Project Report

Online Petshop System

Submitted by

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BSCS-16-25

Session (2016-20)

Supervised by

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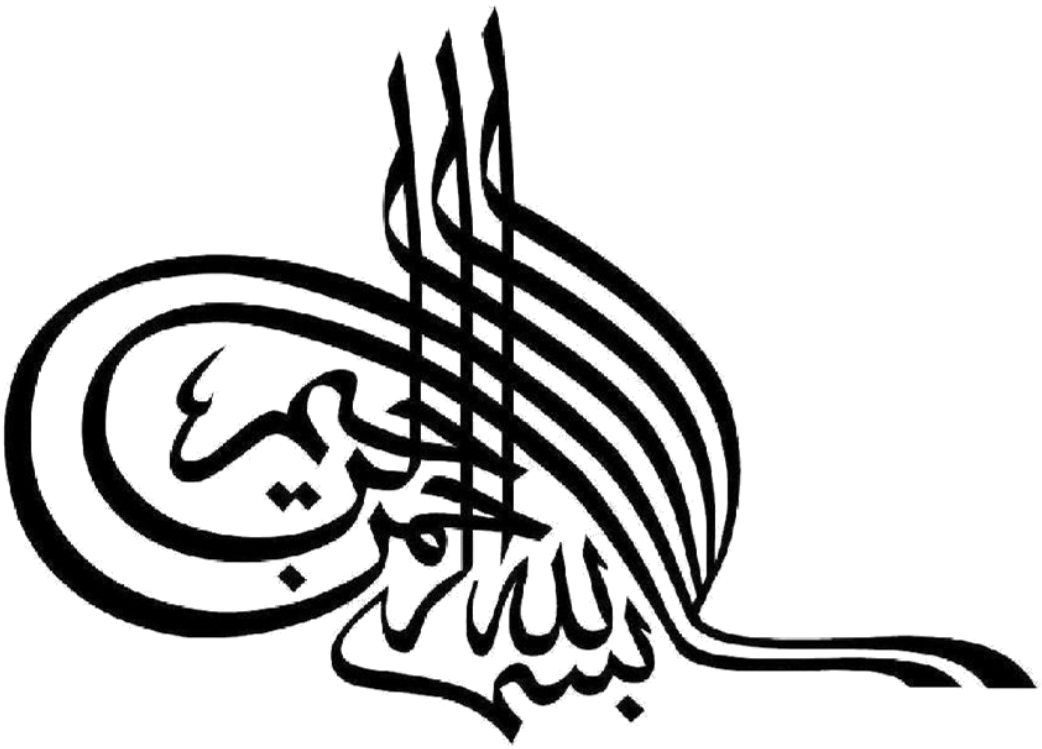
DEPARTMENT OF COMPUTER SCIENCE

BAHAUDDIN ZAKARIYA UNIVERSITY MULTAN PAKISTAN



In the name of Allah,
the Most Beneficent,
the Most Merciful

FINAL APPROVAL

It is certified that we have read the thesis entitled "**Online Petshop System**" submitted by **Kashif Ali** and it is our judgment that this thesis is of sufficient standard to warrant its acceptance by Department of Computer Science , Bahauddin Zakariya University Multan, for the partial fulfillment of the requirement for the Master of Science in Computer Science .

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DEDICATION

To our parents, teachers and all of the people who prayed for us. A special feeling of gratitude to my loving parents; I also dedicate this dissertation to my friends and family who have supported me throughout the process.

ACKNOWLEDGMENTS

With the blessings of Almighty Allah and prayers of our parents I have made this attempt to achieve the goal that was set for me to complete the Master degree. Although the project was complex and complicated, I put my maximum effort to fulfill the goal.

I deeply indebted to our teachers and special gratitude to our final year project supervisor,

Dr. M. Nabeel Asghar whose guidance, suggestion and encouragement remained a continuous source of inspiration for us throughout the entire course of project.

I wish to seize this opportunity to thanks all our friends, who very patiently guided us through all the stages of the project with regard to system support. Finally a special thanks to our parents, friends and our family for their prayers, unending support and encouragement during the course of a long and tedious struggle to accomplish the work in time.

BSCS Session (2016-20)

Roll# BSCS_16_25

Name: Kashif Ali

PROJECT BRIEF

PROJECT NAME	**Online PetShop System**
UNDERTAKEN BY	Kashif Ali
SUPERVISED BY	Dr. M. Nabeel Asghar
STARTING DATE	May 1, 2020
COMPLETION DATE	July 25, 2020
COMPUTER USED	Dell Latittude3330 (IntelR)core.i5-3337U.CPU , 1.80 Ghz, 1.80 Ghz, 4 GB RAM ,750 GB Hard disk
OPERATING SYSTEM	Windows 8.1
SOURCE LANGUAGE(S)	HTML,CSS,CSS3,Jquery,PHP,Laravel
DBMS USED	MySQL
TOOLS/PACKAGES	XAMPP SERVER/Sublime editor

ABSTRACT

This project is a web based PetShop system for an existing shop. The project objective is to deliver the online shopping application into android platform.

This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet by using an android device. Thus the customer will get the service of online shopping and home delivery from his favorite shop. This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains.

If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flipcart or ebay. Since the application is available in the Smartphone it is easily accessible and always available.

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CHAPTER 1

INTRODUCTION

This project is a web based shopping system for an existing shop.
The project objective is to deliver the online shopping application into android platform.

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet by using an android device. Thus the customer will get the service of online shopping and home delivery from his favorite shop

1.1 PROJECT OBJECTIVE:

The objective of the project is to make an application in android platform to purchase items in an existing shop. In order to build such an application complete web support need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of an android application with web view.

1.2 PROJECT OVER VIEW:

The central concept of the application is to allow the customer to shop virtually using the Internet and allow customers to buy the items and articles of their desire from the store. The information pertaining to the products are stores on an RDBMS at the server side (store).

The Server process the customers and the items are shipped to the address submitted by them. The application was designed into two modules first is for the customers who wish to buy the articles. Second is for the storekeepers who maintains and updates the information pertaining to the articles and those of the customers. The end user of this product is a departmental store where the application is hosted on the web and the administrator maintains the database. The application which is deployed at the customer database, the details of the items are brought forward from the database for the customer view based on the selection through the menu and the database of all the products are updated at the end of each transaction. Data entry into the application can be done through various screens designed for various levels of users. Once the authorized personnel feed the relevant data into the system, several reports could be generated as per the security.

1.3 PROJECT SCOPE:

This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. The system recommends a facility to accept the orders 24*7 and a home delivery system which can make customers happy.

If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flipcart or ebay. Since the application is available in the Smartphone it is easily accessible and always available.

1.4 STUDY OF THE SYSTEM

1.4.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Administrator
- Moderators
- Users

CHAPTER 2

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems and using the information to recommend improvements on the system. System analysis is a problem solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

The current system for shopping is to visit the shop manually and from the available product choose the item customer want and buying the item by payment of the price of the item .

1. It is less user-friendly.
2. User must go to shop and select products.
3. It is difficult to identify the required product.
4. Description of the product limited.
5. It is a time consuming process
6. Not in reach of distant users.

2.2 PROPOSED SYSTEM

In the proposed system customer need not go to the shop for buying the products. He can order the product he wish to buy through the application in his Smartphone. The shop owner will be admin of the system. Shop owner can appoint moderators who will help owner in managing the customers and product orders. The system also recommends a home delivery system for the purchased products.

2.3 SYSTEM REQUIREMENT SPECIFICATION

2.3.1 GENERAL DESCRIPTION

Product Description:

The system consists of two parts .A web application which can provide the online shopping service and an android application for the customer to access the web service from his Smartphone. Web application should be able to help the customer for selecting his item and to help the owner in managing the orders from the customers.

Problem Statement:

As online shopping became a trend nowadays the regular shops are losing their customers to online brands. Customers have effortless shopping experience and saving time through shopping online. For competing with those online brands , If shops are providing an online portal where their customers can shop through internet and get the products at their doors it will increase the number of customers.

2.3.2 SYSTEM OBJECTIVES

- To provide an android application for online shopping of products in an existing shop.
- To provide a online shopping web site for the same shop.

2.3.3 SYSTEM REQUIREMENTS

2.3.3.1 NON FUNCTIONAL REQUIREMENTS

i. EFFICIENCY REQUIREMENT

When an online shopping cart android application implemented customer can purchase product in an efficient manner.

ii. RELIABILITY REQUIREMENT

The system should provide a reliable environment to both customers and owner. All orders should be reaching at the admin without any errors.

iii. USABILITY REQUIREMENT

The android application is designed for user friendly environment and ease of use.

iv. IMPLEMENTATION REQUIREMENT

Implementation of the system using css and html in front end with jsp as back end and it will be used for database connectivity. And the database part is developed by mysql. Responsive web designing is used for making the website compatible for any type of screen.

v. DELIVERY REQUIREMENT

The whole system is expected to be delivered in four months of time with

a weekly evaluation by the project guide.

