

**VIETNAM NATIONAL UNIVERSITY, HANOI**  
**UNIVERSITY OF ENGINEERING AND TECHNOLOGY**



**PROJECT PLAN DOCUMENT FOR**  
**ONLINE ECOMMERCE WEBSITE**

**SEMESTER 232**

**GROUP 10**

<b>Group members:</b>	<b>Phan Anh Tú</b>	<b>Student ID: 22028238</b>
	<b>Mai Anh Tuấn</b>	<b>Student ID: 22028144</b>
	<b>Nguyễn Ngọc Hưng</b>	<b>Student ID: 22028142</b>
	<b>Nguyễn Đức Phát</b>	<b>Student ID: 22028298</b>
	<b>Nguyễn Nhật Phong</b>	<b>Student ID: 22028272</b>

<b>Course:</b>	Software Engineering
<b>Course ID:</b>	INT2208E 23
<b>Instructor:</b>	Assoc. Prof. Đặng Đức Hạnh

**HÀ NỘI – 2024**

---

# **Project Plan Document**

**for**

# **Online Ecommerce Website**

**Version 2.0 approved**

**Prepared by Group 10**

**University of Engineering and Technology**

**March 27<sup>th</sup>, 2024**

Date	Document version	Description	Author
23 <sup>th</sup> March, 2024	1.0	<b>Subsection details authors:</b>	
		1. Introduction	Phan Anh Tú
		2. Project Schedule	Phan Anh Tú
		3. Resource Allocation	Mai Anh Tuấn
		4. Tasks Breakdown and Roles	Phan Anh Tú
		5. Communication Plan	Nguyễn Ngọc Hưng
		6. Risk Assessment and Mitigation Strategies	Mai Anh Tuấn
27 <sup>th</sup> , March, 2024	2.0	7. Review and Approval	Phan Anh Tú
		<b>Subsection details updated:</b>	
		3. Resource Allocation	Nguyễn Nhật Phong
		6. Risk Assessment and Mitigation Strategies	Nguyễn Nhật Phong

## Table of Contents

1.	Introduction .....	7
1.1.	Purpose .....	7
1.2.	Intended Audience and Reading Suggestions .....	7
1.3.	Product Scope .....	8
1.4.	References .....	8
2.	Project Schedule .....	9
3.	Resource Allocation .....	14
3.1.	Software .....	14
3.2.	Hardware .....	15
3.3.	People .....	15
3.4.	Materials .....	16
4.	Task Breakdown and Roles .....	16
5.	Communication Plan .....	22
5.1.	Meeting Schedule .....	22
5.2.	Communication Tools .....	22
5.3.	Decision-Making Process .....	23
6.	Risk Assessment and Mitigation Strategies .....	24
7.	Review and Approval .....	25
7.1.	Project Scope and Requirements .....	25
7.2.	Design Review .....	25
7.3.	Feature Approval .....	25
7.4.	Content and Security Review .....	25
7.5.	Performance Testing Approval .....	26
7.6.	Final System Acceptance .....	26
7.7.	Evaluation and Analysis of Post-Release Feedback: .....	26

## Table of Figures

Figure 1. Gantt Chart for project schedule.....	14
---	----

# Revision History

Name	Date	Reason for Changes	Version

# 1. Introduction

## 1.1. Purpose

In today's competitive and convenience-driven society, consumers prefer the ease of shopping remotely rather than venturing out. This shift is evident, with Southeast Asia recording the highest mobile Internet usage in the region, averaging 3.6 hours per day per person, according to Google and Temasek's research.

Acknowledging this trend, our team proposes the development of an online ecommerce platform to cater to this demand. Key features include robust search functionality for easy product discovery, high-quality images, and detailed descriptions to aid decision-making. Additionally, seamless product management and payment processes, along with review and rating features, will enhance user experience and credibility.

User account registration and management will allow for order tracking and purchase history access. Statistical analysis tools will provide insights into customer behavior for continuous improvement, while diverse payment methods will offer flexibility. Furthermore, customer support features will be integrated to address inquiries promptly.

