# Madan Bhandari Memorial College

Binayak Nagar, New Baneshwor

## Project of E-Commerce

## "Tachis Studio's Website"

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**Date:** 2080/03/22

# Declaration

We hereby declare that the project for e-commerce titled as “Tachis studio” submitted, is a record of an original work done by the team consisting of Adina Shrestha, Rubina Kafle, Sanjana Chaudhary and Utsav Acharya under the guidance of our lecturer Aavash Khadka. This lab report for e-commerce site has been created by following the standard structure.

Signature: …….

Date: ……

# Acknowledgement

We would like to express our sincere gratitude and appreciation to all those who have contributed to the successful completion of this lab report on the subject of e-commerce. Without their guidance, support, and expertise, this endeavor would not have been possible. First and foremost, we would like to extend our heartfelt thanks to our esteemed lecturer, Mr. Aavash Khadka, whose unwavering dedication and profound knowledge of the subject matter have been instrumental in shaping my understanding of e-commerce. His insightful feedback and invaluable suggestions have greatly enriched this lab report. We are also deeply indebted to the coordinator of the CSIT department, Mr. Phul Babu Jha, for his continuous encouragement and meticulous supervision throughout this academic endeavor. His enthusiasm and passion for teaching have been a constant source of inspiration, motivating me to strive for excellence. Furthermore, we extend my sincere appreciation to the entire CSIT department of Madan Bhandari Memorial College for providing the necessary resources and a conducive learning environment. The department's commitment to academic excellence and its continuous efforts to enhance the learning experience have played a significant role in shaping our overall understanding of e-commerce. Lastly, we would like to express our heartfelt gratitude to our family for their unwavering support and encouragement throughout our academic journey. Their love, understanding, and belief in our abilities have been a constant source of motivation and inspiration. Additionally, we would like to extend our special thanks to Tachis Studios for their generous support in providing access to their media and products, which added a valuable dimension to our research and analysis in this lab report. Their collaboration has greatly enriched our understanding of e-commerce, and we are truly grateful for their contribution to the success of this endeavor.

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# Introduction

The purpose of this lab report is to present the development and implementation of an e-commerce website for a business named "Tachis Studio." The primary objective of the website is to provide a digital platform for the business to sell its products, which mainly cater to women's fashion needs, including clothing, bags, and makeup kits.

In today's digital era, e-commerce has become an indispensable part of the retail industry. The convenience and accessibility offered by online shopping have revolutionized the way consumers browse and purchase products. Businesses, like Tachis Studio, have recognized the importance of establishing an online presence to reach a wider customer base and compete in the digital marketplace. The development of the e-commerce website was carried out as a practical project in a collaborative effort by our group members. Our team recognized the potential of e-commerce in empowering businesses to expand their reach and increase their sales. By creating a user-friendly and visually appealing website, we aimed to provide Tachis Studio with an effective tool to connect with customers, showcase their products, and facilitate seamless online transactions.

Throughout the development process, we focused on incorporating key features essential for a successful e-commerce platform. These features included an intuitive user interface, a secure payment gateway, product categorization, search functionality, and a shopping cart system. By implementing these functionalities, we aimed to enhance the overall user experience and streamline the online shopping process for customers. In addition to the technical aspects of the website, we also considered the unique characteristics of Tachis Studio's target audience. Women, as the primary consumers of the products offered by the business, were taken into account when designing the website's aesthetics, content, and product presentation. Our objective was to create a visually appealing and engaging website that resonates with the target customers, encouraging them to explore the offerings of Tachis Studio and make purchases.

In the development of the e-commerce website for Tachis Studio, we opted to utilize WordPress as our chosen content management system (CMS). WordPress is a widely acclaimed platform known for its versatility, user-friendly interface, and extensive range of customizable themes and plugins.

# Objectives

The objectives are as follows:

1. Create a Proper E-commerce Website

The primary objective of the project is to develop a fully functional and professional e-commerce website for Tachis Studio. This involves designing and implementing an intuitive user interface, ensuring proper navigation, and organizing various product listings in a structured and visually appealing manner.

2. Include Cart and Support Checkout

An essential objective is to incorporate a shopping cart feature into the website, allowing users to add products to their cart for later purchase. Additionally, the website should support a smooth and seamless checkout process, enabling customers to review their selected items, enter shipping and billing information, and complete the purchase with ease.

3. Include a Payment Gateway

Another key objective is to integrate a secure and reliable payment gateway into the e-commerce website. This involves selecting a suitable payment gateway provider and configuring the necessary settings to ensure that customers can make secure online payments for their purchases. The payment gateway should support various payment methods and provide a seamless transaction experience for customers.

By achieving these objectives, the project aims to establish a robust and user-friendly e-commerce website for Tachis Studio, facilitating efficient product browsing, seamless checkout, and secure online transactions.

# Technologies Used

The development of the e-commerce website for Tachis Studio involved the utilization of various technologies to ensure an efficient and seamless online shopping experience. By employing a combination of robust tools and platforms, we aimed to create a user-friendly website that caters to the specific needs of the business and its customers.

The technologies utilized in the development process include:

1. WordPress: We chose WordPress as the content management system (CMS) to build and manage the website. Its extensive range of themes, plugins, and customization options allowed us to create a visually appealing and highly functional e-commerce platform for Tachis Studio.

WordPress theme

We used Boutique theme which is a child theme of the theme storefront. We choose this theme because it was the closest theme that could meet our requirement to create the website.

WordPress plugins

We used various plugins for the various purpose. The plugins we used are:

- WooCommerce: We integrated the WooCommerce plugin, a widely used e-commerce solution, to power the online store functionality of the website. This plugin facilitated the creation of product listings, shopping cart management, secure payment processing, and order management, ensuring a seamless and reliable shopping experience for customers.
- Payment plugins for PayPal WooCommerce: We integrated the PayPal plugin, to integrate the payment gateway in our website.
- Variation Swatches for WooCommerce: We integrated the variation swatches plugins that provides a visually appealing and user-friendly interface for customers to choose product variations.

- Widget option: We integrated widget option plugins to use the widgets properly in the website.
- My WordPress Login Logo: We integrated my WordPress login logo to change the logo at the admin side login page.

2. Apache Server: Apache Server was employed as the web server to host the website. Its reliability, scalability, and compatibility made it an ideal choice to ensure seamless delivery of web pages and handle incoming requests from users.

