user_id"];
        $select_cart = mysqli_query($con, "SELECT * FROM `cart` WHERE item_name = '$item_name' AND cus_id = '$user'");
        if (mysqli_num_rows($select_cart) > 0) {
            echo '<script>alert("Product already added to cart")</script>';
        } else {
            $insert_product = mysqli_query($con, "INSERT INTO `cart`(`cus_id`, `item_id`, `item_name`, `price`, `quantity`) VALUES('$user', '$item_id','$item_name', '$price', '$quantity')");
            echo '<script>alert("Product added to cart succesfully")</script>';
        }
    }
} else {
    header('location:../login/login.php');
}
?>
<section class="sub-header">
    <?php
```

```

    if (isset($message)) {
        foreach ($message as $message) {
            echo '<div class="message"><span>' . $message . '</span> <i class="fas fa-times"
onclick="this.parentElement.style.display = `none`; "></i> </div>';

        };
    };
    include('../include/nav.php');
    ?>
    <h1>Order</h1>
</section>
<section class="container content-section">
    <br>
    <h2 class="section-header">Household</h2>
    <div class="row">
        <div class="col-sm-12 col-md-6">
            <div class="shop-items">
                <?php
                $sql = "SELECT * FROM item WHERE cat_id=1";
                $result = mysqli_query($con, $sql);
                if (mysqli_num_rows($result) > 0) {
                    foreach ($result as $row) {
                        ?>
                            <div class="col-sm-12 col-md-6">
                                <div class="shop-item">
                                    <form action="" method="POST">
                                        <span class="shop-item-title"><?php echo $row['item_name'];
?></span>
                                        
                                        <div class="shop-item-details">
                                            <span class="shop-item-price">Rs<?php echo $row['price']; ?>
per piece</span>
                                            <input type="hidden" name="price" value="<?php echo
$row['price'] ?>">
                                            <input type="hidden" name="item_name" value="<?php echo
$row['item_name'] ?>">

```

```

        <input type="hidden" name="item_id" value="<?php echo
$row['item_id'] ?>">
        <input class="btn btn-primary " name="submit" value="ADD TO
CART" type="submit">
    </form>
</div>
</div>
</div>
<?php } ?>

<?php } ?>
</div>
</div>
</div>
</section>
<style type="text/css">
    hr {
        width: 70%;
        margin: auto;
        position: relative;
        height: 3px;
        background: black;
        margin-bottom: 50px;
    }
</style>
<hr>
<section class="container content-section">
    <br>
    <h2 class="section-header">Garments</h2>
    <div class="row">
        <div class="col-sm-12 col-md-6">
            <div class="shop-items">
                <?php
                $sql = "SELECT * FROM item WHERE cat_id=2";
                $result = mysqli_query($con, $sql);
                if (mysqli_num_rows($result) > 0) {

```

```

        foreach ($result as $row) {
?>
            <div class="col-sm-12 col-md-6">
                <div class="shop-item">
                    <form action="" method="POST">
                        <span class="shop-item-title"><?php echo $row['item_name'];
?></span>
                            
                                <div class="shop-item-details">
                                    <span class="shop-item-price">Rs<?php echo $row['price']; ?>
per piece</span>
                                        <input type="hidden" name="price" value="<?php echo
$row['price'] ?>">
                                            <input type="hidden" name="item_name" value="<?php echo
$row['item_name'] ?>">
                                                <input type="hidden" name="item_id" value="<?php echo
$row['item_id'] ?>">
                                                    <input class="btn btn-primary " name="submit" value="ADD TO
CART" type="submit">
                                                        </form>
                                                    </div>
                                                </div>
                                            </div>
                                        <?php } ?>
                                    <?php } ?>
                                </div>
                            </div>
                        </div>
                    </section>
                <br>
                <!--About Us-->
                <?php
include('../../include/footer.php');
?>

```

Now let's see the source code of **order/index.php** which is used for user to submit for raising donation.

