

# Lab 1: Setting Up the Development Environment and Installing WordPress

## Objective:

This is a complete report of the lab exercises on the development of an e-commerce website using WordPress and WooCommerce. The labs cover important areas of website setup, configuration, and functionality, step-by-step procedures, findings, and conclusions

## Task Performed

### 1) Install and Configure XAMPP

- Download XAMPP from the official website (<https://www.apachefriends.org/>).
- Install XAMPP as per the on-screen instructions.
- Open the XAMPP.
- Start Apache and MySQL from the XAMPP Control Panel.

### 2) Download and Set Up WordPress

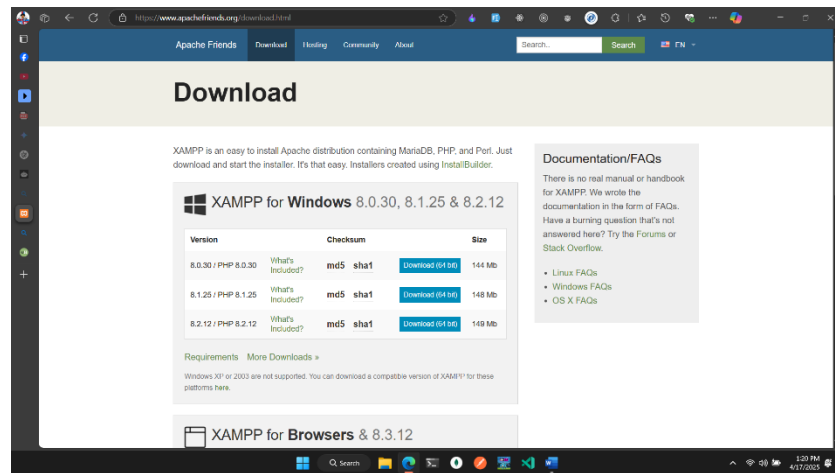
- Download WordPress from [Download – WordPress.org](https://wordpress.org/)
- Unzip the WordPress folder and transfer it under the htdocs directory inside the XAMPP installation folder.
- Create a new MySQL database using phpMyAdmin.
- Configure the wp-config.php file so that WordPress can communicate with the database.
- Complete the WordPress installation process by providing site details.

### 3) Access and explore the WordPress Dashboard

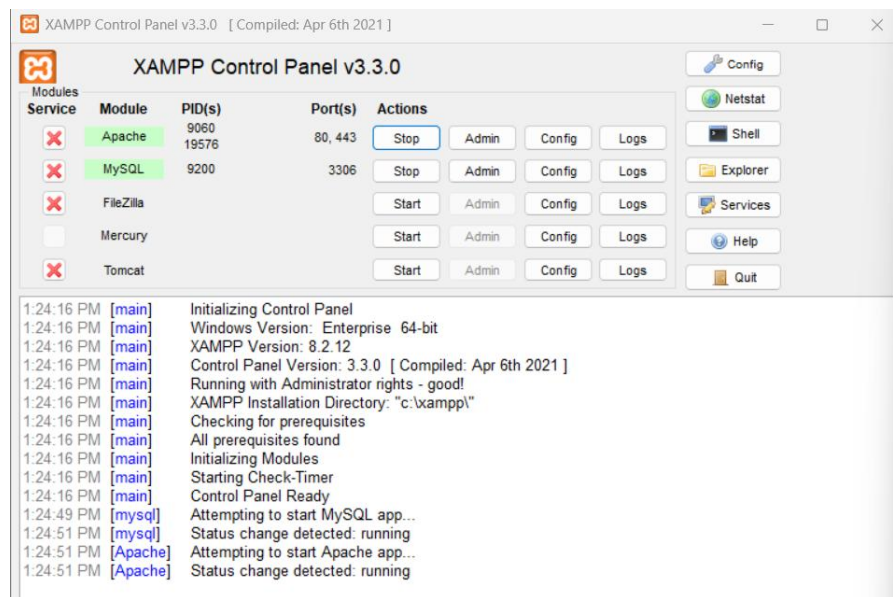
- Log in to the WordPress dashboard using admin credentials.
- Explore dashboard features like posts, pages, themes, and plugins.

Screenshots:

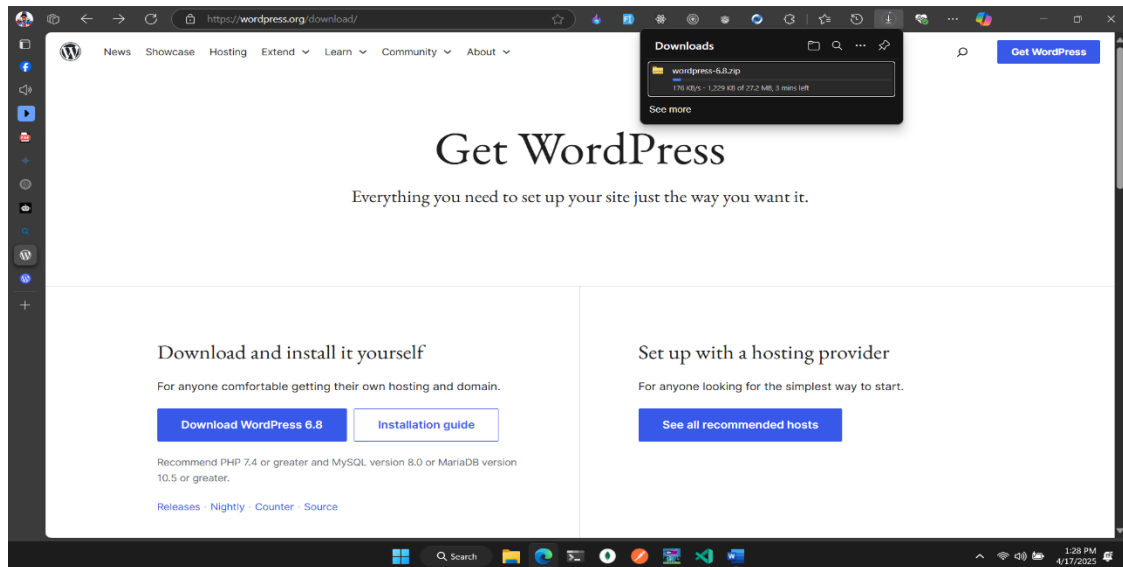
✧ Screenshot of XAMPP installation



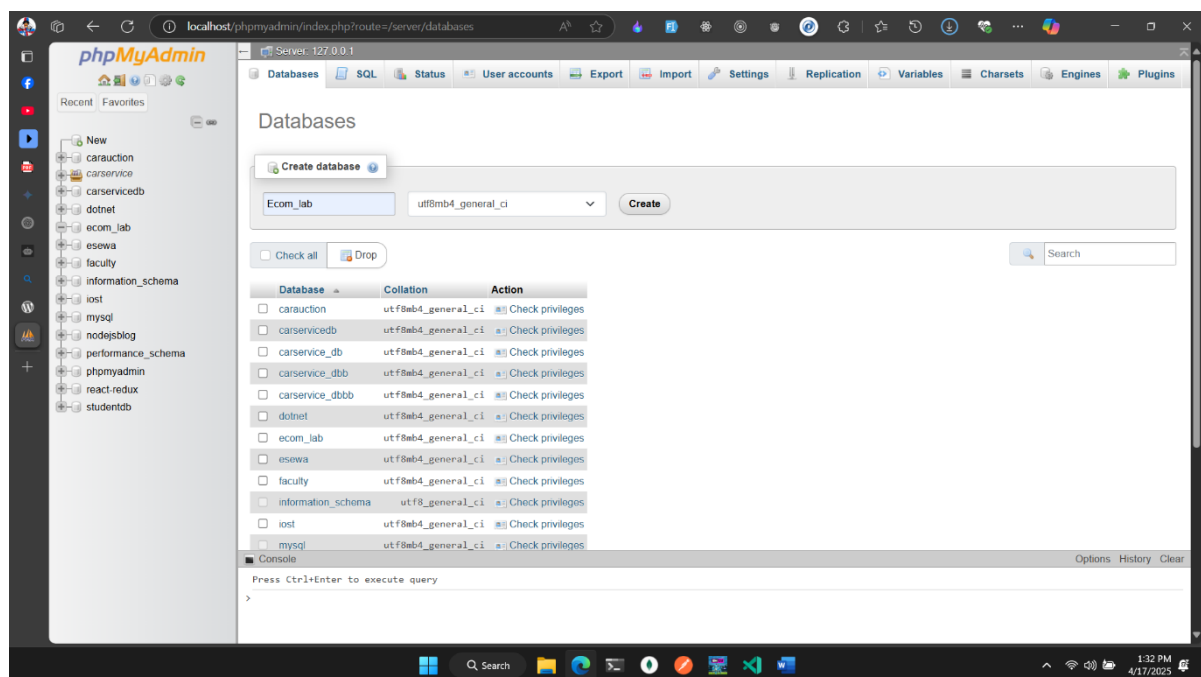
✧ Screenshot of Apache and MySQL running.




1. WordPress installation process:
  - Download WordPress.



- Screenshot of database creation in phpMyAdmin



Screenshot of WordPress setup wizard.



Below you should enter your database connection details. If you are not sure about these, contact your host.

**Database Name**   
The name of the database you want to use with WordPress.

**Username**   
Your database username.


**Password**  [Show](#)  
Your database password.

**Database Host**   
You should be able to get this info from your web host, if localhost does not work.

**Table Prefix**   
If you want to run multiple WordPress installations in a single database, change this.

[Submit](#)

Screenshot of successful installation confirmation and Auth setup.



**Username or Email Address**

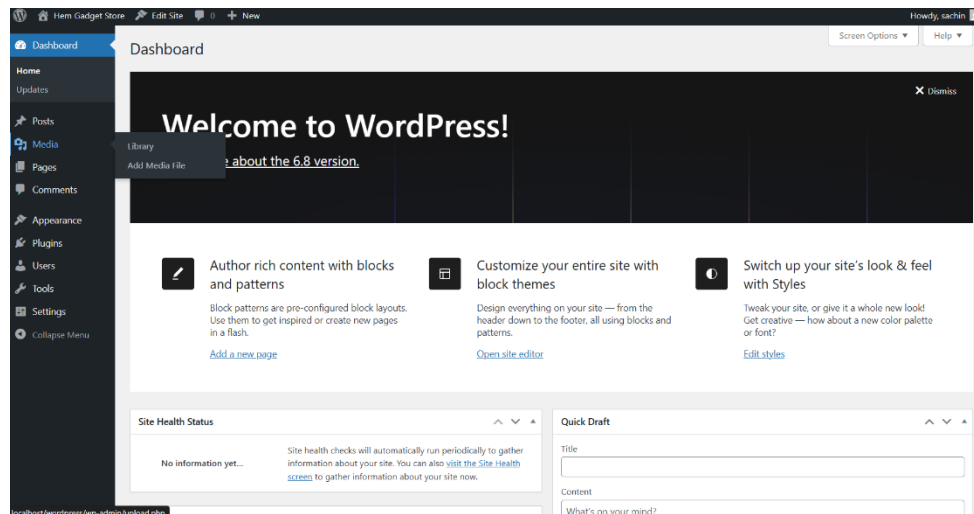
**Password**  
 [Show](#)

☒ Remember Me [Log In](#)

[Lost your password?](#)

[← Go to Hem Gadget Store](#)

## 2. WordPress Dashboard



### Observations/Findings:

1. XAMPP helps to build a local server environment by packaging Apache, MySQL, and PHP together.
2. WordPress installation is quite simple and requires little configuration.
3. The WordPress dashboard is an interface that makes it easy to manage website content and customization.

### Conclusion

In summary, the lab was successful in showing how to set up a local development environment using XAMPP and install WordPress. The procedure involved XAMPP installation, database setup, WordPress configuration, and finally accessing the WordPress dashboard. One of the challenges was to have the database credentials correctly configured in wp-config.php; however, the issues were effectively solved through troubleshooting.

## Lab 2: Installing WooCommerce & Creating Categories/Subcategories

### **Objective:**

The purpose of this lab is to install the WooCommerce plugin and set up the foundational structure for an eCommerce site by creating product categories and subcategories.

### **Tasks Performed:**

#### 1) Install and Activate the WooCommerce Plugin:

- Navigated to the WordPress admin panel.
- Went to Plugins > Add New and searched for "WooCommerce".
- Installed and activated the WooCommerce plugin.

#### 2) Run the WooCommerce Setup Wizard:

- Completed the WooCommerce setup wizard by providing store details, payment methods, and shipping options.
- Configured default currency and tax settings.

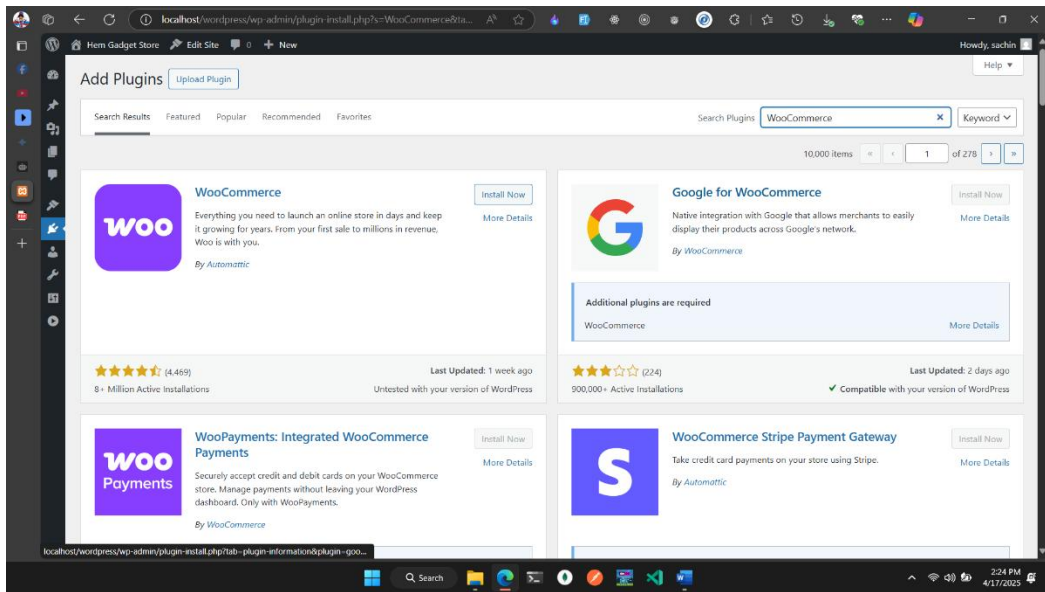
#### 3) Create Product Categories and Subcategories:

- Navigated to Products > Categories in the WordPress dashboard.
- Created main product categories and added relevant subcategories.
- Configured category descriptions and featured images.

#### 4) Add Sample Products Under the Created Categories:

- Navigated to Products > Add New.
- Added sample product details, including name, description, price, and images.
- Assigned products to appropriate categories and subcategories.