3. MySQL: MySQL was used as the database management system to store and retrieve product information, user data, and transaction details. Its robustness, speed, and compatibility with PHP (used in conjunction with WordPress) facilitated efficient data management and retrieval processes.

By leveraging these technologies, we aimed to create a well-integrated and efficient e-commerce website for Tachis Studio, empowering them to connect with their target audience and enhance their online presence.

## Proposed Website

The proposed e-commerce website for Tachis Studio aims to create a user-friendly platform that offers a seamless online shopping experience for customers. With a focus on intuitive navigation and a visually appealing interface, the website will provide visitors with an effortless way to explore and purchase the wide range of women's products available.

A key objective of the website is to showcase Tachis Studio's product offerings in an organized and attractive manner. The website will feature clear and detailed product listings, including descriptions, images, pricing, and available variations. This will enable customers to easily browse through the collection of clothing, bags, and makeup kits and make informed purchasing decisions. Another crucial objective of the website is to incorporate a robust shopping cart system. Customers will have the ability to add desired products to their cart, view and modify cart contents, and proceed to the secure checkout process. The checkout process will be streamlined, ensuring a smooth and hassle-free experience for customers as they enter their shipping information, select payment options, and complete their purchases.

To facilitate secure online transactions, the website will include a trusted and reliable payment gateway. This will enable customers to make payments using various methods, ensuring convenience and flexibility. By implementing a secure payment gateway, customer information and financial details will be safeguarded, fostering trust and confidence in the e-commerce platform.

## Functional Requirements

The functional requirements for the Tachis Studio e-commerce website are outlined below to ensure that customers and administrators can effectively utilize the system and achieve their respective objectives. These requirements define the specific functionalities that the website should possess:

1. Product Catalog: The website should provide a comprehensive and well-organized product catalog, displaying various categories (clothing, bags, makeup kits) and individual product listings. Each listing should include product images, descriptions, pricing, and available variations (sizes, colors, etc.).

2. Shopping Cart: Customers should be able to add products to their shopping cart, view the cart contents, and modify the quantities or remove items. The shopping cart functionality should calculate the total cost and provide a clear summary of the selected items.

3. Secure Checkout: The website should offer a secure and user-friendly checkout process. Customers should be able to enter their shipping information, select shipping methods, and proceed to the payment stage. The checkout process should include multiple payment options, such as credit cards, debit cards, or digital wallets, and ensure the security of personal and financial information.

4. User Accounts: Customers should have the option to create user accounts on the website. User accounts enable customers to save their personal information, track order history, and facilitate a faster checkout process for future purchases.

5. Search Functionality: The website should feature a search bar allowing customers to search for specific products or categories. The search functionality should provide accurate and relevant results based on keywords or product attributes, helping customers find their desired items quickly.

6. Order Management: The website's administrative interface should allow administrators to manage and process customer orders efficiently. This includes tracking order statuses, updating shipping information, generating invoices, and sending order notifications to customers.

7. Inventory Management: Administrators should have the capability to manage product inventory, including tracking stock levels, receiving notifications for low stock, and updating availability status on the website. This ensures accurate product information and prevents overselling.

8. Customer Reviews and Ratings: The website should allow customers to leave reviews and ratings for products they have purchased. This feature enables customers to share their feedback and experiences, helping other customers make informed purchasing decisions.

By incorporating these functional requirements, the Tachis Studio e-commerce website will provide customers with a user-friendly and efficient platform for browsing, selecting, and purchasing products. Additionally, the administrative functionalities will enable efficient order management and overall website administration.

## Nonfunctional Requirements

In addition to the functional requirements, the Tachis Studio e-commerce website should also adhere to non-functional requirements to ensure optimal performance, usability, and security. The non-functional requirements for the website are as follows:

1. Performance: The website should have fast page load times and responsiveness to provide customers with a seamless and engaging shopping experience. It should be optimized to handle high traffic volumes without any significant performance degradation.

2. User Experience: The website should have a visually appealing design, intuitive navigation, and a user-friendly interface. It should be easy to navigate and interact with, allowing customers to find products quickly and complete their purchases efficiently.

3. Security: The website should implement robust security measures to protect customer data and ensure secure online transactions. This includes SSL encryption for data transmission, secure storage of customer information, and compliance with industry-standard security protocols.

4. Scalability: The website should be designed to handle future growth and accommodate increased traffic, product inventory, and customer base. It should be scalable and capable of handling additional products, users, and transactions without compromising performance.

5. Accessibility: The website should adhere to web accessibility standards, making it accessible to individuals with disabilities. It should support features such as screen readers, keyboard navigation, and alternative text for images, ensuring inclusivity for all users.

6. Reliability and Availability: The website should have high uptime and be accessible to customers at all times. It should be hosted on reliable servers with backup and disaster recovery mechanisms in place to minimize downtime.

By meeting these non-functional requirements, the Tachis Studio e-commerce website will deliver an optimal user experience, maintain high security standards, and ensure reliability and scalability to support the growth and success of the business.

## Implementation Requirements

Hardware Requirements:

| | |
|---|---|
| Processor | I3 or better |
| RAM | 4GB or higher |
| Hard Disk Space | Minimum 5GB or higher |

Software Requirements:

| | |
|---|---|
| Operating System | Windows, MACOS, Linux or any other platform that supports web browser |
| Database Management System | MySQL |
| Web Server | Apache |
| Client Application | Any Web Browser |

# Implementation

Admin Side:

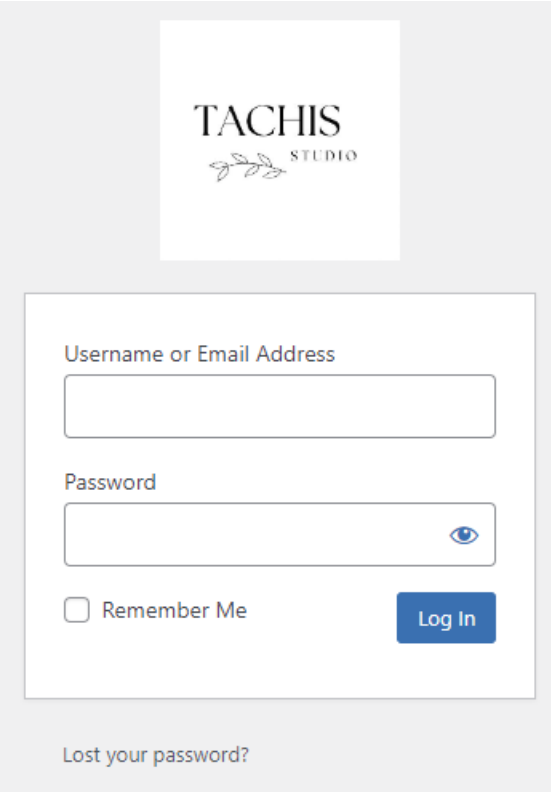



fig: Admin login

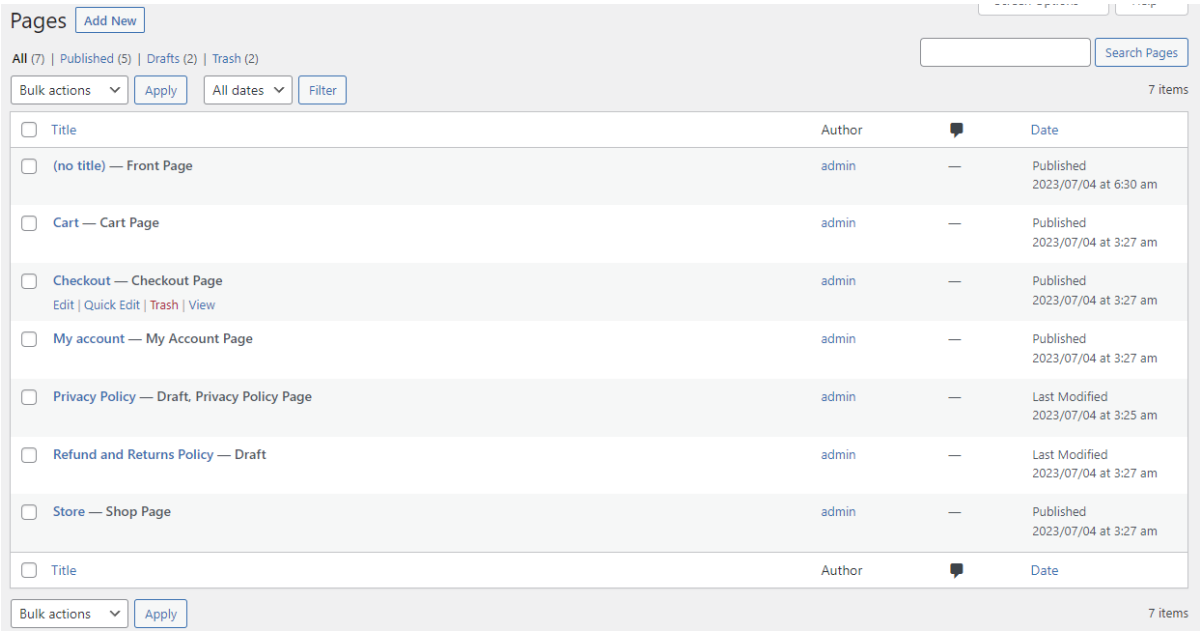



fig: list of pages

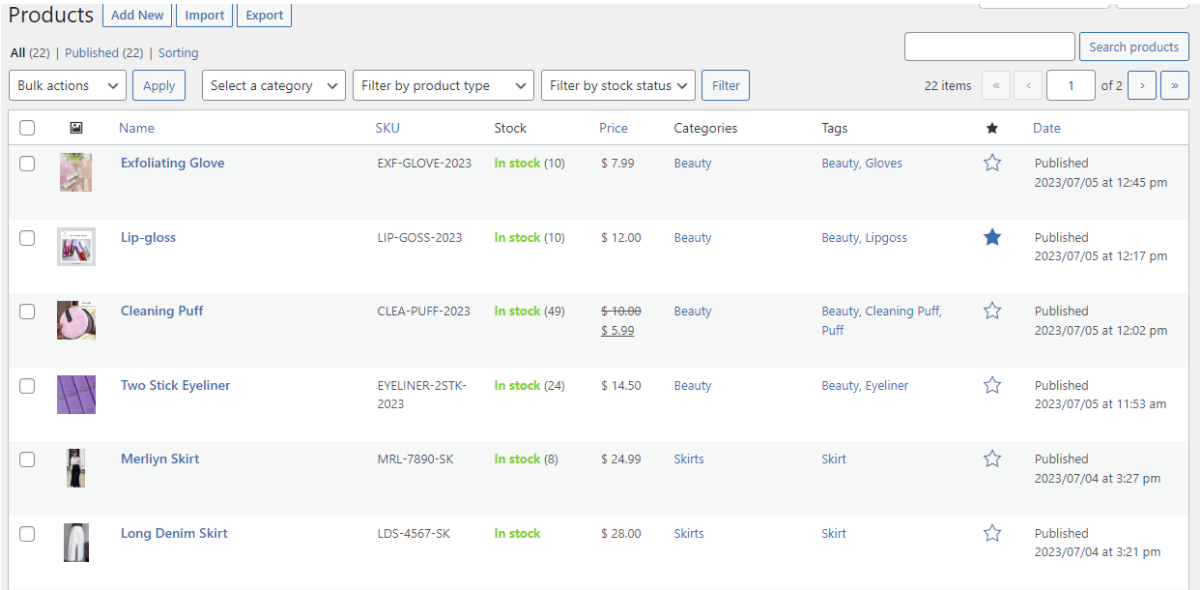



fig: list of products

| Image | Name | Description | Slug | Count |
|---|---|---|---|---|
| | Tshirts | — | tshirts | 4 |
| | Uncategorized | — | uncategorized | 0 |
| | Bags | — | bags | 4 |
| | Beauty | — | beauty | 4 |
| | Coats & Jacket | — | coats-jacket | 3 |
| | Dress | — | dress | 4 |
| | Skirts | — | skirts | 3 |
| Image | Name | Description | Slug | Count |