2.3.3.2 FUNCTIONAL REQUIREMENTS

USER

- USER LOGIN Description of feature

This feature used by the user to login into system. A user must login with his user name and password to the system after registration. If they are invalid, the user not allowed to enter the system.

Functional requirement

- Username and password will be provided after user registration is confirmed.
- Password should be hidden from others while typing it in the field

- REGISTER NEW USER

Description of feature

A new user will have to register in the system by providing essential details in order to view the products in the system. The admin must accept a new user by unblocking him.

Functional requirement

- System must be able to verify and validate information.
- The system must encrypt the password of the customer to provide security.

➢ PURCHASING AN ITEM Description of feature

The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart. User can remove an item from the cart by clicking remove. After confirming the items in the cart the user can submit the cart by providing a delivery address. On successful submitting the cart will become empty.

Functional requirement

- System must ensure that, only a registered customer can purchase items.

ADMIN

➢ MANAGE USER Description of feature

The administrator can add user, delete user, view user and block user.

➢ MANAGE MODERATOR Description of feature

The administrator can add moderator, delete moderator, block moderator and search for a moderator.

➢ MANAGE PRODUCTS Description of feature

The administrator can add product, delete product and view product.

➢ MANAGE ORDERS Description of feature

The administrator can view orders and delete orders.

Functional requirements

-The system must identify the login of the admin.

-Admin account should be secured so that only owner of the shop can access that account

MODERATOR

Description of features

A moderator is considered as a staff who can manage orders for the time being. As a future update moderator may give facility to add and manage his own products. Moderators can reduce the work load of admin. Now moderator has all the privilege of an admin having except managing other moderators. He can manage users and manage products. He can also check the orders and edit his profile.

Functional requirement

-The system must identify the login of a moderator.

CHAPTER 3

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. It emphasis on translating design. Specifications to performance specification. System design has two phases of development

- Logical design
- Physical design

During logical design phase the analyst describes inputs (sources), output s(destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the

database. In this project the student details are to be entered at the time of registration. A page is designed for this purpose which is user friendly and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

3.2 DATABASE

DATABASE DESIGN:

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are

- Primary Key- the field that is unique for all the record occurrences.
- Foreign Key -the field used to set relation between tables.

Normalization is a technique to avoid redundancy in the tables.

3.3 SYSTEM TOOLS

The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1.FRONT END:

JSP, HTML, CSS, JAVA SCRIPT,ANDROID are utilized to implement the frontend.

Java Server Pages (JSP)

Different pages in the applications are designed using jsp. A Java Server Pages component is a type of Java servlet that is designed to fulfil the role of a user interface for

a Java web application. Web developers write JSPs as text files that combine HTML or XHTML code, XML elements, and embedded JSP actions and commands. Using JSP, one can collect input from users through web page.

HTML (Hyper Text Markup Language)

HTML is a syntax used to format a text document on the web.

CSS (Cascading Style Sheets)

CSS is a style sheet language used for describing the look and formatting of a document written in a markup language.

Java Script

JS is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.

Java Script is used to create pop up windows displaying different alerts in the system like "User registered successfully", "Product added to cart" etc.

Android

The application is delivered to customer through an android application. So android platform is used to develop the user application.

3.3.2 BACK END

The back end is implemented using MySQL which is used to design the databases.

MySQL

MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language.

An application software called Navicat was used to design the tables in MySQL.

3.4 TABLES

- LOGIN

login

Field Name	Field Type	Default	AllowNull	PriKey	Extra
uid	int(11) FIRST		NO	YES	auto_increment
uname	varchar(50) AFTER `uid`		NO	NO	
upass	varchar(50) AFTER `uname`		NO	NO	
utype	varchar(20) AFTER `upass`		NO	NO	
enabled	varchar(10) AFTER `utype`		NO	NO	

Fig 3.1: Login Table

User will register with user name and password and then will login according to user name and password.

- USER DETAILS

userdetails

Field Name	Field Type	Default	AllowNull	PriKey	Extra
uid	int(11) FIRST		NO	YES	
uloginname	varchar(50) AFTER `uid`		NO	NO	
uemailid	varchar(100) AFTER `uloginnam`		NO	NO	
umobno	varchar(30) AFTER `uemailid`		NO	NO	

Fig 3.2: User Details Table

- PRODUCT DETAILS

product_details

Field Name	Field Type	Default	AllowNull	PriKey	Extra
id	int(11) FIRST		NO	YES	auto_increment
name	varchar(100) AFTER `id`		NO	NO	
description	varchar(500) AFTER `name`		YES	NO	
price	varchar(50) AFTER `description`		YES	NO	
photo	varchar(100) AFTER `price`		YES	NO	

Fig 3.3: Product Details Table

- PRODUCT ORDERS

product_orders

Field Name	Field Type	Default	AllowNull	PriKey	Extra
id	int(11) FIRST		NO	YES	auto_increment
product_id	int(11) AFTER `id`		NO	NO	
user_id	int(11) AFTER `product_id`		NO	NO	
deliver_address	varchar(500) AFTER `user_id`		YES	NO	