## Screenshots:



### Tell us a bit about your store

We'll use this information to help you set up payments, shipping, and taxes, as well as recommending the best theme for your store.

**GIVE YOUR STORE A NAME**

Hem Gadget Store

Don't worry — you can always change it later!

**WHICH INDUSTRY IS YOUR CLIENT'S BUSINESS IN?**

Select an industry

**WHERE IS YOUR STORE LOCATED? \***

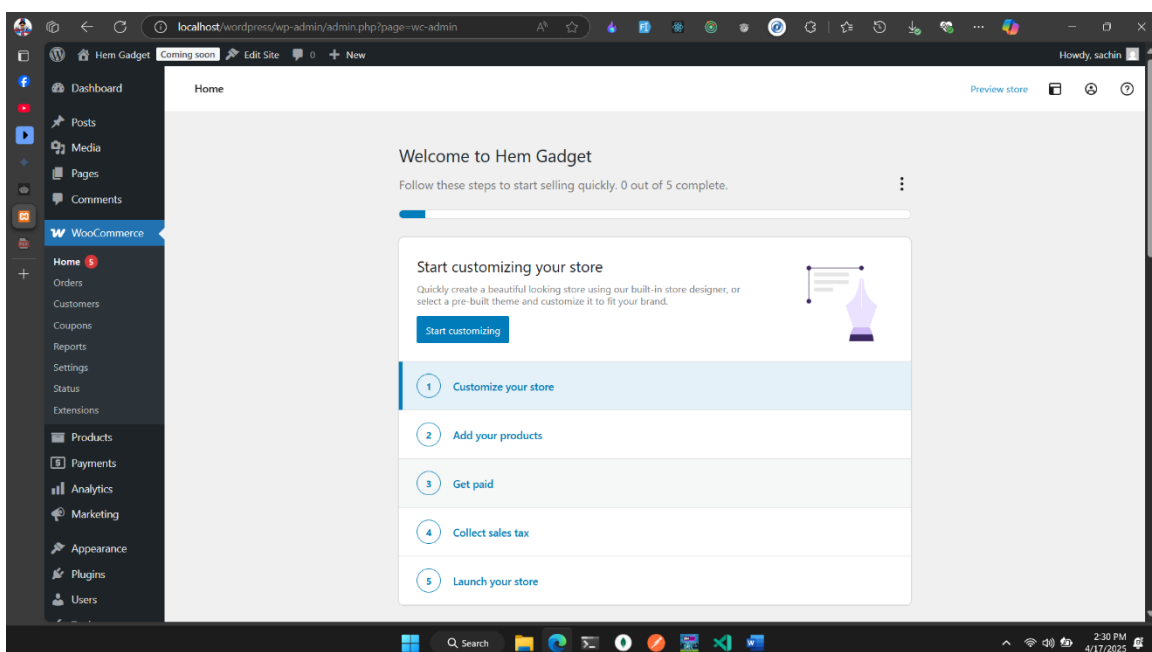
Nepal — Bagmati

**YOUR EMAIL ADDRESS**

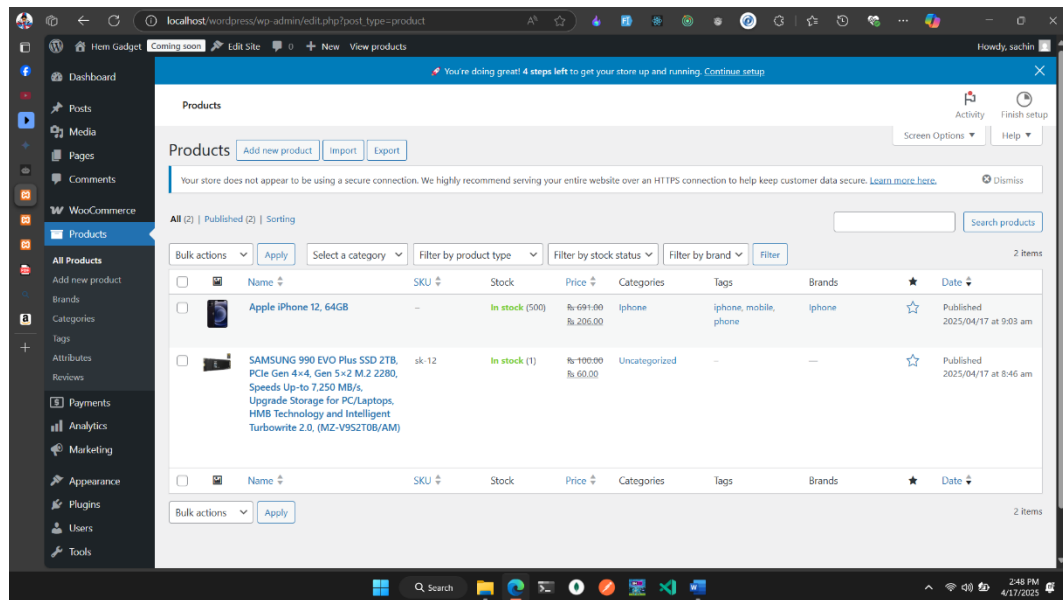
thapasachin572@gmail.com

☐ Opt-in to receive tips, discounts, and recommendations from the Woo team directly in your inbox.

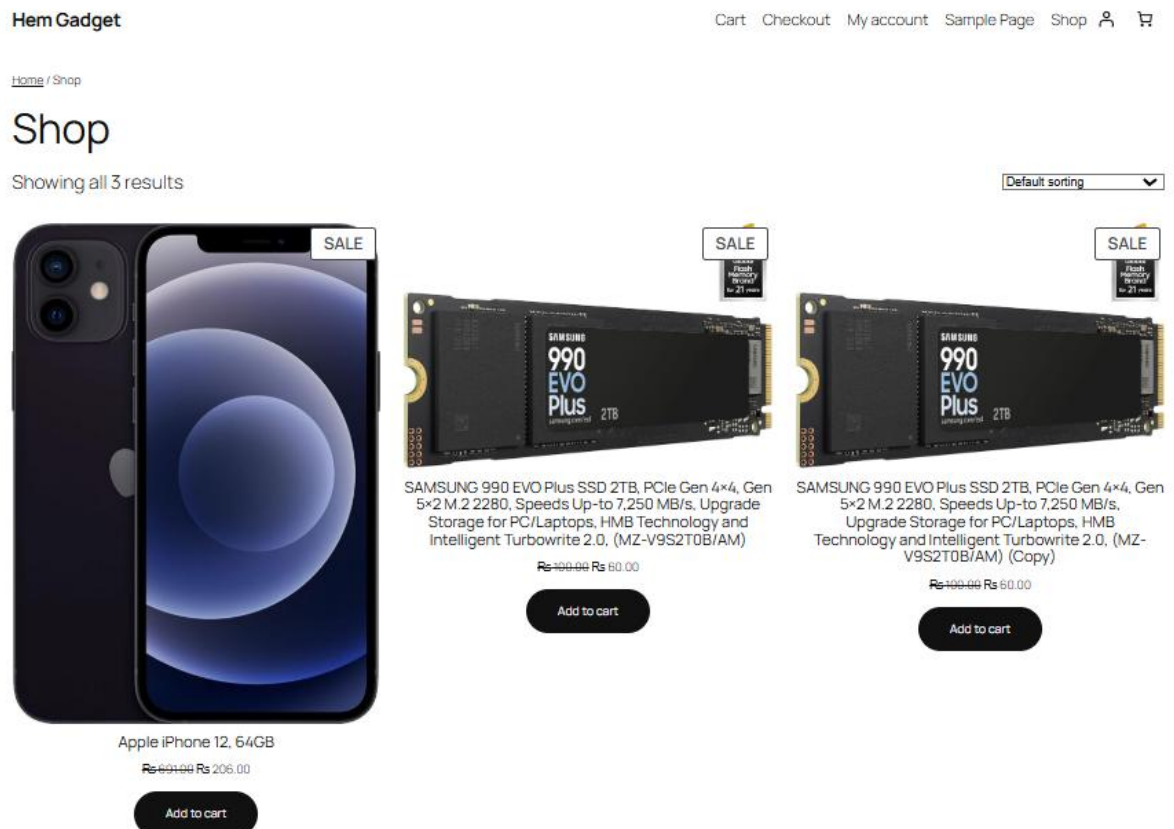
[Continue](#)