fig: list of categories

Orders Add order

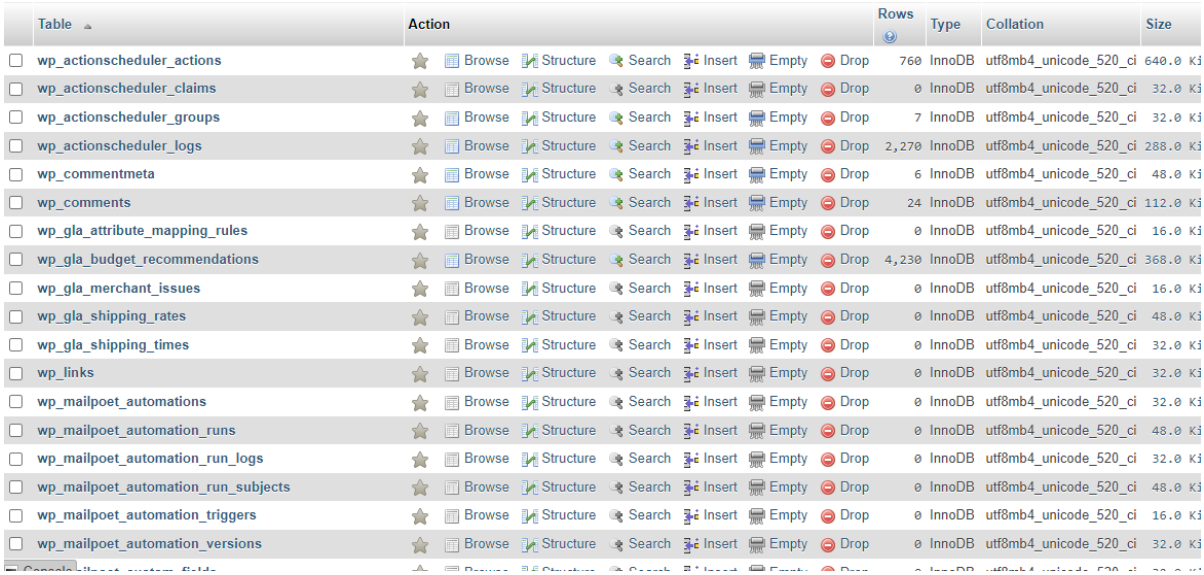
All (4) | Processing (1) | Completed (2) | Refunded (1)

Search orders

Bulk actions Apply All dates Filter by registered customer Filter

| Order | Date | Status | Total |
|---|---|---|---|
| #478 Sanjana Chaudhary | 8 mins ago | Processing | $ 61.50 |
| #477 Rubina Kafle | 11 mins ago | Completed | $ 44.98 |
| #476 Adina Shrestha | 19 hours ago | Completed | $ 9,650.00 |
| #474 Utsav Acharya | 19 hours ago | Refunded | ~~$ 749.00~~ $ 0.00 |
| Order | Date | Status | Total |

fig: list of orders



| Table | Action | Rows | Type | Collation | Size |
|---|---|---|---|---|---|
| wp_actionscheduler_actions | Browse Structure Search Insert Empty Drop | 760 | InnoDB | utf8mb4_unicode_520_ci | 640.0 Ki |
| wp_actionscheduler_claims | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 32.0 Ki |
| wp_actionscheduler_groups | Browse Structure Search Insert Empty Drop | 7 | InnoDB | utf8mb4_unicode_520_ci | 32.0 Ki |
| wp_actionscheduler_logs | Browse Structure Search Insert Empty Drop | 2,270 | InnoDB | utf8mb4_unicode_520_ci | 288.0 Ki |
| wp_commentmeta | Browse Structure Search Insert Empty Drop | 6 | InnoDB | utf8mb4_unicode_520_ci | 48.0 Ki |
| wp_comments | Browse Structure Search Insert Empty Drop | 24 | InnoDB | utf8mb4_unicode_520_ci | 112.0 Ki |
| wp_gla_attribute_mapping_rules | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 16.0 Ki |
| wp_gla_budget_recommendations | Browse Structure Search Insert Empty Drop | 4,230 | InnoDB | utf8mb4_unicode_520_ci | 368.0 Ki |
| wp_gla_merchant_issues | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 16.0 Ki |
| wp_gla_shipping_rates | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 48.0 Ki |
| wp_gla_shipping_times | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 32.0 Ki |
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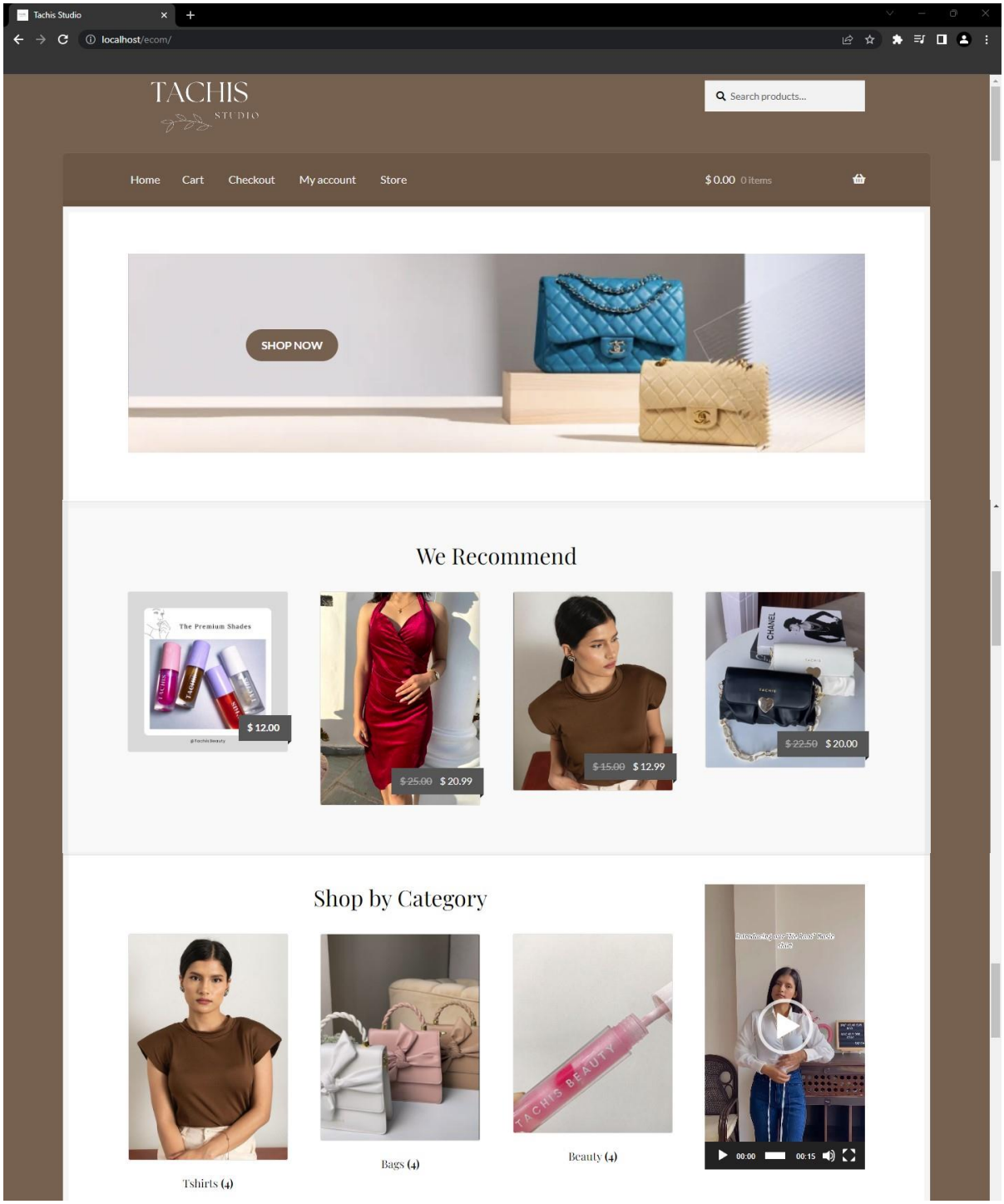
| wp_mailpoet_automation_runs | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 48.0 Ki |
| wp_mailpoet_automation_run_logs | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 32.0 Ki |
| wp_mailpoet_automation_run_subjects | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 48.0 Ki |
| wp_mailpoet_automation_triggers | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 16.0 Ki |
| wp_mailpoet_automation_versions | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_unicode_520_ci | 32.0 Ki |