Fig 3.4: Product Orders table

3.5 E-R DIAGRAMS

- LOGIN

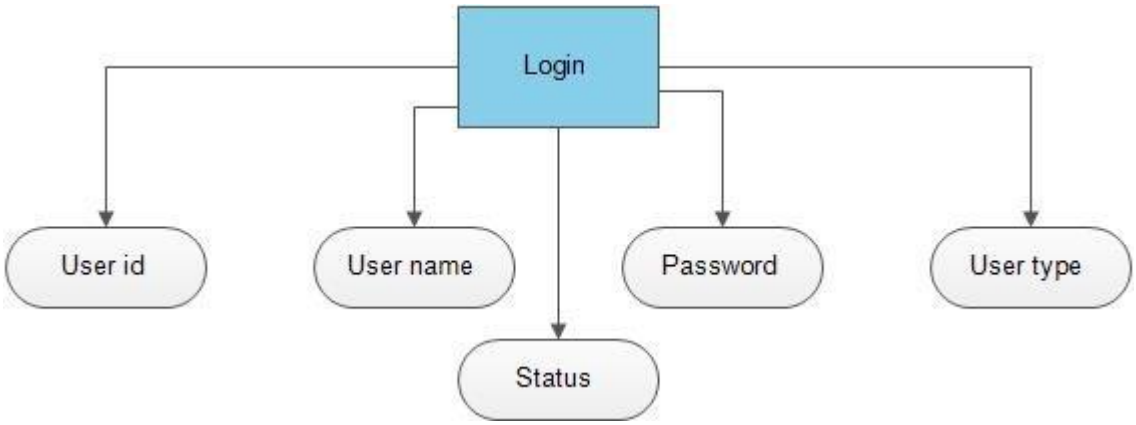


Fig 3.5: Login

- USER DETAILS

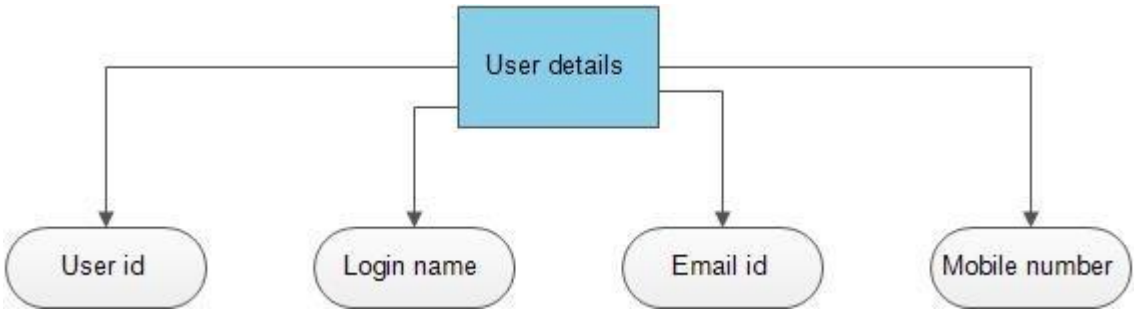


Fig 3.6: User Details

- PRODUCT DETAILS

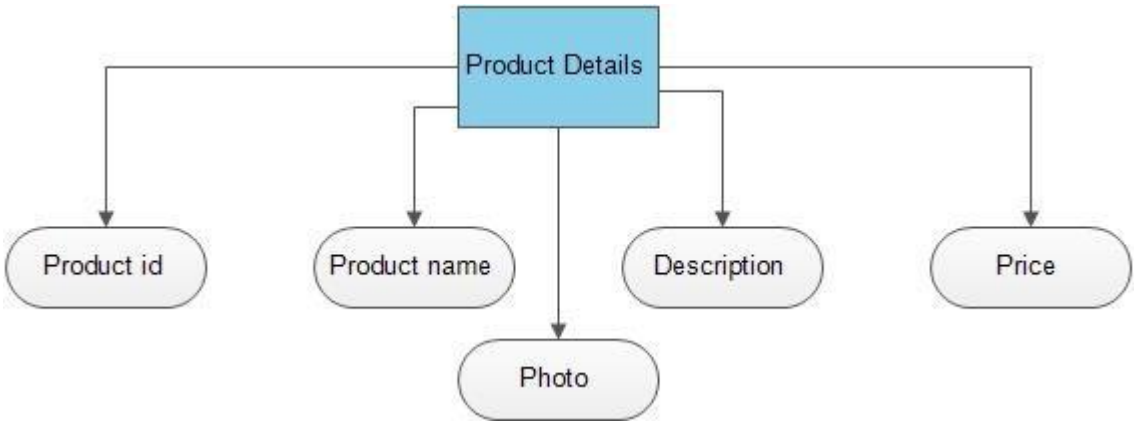


Fig 3.7: Product Details

- PRODUCT ORDERS

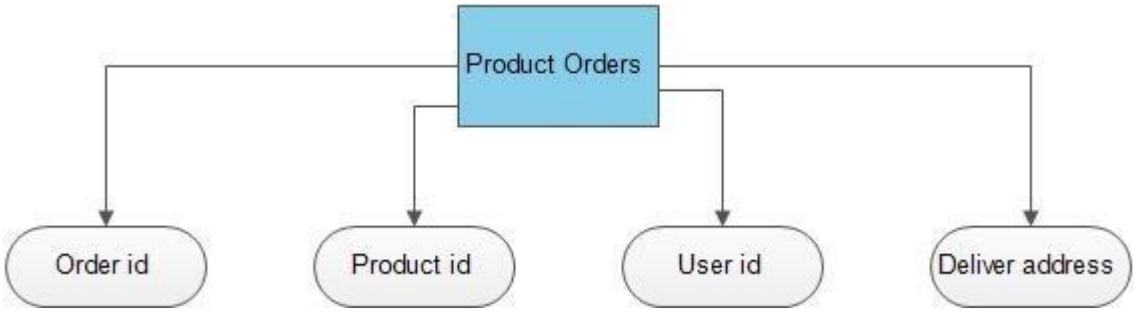


Fig 3.8: Product Orders

- COMPLETE DIAGRAM

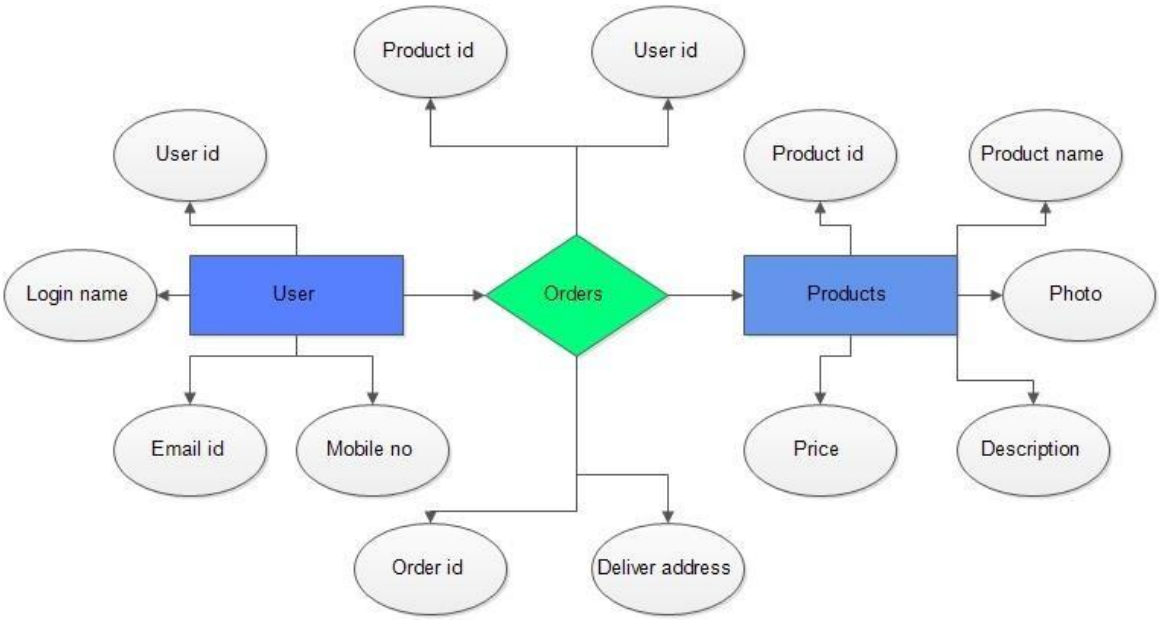


Fig 3.9: Complete Diagram

- COMPLETE DIAGRAM

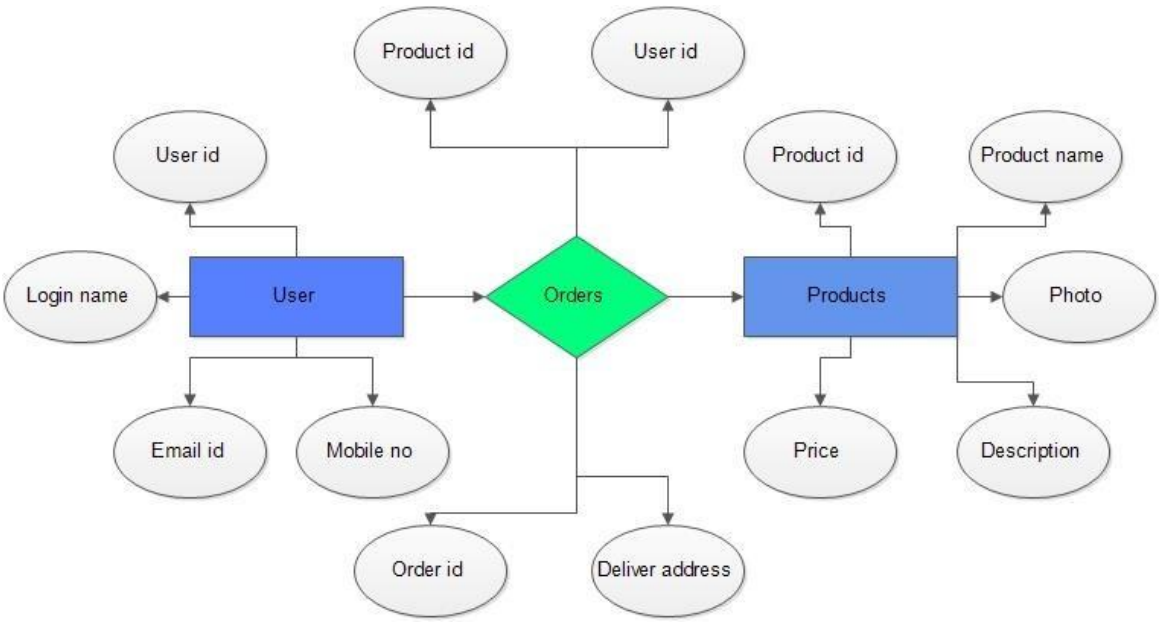


Fig 3.9: Complete Diagram

3.6 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a structured analysis and design tool that can be used for flowcharting. A DFD is a network that describes the flow of data and the processes that change or transform the data throughout a system. This network is constructed by using a set of symbols that do not imply any physical implementation. It has the purpose of clarifying system requirements and identifying major transformations. So it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. DFD can be considered to an abstraction of the logic of an information-oriented or a process-oriented system flow-chart. For these reasons DFD's are often referred to as logical data flow diagrams.

EXTERNAL ENTITY

An external entity is a source or destination of a data flow. Only those entities which originate or receive data are represented on a data flow diagram. The symbol used is a rectangular box.

PROCESS

A process shows a transformation or manipulation of data flow within the system. The symbol used is an oval shape.

DATAFLOW

The data flow shows the flow of information from a source to its destination. Data flow is represented by a line, with arrowheads showing the direction of flow. Information always flows to or from a process and may be written, verbal or electronic. Each data flow may be referenced by the processes or data stores at its head and tail, or by a description of its contents.