In line with regulations, our platform will prioritize security and privacy to ensure user data protection. Through these efforts, our ecommerce website, **Market Swift**, aims to provide users with a convenient, secure, and efficient online shopping experience. Document Conventions

## 1.2. Intended Audience and Reading Suggestions

The document describes the scope, functionality and features of an online shopping system which has a small group of audience. This document finds relevance to people from various different technical and non-technical backgrounds. There are different types of reader that the document is intended for:

### 1. Developers:

This section caters to software developers involved in the creation and maintenance of the Online Ecommerce System. Developers should delve into the technical intricacies, architectural blueprints, and implementation intricacies outlined within the documentation. It's crucial to thoroughly grasp the prescribed coding standards, API integrations, and chosen frameworks.

### 2. Project Managers:

Project managers are tasked with overseeing the planning and execution of the Online Ecommerce System. Project managers should closely examine the project roadmap, resource distribution, and budgetary allocations detailed in the documentation. Additionally, attention should be given to milestone markers, risk assessments, and corresponding mitigation strategies for effective project management.

### 3. Testers:

Quality assurance testers entrusted with evaluating the functionality, usability, and performance of the Online Ecommerce System. Testers should concentrate on understanding the testing frameworks, methodologies, and scenarios delineated in the documentation. It's imperative to rigorously test the system through functional, usability, and regression testing procedures to ensure optimal performance.

### 4. Documentation Writers:

Technical writers are responsible for documenting the features, functionalities, and usage guidelines of the Online Ecommerce System. Documentation writers should meticulously review the documentation's structure, content layout, and writing style. They should prioritize clarity, conciseness, and coherence in conveying technical information to diverse stakeholders.

### **1.3. Product Scope**

The implementation of an online e-commerce system is pivotal for expanding market reach, enhancing customer experience, and optimizing sales performance. This project plan provides a comprehensive overview of the scope, milestones, tasks, and schedule essential for successful implementation and monitoring of the online e-commerce platform.

#### *1.3.1. The key objectives include:*

- To gain hands-on experience in developing and managing an online e-commerce platform.
- To create a user-friendly and functional online store for a fictitious business.
- To apply marketing strategies to attract customers and increase sales.
- To collaborate effectively as a team and utilize each member's skills and strengths.

#### *1.3.2. The scope of the project includes:*

- Selection and customization of a suitable e-commerce platform, considering the needs and preferences of the group.
- Designing and developing the online store, including creating product listings and implementing a shopping cart.
- Integrating payment gateways and shipping solutions to enable secure transactions and efficient order fulfillment.
- Migrating mock product data and customer information to populate the online store.
- Conducting training sessions for each team member on managing and operating different aspects of the e-commerce system.

### **1.4. References**

- [1] Ian Sommerville, *Software Engineering 10<sup>th</sup> Edition*, Pearson, 2016
- [2] Software Engineering course slides provided by lecturers.



## 2. Project Schedule

A schedule presenting the main milestones and deadlines for our project is depicted in table format with the specified columns:

Phase	Task	Task Description	Start Date	End Date
Planning and Research	Define project objectives and scope	This task involves clarifying the goals and boundaries of the project. It includes identifying what the project aims to achieve, outlining its deliverables, and defining the scope of work. The objective is to establish a clear direction for the project and ensure alignment with stakeholders' expectations./	04/03/2024	06/03/2024
	Determine target audience	This task focuses on understanding the target audience demographics, behaviors, and preferences. It includes defining customer segments, identifying their pain points and motivations, and determining how the business will address their needs.	07/03/2024	08/03/2024
	Allocate roles and responsibilities	Allocating roles and responsibilities involves assigning specific tasks and duties to team members based on their skills, expertise, and availability. It includes defining each team member's role within the project, establishing communication channels, and ensuring clarity about expectations and accountability. The goal is to maximize efficiency and collaboration throughout the project lifecycle.	09/03/2024	10/03/2024
Platform Selection and Customization	Research and select an e-commerce platform	This task involves conducting thorough research exploring different platforms (e.g., Shopee, Shopify, WooCommerce) to identify suitable e-commerce platforms that align with the project's requirements and goals. It includes evaluating factors such as scalability, flexibility, ease of use, available features, pricing, and support options. Once potential platforms are identified, a comprehensive analysis is conducted to select the most appropriate one for the project.	11/03/2024	13/03/2024
	Customize platform to project requirements	After selecting the e-commerce platform, this task focuses on customizing it to meet the specific needs and branding of the project. It involves configuring design elements, layouts, and functionalities to align with the project's aesthetic and	14/03/2024	16/03/2024