fig: database

Client Side:


Tachis Studio
localhost/ecom/
TACHIS
STUDIO
Search products...
Home
Cart
Checkout
My account
Store
$ 0.00 0 items
SHOP NOW
We Recommend
$ 12.00
$ 25.00 $ 20.99
$ 15.00 $ 12.99
$ 22.50 $ 20.00
Shop by Category
Tshirts (4)
Bags (4)
Beauty (4)

## New In

Exfoliating Glove

Add to cart

Lip-gloss

Select options

Cleaning Puff

SALE!

Add to cart

## Fan Favorites

Crop Blazer

★★★★★

SALE!

Add to cart

Tie Knot Shirt

★★★★★

SALE!

Select options

Bottega Bag

★★★★★

SALE!

Select options

## On Sale

Cleaning Puff

SALE!

Add to cart

Blazer Set

SALE!

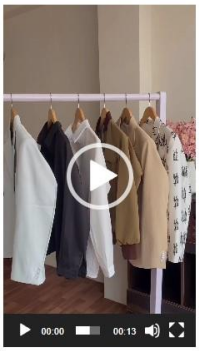
Select options

Crop Blazer

★★★★★

SALE!

Add to cart



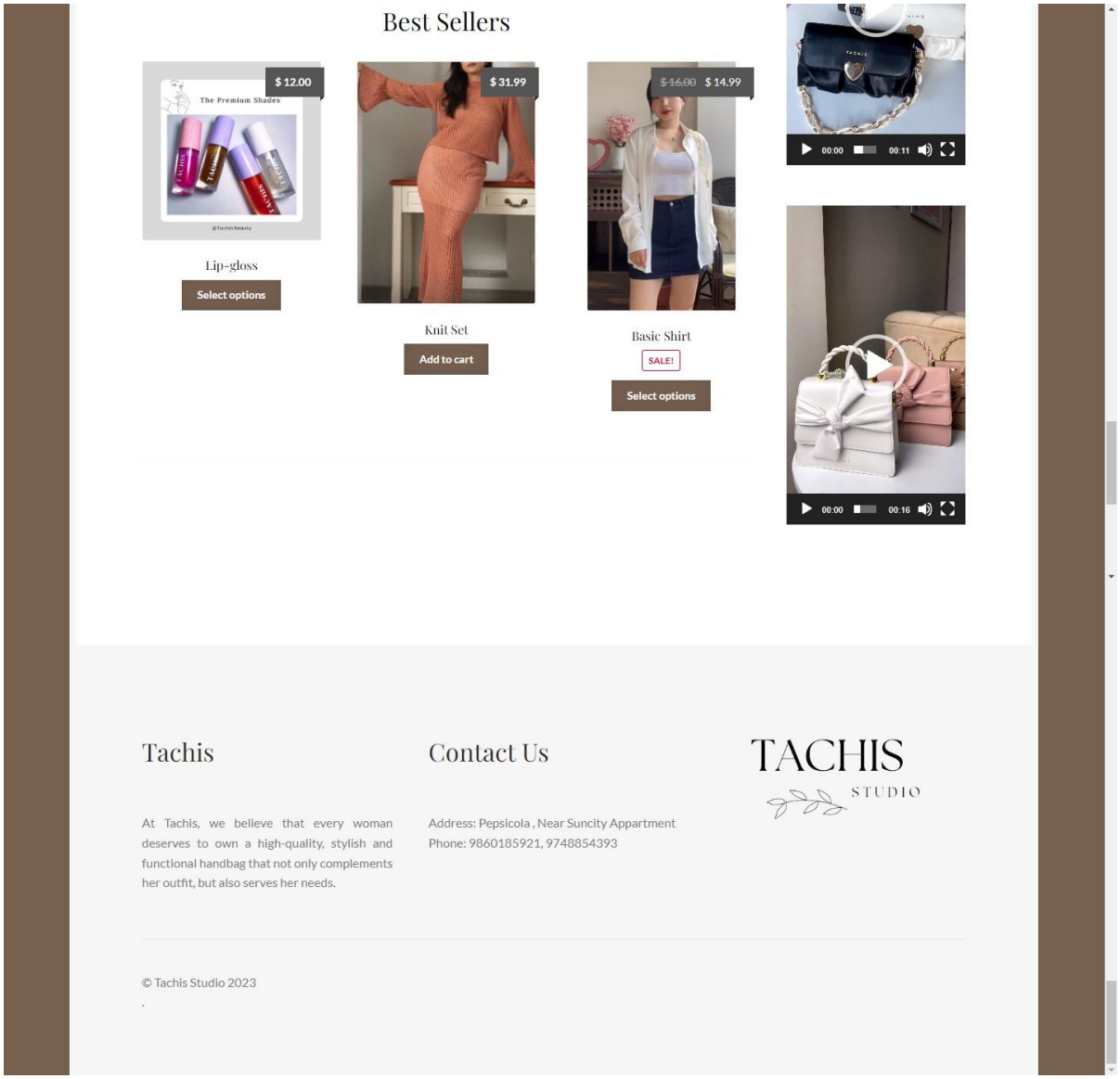



fig: Home Page

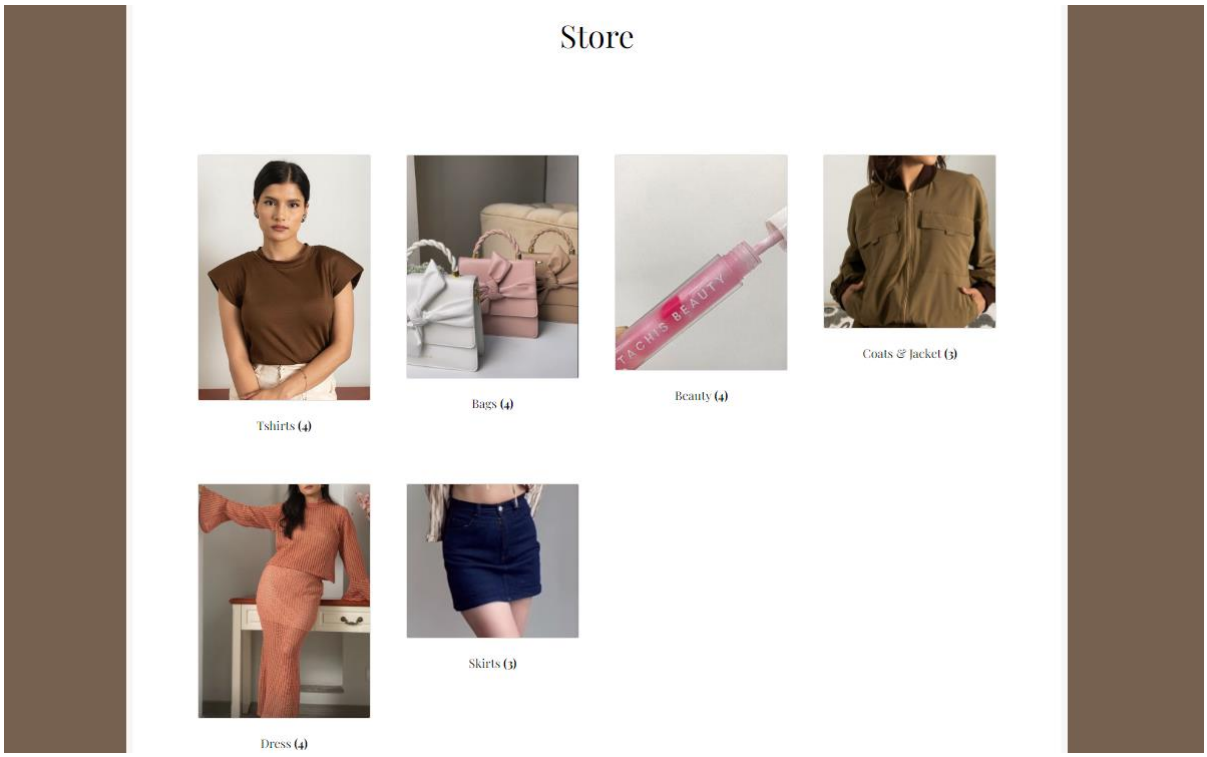



fig: Store Page

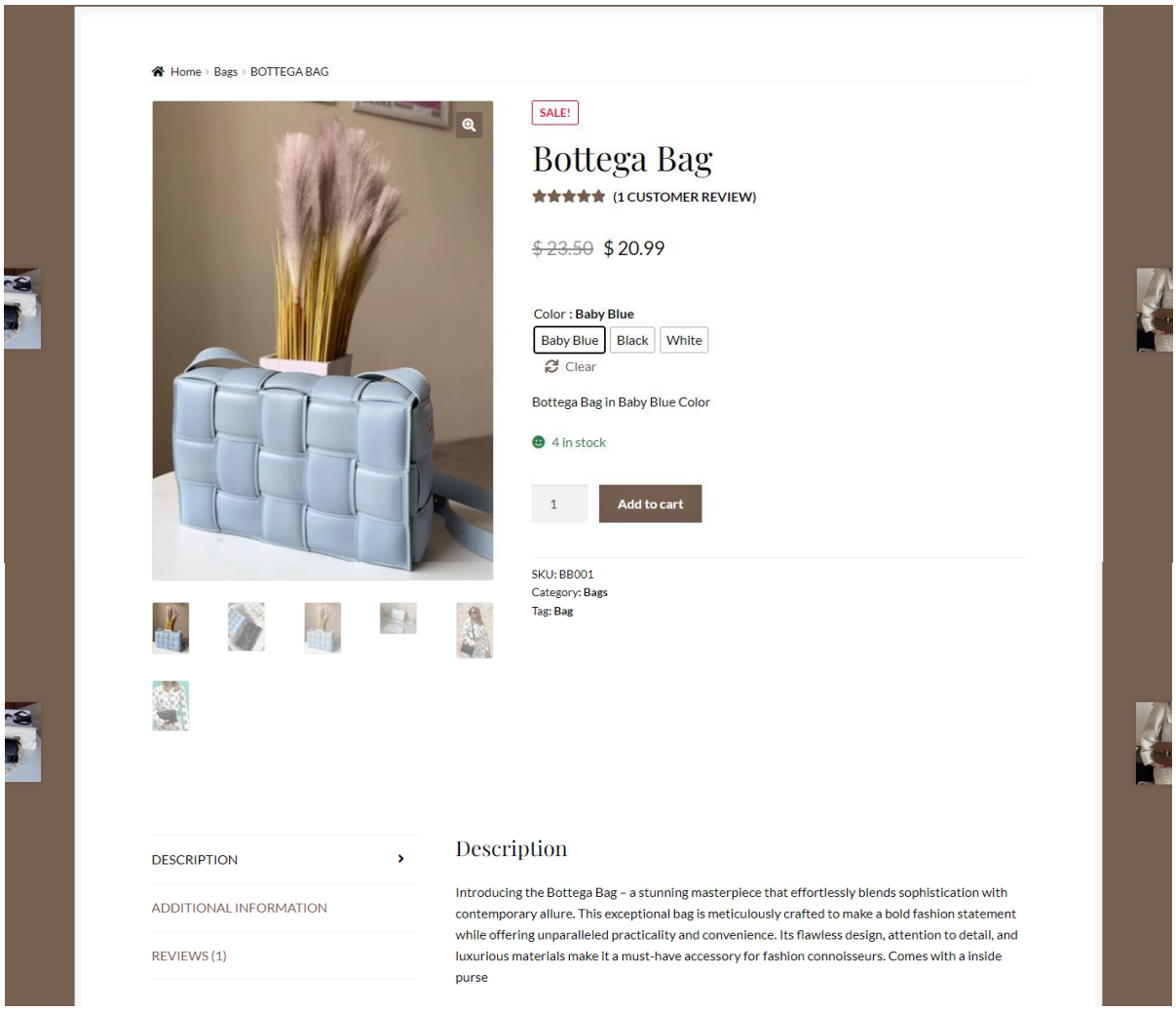



fig: Product page

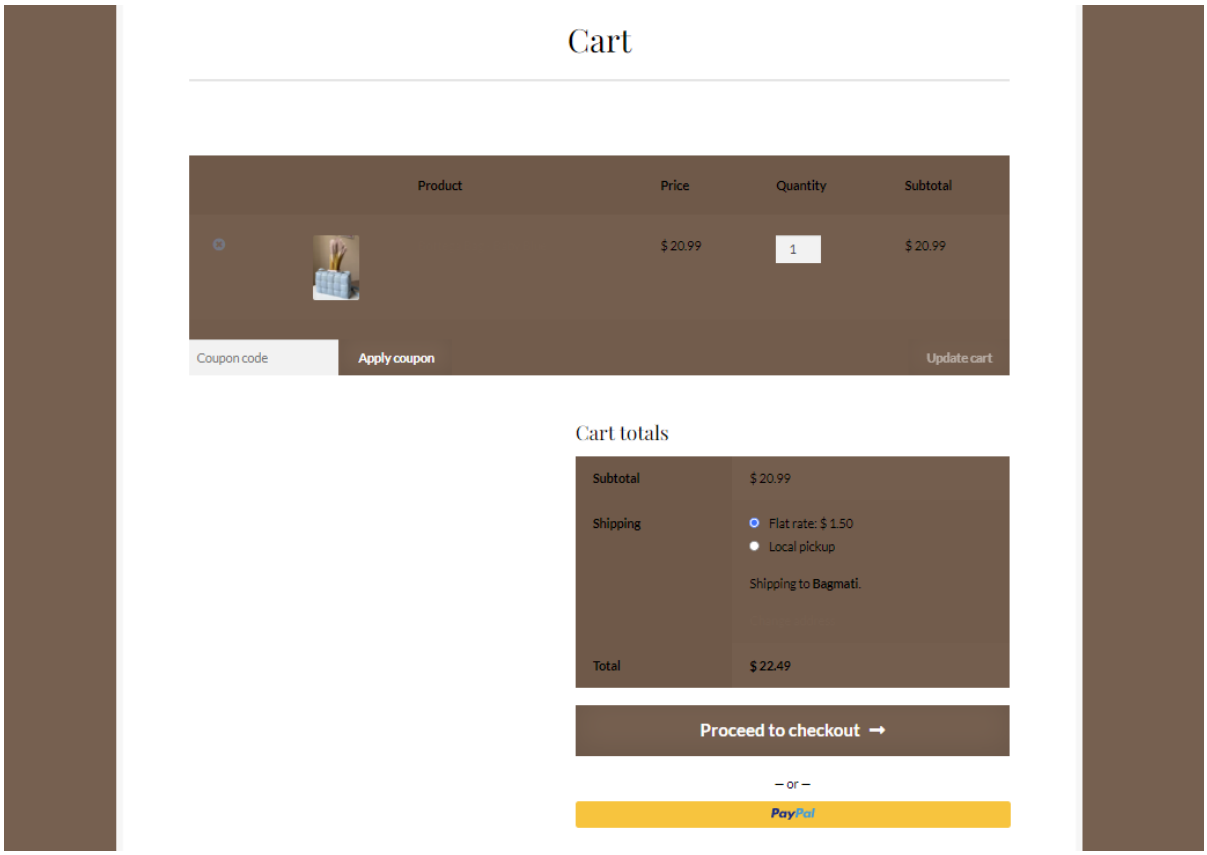



fig: Cart page

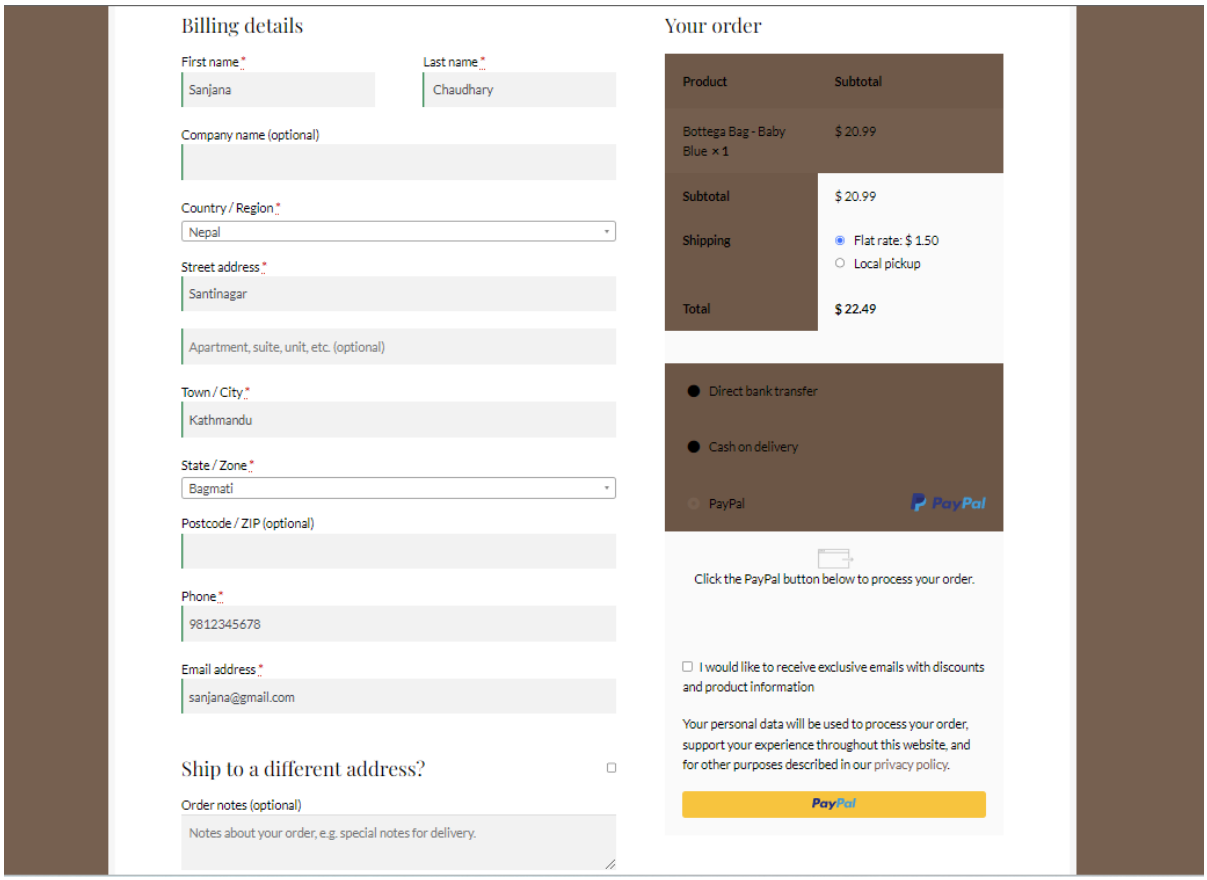