DATA STORE

A data store is a holding place for information within the system: It is represented by an open ended narrow rectangle. Data stores may be long-term files such as sales ledgers, or may be short-term accumulations: for example batches of documents that are waiting to

be processed. Each data store should be given a reference followed by an arbitrary number.

- LOGIN DFD

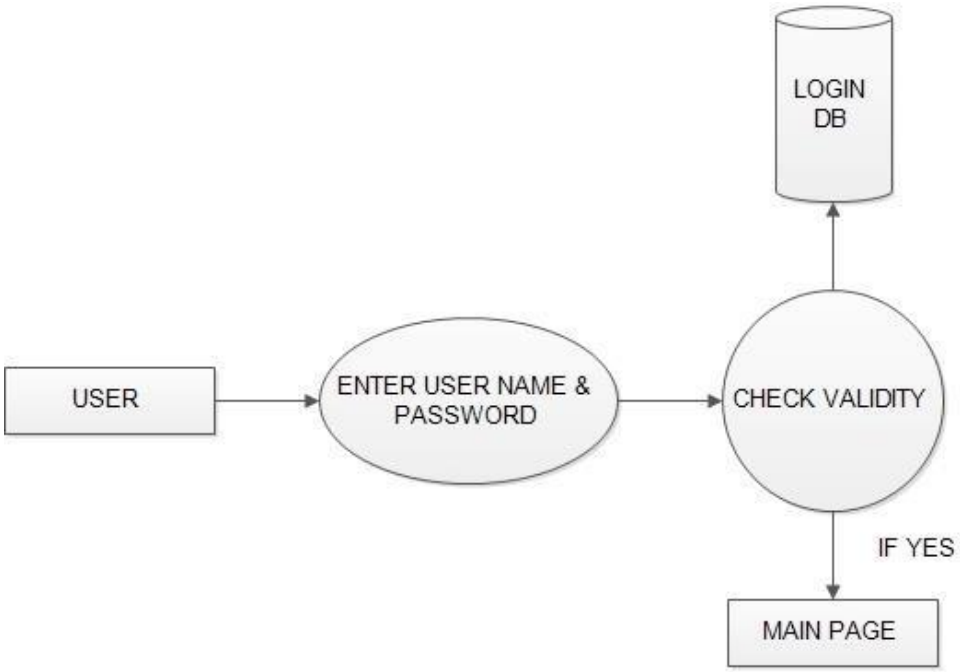


Fig 3.10: Login DFD

- LOGIN DFD

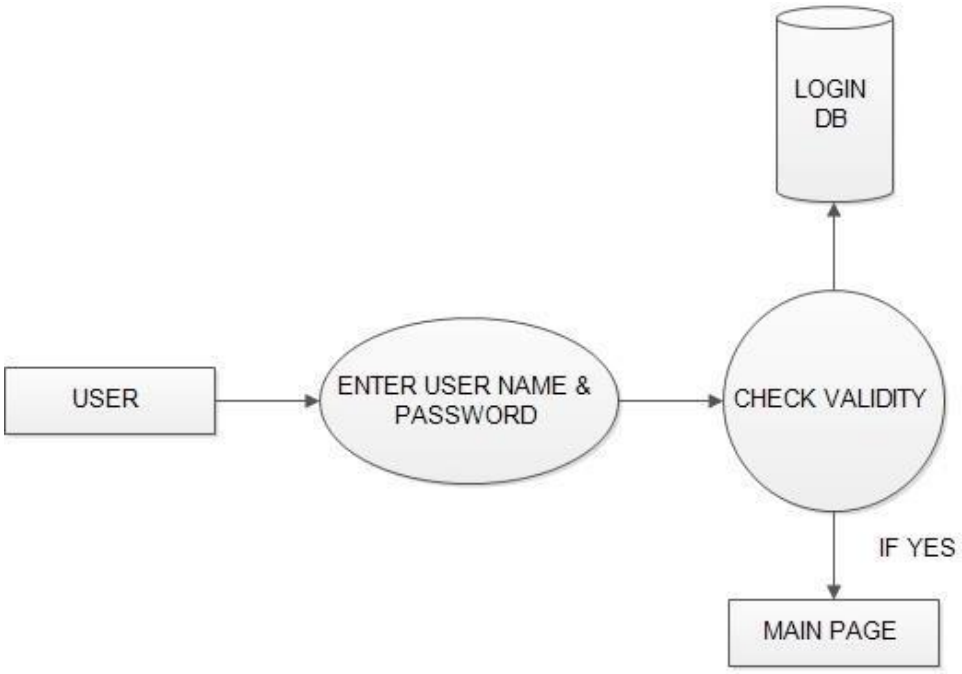


Fig 3.10: Login DFD

- LOGIN DFD

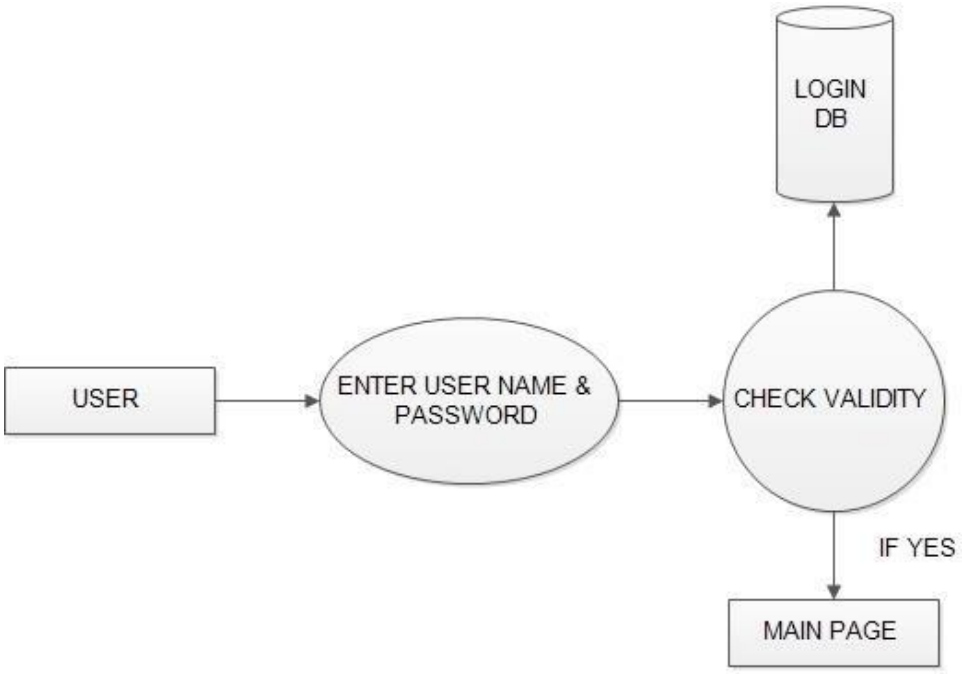


Fig 3.10: Login DFD

- LOGIN DFD

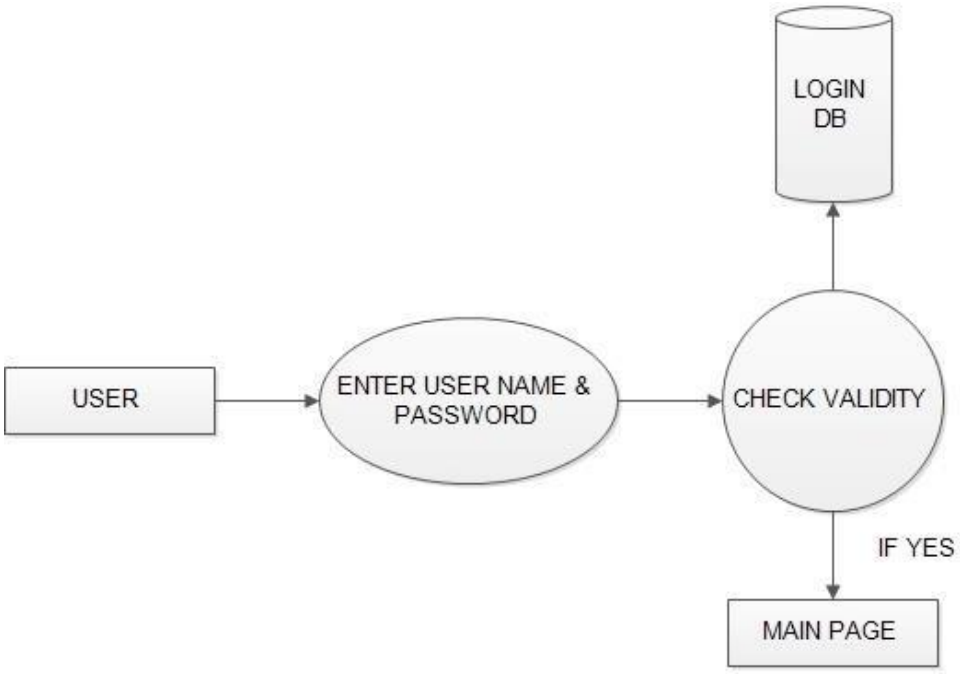


Fig 3.10: Login DFD

- REGISTRATION DFD

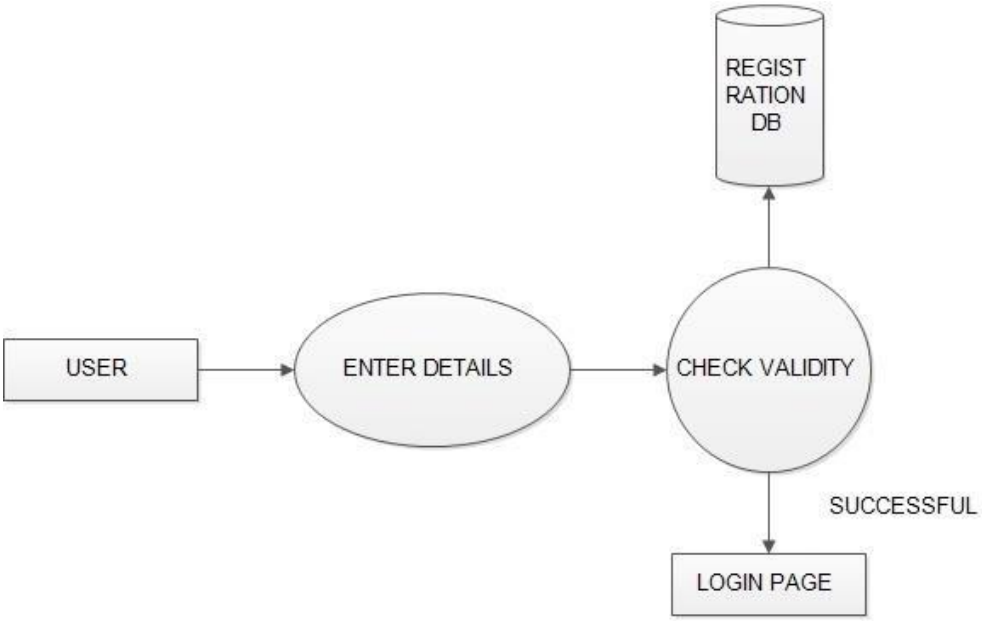


Fig 3.11: Registration DFD

- REGISTRATION DFD

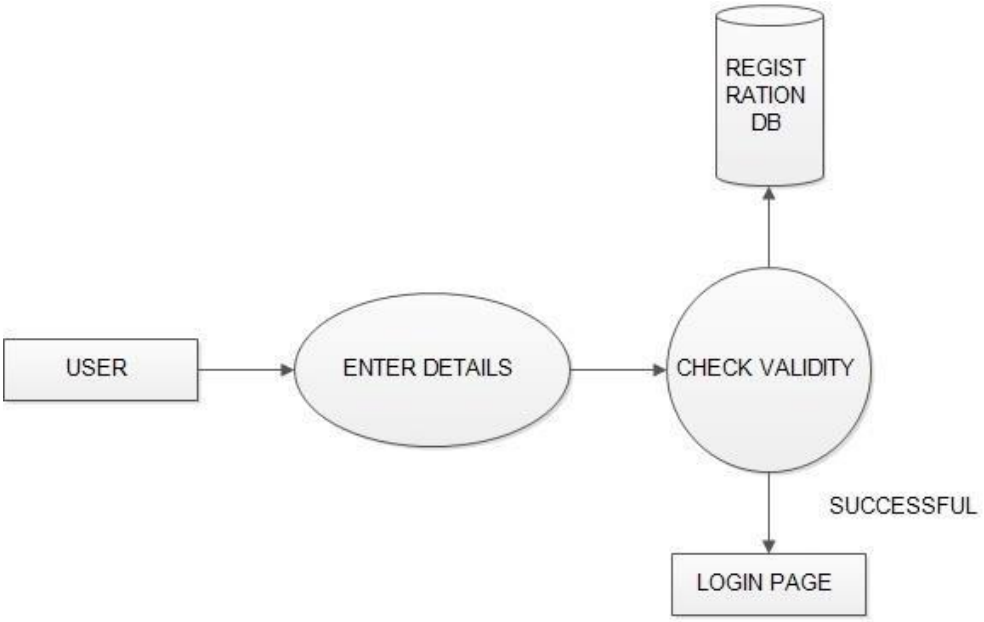


Fig 3.11: Registration DFD