## Screenshots of the created categories and subcategories.



## Screenshots of the added sample products:





## **Observations/Findings:**

- WooCommerce provides a seamless setup wizard for configuring an online store.
- Categories and subcategories help in organizing products efficiently.
- Adding products requires proper classification and description to enhance user experience

## **Conclusion:**

In this lab, we successfully installed and configured WooCommerce, created product categories and subcategories, and added sample products. This setup establishes the initial framework for an eCommerce site. Challenges included ensuring proper categorization and configuring WooCommerce settings correctly

## Lab 3: Adding Simple and Variable Products

### Objectives:

The purpose of this lab is to learn how to add simple and variable products in WooCommerce by configuring product details, attributes, and variations.

### Tasks Performed:

#### 1. Add a Simple Product

- Navigated to Products > Add New in the WordPress dashboard.
- Entered product name, description, and price.
- Uploaded product images and assigned the product to a category.
- Published the simple product.

#### 3. Add a Variable Product

- Navigated to Products > Add New.
- Selected "Variable product" in the Product Data section.
- Created product attributes (e.g., size, color) under Attributes.
- Enabled "Used for variations" and added values for each attribute.
- Configured product variations with specific pricing and stock management.

#### 4. Configure Product Attributes and Variations

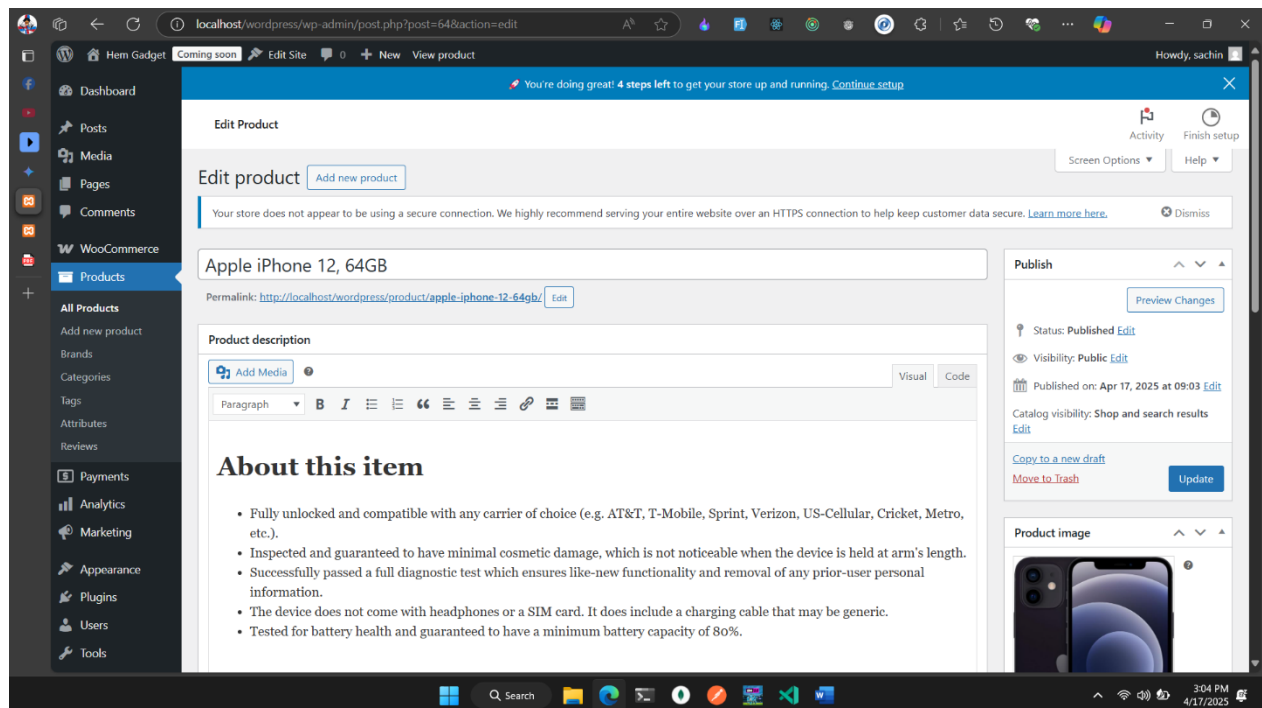
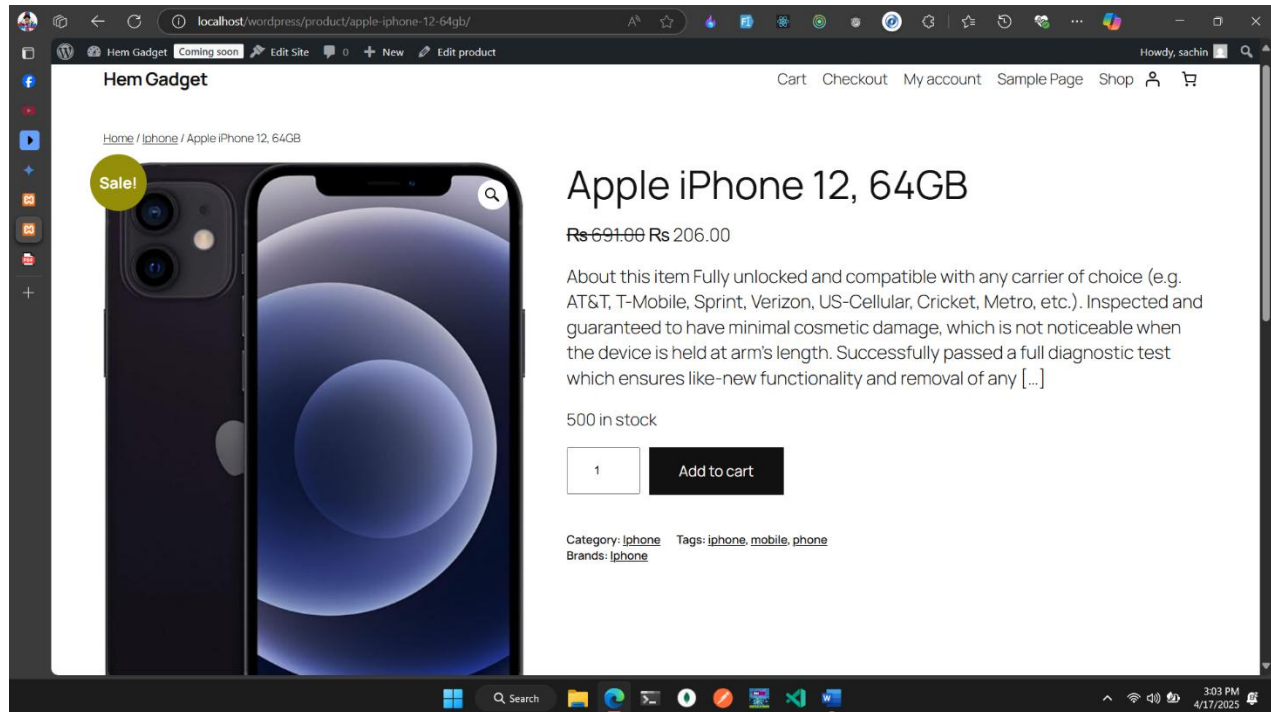
- Defined different sizes and colors for the variable product.
- Assigned different prices, stock levels, and images for each variation.
- Ensured variations were properly displayed on the product page.

