LAUNDRY MANAGEMENT SYSTEM

A project report submitted to

DEPARTMENT OF INFORMATION TECHNOLOGY

in partial fulfillment of the requirements for the award of the degree

BACHELOR OF COMPUTER APPLICATIONS

Submitted by

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DEPARTMENT OF INFORMATION TECHNOLOGY

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MARCH – 2020

DEPARTMENT OF INFORMATION TECHNOLOGY

St. JOSEPH'S COLLEGE (AUTONOMOUS),

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CERTIFICATE

This is to certify that the project work titled **"LAUNDRY MANAGEMENT SYSTEM"** is a bona fide report of **DHINESH A, D NO. 17UBC545** submitted to Department of Information Technology in partial fulfillment of the requirements for the award of the Degree of **Bachelor of Computer Applications** under my guidance and supervision from November 2019–March 2020.

HEAD OF THE DEPARTMENT **SIGNATURE OF THE GUIDE**

The Viva-Voce Examination conducted on_____

INTERNAL EXAMINER **EXTERNAL EXAMINER**

Date: Date:

ACKNOWLEDGEMENT

First and for most, I am graceful to the GOD Almighty, who has showered his blessing on me throughout this project and who has been an ineffable source of strength and inspiration in completing the project.

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DHINESH A

(17UBC545)

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1. INTRODUCTION

1.1 About the Project

The project is entitled as **"LAUNDRY MANAGEMENT SYSTEM".** It is an online application. In this project administrator can add, view and maintain product details. The customer can create their own account. After creating their account, customer can login and place their orders. Then administrator can view and confirm the orders. When order is confirmed the company employees contact you and pick your orders. After dry clean they will door deliver the order. Now-a-days many people don't have enough time to take cloth to laundry. This application will helps you to make this work easier. This application is user friendly and basic knowledge is enough to use this application. This application reduced as much as possible to avoid errors while entering data. It also produces error message will entering invalid data. Order through this application will save your time and money.

2. STYSTEM STUDY

2.1 Existing System

The existing system contains only contact details, reviews and gallery. There is no login for customers and administrator. If any customer wants to place an order they need to contact laundry shop to place orders. In this process customer can't know the price of the each product and total amount. The customer can't see the previous order details.

2.2 Disadvantages of Existing System

- Time consuming
- Less Efficient
- Not User Friendly
- Data Redundancy
- More Manual Work Required
- Less Accurate

2.3 Proposed System

LAUNDRY MANAGEMENT SYSTEM is application software and it is user-friendly for customer and administrator. Through this application administrator can add and view product details easily. After that customers can view the product details and place the orders. After that administrator can view the orders and confirm the orders. It reduces the man power and time. These are no need to contact the administrator.

2.4 Advantages of Proposed System

- The ordering process becomes faster and more consistent.
- After registration and login customer can use the system to view the product detail and place their order. So this will save time.
- Provides good communication for the customer.
- Easy to access the system where ever and any time.

2.5 Problem Definition and Description

Now-a-days customers need an application which is user-friendly and contain more detail about the products. In this application, customer can know their order status. This application is in user-friendly manner for customer. In this application, customer can place their orders and administrator can view orders and confirm or cancel the customer orders.

This project contains the following modules are,

Admin Module

- User Details
- Request Details
- Delivery Status
- Manage Price
- Queries

User Module

- Registration and Login
- Laundry Request
- Request Status
- About

3. SYSTEM ANALYSIS

3.1 Package Selected

FRONT END : PHP

BACK END : MYSQL

3.2 Resources Selected

Hardware Resources

Processor : Intel core i5 processor

RAM : 2.53 GHz

Hard Disk : 40GB

Key Board : Standard Windows Keyboard

Mouse : Optical

Monitor : Samsung

Software Resources

Operating System : Windows 7

IDE : Notepad++

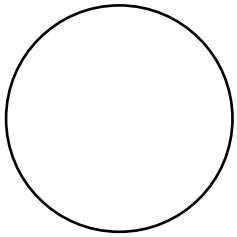
Server : Xamp Server

Browser : Google Chrome

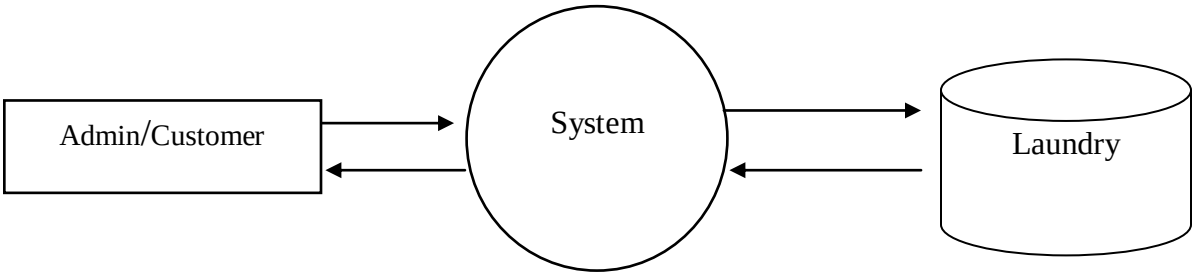
Documentation : Microsoft Word 2007

3.3 Data Flow Diagram

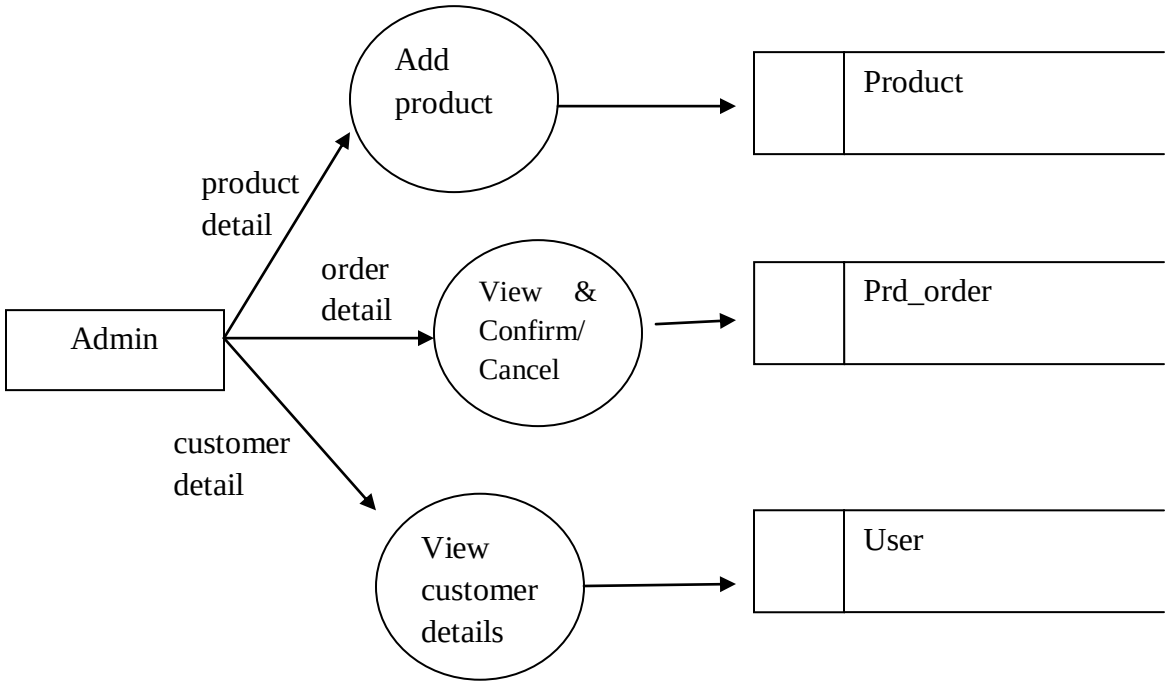
A two-dimensional diagram explains how data is processed and transferred in a system. The graphical depiction identifies each source of data and how it interacts with other data sources to reach a common output. Individuals seeking to draft a data flow diagram must identify external inputs and outputs, determine how the inputs and outputs relate to each other, and explain with graphics how these connections relate and what they result in. This type of diagram helps business development and design teams visualize how data is processed and identify or improve certain aspects.