- ADMIN DFD

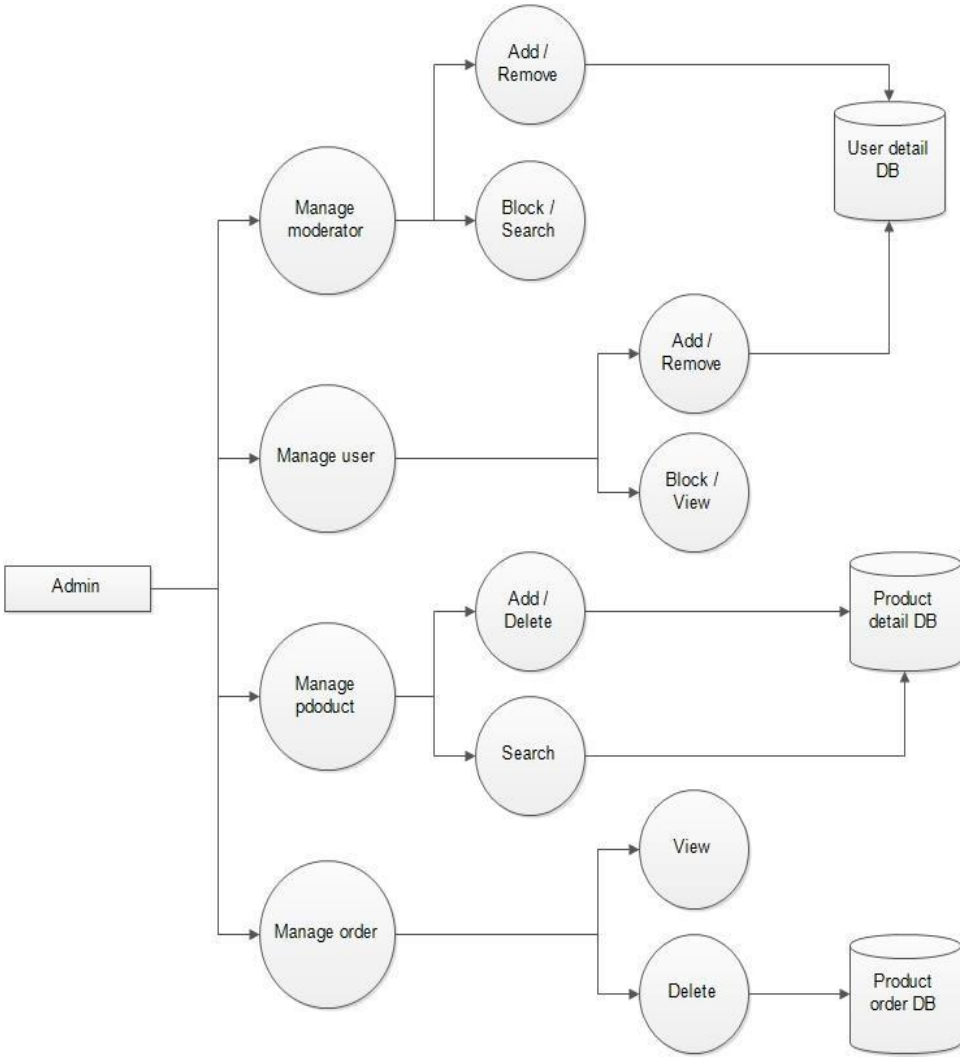


Fig 3.12: Admin DFD

- MODERATOR DFD

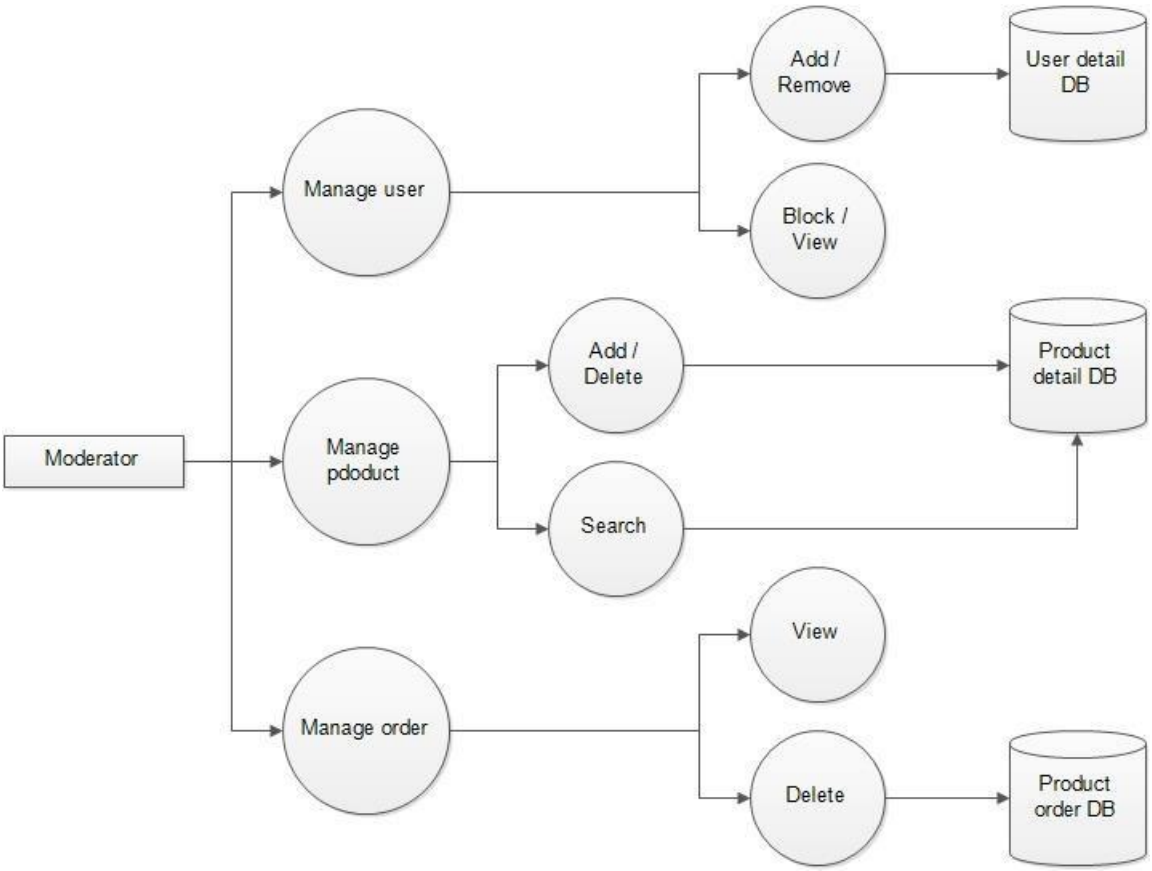


Fig 3.13: Moderator DFD

CHAPTER 4

System Development & Implementation

4.1 Introduction to System development

Systems development is the process of defining, designing, testing, and implementing a new software application or program. It could include the internal development of customized systems, the creation of database systems, or the acquisition of third party developed software.

4.2 Tools Selection

- MVC framework (Laravel)
- Php
- Bootstrap
- Html
- Css
- MySQL

4.3 Hardware for the System

Processor:

Intel(R) Core i3 or above

Ram: 2GB

Hard: 500 GB

Operating System: Windows 7, 8, 10

System Type: 32/64-bit

Printer: (Canon/Dell)

4.4 Coding Standards

