



SHOPHUB : E-COMMERCE MANAGEMENT SYSTEM

PROJECT REPORT

SUBMITTED BY:

SAMAR RAJ

2427030312

A

UNDER THE SUPERVISION OF :

Dr. NEELAM CHAPLOT

**Department of Computer Science and Engineering Manipal
University Jaipur**

INTRODUCTION

- The E-Commerce Management System is a database-driven web application developed using PHP, MySQL, and Bootstrap.
- It allows administrators to manage products, customers, and orders efficiently.
- The project demonstrates how relational database principles can be applied to real-world e-commerce problems, ensuring data consistency and security.

OVERVIEW

- Understand relational database design concepts.
- Implement CRUD operations in PHP and MySQL.
- Provide admin and customer functionality.
- Design normalized tables to prevent redundancy.
- Demonstrate use of primary and foreign keys.

SYSTEM ARCHITECTURE

The system follows a 3-tier architecture:

1. Presentation Layer (Frontend): HTML, CSS, Bootstrap.
2. Logic Layer (Backend): PHP for business logic.
3. Data Layer (Database): MySQL for storing relational data.

DATABASE DESIGN

The database schema includes the following tables:

- users(id, username, password, role, email, phone, address)
- products(id, name, price, description, stock)
- orders(id, customer_id, order_date, total_amount)
- order_items(id, order_id, product_id, quantity, subtotal)

Each table is linked using foreign key relationships.

TECH STACK USED

Tools Used:

- XAMPP - HOSTING/SERVER
- PHP 8, MySQL - BACKEND DEVELOPMENT/LOGIC
- HTML, CSS, Bootstrap 5 - FRONTEND DEVELOPMENT/LOGIC

Modules:

- Admin Login and Dashboard
- Product Management (Add/View)
- Customer Registration and Login
- Order Placement and Checkout
- View Orders by Admin

NORMALIZATION

Database normalization ensures efficiency:

- 1NF - Atomic attributes.
- 2NF - Non-key columns fully dependent on primary key.
- 3NF - No transitive dependencies.

TABLES IN DATABASE:

--USERS TABLE

id	username	email	phone	address	password	role
2511001	samarraj10	NULL	NULL	NULL	\$2y\$10\$SlzkOAlfZCdbuCwnA.HHgenJV2OKcyApDPCfpC6WiOr...	admin
2511002	abhaydv04	NULL	NULL	NULL	\$2y\$10\$7QVrdYlpEtmXjyaxmdAFsulUdQn7GAVZcFX1q7IUu.P...	customer
2511003	manthan07	manthan07@gmail.com	9876765644	Jagdeo Path	\$2y\$10\$R4NYyqnCk2skjetC8SeG.uHjdE1dqH00lwZefoCGB...	customer
2511004	hustler	hustle@gmail.com	8765432345	Kankarbagh	\$2y\$10\$aaazt2f6nWWLoy7i6dbUYu0SOIPBgnFojQngCK9U7xs...	admin
2511005	harshraj	harsh@gmail.com	9876453476	Gola Road	\$2y\$10\$cJkQrrjPJsSL8XsN7wl2WuqPanZX5qo95.KwA2nS3wf...	customer
2511006	anshkr	ansh@gmail.com	9876156709	Purnea	\$2y\$10\$tvVs4T0w1DzV18nQPn/I0EqWp943XPlulRYniFiL5...	customer
2511007	kalyanipd	kalyani@gmail.com	6754321235	MGM Street	\$2y\$10\$uozQerzb8EbLhUs/dOBSeECgYZdHSYOm.7Pn9cONaw...	customer
2511008	vijayth	vijay@gmail.com	8976543209	Church Road	\$2y\$10\$LgkqaOYexdrIEmXXBotLTultwqdwjH6H1GWrNG8Zhf...	customer
2511009	akshatkr	akshat@gmail.com	7865432345	Purnea Railway Station	\$2y\$10\$cSWqrzKwMZRF7NzFM2psseC/lxZHi8fNkjXSyz/ZwMi...	customer
2511010	anitk	animendra@gmail.com	6543568901	Bhilai Chauraha	\$2y\$10\$mTGG3RdPobZ8jSeljwAlexAbN8cK/KWZQp3hmFcYT2...	customer