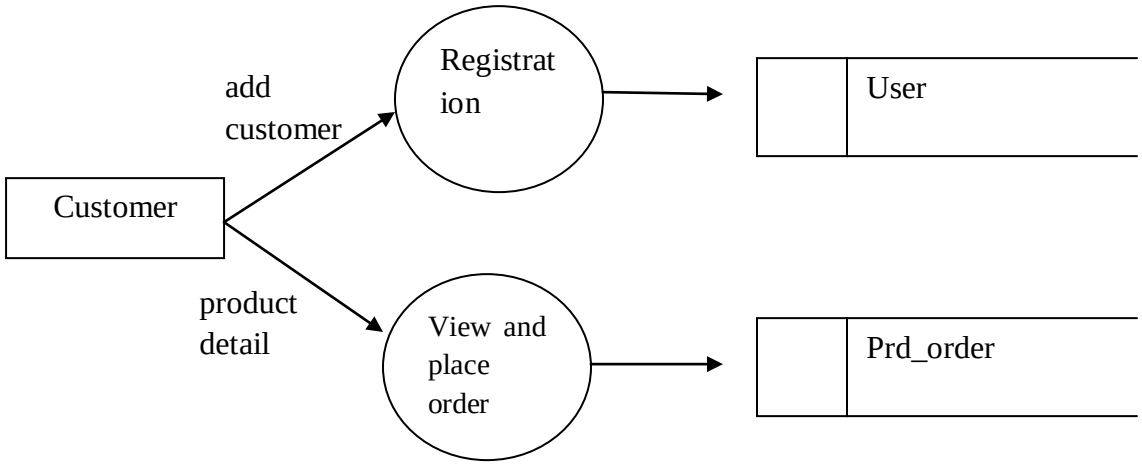
Symbol	**Description**
	An **entity**. A source of data or a destination for data.
	A **process** or task that is performed by the system.
	A **data store**, a place where data is held between processes.
	A **data flow**.

Level 0

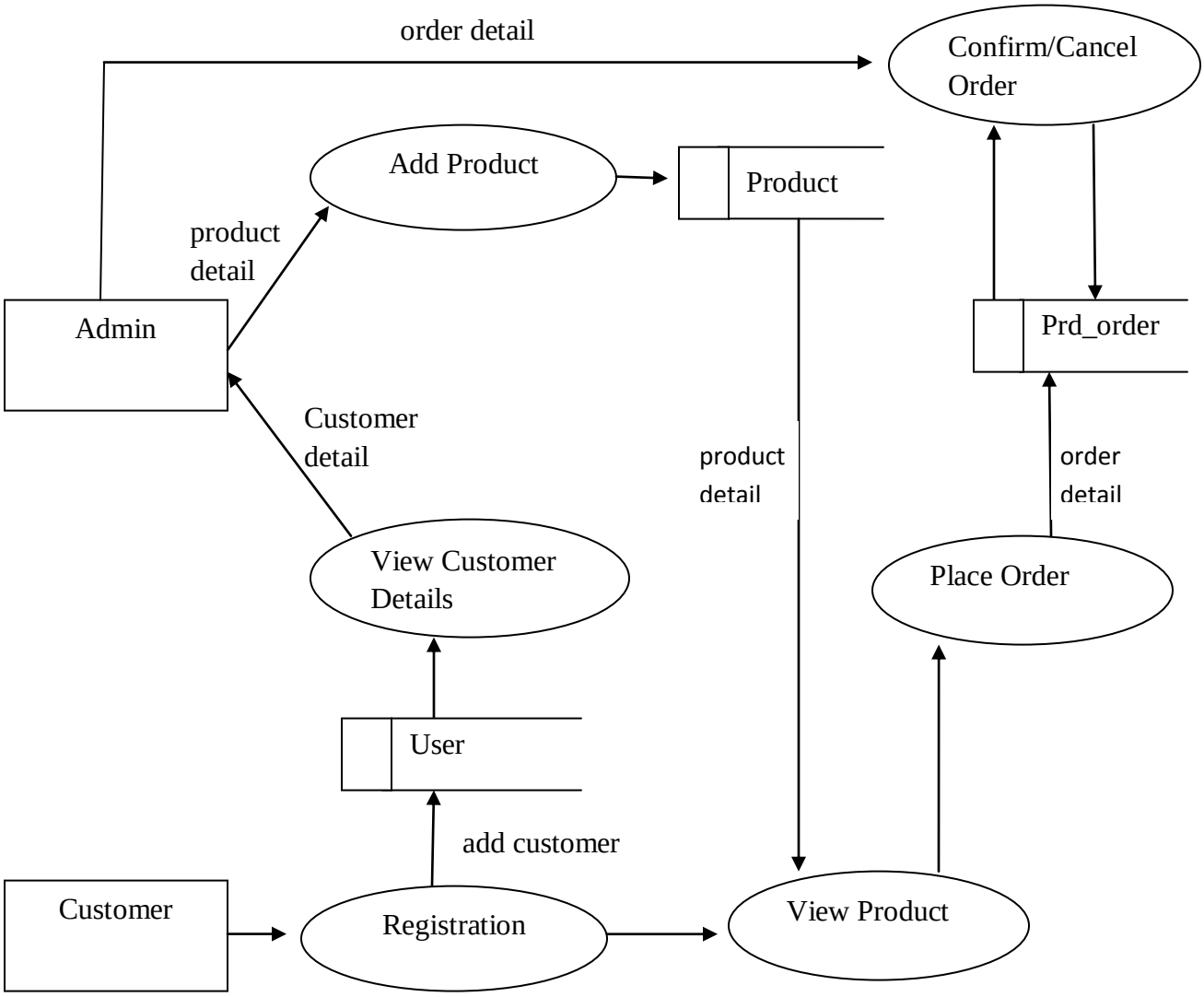


Level 1


Add product
Product
product detail
order detail
View & Confirm/ Cancel
Prd_order
Admin
customer detail
View customer details
User


Registrat ion
User
add customer
Customer
product detail
View and place order
Prd_order