Standards in computer programming are methods of programming that have been declared acceptable and thereafter are recommended as the approach that should be used. Much like what GAAP is to Accounting, programming standards allow programmers to use a common ground when writing code.

4.5 Code for Operations

For users

Step 1 Go to Thepetshop

Step 1.1 Registration

Step 2 Users will login

Step 3 Login successfully done

Step 4 Users will go to main page

Step 5 Users can view his profile

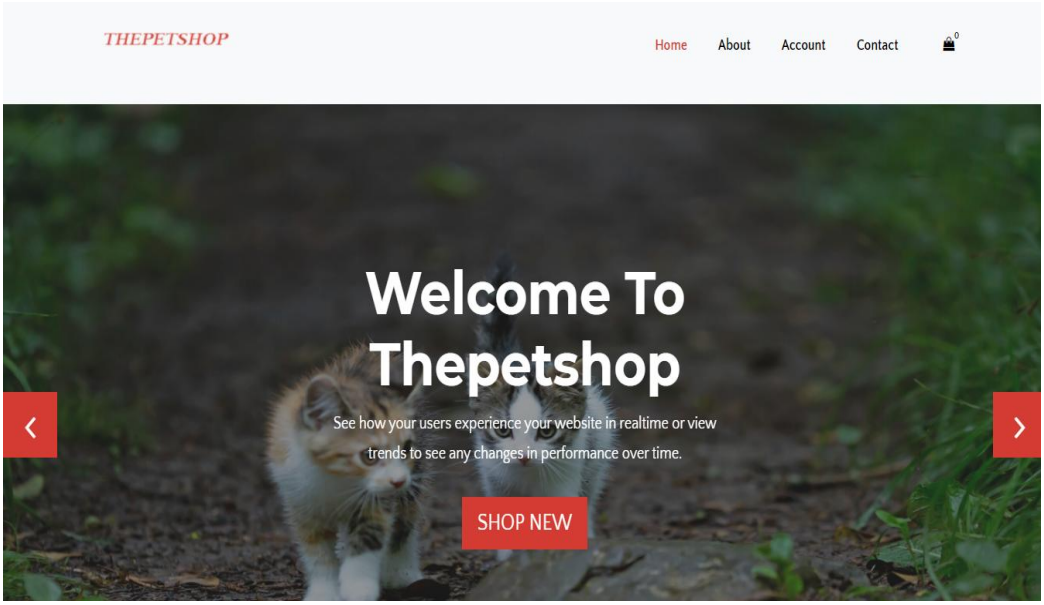
Step 5.1 Users can add his info in his profile

Step 5.2 User can buy products

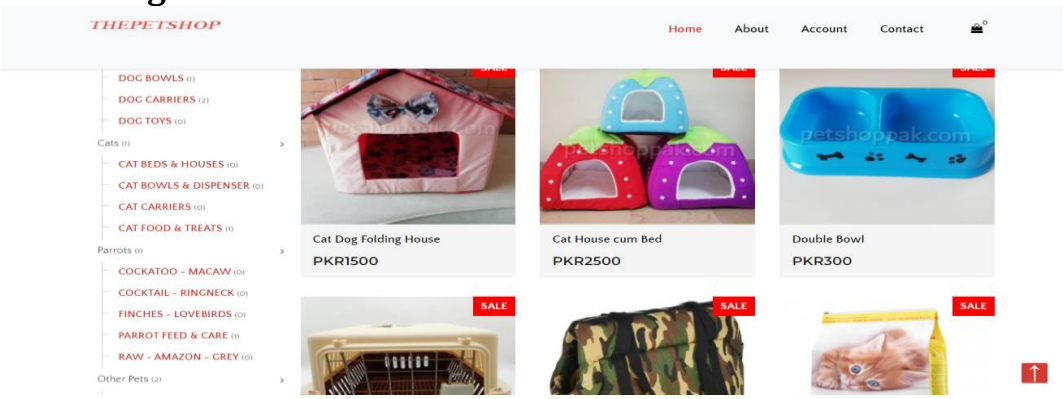
Step 6 Users can logout

Step 7 End

1 Images OF SYSTEM FUNCTIONS



Home Page

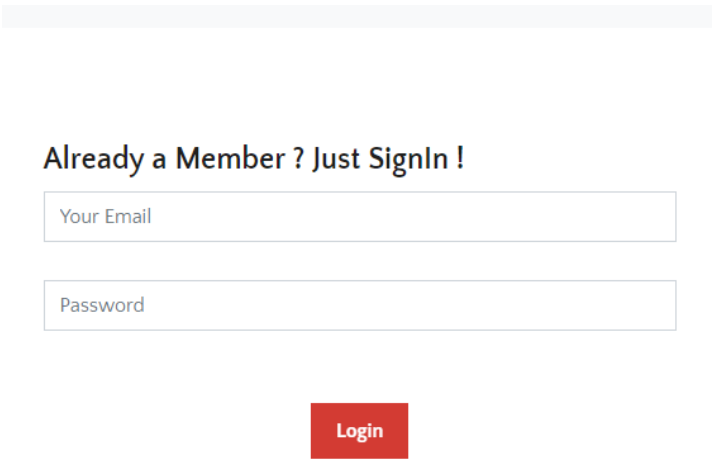


This is the home page when you vist the site .In the Home there are number of pets available .