#### 5. Set Pricing and Product Descriptions

- Entered relevant pricing for simple and variable products.
- Added short and long descriptions for better product details.
- Reviewed and published the products.

## Screenshots:

- Screenshots of the simple product configuration.



## **Observations/Findings:**

- Simple products are straightforward, with only a single set of attributes.
- Variable products require defining attributes and creating variations for different options.
- Properly setting up product attributes ensures a better user experience and inventory management.

## **Conclusion:**

In this lab, we successfully added both simple and variable products in WooCommerce. Understanding the difference between these product types is crucial for managing an online store effectively. Challenges included ensuring correct attribute setup and variation pricing.

## Lab 4: Configuring Payment and Shipping Options

### Objective:

The purpose of this lab is to set up payment gateways and shipping methods for the eCommerce site, ensuring a seamless checkout process and better user experiences.

### Tasks Performed:

#### 1. Set Up Payment Gateways

- Navigated to WooCommerce > Settings > Payments.
- Enabled and configured available payment methods (e.g., esewa , PayPal, Stripe, COD).
- Entered API keys and other necessary credentials for online payment gateways.
- Tested payment processing to verify successful transactions.

#### 2. Set Up Shipping Zones and Methods

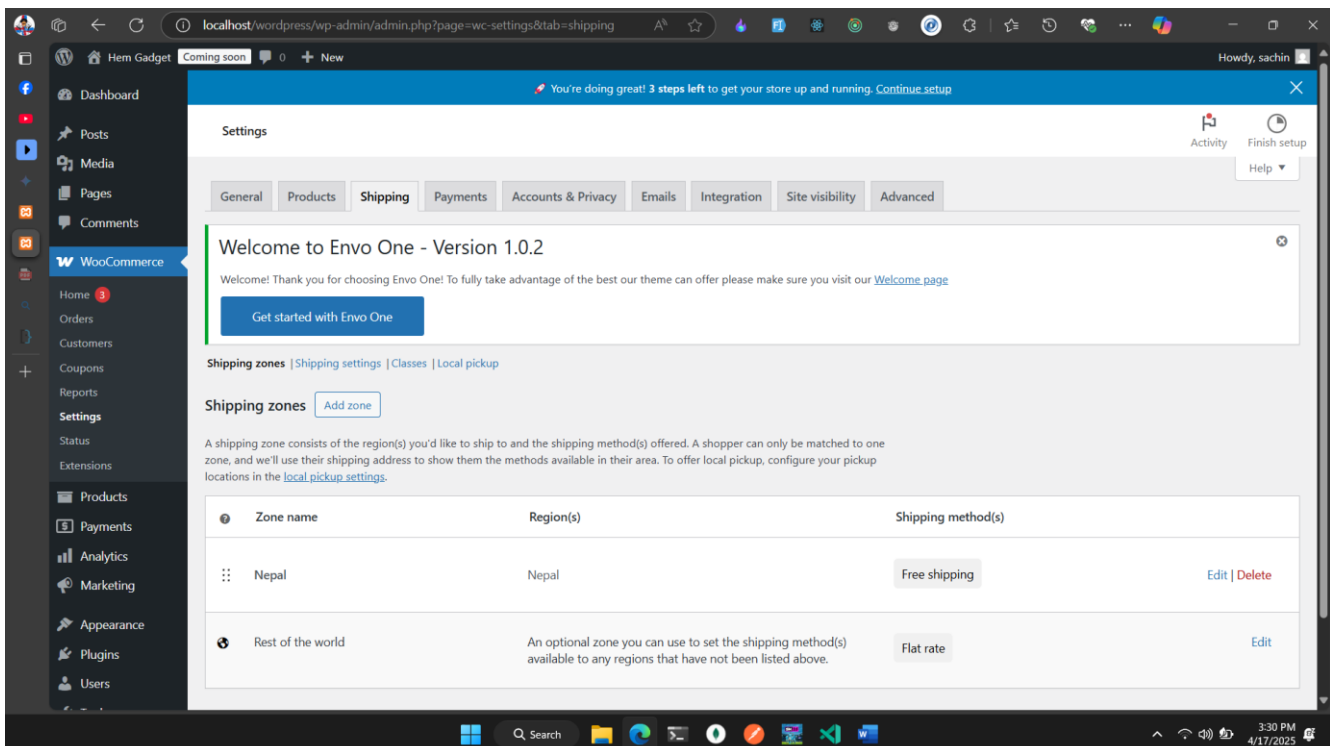
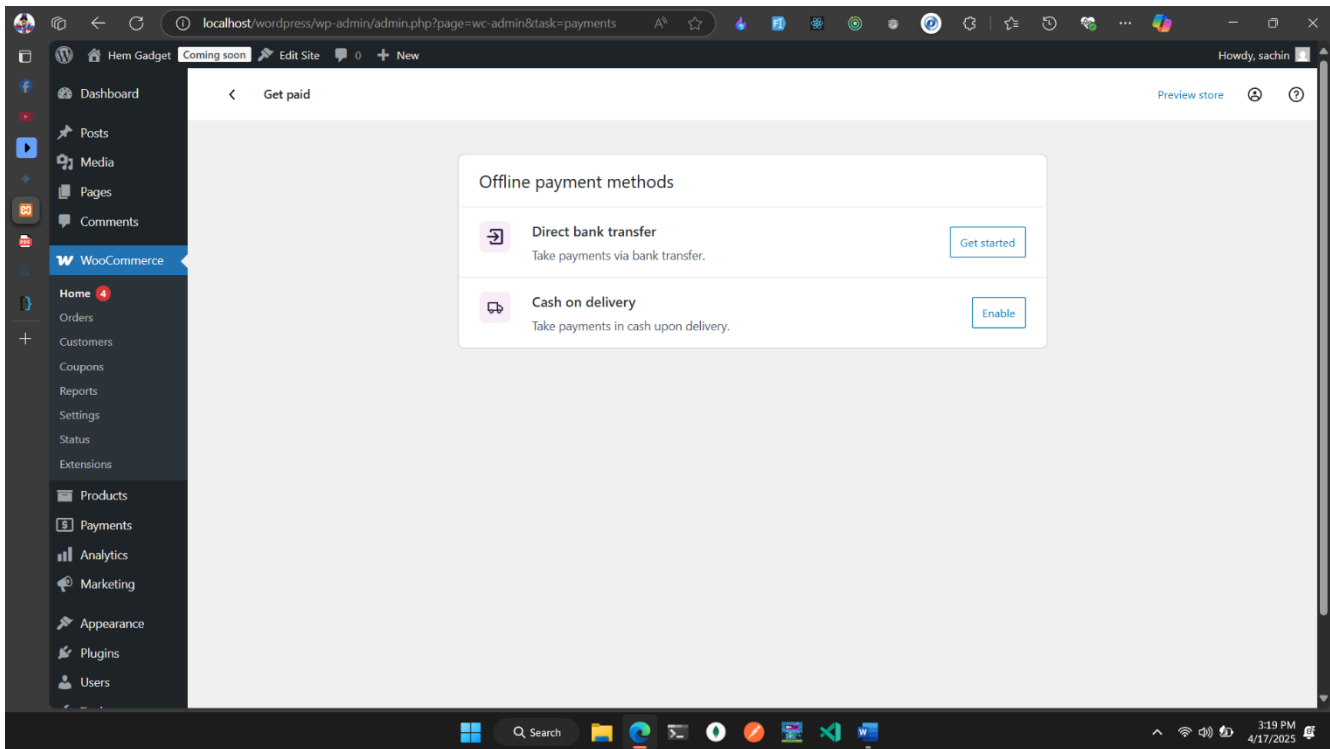
- Navigated to WooCommerce > Settings > Shipping.
- Created shipping zones based on geographical locations.
- Configured different shipping methods:
  - Flat Rate: Set a fixed shipping cost per order.
  - Free Shipping: Enabled for orders above a specified amount.
  - Local Pickup: Provided an option for customers to collect orders in person.

