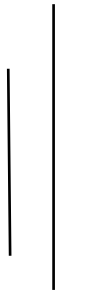**Tribhuvan University**

Faculty of Humanities and Social Science

Swastik College, Bhaktapur

MIS and E-Business

Project Report on ElectroMart

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August 2025

ABSTRACT

The project "ElectroMart" focuses on developing an e-commerce platform specializing in the sale of electronic products such as mobiles, earbuds, watches, fans, and other gadgets. The platform is built using WordPress and includes features such as user and admin dashboards. The user dashboard allows customers to manage their profiles, browse products, add items to the cart, and track orders, while the admin dashboard enables efficient management of product categories, inventory, and transactions. The goal is to create a seamless and user-friendly shopping experience for both customers and administrators.

The ElectroMart e-commerce platform successfully achieves its goals of enhancing user experience and simplifying administrative tasks. With a robust WordPress configuration and intuitive dashboards for both users and admins, ElectroMart stands out as a competitive platform in the online electronics market.

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CHAPTER1: INTRODUCTION

1.1 Introduction

The project "ElectroMart" is an e-commerce platform built using WordPress, focused on providing a wide range of electronic products such as mobiles, headphones, watches, fans, and other gadgets. It is designed with both user and admin dashboards where customers can browse products, add to cart, place orders, and track them, while administrators can manage categories, inventory, and transactions. The main aim of ElectroMart is to create a simple, secure, and user-friendly online shopping experience that meets the growing demand for electronic devices in the digital marketplace.

1.2 Problem Statement

The growing demand for online shopping of electronic devices is hindered by a lack of reliable local platforms, difficulty in managing inventory and product categories, customer challenges in tracking orders, and administrative issues with transaction handling and product management.

1.3 Objective

The main objective of ElectroMart are as follow:

- To develop an e-commerce platform for selling electronic devices like mobiles, headphones, watches, and fans.
- To design a user-friendly dashboard for customers to browse products, add to cart, and track orders.
- To provide an efficient admin dashboard for managing categories, products, inventory, and transactions.

- To ensure a secure, reliable, and convenient shopping experience for customers.
- To enhance business efficiency by simplifying administrative tasks**.**

1.4 Limitations

The limitations of website are:

- The website lacks advanced security features, which may affect data protection.

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- The platform depends on internet connectivity for operation.
- It does not support all popular payment methods, limiting user flexibility.
- Some advanced features are missing, reducing overall functionality and user experience.

1.5 Report Organization

This report covers all information of project 'ElectroMart'. The report is organized in following ways:

- **Introduction** – Provides an overview of the project, including the problem statement and objectives.
- **Implementation Details** – Discusses the configuration of WordPress and the functionalities of the user and admin dashboards, supplemented with screenshots.
- **Conclusion** – Summarizes the project outcomes and potential areas for enhancement.

CHAPTER 2: SYSTEM ANALYSIS

2.1: System Analysis:

2.1.1 Requirement Analysis

➢ **Functional Requirements**

Functional requirements define the specific behavior or functions of the system. For ElectroMart, these include:

1) **User Registration and Login:** Customers can register and log in to their accounts to place orders, save addresses, and manage profile settings.

2) **Product Display:** Customers can browse various products with relevant details such as name or product details**.**

3) **Search and Filter:** Users can search for watch and filter results based on category (e.g., watch)**.**

4) **Add to cart and checkout:** Customers can add selected products to the cart and proceed to checkout with their preferred shipping and payment options.

5) **Order Placement:** Orders can be placed by providing delivery details and confirming payment through Online Payment(i.e.esewa)**.**

6) **Order Management (Admin):** The admin dashboard allows management of orders, updating order status, tracking inventory, and managing customer details.

➢ **Non-Functional Requirements**

Non-functional requirements specify how the system performs its functions. For ElectroMart, these include:

1) **Usability:** The website must have an attractive, intuitive, and user-friendly interface for smooth shopping experiences across all devices.

2) **Reliability:** The system should operate without crashes, ensuring accurate product data, secure transactions, and dependable performance**.**

3) **Performance:** The website should load quickly and support multiple simultaneous users without affecting the speed of product search or checkout.

4) **Security:** All user data, including personal and payment information, must be protected using secure login systems, SSL encryption, and trusted WordPress security plugins.

5) **Scalability:** The system should be able to handle increasing numbers of users, orders, and product listings as ElectroMart grows.