--PRODUCTS TABLE

id	name	description	price	stock	created_at
1	Water Bottle	BLACK COLOURED 1000ML STEEL WATER BOTTLE	600.00	9	2025-11-08 19:39:29
2	PINTOLA OATS	HIGH PROTEIN PINTOLA OATS 1000G 25G PROTEIN	999.00	9	2025-11-08 23:25:26
3	MILK	AMUL TAAZA 200ML TONED MILK	17.00	10	2025-11-10 02:06:28
4	AIRPODS	BOAT BOLD BLACK AIRPODS LOW LATENCY 42HRS BATTERY ...	999.00	10	2025-11-10 02:10:36
5	LAPTOP	HP VICTUS AMD RYZEN 5 NVIDIA GEFORCE RTX 5000 SERI...	60599.00	10	2025-11-10 02:12:46
6	WATCH	CASIO VINTAGE DIGITAL DIAL ROSE GOLD	4495.00	9	2025-11-10 02:14:36
7	LEATHER JACKET	LEATHER RETAIL LEATHER JACKET FOR MEN	2089.00	9	2025-11-10 02:16:07
8	COMIC BOOK	THE MONK WHO SOLD HIS FERRARI BY ROBIN SHARMA	199.00	10	2025-11-10 02:18:21
9	KETTLE	PRESTIGE 1L WATER KETTLE	599.00	10	2025-11-10 02:19:26
10	SNICKERS	ASIAN WHITE SNICKERS	799.00	10	2025-11-10 02:20:18
11	SNICKERS	ASIAN WHITE SNICKERS	799.00	10	2025-11-10 02:20:29

--ORDERS TABLE

id	customer_id	order_date
2	2511002	2025-11-08 21:51:40
3	2511003	2025-11-10 02:59:50

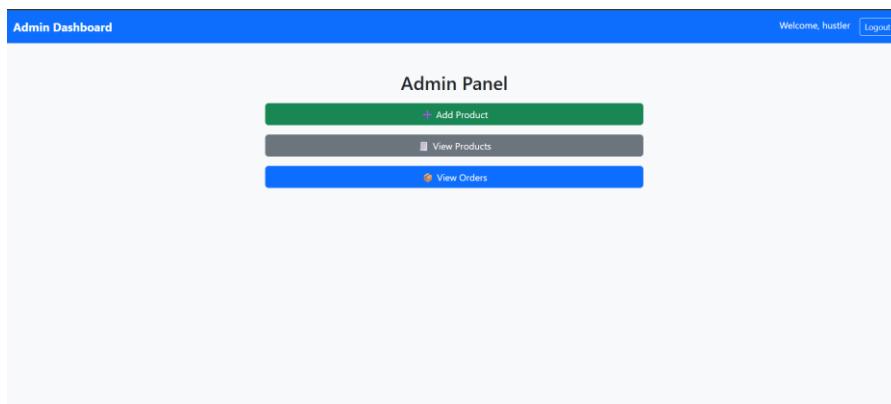
--ORDER_ITEMS TABLE

id	order_id	product_id	quantity
1	2	1	1
2	3	2	1
3	3	7	1
4	3	6	1

FRONTEND DESIGN

- Bootstrap was used to design a responsive, clean UI.
- The admin panel features gradient themes, modern buttons, and consistent typography.
- Forms and tables are structured using Bootstrap's grid layout for clarity and accessibility.

--ADMIN DASHBOARD



The screenshot shows a top navigation bar with "Admin Dashboard" on the left, "Welcome, hustler" in the center, and "Logout" on the right. Below this is a section titled "Admin Panel" containing three buttons: "Add Product" (green), "View Products" (grey), and "View Orders" (blue).

--CUSTOMER DASHBOARD

The screenshot shows a customer dashboard for an e-commerce platform. At the top, there's a blue header bar with the text "E-Commerce" on the left, and "Cart (0) Welcome, manthan07 Logout" on the right. Below the header, the main content area is titled "Available Products". It displays a grid of seven product cards:

- SNICKERS**
ASIAN WHITE SNICKERS
₹799.00
[Add to Cart](#)
- SNICKERS**
ASIAN WHITE SNICKERS
₹799.00
[Add to Cart](#)
- KETTLE**
PRESTIGE 1L WATER KETTLE
₹599.00
[Add to Cart](#)
- COMIC BOOK**
THE MONK WHO SOLD HIS FERRARI BY ROBIN SHARMA
₹199.00
[Add to Cart](#)
- LEATHER JACKET**
LEATHER RETAIL LEATHER JACKET FOR MEN
₹2,089.00
[Add to Cart](#)
- WATCH**
CASIO VINTAGE DIGITAL DIAL ROSE GOLD
₹4,495.00
[Add to Cart](#)
- LAPTOP**
HP VICTUS AMD RYZEN 5 NVIDIA GEFORCE RTX 5000 SERIES
₹60,599.00
[Add to Cart](#)
- AIRPODS**
BOAT BOLD BLACK AIRPODS LOW LATENCY 42HRS BATTERY
FAST CHARGE
[Add to Cart](#)
- MILK**
AMUL TAAZA 200ML TONED MILK
₹17.00
[Add to Cart](#)

CONCLUSION

The E-Commerce RDBMS project demonstrates an efficient way to connect front-end design with a normalized MySQL database. It emphasizes CRUD operations, data integrity, and user interaction. The project successfully integrates all major components of a real-world e-commerce management system.

FUTURE WORK

- Add product images and categories.
- Integrate a payment gateway.
- Implement analytics dashboard for sales.
- Deploy the system on a live web server.
- Enhance with REST APIs for mobile ap