#### 3. Test the Checkout Process

- Added products to the cart and proceeded to checkout.
- Selected different payment methods and verified transactions.
- Checked shipping method selection and ensured correct calculations.

## Screenshots:

🌈 Screenshots of the payment gateway configurations.



## 🌐 Screenshots of the checkout process.

**Hem Gadget**

**Contact information**  
We'll use this email to send you details and updates about your order.

Email address  
thapasachin572@gmail.com

**Shipping address**  
Enter the address where you want your order delivered.

Country/Region  
Nepal

First name Last name

Address

+ Add apartment, suite, etc.

City State / Zone  
Bagmati

Postal code (optional) Phone (optional)

☒ Use same address for billing

**Order summary**

5 Apple iPhone 12, 64GB **Rs 1,030.00**  
~~Rs 699.00~~ ~~Rs 206.00~~  
About this item  
Fully unlocked and compatible with any carrier of choice (e.g. AT&T, T-Mobile, Sprint...)

Add a coupon

Subtotal **Rs 1,030.00**  
Delivery Free shipping

**Total Rs 1,030.00**

**Shipping options**

City Bagmati

Postal code (optional) Phone (optional)

☒ Use same address for billing

**Shipping options**

☒ Free shipping **FREE**

**Payment options**

☐ Direct bank transfer

☒ Cash on delivery  
Pay with cash upon delivery.

☐ Add a note to your order

By proceeding with your purchase you agree to our Terms and Conditions and Privacy Policy

[← Return to Cart](#) [Place Order](#)

**Order summary**

5 Apple iPhone 12, 64GB **Rs 1,030.00**  
~~Rs 699.00~~ ~~Rs 206.00~~  
About this item  
Fully unlocked and compatible with any carrier of choice (e.g. AT&T, T-Mobile, Sprint...)

Add a coupon

Subtotal **Rs 1,030.00**  
Delivery Free shipping

**Total Rs 1,030.00**

## **Observations/Findings:**

- WooCommerce provides flexible payment gateway integration, allowing multiple payment options.
- Shipping zones help customize shipping methods based on customer locations.
- Testing the checkout process ensures smooth transactions and accurate shipping calculations.

## **Conclusion:**

In this lab, we successfully configured payment and shipping options in WooCommerce. Proper setup of payment gateways and shipping methods enhances the user experience and ensures seamless order fulfillment. Challenges included API key configuration for payment gateways and ensuring accurate shipping rate calculations.



# Lab 5: Creating a Contact Us Page with Advanced Form Integration

## Objective:

The purpose of this lab is to create a functional "Contact Us" page using plugins like Contact Form 7, Mailchimp, and advanced form integration to enhance communication and email marketing capabilities.

## Tasks Performed:

### 1. Install and Configure Contact Form 7

- Navigated to Plugins > Add New in the WordPress dashboard.
- Searched for and installed Contact Form 7.
- Created a new contact form and customized fields (Name, Email, Message)
- Copied the form short code and embedded it into the "Contact Us" page.

### 2. Integrate Mailchimp for Email Marketing and Newsletter Sign-up

- Installed and activated the MC4WP: Mailchimp for WordPress plugin.
- Connected Mailchimp API with the website.
- Created a newsletter sign-up form and added it to the "Contact Us" page.