6) **Maintainability:** The website should be easy to update and maintain using the WordPress dashboard, with plugin-based feature upgrades and regular system backups.

2.1.2 Feasibility Study

a. Technical Feasibility

This website is considered technically feasible because all the required tools and resources for its development are easily available. The system is built using a **Content Management System (CMS)**, which is free and open-source, making the development process simple and cost-effective. Additionally, free software like **XAMPP** provides an easy environment for database and server management. Overall, the technical resources are reliable and accessible, ensuring smooth development and successful implementation of the system.

b. Economic Feasibility

Developing this system requires very little cost because most of the tools and platforms used are free and open-source. By utilizing resources like **WordPress** and **XAMPP**, the project eliminates the need for expensive software or licenses. Since the coding and setup are managed internally, there is no significant financial investment, making the project both **cost-effective and economically feasible**.

c. Operational Feasibility

The system clearly demonstrates its operational feasibility with a simple and interactive design that makes it easy for users to access and utilize its features. Its smooth functionality and well-structured operations require minimal maintenance, ensuring efficiency in handling day-to-day tasks and improving the overall management process of the system.

d. Schedule Feasibility

The project was designed to be completed within a limited timeframe, and by using a **CMS platform**, the overall development process became faster and more efficient. This reduced the need for extensive manual coding and minimized potential delays. As a result, the project was successfully finished within the expected schedule, proving that the application is highly feasible in terms of time management.
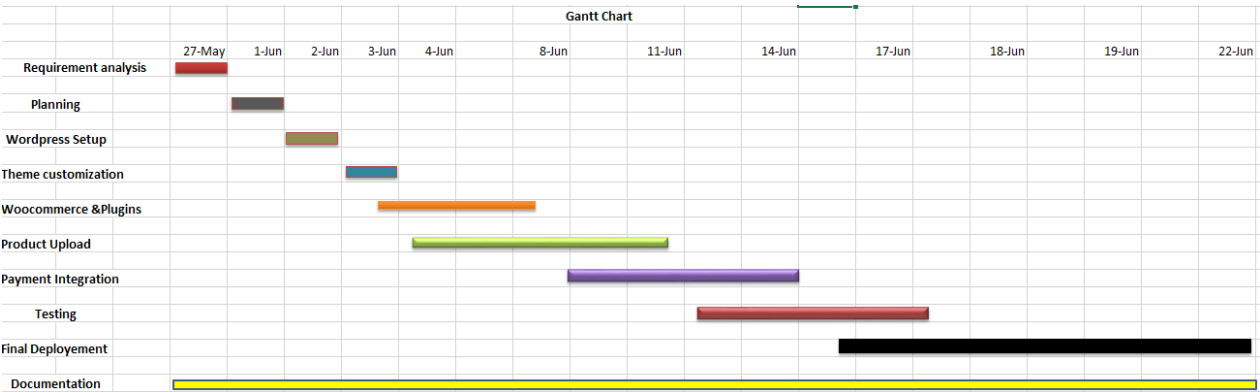
2.1.3 Gantt chart

Table: Gantt chart for ElectroMart

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CHAPTER 3: IMPLEMENATION DETAILS

3.1 Implementation

3.1.1 Tools Used

- **WordPress:** WordPress is a **Content Management System (CMS)** that allows users to easily create, manage, and publish websites without needing advanced programming skills. It is **open-source and free**, providing themes, plugins, and customizable options to build anything from blogs and portfolios to full e-commerce platforms. WordPress powers a large portion of websites worldwide because of its flexibility, user-friendliness, and wide community support.

- **XAMPP:** XAMPP is a **free and open-source web server solution package** that provides a local development environment. It includes **Apache (server), MySQL/MariaDB (database), PHP, and Perl**, all bundled together to make website development easier. Developers use XAMPP to run and test websites locally on their computer before deploying them online. It is widely used for learning, experimenting, and developing dynamic websites like those built with WordPress.

3.1.2 Implementation Details of Modules (Description of procedures/functions)

a) **Product Management Module:** This module includes features such as adding new products, updating existing product details, and removing products from the inventory.

b) **Shopping Cart Module:** The shopping cart module allows users to add products to their carts while browsing. Users can view and modify the contents of their carts before proceeding to checkout.

c) **Order Processing Module:** It involves functionalities like confirming orders, and updating the inventory after successful purchases.

d) **Payment Gateway Integration:** This module involves s integration of a payment gateway to facilitate online transactions. This application supports two payment methods i.e. Electronic payment and cash on delivery ensuring flexibility for users.

e) **User Feedback and Review Module:** The feedback and review module enable users to share their experiences and opinions on purchased products.