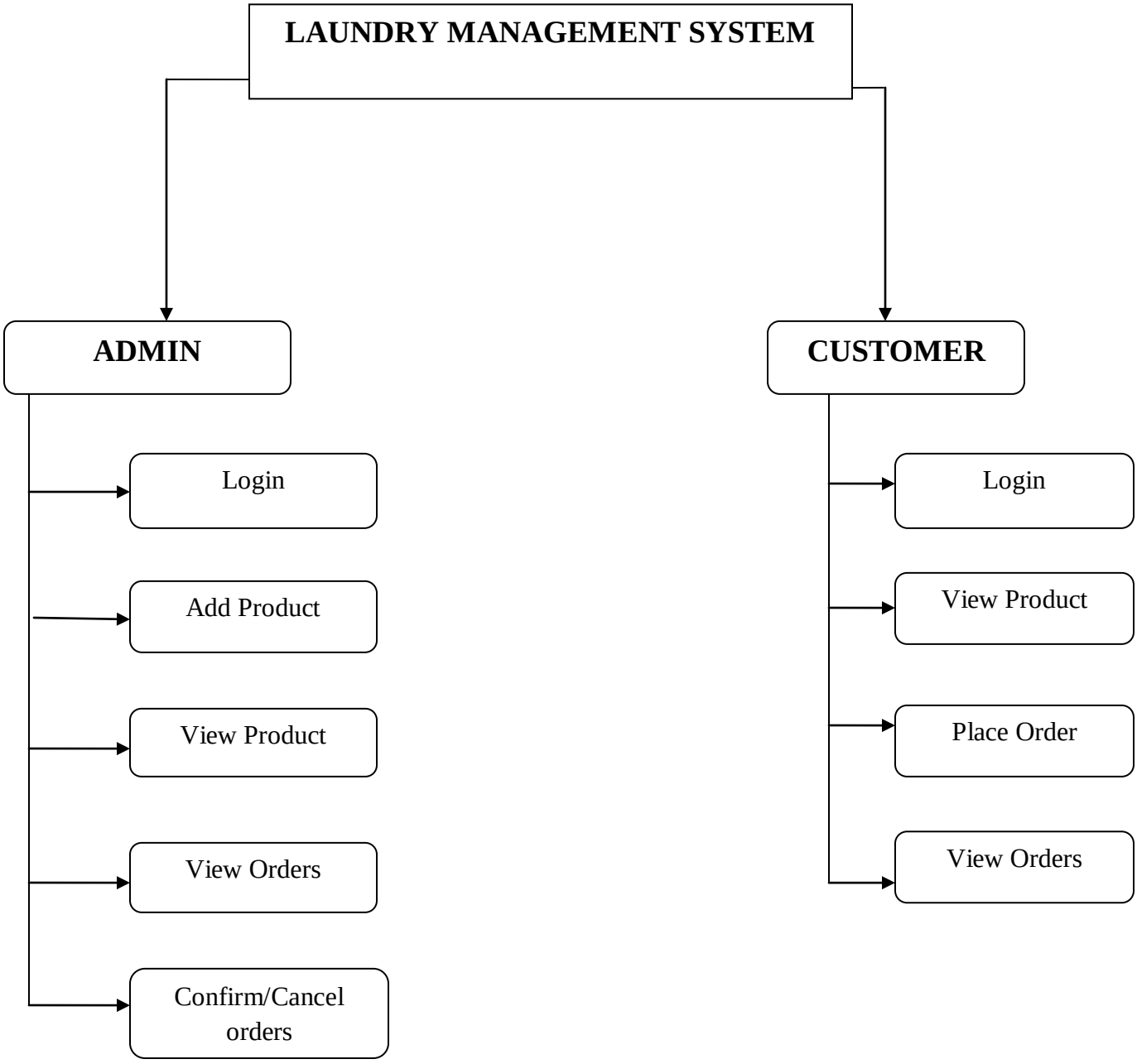
Level 2


order detail
Confirm/Cancel Order
Add Product
Product
product detail
Admin
Prd_order
Customer detail
product detail
order detail
View Customer Details
Place Order
User
add customer
Customer
Registration
View Product

4. SYSTEM DESIGN

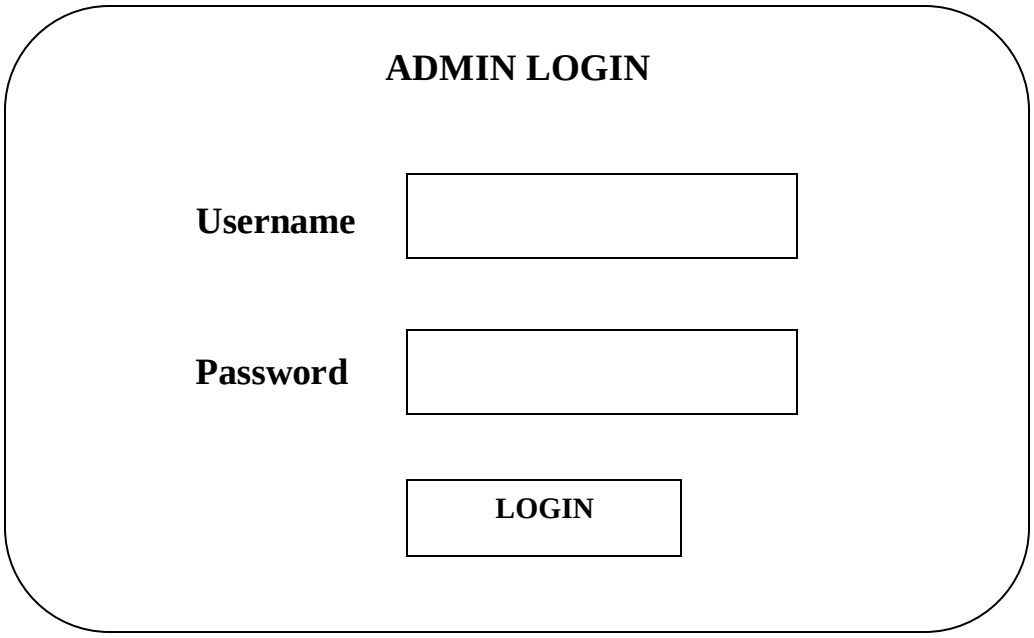
4.1 Architectural Design

A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system. System architecture can comprise system components, the externally visible properties of those components, the relationships (e.g. the behavior) between them. It can provide a plan from which products can be procured, and systems developed, that will work together to implement the overall system. There have been efforts to formalize languages to describe system architecture; collectively these are called architecture description languages (ADLs).

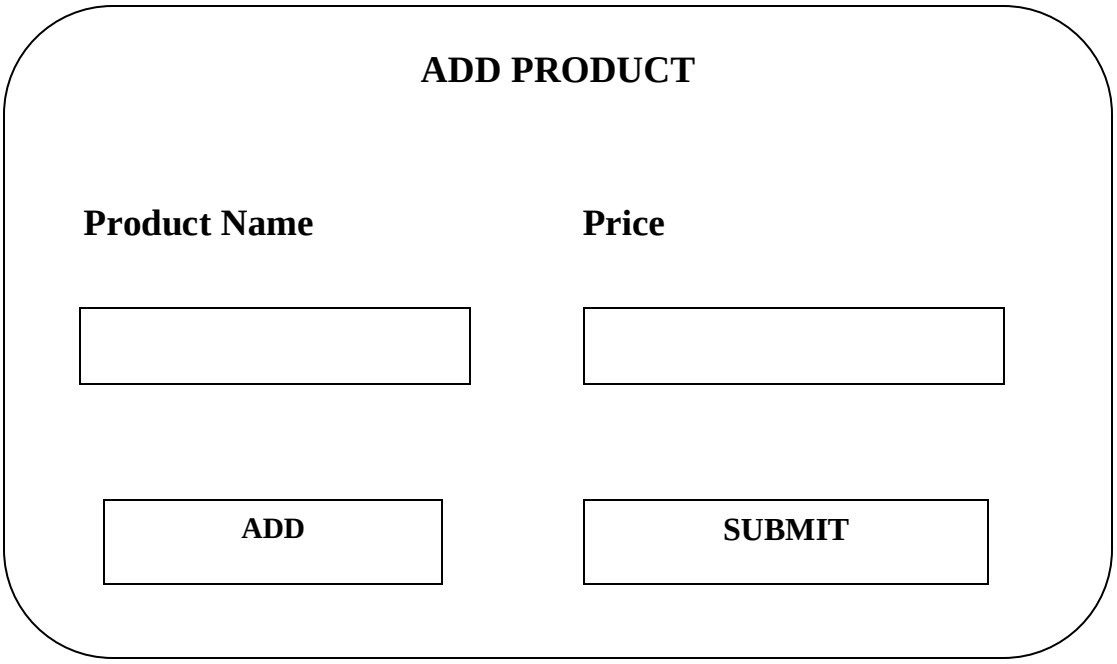

LAUNDRY MANAGEMENT SYSTEM
ADMIN
CUSTOMER
Login
Add Product
View Product
View Orders
Confirm/Cancel orders
Login
View Product
Place Order
View Orders