### 3. Use Advanced Form Integration Plugins

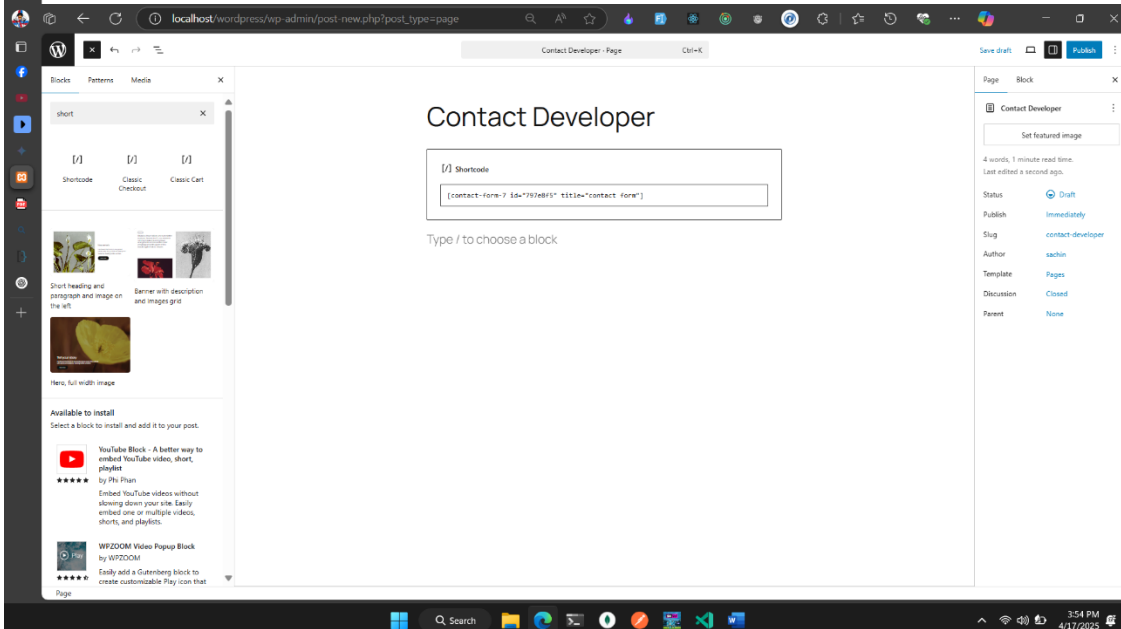
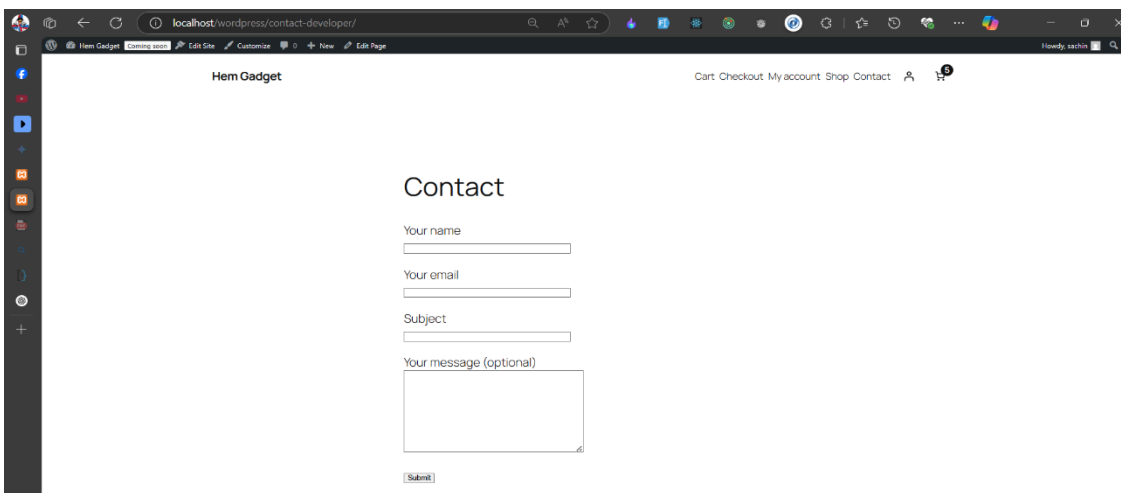
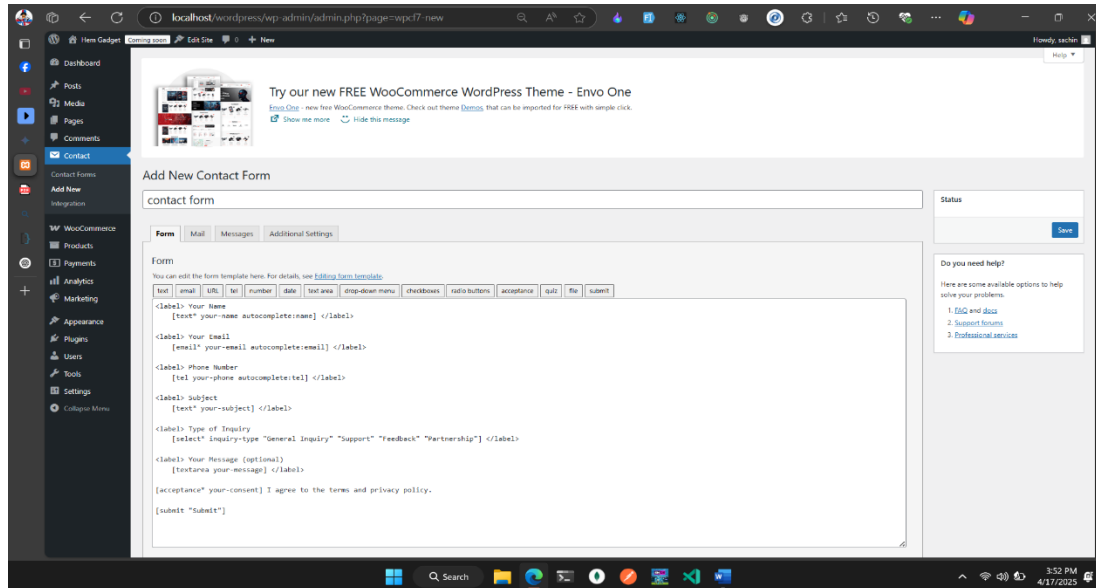
- Installed additional plugins to enhance form functionality (e.g., reCAPTCHA, form validation, auto-responder emails).
- Configured reCAPTCHA to prevent spam submissions.
- Set up automatic email responses for form submissions.

### 4. Add the "Contact Us" Page to the Website and Test Functionality

- Created a new page titled Contact Us.
- Embedded the Contact Form 7 shortcode and Mailchimp sign-up form.
- Published the page and tested form submissions.

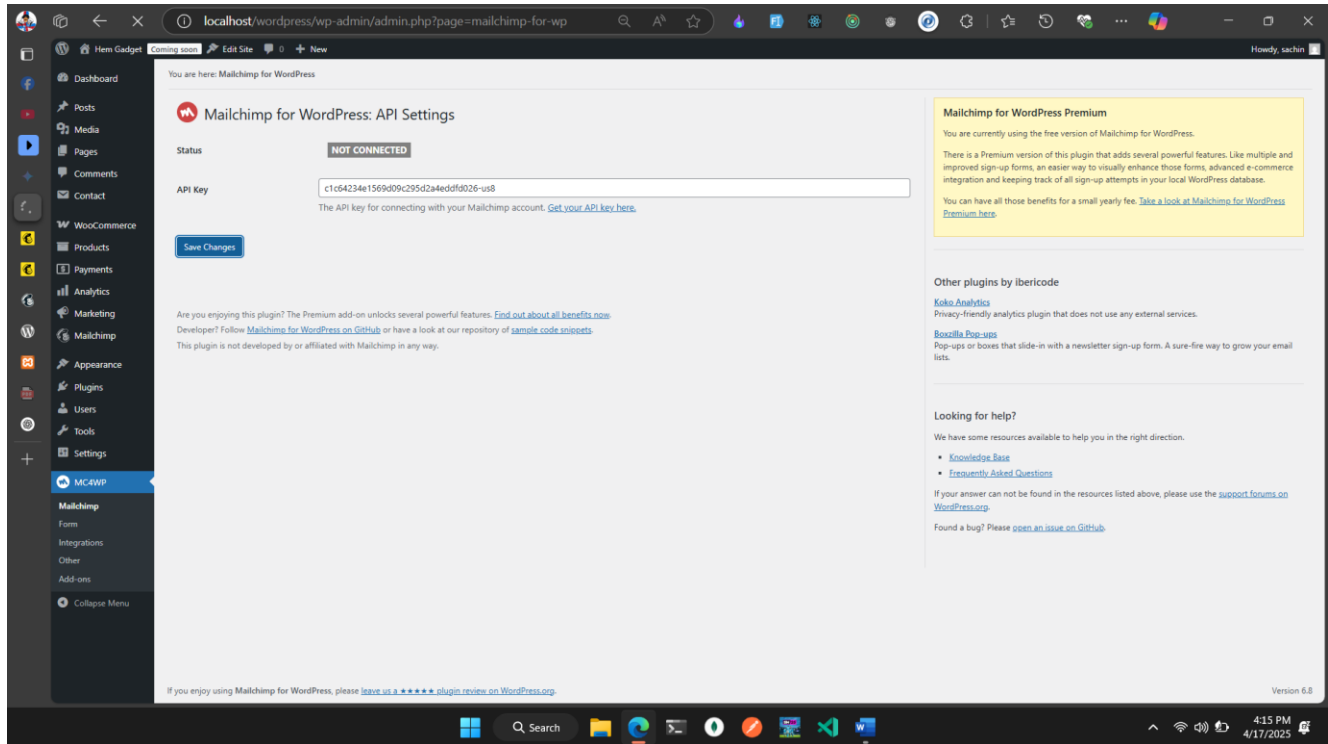
# Screenshots:

## 1. Contact Form 7 Configuration:



## 2. Mailchimp Integration:

✂ Screenshot of Mailchimp API configuration.



## Observations/Findings:

- Contact Form 7 provides an easy way to create and manage contact forms.
- Mailchimp integration allows efficient email marketing and lead collection.
- Advanced form integrations, such as reCAPTCHA and auto-responders, enhance security and user engagement.

## Conclusion:

In this lab, we successfully created a functional Contact Us page with advanced form integration. This enhances communication with users and supports email marketing strategies. Challenges included configuring Mailchimp API and ensuring proper form validation.

## Lab 6: Finalizing and Testing the Website

### **Objective:**

The purpose of this lab is to finalize the website and ensure all features are fully functional before deployment.