CHAPTER 4: CONCULSION AND RECOMMENDATION

4.1 Conclusion

The project **"ElectroMart"** successfully develops a user-friendly e-commerce platform for electronic products using WordPress. With dedicated dashboards for both users and administrators, the system ensures smooth product browsing, order tracking, and efficient inventory management. It enhances customer convenience while simplifying administrative tasks, making it a reliable solution for online electronics shopping.

4.2 Recommendation

For future improvements, ElectroMart can integrate advanced features such as **multiple payment gateways, mobile app support, AI-based product recommendations, and enhanced security measures**. Expanding product categories and improving scalability will further strengthen its role as a competitive online marketplace.
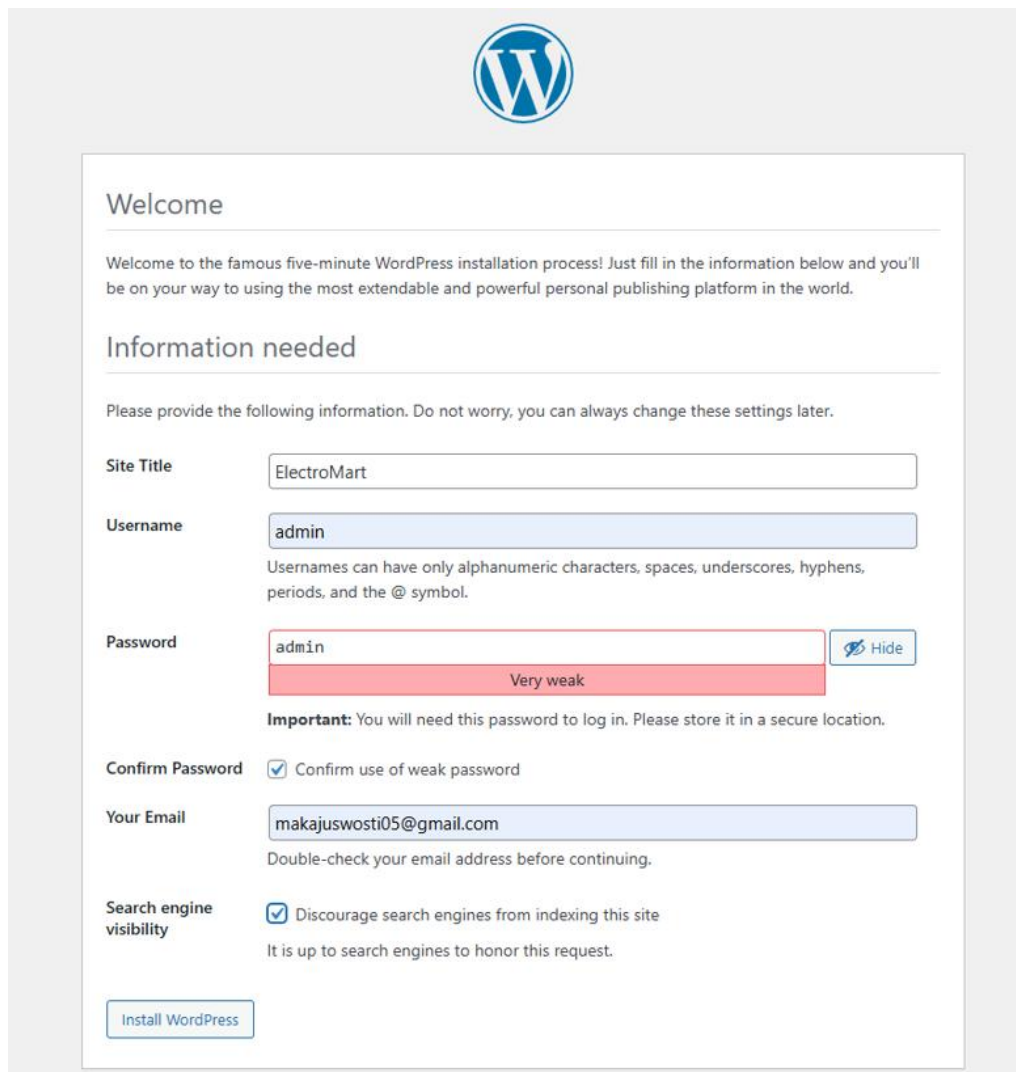
APPENDICES

➢ **Description of WordPress Configuration**

The following provides a step of the WordPress configuration process used to set up the ElectroMart platform.