fig: Checkout Page

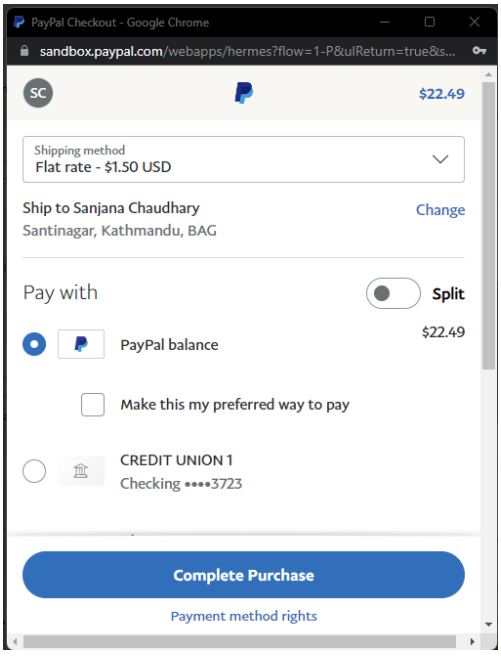
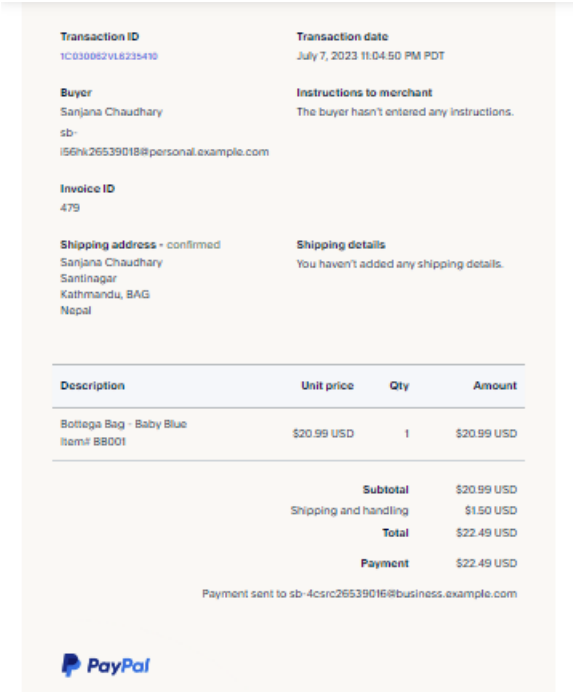



fig: PayPal payment

fig: order success page



**Transaction ID**
1C030082VL8235410

**Transaction date**
July 7, 2023 11:04:50 PM PDT

**Buyer**
Sanjana Chaudhary
sb-
l56hk2653901 8@personal.example.com

**Instructions to merchant**
The buyer hasn't entered any instructions.

**Invoice ID**
479

**Shipping address** • confirmed
Sanjana Chaudhary
Santinagar
Kathmandu, BAG
Nepal

**Shipping details**
You haven't added any shipping details.

| Description | Unit price | Qty | Amount |
|---|---|---|---|
| Bottega Bag - Baby Blue<br>Item# BB001 | $20.99 USD | 1 | $20.99 USD |

| | |
|---|---|
| **Subtotal** | $20.99 USD |
| Shipping and handling | $1.50 USD |
| **Total** | $22.49 USD |
| **Payment** | $22.49 USD |

Payment sent to sb-4csrc26539016@business.example.com

PayPal

fig: PayPal payment receipt