		functional requirements. Customization may include adjusting themes, adding or removing features, and integrating third-party plugins or extensions as needed.		
	Configure essential features	Configuring essential features entails setting up core functionalities required for the e-commerce platform to operate effectively. This includes configuring product listings, payment gateways, shipping options, tax settings, and user authentication processes. The goal is to ensure that the platform is equipped with all necessary features to support online transactions, streamline order processing, and provide a seamless shopping experience for customers.	16/03/2024	17/03/2024
Design	Architectural Design	Architectural design involves creating a blueprint for the overall structure and organization of the website's backend and frontend components. It includes defining the system architecture, such as server infrastructure, databases, application servers, and caching layers. The goal is to design a scalable, secure, and efficient system that meets the project's requirements and supports future growth.	18/03/2024	19/03/2024
	Database Design	Database design focuses on designing the database schema and data model to efficiently store and manage the website's data. It includes defining database tables, relationships, indexes, and constraints based on the project's requirements and data access patterns. The goal is to create a well-structured database that ensures data integrity, performance, and scalability.	19/03/2024	20/03/2024
	Design website layout	This task involves conceptualizing and creating a blueprint for the overall structure and organization of the website's pages. It includes defining the arrangement of key elements such as headers, navigation menus, content sections, and footers to ensure a logical and visually appealing layout.	21/03/2024	
	Design User Interface	Designing the user interface focuses on crafting visually engaging and intuitive elements for user interaction. This includes designing elements such as buttons, forms, icons,	22/03/2024	

		typography, and color schemes to enhance usability and provide a seamless browsing experience for website visitors.		
	Design Software Interfaces	This task involves designing interfaces for any software tools or applications integrated into the website, such as content management systems (CMS), customer relationship management (CRM) systems, or inventory management software. The goal is to ensure consistency in design language and smooth integration with the website's overall aesthetics and functionality.	23/03/2024	24/03/2024
	Design Communication Interface	Designing the communication interface entails creating visual components and interaction patterns for communication features on the website.	25/03/2024	
	Design Refinement	The design refinement task involves iteratively reviewing and refining the visual aspects of the website design. This includes gathering feedback from stakeholders and usability testing to identify areas for improvement and making necessary adjustments to enhance the overall design quality and user experience.	26/03/2024	27/03/2024
<b>Development</b>	Frontend Development	<ul style="list-style-type: none"> <li>- Write HTML, CSS, and JavaScript code to create the user interface based on the design specifications.</li> <li>- Implement responsive design to ensure the website is accessible and usable across different devices and screen sizes.</li> <li>- Integrate frontend frameworks or libraries to enhance UI/UX and streamline development.</li> </ul>	28/03/2024	11/04/2024
	Backend Development	<ul style="list-style-type: none"> <li>- Set up server infrastructure and configure web servers (e.g., Apache, Nginx) and databases (e.g., MySQL, MongoDB).</li> <li>- Develop server-side logic and business logic using programming languages (e.g., Python, Node.js, Ruby) and frameworks (e.g., Django, Flask, Express.js).</li> <li>- Implement authentication and authorization mechanisms to secure access to sensitive data and functionalities.</li> </ul>	28/03/2024	11/04/2024