Select which you wants For Example.
ready

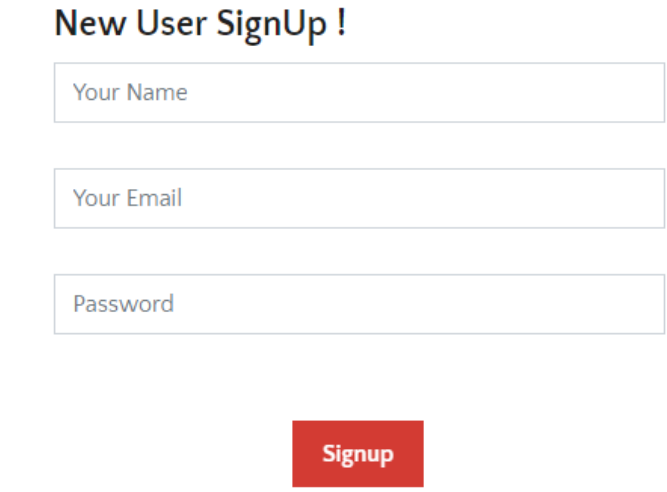
Sign In:

For Sign in you put your email and password which you put at the time of sign up



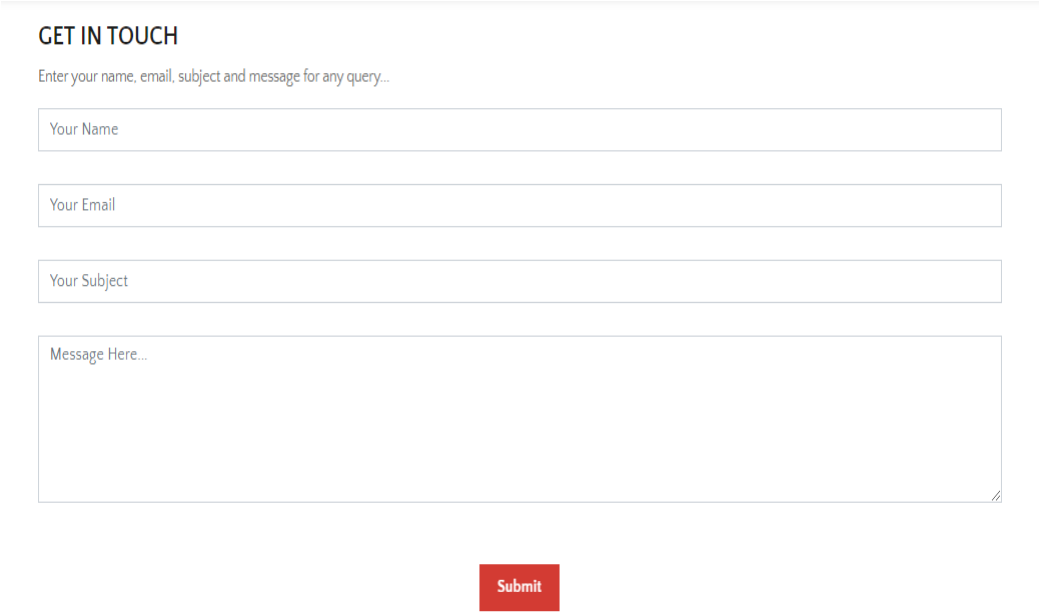
Sign Up:

For signing up you must enter your valid email and password and username

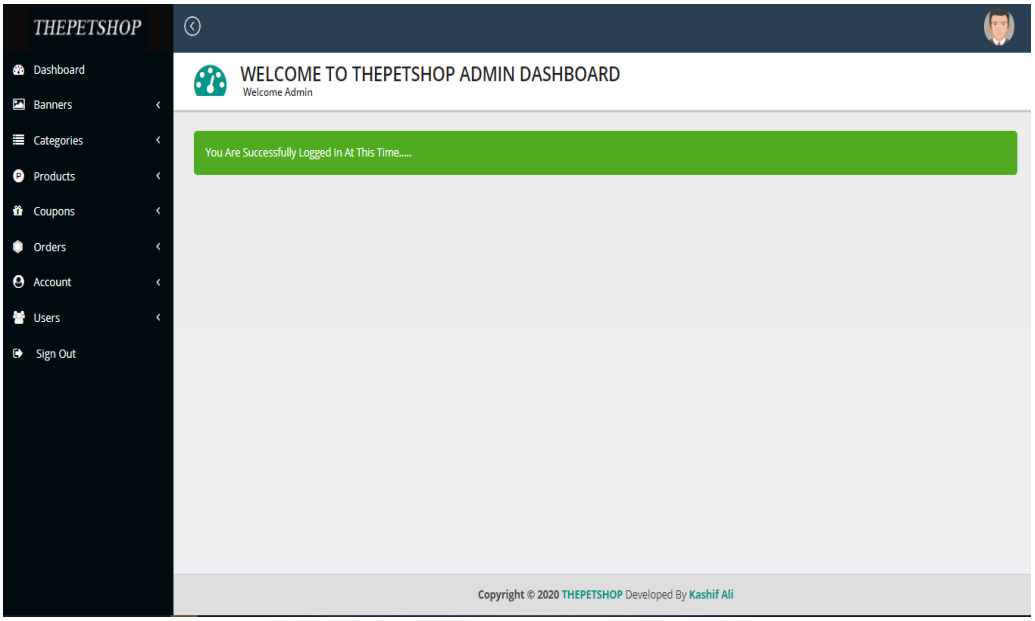


Contact US:

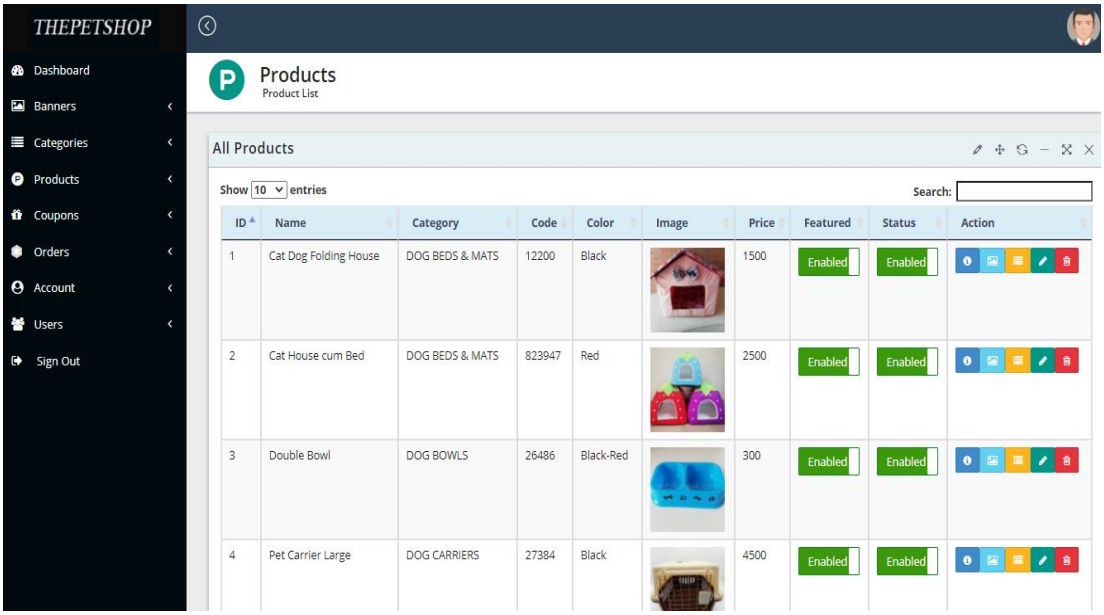
For contact us you enter your name ,Email . In the subject the write your problem domain And in the Message write about the help or support you needed.