➢ **Installation of WordPress:**

- Created database named electromart_db in phpMyAdmin.

- During the WordPress installation, created the Site Title with username, password and email.

- Complete the setup by clicking "Install WordPress" to finalize the configuration.

Figure A.1: Configuration of WordPress

➢ **For Admin:**

Figure A.2: Login details for admin

➢ **Theme Customization:**

Downloaded theme named "Electronic Gadget Store"
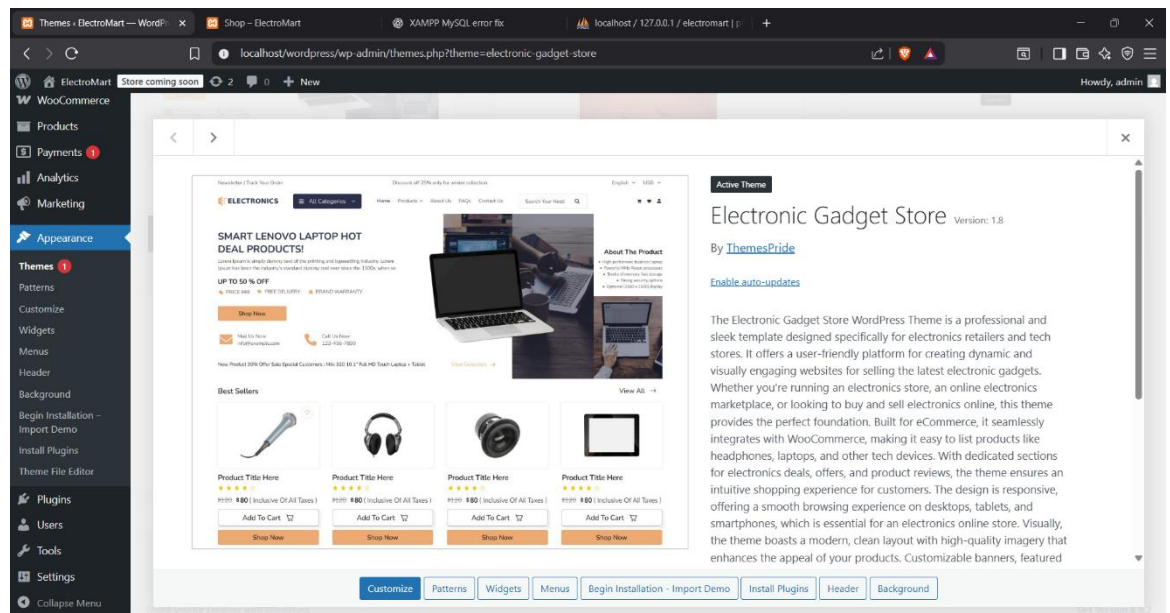
Figure A.3: Theme Customization

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> **Plugins:**

"Payment Plugin for esewa" is used in payment section.
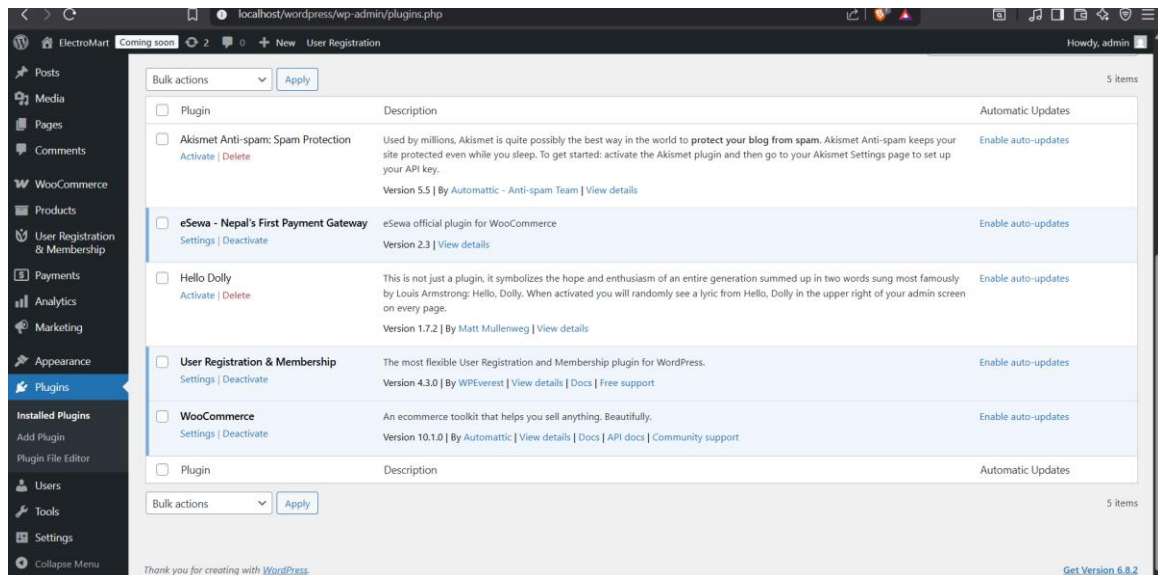
Figure A.4: Plugins