4.2 I/O Form Designs

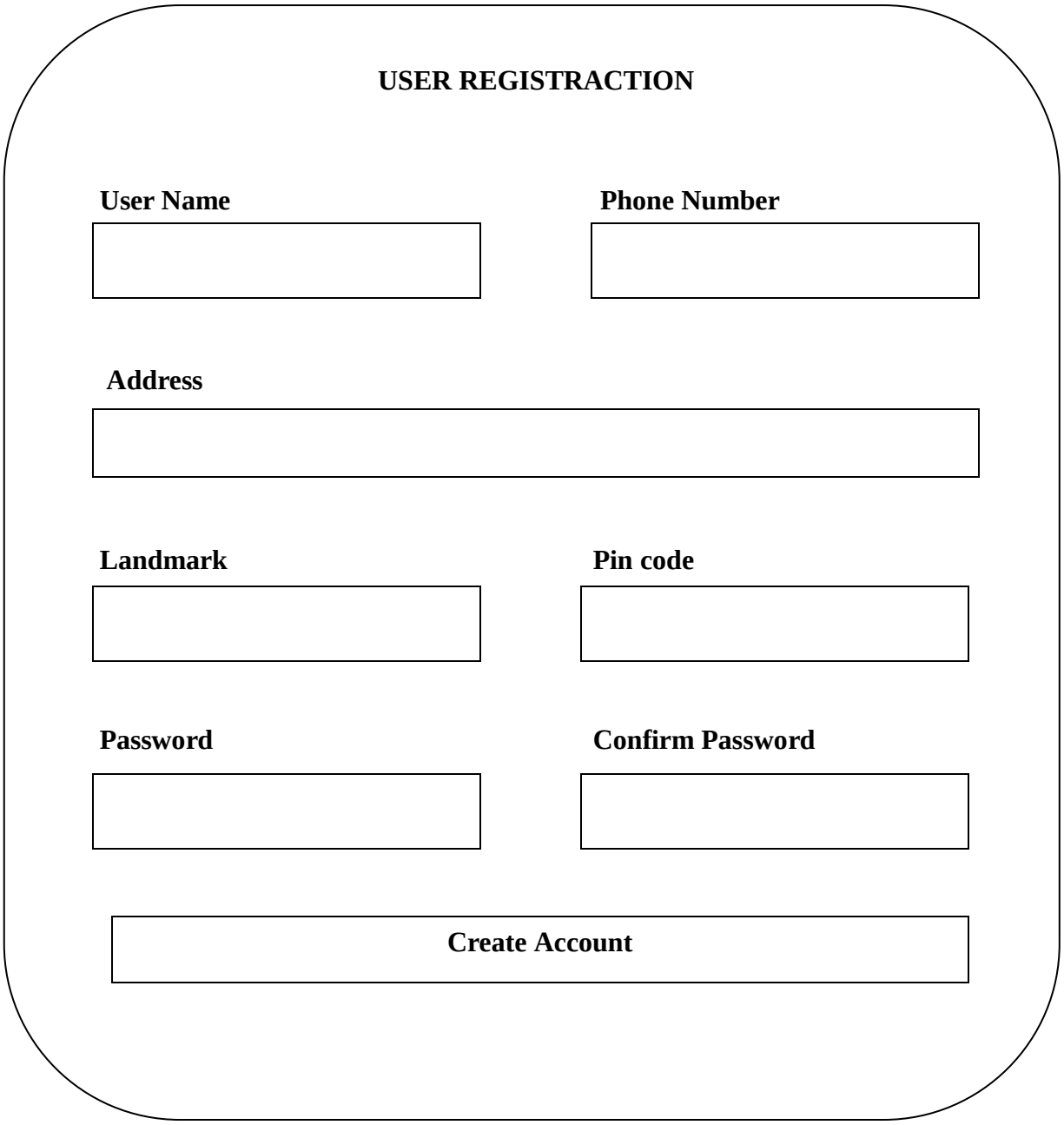
Admin login



Add Product



User Registration



Place Order

ADD ORDER

	Product Name	**Quantity**	**Price(Rs.)**	
☐	Silk	1	100	1

Check the Product and add quantity in ADD column.

Place Order

Feedback

FEEDBACK

Enter Your Feedback

Submit Feedback

4.3 Tables

Admin Login

S. No	Field Name	Data Type	CONSTRAINTS
1	name	varchar (30)	NOT NULL
2	password	varchar(30)	NOT NULL
3	count	int(1)	NULL
4	feed	int(5)	NULL
5	amount	int(10)	NULL

Add Product

S. No	Field Name	Data Type	CONSTRAINTS
1	id	int(10)	PRIMARY KEY, NOT NULL
2	name	varchar(30)	NOT NULL
3	price	int(10)	NOT NULL

User Registration

S. No	Field Name	Data Type	CONSTRAINTS
1	id	int(2)	PRIMARY KEY, NOT NULL
2	name	varchar(30)	NOT NULL
3	phone	int(10)	NOT NULL
4	address	varchar(100)	NOT NULL
5	lmark	varchar(50)	NOT NULL
6	pin	int(6)	NOT NULL
7	password	varchar(50)	NOT NULL

Place Order

S. No	Field Name	Data Type	CONSTRAINTS
1	sno	int (5)	PRIMARY KEY, NOT NULL
2	date	date	NOT NULL
3	time	time(6)	NOT NULL
4	c_id	int(10)	NOT NULL
5	prd_id	int(10)	NOT NULL
6	name	varchar(30)	NOT NULL
7	qty	int(10)	NOT NULL
8	amount	int(10)	NOT NULL
9	tot_amt	int(10)	NULL
10	Process	varchar(10)	NULL
11	del_date	date	NULL
12	c_name	varchar(30)	NULL
13	del_phone	int(10)	NULL

14	del_address	varchar(100)	NULL
15	del_landmark	varchar(30)	NULL
16	id	int(10)	NULL

Feedback

S. No	Field Name	Data Type	CONSTRAINTS
1	S_no	int(5)	PRIMARY KEY, NOT NULL
2	c_Id	int (5)	NOT NULL
3	c_name	varchar(5)	NOT NULL
4	feedback	varchar(100)	NOT NULL
5	view	int(1)	NOT NULL

4.4 NORMALIZATION

Normalization is the process of strutting relational database schema such that most ambiguity is removed. The stage of normalization is referred to as forms and progress from the least restrictive (first normal form), generally, most database designers do not attempt to implement anything higher form of boyee code Normal Form.

First Normal Form

A relation is said to be First Normal Form (INF) if and each attributed of the relation is atomic. More simply, to be INF, each column must contain only a single value and each now certain in the same column.