```

<?php
include('../dbconn.php');

// session_start();
if (!isset($_SESSION['ADMIN_NAME'])) {
    $_SESSION['msg'] = "Access Denied";
    header('location:../login.php');
}
?>
<!doctype html>
<html lang="en">

<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Custom Css -->
    <link rel="stylesheet" href="../css/style.css">

    <!-- Fontawesome CDN -->
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.10.0-1/css/all.min.css" integrity="sha512-wDB6AYiYP4FO5Sxieamqy9wtpAY3qdHMqlhZecIEUu1YjkLw5gQf/4ZDgOzmCBAF5SheMjmugkpUSVoUrGbLkQ==" crossorigin="anonymous" />

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css" integrity="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkGIXeMed4M0jlfIDPvg6uqKI2xXr2" crossorigin="anonymous">

    <title>Admin's Dashboard</title>
</head>

<body>
    <nav class="navbar navbar-expand-lg navbar-light bg-danger fixed-top">
        <a class="navbar-brand text-white font-weight-bold py-1 font-25" href="../dashboard.php">Admin Pannel</a>
        <div class="dropdown ml-auto">
            <button class="btn btn-light dropdown-toggle" type="button" id="dropdownMenuButton" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
                Welcome! Admin <i class="fas fa-user pl-1"></i>
            </button>
            <div class="dropdown-menu" aria-labelledby="dropdownMenuButton">
                <a class="dropdown-item" href="../logout.php"><i class="fas fa-sign-out-alt"></i> <span>Logout</span></a>
            </div>
        </div>
    </nav>

```



```

        </div>
    </div>
</div>

</nav>

<div class="container-fluid">
    <div class="row mt-5">
        <div class="col-md-2 col-sm-12 mt-5 ml-0">
            <ul class="nav flex-column bg-light">
                <li class="nav-item">
                    <a class="nav-link active font-weight-bold" aria-current="page"
href=" ../dashboard.php" style="color: black;">
                        <i class="fas fa-tachometer-alt"></i> Dashboard</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link active font-weight-bold" aria-current="page"
href=" ../customers/index.php" style="color: black;">
                        <i class="fas fa-spinner"></i> Customers</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link active font-weight-bold" aria-current="page"
href=" ../categories/index.php" style="color: black;">
                        <i class="fas fa-box"></i> Categories</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link active font-weight-bold" aria-current="page"
href=" ../items/index.php" style="color: black;">
                        <i class="fas fa-bullhorn"></i> Items</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link active font-weight-bold" aria-current="page"
href=" ../orders/index.php" style="color: black;">
                        <i class="fas fa-bullhorn"></i> Orders</a>
                </li>
            </ul>
        </div>
        <div class="col-10 mt-3">
            <div class="shadow">
                <p class="text-center font-weight-bold text-white p-2 bg-dark">Orders</p>
                <div class="p-5 table-responsive">
                    <table class="table table-bordered my-2">
                        <thead>
                            <tr>
                                <th class="text-center" scope="col">SN</th>
                                <th class="text-center" scope="col">Item Name</th>
                                <th class="text-center" scope="col">Customer</th>
                                <th class="text-center" scope="col">Quantity</th>
                                <th class="text-center" scope="col">Total Price</th>
                                <th class="text-center" scope="col">Date ordered</th>

```

```

        <th class="text-center" scope="col">Status</th>
    </tr>
</thead>
<tbody>
    <?php

    $sql = "SELECT * FROM `order`";
    $i = 1;

    $result = mysqli_query($con, $sql);

    if (mysqli_num_rows($result) > 0) {
        while ($data = mysqli_fetch_assoc($result)) {

            $userid = $data['cus_id'];
            $query = "SELECT `name` FROM `customer` WHERE cus_id =
$userid";

            $result_name = mysqli_query($con, $query);
            $data1 = mysqli_fetch_assoc($result_name);
            ?>

            <tr>
                <th class="text-center" scope="row"><?php echo $i; ?></th>
                <td class="text-center"><?php echo $data['item_name'];

                <td class="text-center"><?php echo $data1['name']; ?></td>
                <td class="text-center"><?php echo $data['quantity']; ?></td>
                <td class="text-center"><?php echo $data['price']; ?></td>
                <td class="text-center"><?php echo $data['date']; ?></td>
                <td class="text-center">
                    <?php
                    if ($data['status'] == 1) {
                        echo '<p> <a href="status.php?id=' . $data['o_id'] .
'&status=0" class="btn btn-success"> Approved </a> </p>';
                    } else {
                        echo '<p> <a href="status.php?id=' . $data['o_id'] .
'&status=1" class="btn btn-danger"> Pending </a> </p>';
                    }
                ?>
            </td>
        </tr>

        <?php
        $i++;
    }
    ?>

</tbody>
</table>

```

```
    </div>
  </div>
</div>
</div>
</div>
```

```
    <script    src="https://code.jquery.com/jquery-3.5.1.slim.min.js"    integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>
```

```
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
ho+j7jyWK8fNQe+A12Hb8AhRq26LrZ/JpcUGGOn+Y7RsweNrtN/tE3MoK7ZeZDyx"
crossorigin="anonymous"></script>
```

```
</body>
```

```
</html>
```

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