> **Description of User Dashboard**

  ▪ **Profile:**

  The Profile section allows users to manage their personal information including display name and email address.

Figure A.5: Profile of user

- **Product List:**

  The Product List display available devices from different products. User can
  filter and sort products based on various criteria.
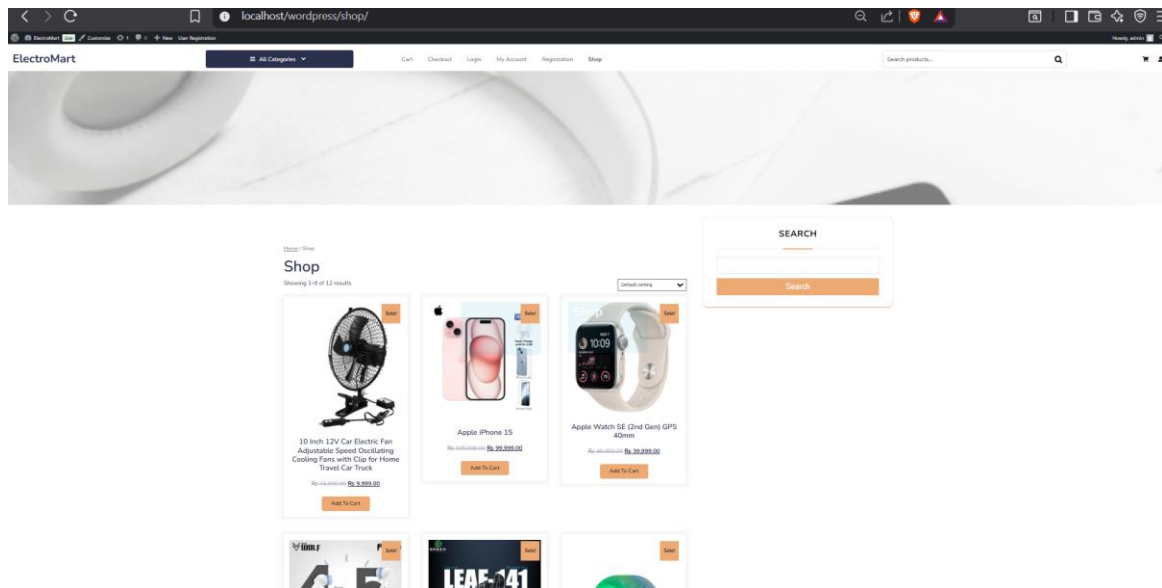
Figure A.6: Product List
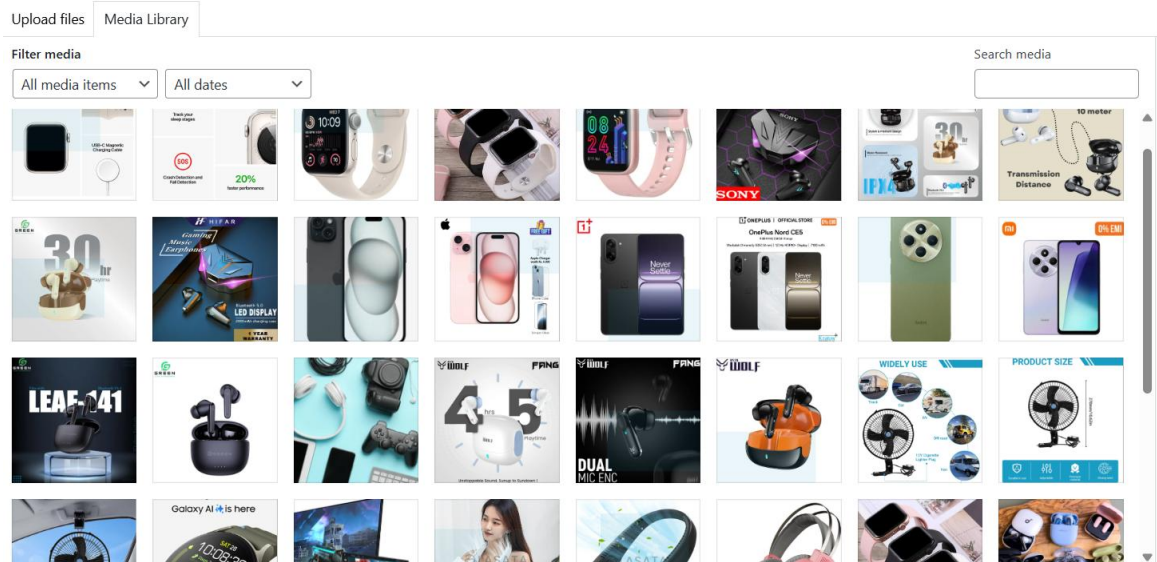
Figure A.7: Product Gallery