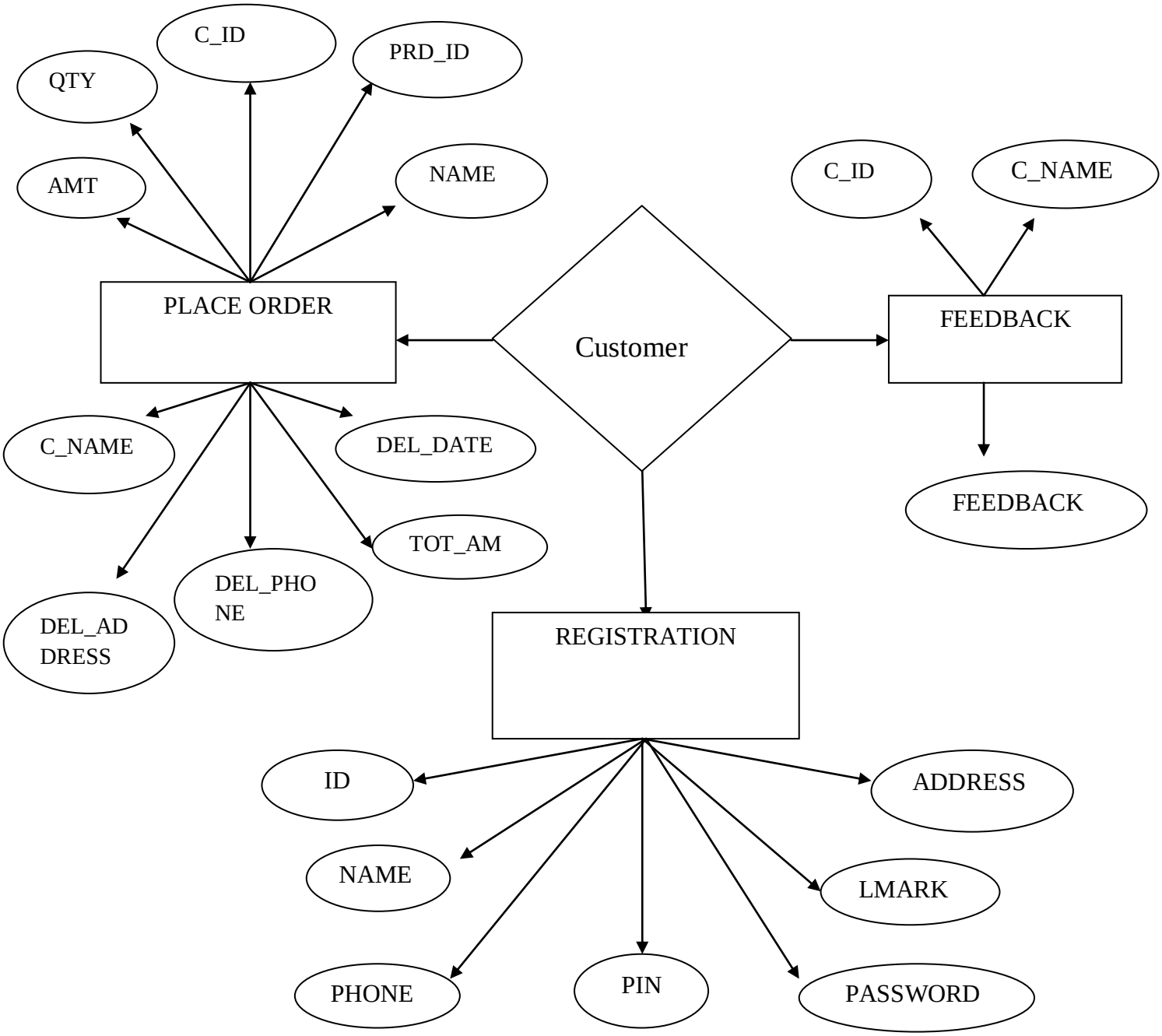
Un Normalized Table

Id	Name	Price
121	Silk	200
121	Cotton	100
122	Jeans	200

Normalized Table

Id	Name	Price
121	Silk	200
122	Cotton	100
123	Jeans	200

4.5 E-R Diagram



4.6 Data Dictionary

Field name	Data Type	Description	Sample Values
address	varchar (100)	Describe the customer address	21-B, ss kovil, trichy
amt	int(10)	Describe the amount	300
c_id	int (100)	Describe the customer id	1234
c_name	varchr(30)	Describe the customer name customer table	Vignesh
c_name	varchar (30)	Describe the customer name pre_order table	Vignesh
date	date(10)	Describe the order date	2020-03-01
del_address	varchar (100)	Describe the delivery address	21-B, ss kovil, trichy
del_date	date(10)	Describe the delivery date	2020-03-06
del_landmark	varchar (50)	Describe the delivery landmark	Chinthamani
del_phone	int(10)	Describe the customer phone number	1234567890
feedback	varchar(150)	Describe the customer feedback	Nice
id	int(10)	Describe the product id	154
id	int(10)	Describe the customer id	765

id	int(10)	Describe the order id	546
lmark	varchar(50)	Describe the customer landmark	Chinthamani
name	varchar(30)	Describe the customer name	Vignesh
name	varchar(30)	Describe the product name	Cotton
name	varchar(30)	Describe the admin name	Admin
password	varchar(30)	Describe the customer password	123
password	varchar(30)	Describe the admin password	Admin
phone	int(10)	Describe the customer phone number	1234567890
pin	int(6)	Describe the customer pin code	620002
prd_id	int(10)	Describe the product id	1234
price	int(10)	Describe the product price	100
qty	int(10)	Describe the product quantity	3
tot_amt	int(10)	Describe the total amount	300

5. SYSTEM DEVELOPMENT

5.1 Functional Document

Admin Module

- **User Details:**

  In this module administrator can able to view details about the customers. And their order detail.

- **Request Details:**

  In this module the administrator can able to view the request and accept the request from the customer. Administrator can change the state from request state to process state and process state o finish state.

- **Delivery Status:**

  In this module administrator can view the detail about the delivered orders and the price of each orders.

- **Manage Price:**

  In this module the administrator can update and delete product details.

- **Queries:**

  In this module the administrator can view customer feedbacks.

User Module

- **Registration and Login:**

  In this module user can create their account and the message will displayed to confirm their registration.

- **Laundry Request:**

  In this module customer can place their orders. And details about the order will be displayed

  .

- **Status:**

  In this module customer can check whether their order is in process state or in request state or in finished state. If the order is in finished state, then the total amount and the order detail will be displayed in dashboard.

- **About:**

  In this module the customer can view and update their personal details.

5.2 Special Features of the Language

The main features of PHP are it is open source scripting languages so you can free download this and use. PHP is a server site scripting language. It is open source scripting language. It is widely used all over the world. It is faster than other scripting language.

Simple:

It's popularly known for its simplicity, familiarity and easy to learn the language as the syntax is similar to that of C or Pascal language. So the language is very logical and well organized general purpose programming language. Even people with a normal programming background can easily understand and capture the use of language. PHP is very advantageous for new users as it's a very reliable fluent, organized, clean, demandable and efficient.

Loosely Typed Language:

PHP encourages the use of variables without declaring its data types. So this taken care at the execution tie depending o the value assigned to the variable. Even the variable name can be changed dynamically.

Flexibility:

PHP is known for its flexibility and embedded natures as it can be well integrated with HTML, XML, JAVASCRIPT and many more. PHP can run on multiple operating systems like Windows, UNIX, Mac, OS, Linux, etc. The PHP scripts can easily run on any device like laptops, mobiles, tables and copter. It is very comfortable integrated with various Databases. The executable PHP can also be run on command-line as well as directly on the machine.

Open Source:

All PHP frameworks are open sources, no payment is required for the users and its completely free. User can just download PHP and start using for their applications or projects. Even in companies, the total cost is reduced for software development providing ore reliability and flexibility.

Cross-Platform Compatibility:

PHP is multi-platform and known for its portability as it can run on any operating system and windows environments. The most common are XAMPP and LAMP. As PHP is platform-independent, it's very easy to integrate with various databases and other technologies with various databases and other technologies without reimplementation. It effectively saves a lot energy, time and money.

Error Reporting and Exception:

PHP supports much error reporting constants to generate errors and relevant warnings at run time. PHP5 supports exception handling which is used to throw errors which can be caught at any time.

Active Community Support:

PHP is very rich with many diverse online community developers to help beginners for web-based application. These worldwide volunteers contribute many features as well as new version for PHP libraries. Even that contributes a translation in different languages to help out programmers. There is a bundle of third-party open-source libraries which provide basic functionalities. Even the documentation given by the official site helps in implementing new features providing access to a variety of creative imagination.

Fast and Efficient Performance:

Users generally prefer fast loading websites. For any web development, speed becomes an important aspect which is taken care of by PHP. PHP scripts are faster tha other scripting languages like ASP.NET, PERL and JSP. The memory manager of PHP7 is vey optimized and fast as compared to older versions of PHP. Even connecting to the database and loading of required data from tables are faster than other programming languages. It provides a built-in module for easy and efficient database management system. The high speed of PHP is advantageous for users for its server administration and mail functionality. Also, it supports session management and removing of unwanted memory allocation.

Features of MYSQL:

The following list shows the most important properties of MYSQL.

Relational Database System:

Like almost all other database system on the market, MYSQL is a relational database system.

Client/Server Architecture:

There is a database server (MYSQL) and arbitrarily many clients, which communicate with the server that is, that query data, save changes, etc. The clients can run on the same computer as the server or on another computer (communication via a local network or the internet).

Almost all of the familiar large database system (Oracle, Microsoft SQL Server, etc) are client/server systems. These are in contrast to the file-server systems, which include Microsoft Access, dBase an FoxPro. The decisive drawback to file-server system is that when run over a network, they become extremely inefficient as the number of users grows.

SQL Compatibility:

MYSQL supports as its database language as is name suggests – SQL (Structured Query Language). SQL is a standardized language for querying and updating data and for administration of a database. There are several SQL dialects. MYSQL adheres to the current SQL standard, although with significant restrictions and a large number of extensions.

Though the configuration setting sql-mode you can make the MYSQL server behave for the most part compatibly with various database systems. Among these are IBM DB/2 and Oracle.

Sub SELECT:

Since version 4.1 MYSQL is capable of processing a query in the form SELECT * FROM table1 WHERE x IN (SELECT y FROM table2).

Views:

Put simply, views relate to an SQL query that is viewed as a distinct database object and makes possible particular view of the database. MYSQL has supported views since version %.0.

Stored Procedures:

Here we are dealing with SQL code that is stored in the database system. Stored procedures are generally used to simplify certain steps, such as inserting or deleting a data record. For client programmers this has the advantage that they di not have to process the tables directly, but can rely on SPs. Like views, SPs help in the administration of largr database projects. SPs can also increase efficiency. MYSQL has supported SPs sine version 5.0.

Triggers:

Triggers are SQL commands that are automatically executed by the server in certain database operation. MYSQL has supported triggers in a limited form from version 5.0 and additional functionality is promised for version 5.1.

Unicode:

MYSQL has supported all conceivable character sets since version 4.1, including Latin-1, Latin-2 and Unicode.