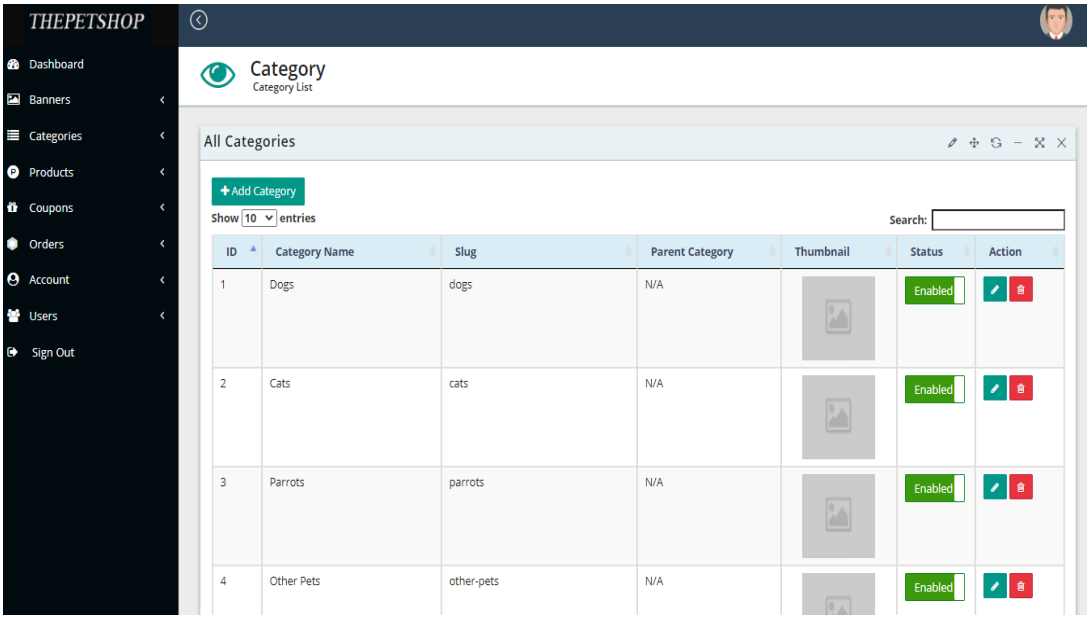
Admin Dashboard:



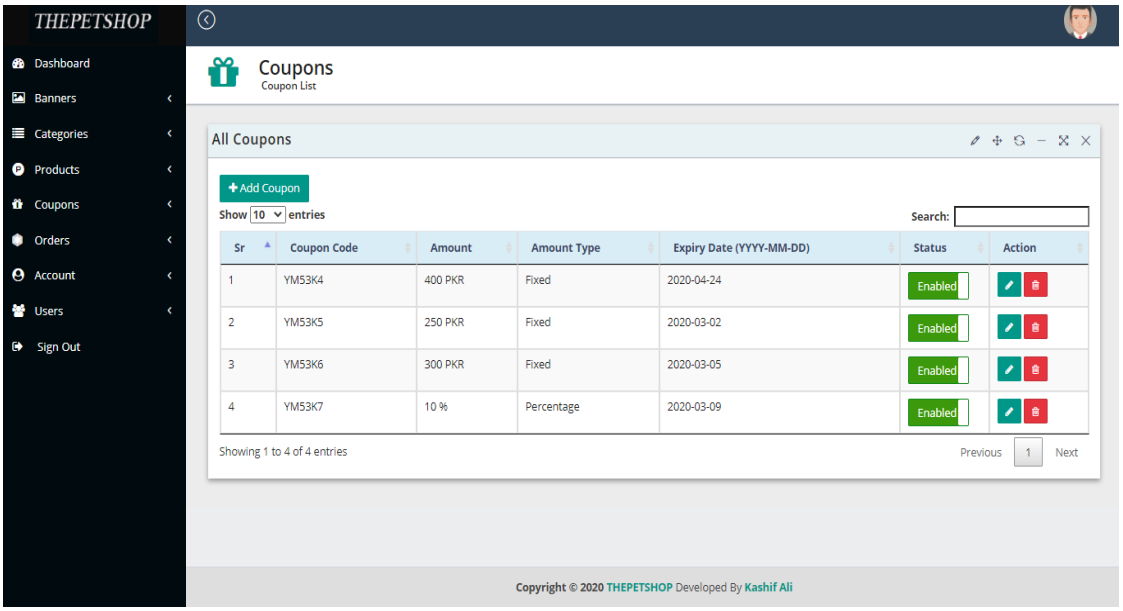
Admin – Products(Add/Edit/Delete):



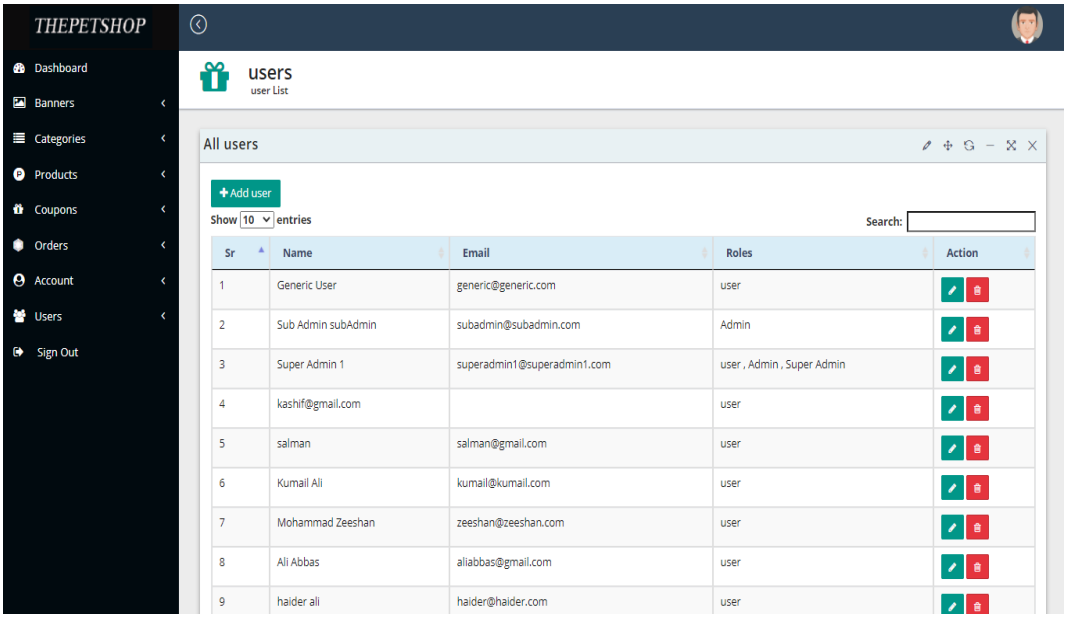
Admin – Categories (Add/Edit/Delete):



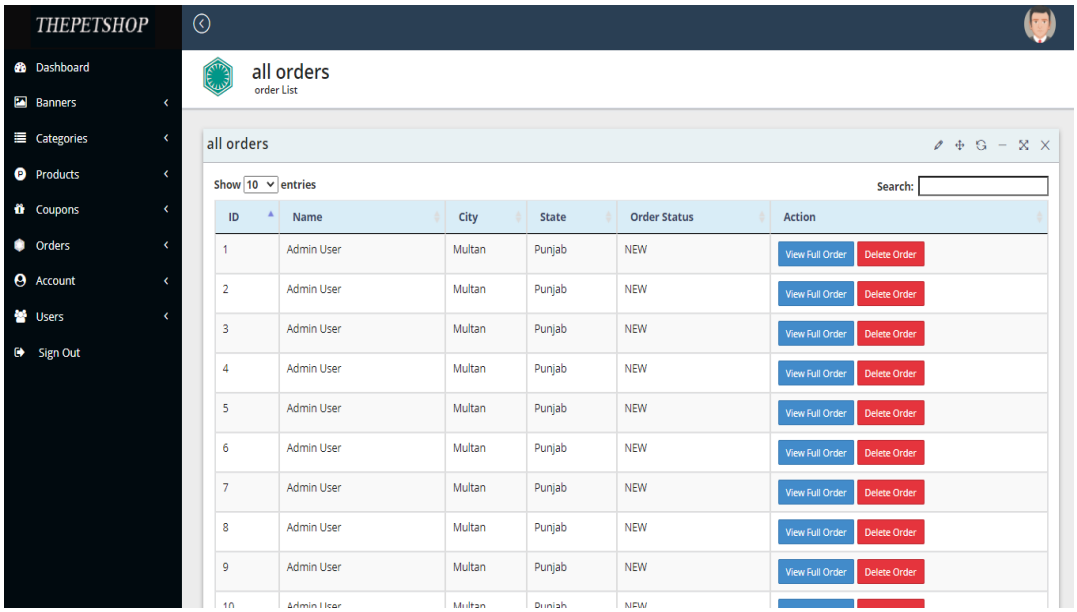
Admin – Coupons (Add/Edit/Delete):



Admin- Users(Add/Edit/Delete):



Admin-Orders (View/Edit/Delete/Change-Status):



Conclusion

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought.

However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store. At the end, it has been a win-win situation for both consumer and sellers.

Reference

https://petshoppak.com/

https://onlinepetshops.com.au/

https://www.petshop.co.uk/