### **Tasks Performed:**

#### **1. Test All Website Functionalities**

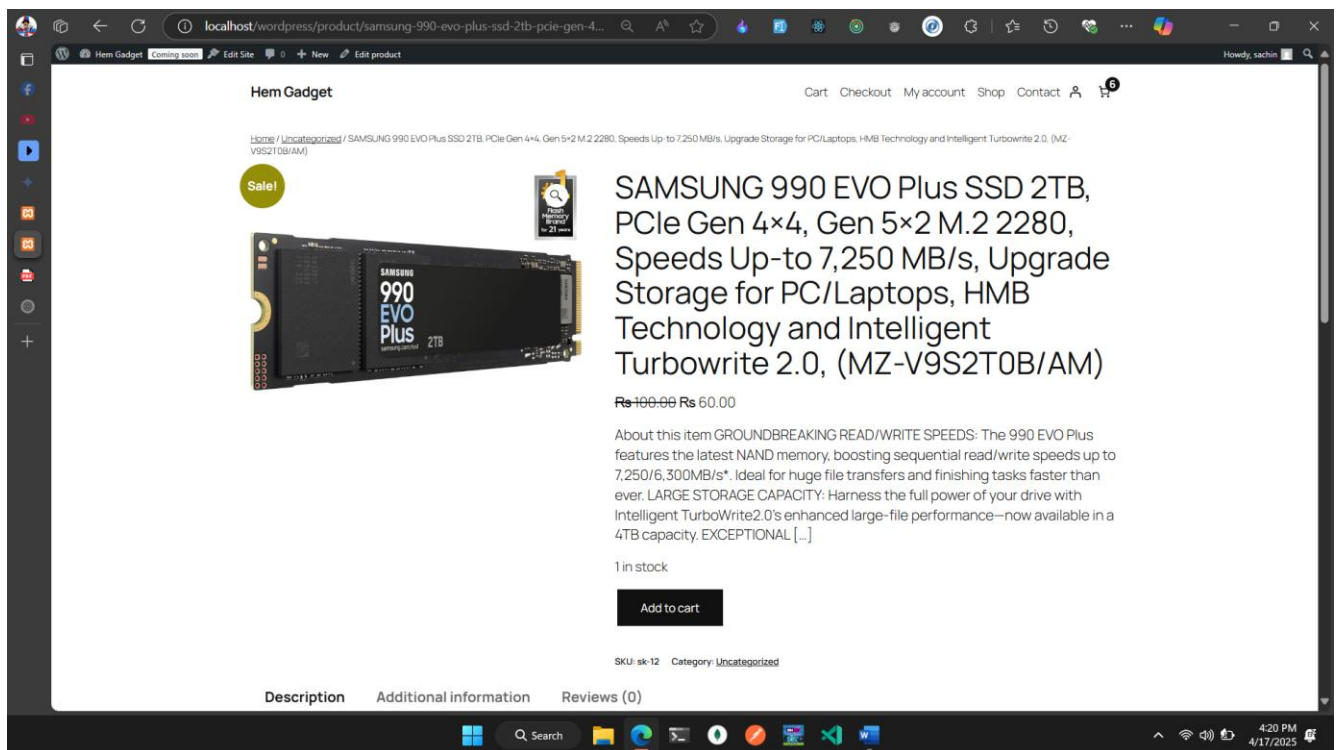
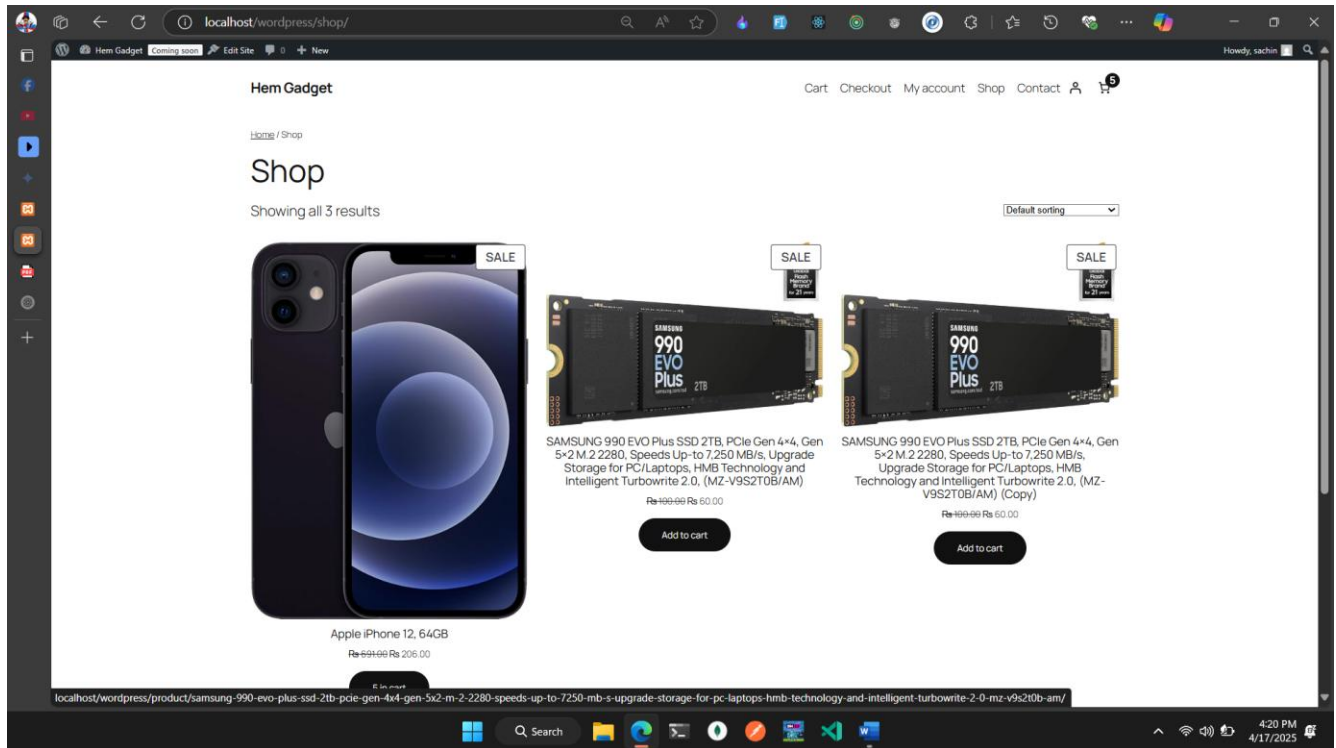
- Reviewed and tested all major pages, including the home page, product pages, and contact form.
- Tested the checkout process to ensure successful transactions and order processing.
- Verified form submissions, email notifications, and database entries.
- Ensured mobile responsiveness and cross-browser compatibility.

#### **2. Identify and Fix Issues**

- Addressed any broken links or missing elements.
- Optimized website performance and loading speed.
- Tested security settings and user access permissions.

## Screenshots:

Screenshots of the final website (homepage, product pages, etc.).



## **Observations/Findings:**

- The website successfully integrates eCommerce functionalities, including product management and checkout.
- Testing helped identify minor issues that were fixed before final deployment.
- Mobile responsiveness and performance optimizations improved user experience

## **Conclusion:**

In this final lab, we tested and finalized all features of the website, ensuring a seamless user experience. The learning process involved working with WooCommerce, WordPress plugins, and troubleshooting various issues. Challenges included debugging checkout errors and optimizing performance, which were successfully resolved. This lab provided valuable experience in building and managing an eCommerce website.