Foreign Key Constraints:

These are rules that ensure that there is no cross references in linked tables that led to nowhere. MYSQL supports foreign key constraints for InnoDB tables.

Transactions:

In the context of a database system, a transaction means the execution of several database operations as a block. The database system ensures that either all of the operations are correctly executed or none of them. This holds even if in the middle of a transaction there is a power failure, the computer crashes or some other disaster occurs. Transactions also give programmers that possibility of interrupting a series of already executed commands.

5.3 Pseudo Code:

Add Product Details

Step 1 : Start.

Step 2 : Enter product details.

Step 3 : Click Submit button.

Step 4 : View product Page is displayed.

Step 5 : Stop.

Edit Product Details

Step 1 : Start.

Step 2 : Information is displayed.

Step 3 : Administrator can modify the details.

Step 4 : Click Update button.

Step 5 : View product Page is displayed.

Step 6 : Stop.

Place Order

Step 1 : Start.

Step 2 : Product details are displayed.

Step 3 : User can select the product the product.

Step 4 : Click place order button.

Step 5 : Delivery address page is displayed.

Step 6 : Add delivery address.

Step 7 : Click add button.

Step 8 : Order receipt will be displayed.

Step 9 : Click confirm button to place the order.

Step 10 : Stop.

Order Details

Step 1 : Start.

Step 2 : Orders are displayed.

Step 3 : Click confirm button to accept the order or cancel button to reject the order.

Step 4 : Dashboard will be displayed.

Step 5 : Stop.

6. TESTING

Testing is a series of different tests that whose primary purpose is to fully exercise the computer based system. Although each test has a different purpose, all work should verify that all system elements have been properly integrated and performed allocated function. Testing is the process of checking whether the developed system works according to the actual requirement and objectives of the system. The philosophy behind testing is to find the errors. A good test is one that has a high probability of finding an undiscovered error. A successful test is one that uncovers the undiscovered error. Test cases are devised with this purpose mind. All the bellow tests are carried out in this project.

6.1 Types of Testing Done

- Unit Testing
- Integration Testing
- Validation Testing

Unit Testing:

The first test in the development process is th unit test. The source code is normally divided into modules, which in turn are divided into smaller units called units. These units have specific behavior. The test done on these units of code is called unit test. Unit test depends upon the language on which the project is developed. Unit tests ensure that each unique path of the project performs accurately to the documented specifications and contains clearly defined inputs and expected results. Test for the behavior of components (nodes and vertices) of a product to ensure their correct behavior prior to system integration.

Integration Testing:

Testing in modules are combined and tested as a group. Modules are typically code modules, individual application, source and destination application on a network, etc. Integration

testing follows unit testing and precedes system testing. Testing after the product is code complete. Betas are often widely distributed or even distributed to the public at large in hopes that that will buy the final product when it is release.

Validation Testing:

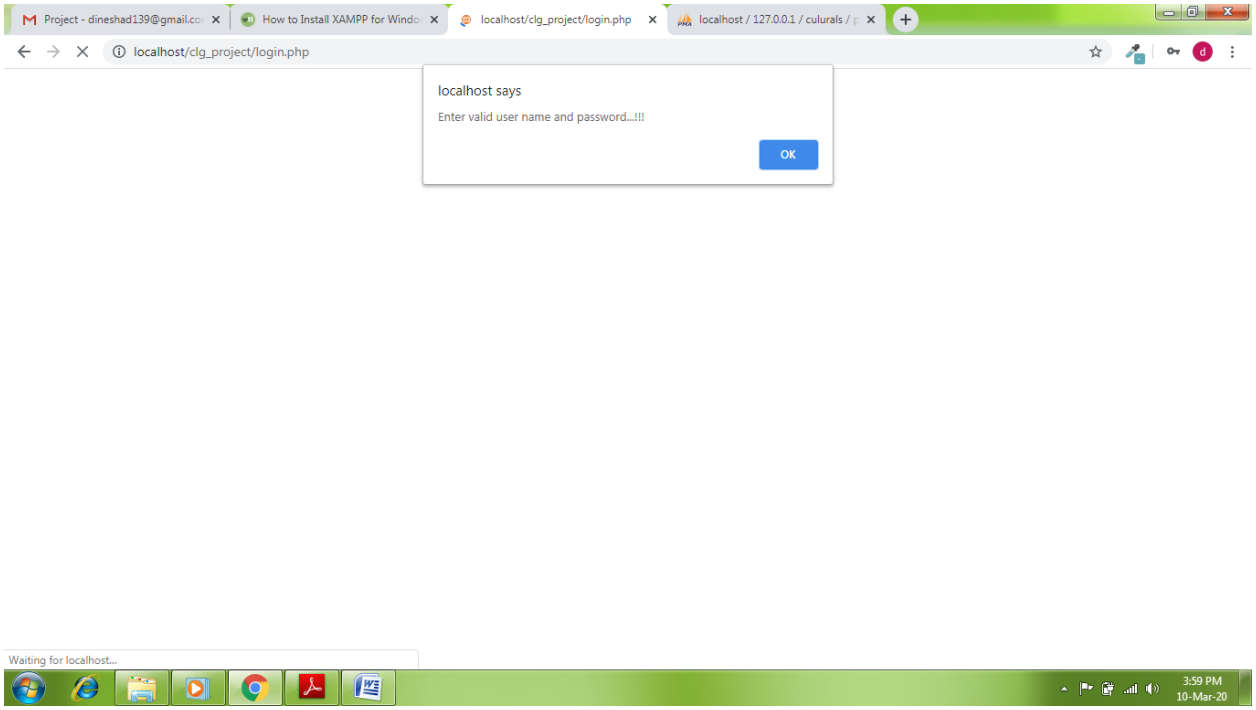
In each module the required field validation is tested. Validation succeeds when the software function in a manner that can be reasonably accepted by the user. Determining if the system complies with the requirements and performs functions for which it is intended and meets the organization's goals and user needs.

6.2 Test Data/Output

Form Name : Login

Test Description : Test for incorrect password.

Result : Enter valid user name and password.



7. USER MANUAL

7.1 Hardware Requirements

Processor	: Intel i5 processor
Processor	: Intel core i5 processor
RAM	: 2.53 GHz
Hard Disk	: 40GB
Key Board	: Standard Windows Keyboard
Mouse	: Optical
Monitor	: Samsung

7.2 Software requirements

Operating System	: Windows 7
IDE	: Notepad++
Server	: Xamp Server
Browser	: Google Chrome
Documentation	: Microsoft Word 2007

7.3 Installation Procedure

Step 1: If you want to run the project in local machine then download the wamp, xampp or any other php servers and install it.

Step 2: Then extract **laundry.zip** file.

Step 3: Move the extracted file inside the xampp folder (move the file to c:\xampp\htdocs).