# Conclusion

In conclusion, the development of the e-commerce website for Tachis Studio has been a significant endeavor aimed at establishing a user-friendly and visually appealing platform for online shopping. Throughout the project, we successfully achieved the objectives set forth, which included creating a proper e-commerce website with various product listings, incorporating a shopping cart and seamless checkout process, and integrating a secure payment gateway.

By leveraging technologies such as WordPress, Apache Server, and MySQL, we were able to build a robust and efficient website that met the specific requirements of Tachis Studio. The utilization of the Boutique theme, a child theme of Storefront, provided a customizable and suitable foundation for the website's design and functionality.

Through the implementation of various WordPress plugins, including WooCommerce for product management and cart functionality, Yoast SEO for search engine optimization, and Contact Form 7 for customer inquiries, we enhanced the website's features and user experience. The Variation Swatches plugin further improved the selection process for product variations, offering customers a visually appealing interface.

The proposed e-commerce website for Tachis Studio aims to deliver an exceptional shopping experience to customers, allowing them to explore and purchase a wide range of women's products conveniently. The intuitive user interface, secure payment gateway, and seamless checkout process contribute to a positive customer journey.

# References


1. Tachis Studio's Instagram. (n.d.). Retrieved from *www.instagram.com/tachisstudio*
2. Tachis Bag's Instagram. (n.d.). Retrieved from *www.instagram.com/tachis_bag*
3. Tachis Beauty's Instagram. (n.d.). Retrieved from *www.instagram.com/tachisbeauty*
4. Adhikari, E. S. N., & Adhikari, S. S. E-Commerce. KEC Publication and Distribution Pvt. Ltd.
5. Kalakota, R., & Whinston, A. B. (1996). Frontiers of electronic commerce.
6. Google. (n.d.). *https://www.google.com/*