▪ **Add to Cart:**

Users can easily add product to their cart for future checkout. This functionality is intuitive and supports quick additional from product list.
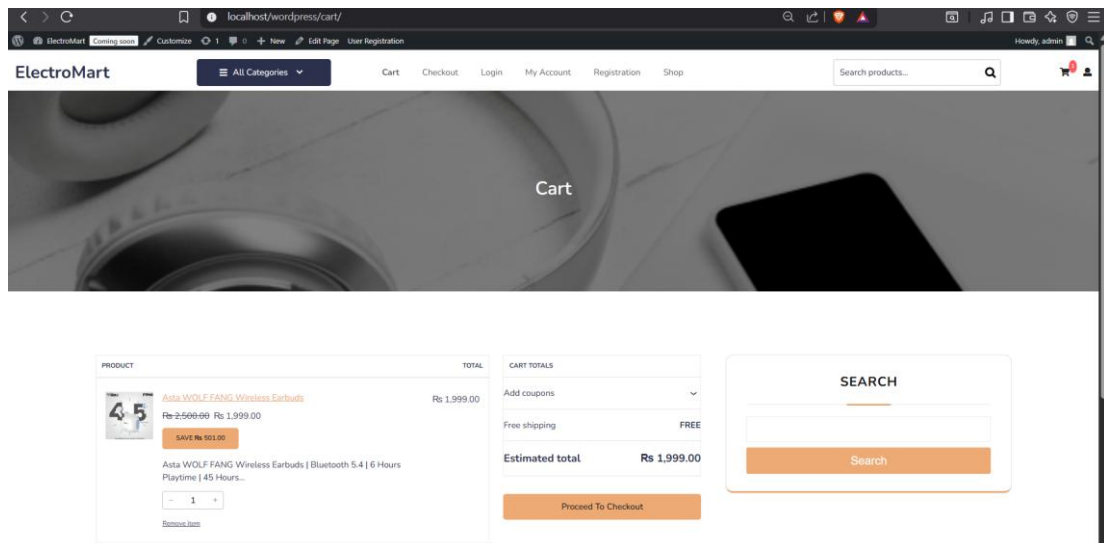
Figure A.8: Add to Cart