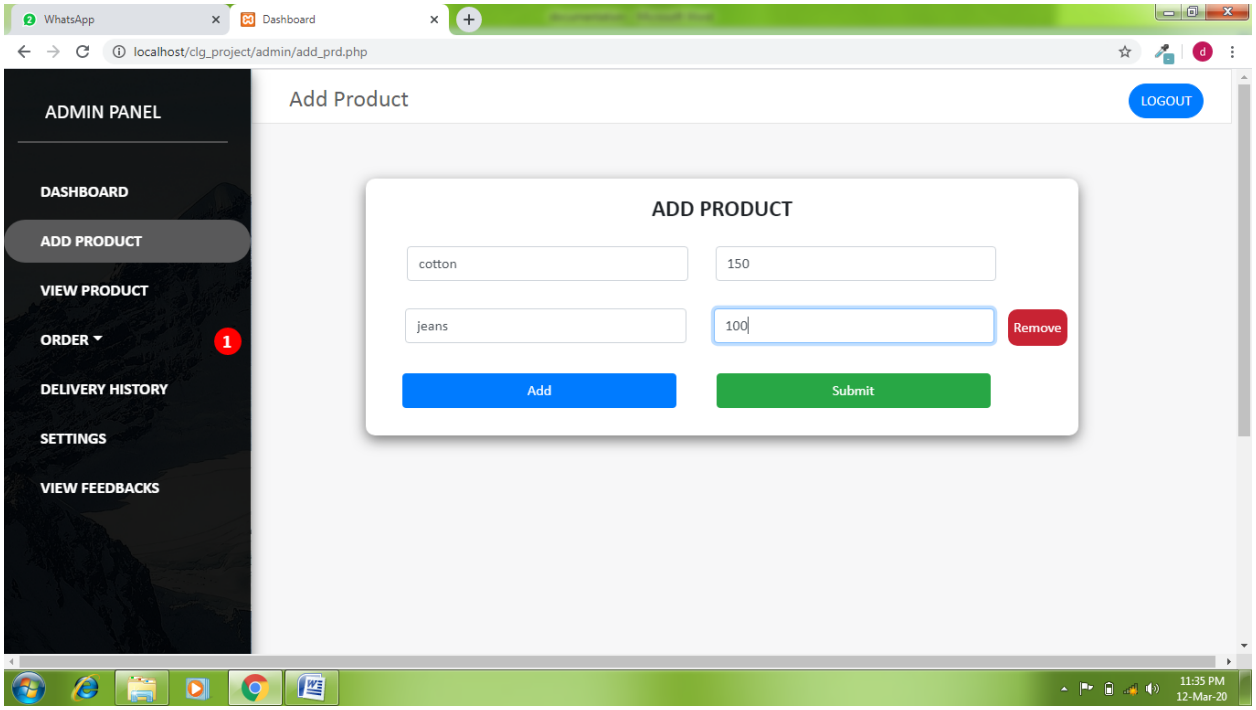
Step 4: Then type **localhost/phpmyadmin** in web browser and create the new database and import the SQL file.

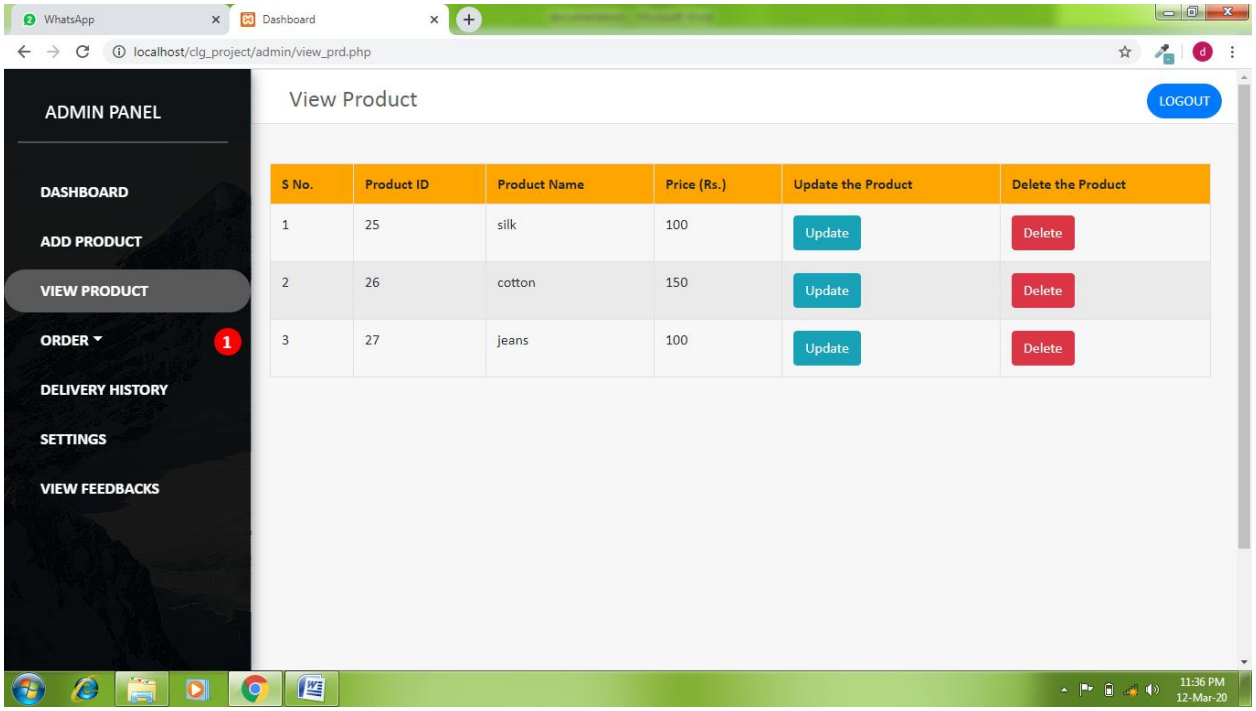
Step 5: After importing the database open the db.php file inside the connection folder and change the database name.

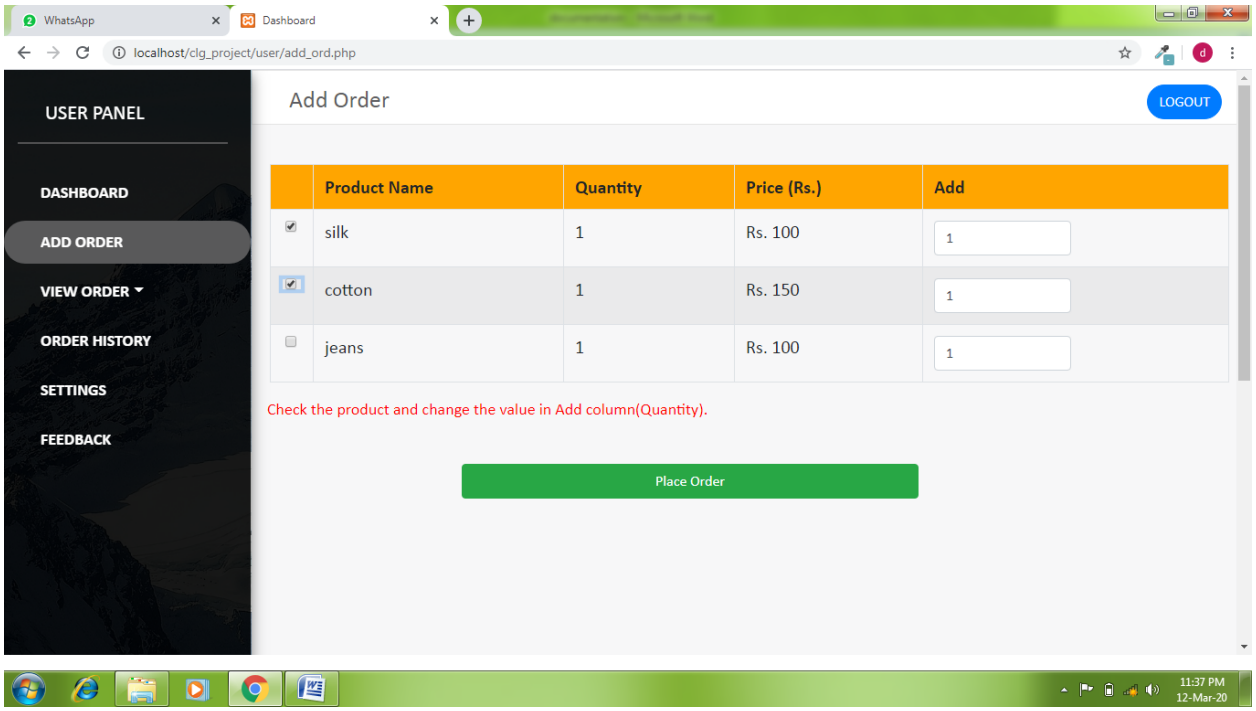
Step 6: Then type **localhost/laundry** in web browser to run the project