▪ **Cart List:**

The cart List shows all the items added by the users. It allows for update to quantities and the removal of items before proceeding to checkout.
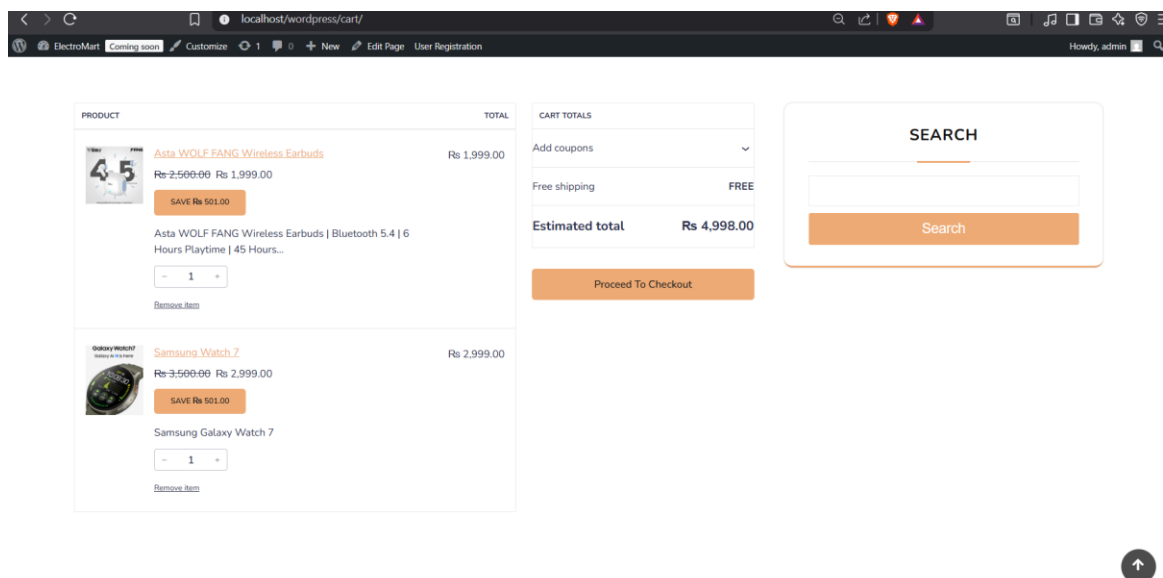
FigureA.9: Cart List

- **Order List History:**

    User can view their past orders, including details such as order status, products purchased and total amount spent.

Figure A.10: Order List History

- **Checkout:**

    The checkout Process is streamline to ensure a hassle- free experience with various methods.

Figure A.11: Check out

➤ **Description of Admin Dashboard**

  ▪ **Category Details:** Admins can add new categories to organize product efficiently and can view and manage existing categories to make it easy to delete or update the product as needed.
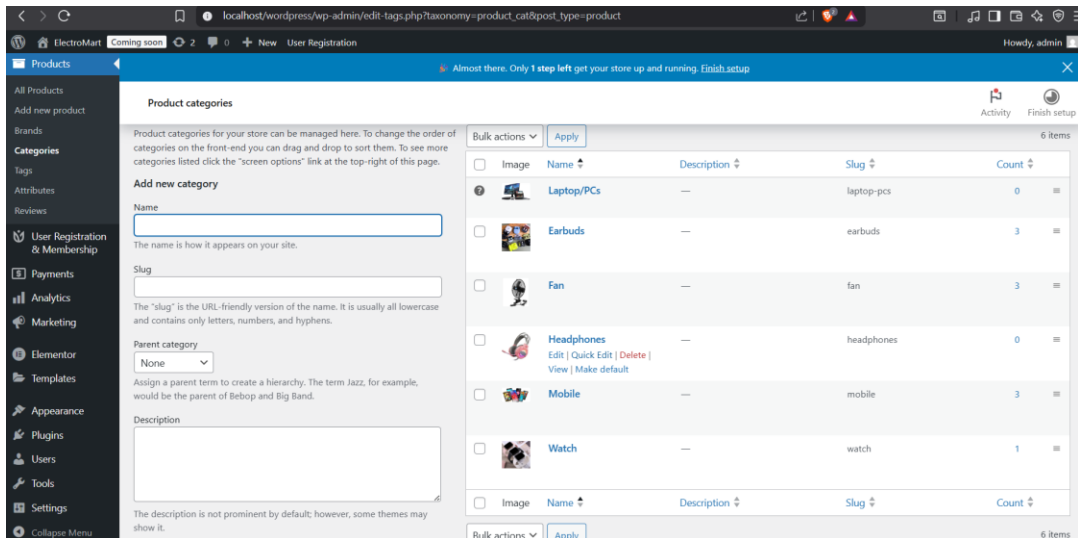
Figure A.12: Adding category and category list

  ▪ **Products:**
    Admins can add products to the inventory including details such as product name, description, price and images and can also manage and view all products with options to edit or delete listing.