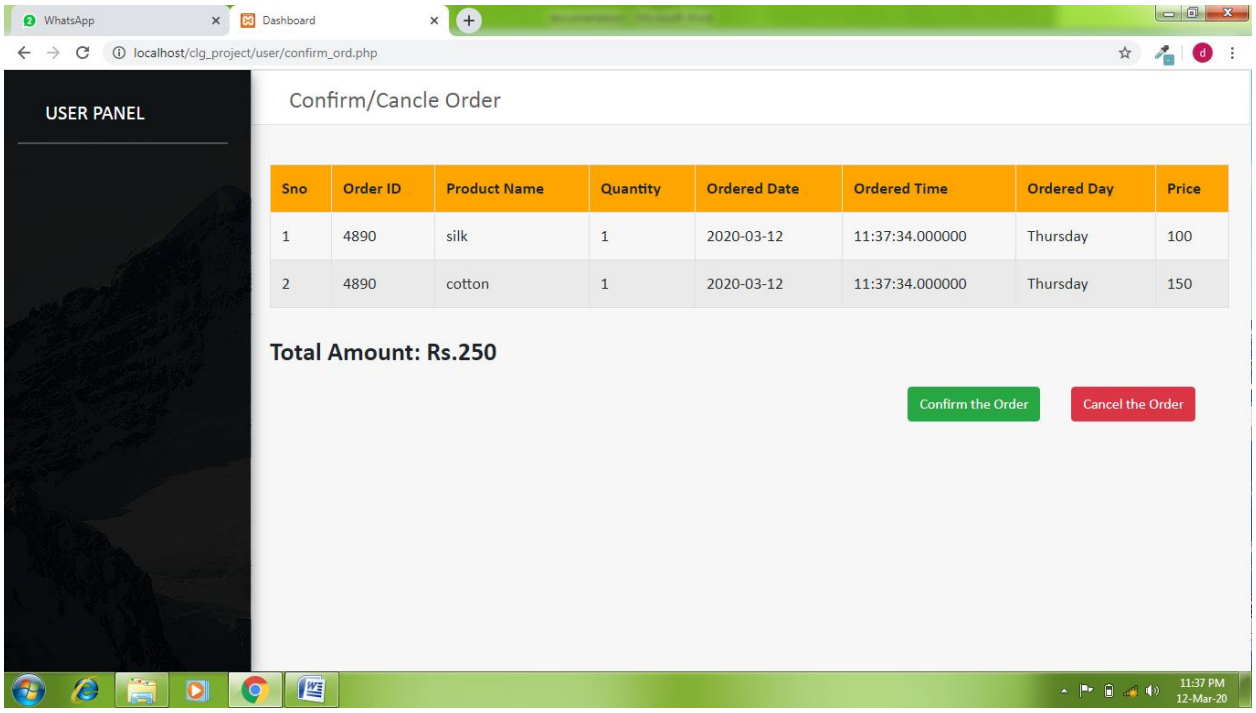
.

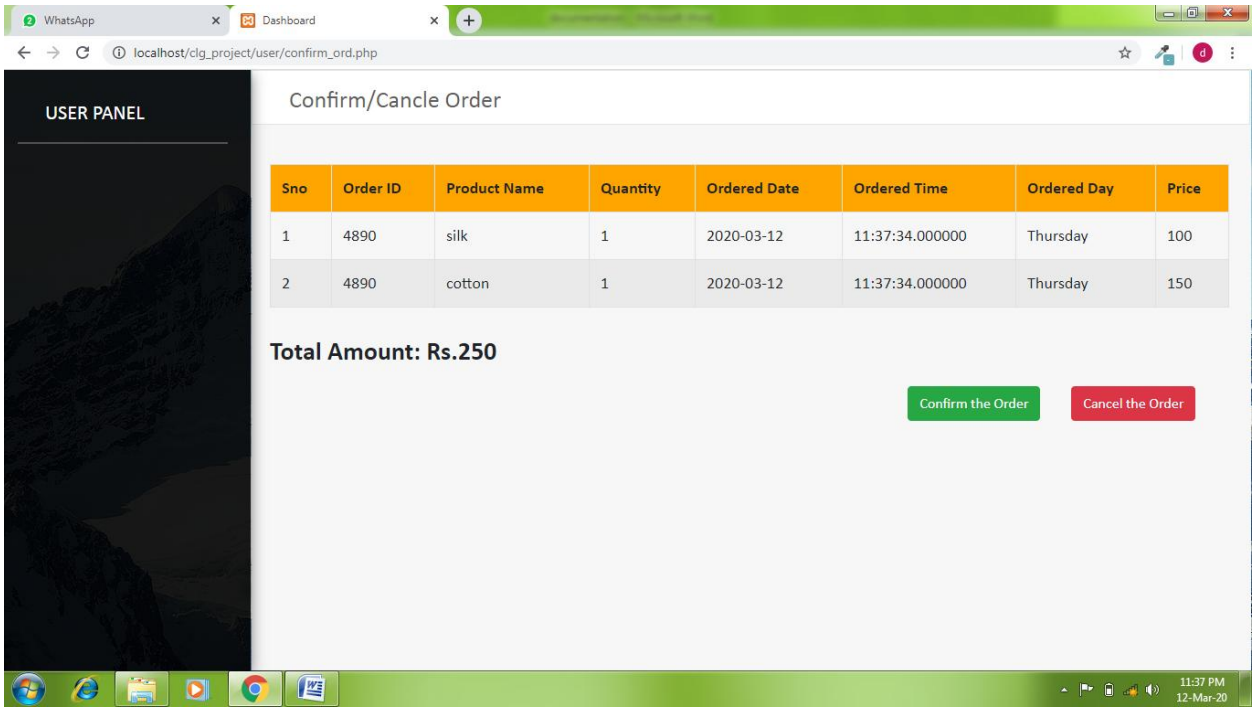
7.4 Sample I/O


WhatsApp
Dashboard
localhost/clg_project/admin/add_prd.php
ADMIN PANEL
DASHBOARD
ADD PRODUCT
VIEW PRODUCT
ORDER
1
DELIVERY HISTORY
SETTINGS
VIEW FEEDBACKS
Add Product
LOGOUT
ADD PRODUCT
cotton
150
jeans
100
Remove
Add
Submit
11:35 PM
12-Mar-20


WhatsApp
Dashboard
localhost/clg_project/admin/view_prd.php
ADMIN PANEL
DASHBOARD
ADD PRODUCT
VIEW PRODUCT
ORDER
1
DELIVERY HISTORY
SETTINGS
VIEW FEEDBACKS
View Product
LOGOUT
S No.
Product ID
Product Name
Price (Rs.)
Update the Product
Delete the Product
1
25
silk
100
Update
Delete
2
26
cotton
150
Update
Delete
3
27
jeans
100
Update
Delete
11:36 PM
12-Mar-20


WhatsApp
Dashboard
localhost/clg_project/user/add_ord.php
USER PANEL
DASHBOARD
ADD ORDER
VIEW ORDER
ORDER HISTORY
SETTINGS
FEEDBACK
Add Order
LOGOUT
Product Name
Quantity
Price (Rs.)
Add
silk
1
Rs. 100
cotton
1
Rs. 150
jeans
1
Rs. 100
Check the product and change the value in Add column(Quantity).
Place Order
11:37 PM
12-Mar-20


WhatsApp
Dashboard
localhost/clg_project/user/confirm_ord.php
USER PANEL
Confirm/Cancle Order
Sno
Order ID
Product Name
Quantity
Ordered Date
Ordered Time
Ordered Day
Price
1
4890
silk
1
2020-03-12
11:37:34.000000
Thursday
100
2
4890
cotton
1
2020-03-12
11:37:34.000000
Thursday
150
Total Amount: Rs.250
Confirm the Order
Cancel the Order
11:37 PM
12-Mar-20


WhatsApp
Dashboard
localhost/clg_project/user/confirm_ord.php
USER PANEL
Confirm/Cancle Order
Sno
Order ID
Product Name
Quantity
Ordered Date
Ordered Time
Ordered Day
Price
1
4890
silk
1
2020-03-12
11:37:34.000000
Thursday
100
2
4890
cotton
1
2020-03-12
11:37:34.000000
Thursday
150
Total Amount: Rs.250
Confirm the Order
Cancel the Order
11:37 PM
12-Mar-20

7.5 Error Message

Form name : Customer Login

Input : Enter invalid name and password.

Error message : Please enter the valid user name and password.

Form name : Admin

Input : Try to open View Product when no product is added.

Error message : No Product to display.

8. CONCLUSION

8.1 Summary of the project

Updating of information becomes so easier. Administrator can add and maintain product details. Customer can easily place their orders. This project provides good interaction and communication facilities between customer and administrator. System security, data security and reliability are the striking features. The System can be modified in future if it is necessary.

8.2 Future Enhancements

- Sending the bill to the customer through the e-mail.
- Implementation of the website into an android application.
- Send an alert message to customer when order is ready for delivery.

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APPENDEX