Figure A.13: Add Products

Figure A.14: View Products

- **Products Details:**

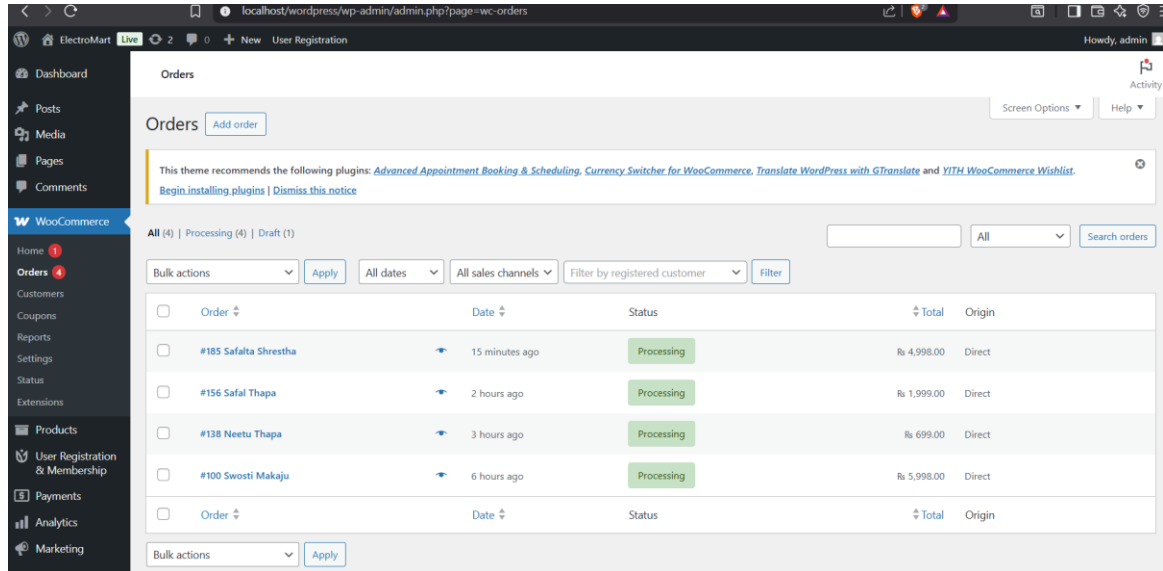 Admin can view details information about each product, including sales statistics, details, etc.

Figure A.15: Product Details

- **Order List:**

  The Order List provides an overview of all orders placed on the platform, with options to update order status.
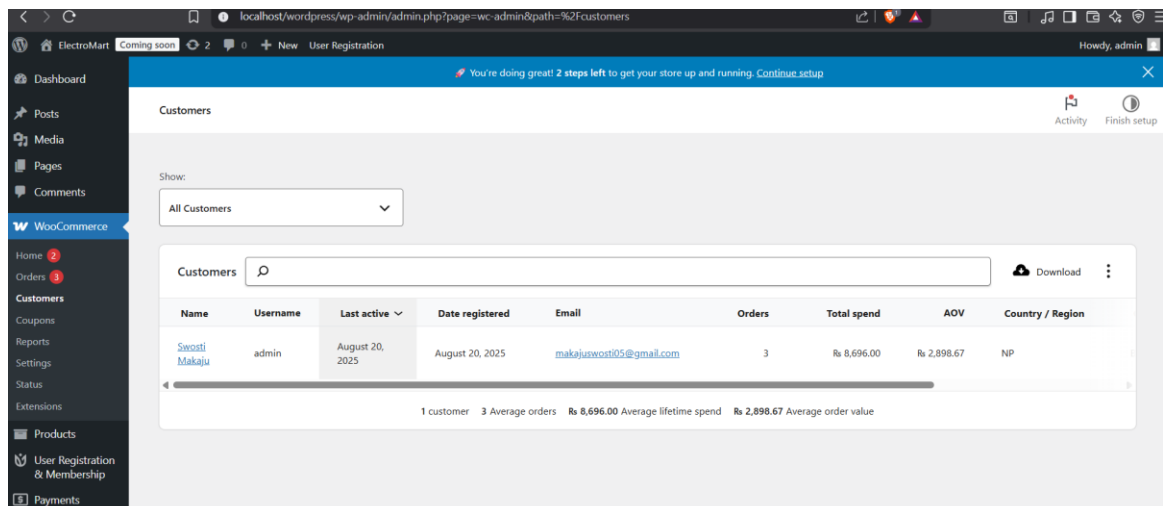
Figure A.16: Order

- **Transactions Details:**

  Admins allows to view all financial transaction with customer details, ensuring accurate records.

Figure A.17: Transaction Details

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References

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