	Database Development	<ul style="list-style-type: none"> <li>- Design and create the database schema based on the data model defined in the design phase.</li> <li>- Write SQL queries and database scripts to create tables, indexes, and constraints.</li> <li>- Implement database optimization techniques to improve performance and scalability.</li> </ul>	28/03/2024	03/04/2024
	Integration of Third-Party Services	<p>Integrate external APIs (e.g., payment gateways, shipping providers, social media platforms) to enable additional functionalities.</p> <p>Implement OAuth or other authentication mechanisms to enable seamless integration with third-party services.</p> <p>Test and troubleshoot integration points to ensure data consistency and reliability.</p>	04/04/2024	11/04/2024
	Unit Testing	Unit testing focuses on testing individual components or units of code in isolation to ensure they function correctly. Developers write test cases for each unit of code and execute them to validate its behavior. Unit testing helps identify bugs early in the development process and ensures that individual components work as expected before integration.	04/04/2024	11/04/2024
<b>Integration and Testing</b>	Integrate Payment Gateways	This task involves integrating payment gateways and shipping solutions into the e-commerce platform to facilitate seamless online transactions and order fulfillment. It includes configuring settings, API integration, and testing to ensure smooth functionality.	12/04/2024	13/04/2024
	Test Website for Functionality and Usability	This task involves conducting comprehensive tests to evaluate the website's functionality and usability. Functional testing ensures that all features work as intended, including navigation, form submission, and checkout processes. Usability testing assesses the website's ease of use, intuitiveness, and accessibility for users. The goal is to identify any issues or usability concerns and address them before launch.	14/04/2024	16/04/2024

	Conduct User Acceptance Testing (UAT)	User acceptance testing (UAT) involves having real users interact with the website to validate its functionality, usability, and overall user experience. Test scenarios are defined based on typical user workflows, and participants are recruited to perform tasks and provide feedback. UAT helps ensure that the website meets user expectations and business requirements before it is released to the public.	17/04/2024	18/04/2024
<b>Launch</b>	Prepare for the Official Launch of the Online Store	This task involves preparing all necessary elements for the official launch of the online store. It includes finalizing website content, ensuring all products/services are properly listed and categorized, configuring payment gateways and shipping options, and conducting thorough testing to verify that everything is functioning correctly. Additionally, tasks may include setting up marketing campaigns, preparing promotional materials, and coordinating with stakeholders to ensure a smooth launch process.	19/04/2024	22/04/2024
	Monitor Website Performance and Customer Feedback	Monitoring website performance and customer feedback is crucial during the launch phase and beyond. It involves continuously tracking key performance indicators (KPIs) such as website traffic, conversion rates, page load times, and customer engagement metrics. Additionally, collecting and analyzing customer feedback through surveys, reviews, and support inquiries helps identify areas for improvement and address any issues or concerns promptly. Regular monitoring allows for timely adjustments and optimizations to enhance the overall user experience and maximize the success of the online store.	23/04/2024	25/04/2024
<b>Ongoing Maintenance and Support</b>	Monitor Website Performance and User Activity	Regularly monitor the website's performance metrics such as load times, server response times, and user engagement. Use analytical tools to track user activity, analyze traffic patterns, and identify any potential issues or areas for improvement. This task involves proactive monitoring to	After this course completes (After 27/05/2024)	

		ensure optimal website performance and user experience.
Update Website Content and Features Needed	and as	Keep the website content fresh, relevant, and up to date by regularly updating information, images, and multimedia content. Additionally, evaluate and implement new features or improvements based on user feedback, technological advancements, or changes in business requirements. This task ensures that the website remains dynamic and aligned with the organization's goals and user expectations.
Provide Customer Support and Assistance	and	Offer responsive and effective customer support to address user inquiries, troubleshoot technical issues, and provide assistance with using the website's features or services. This may involve responding to emails, messages, or support tickets in a timely manner, offering guidance through FAQs or knowledge base resources, and escalating complex issues to appropriate teams for resolution. The goal is to ensure a positive user experience and foster customer satisfaction.

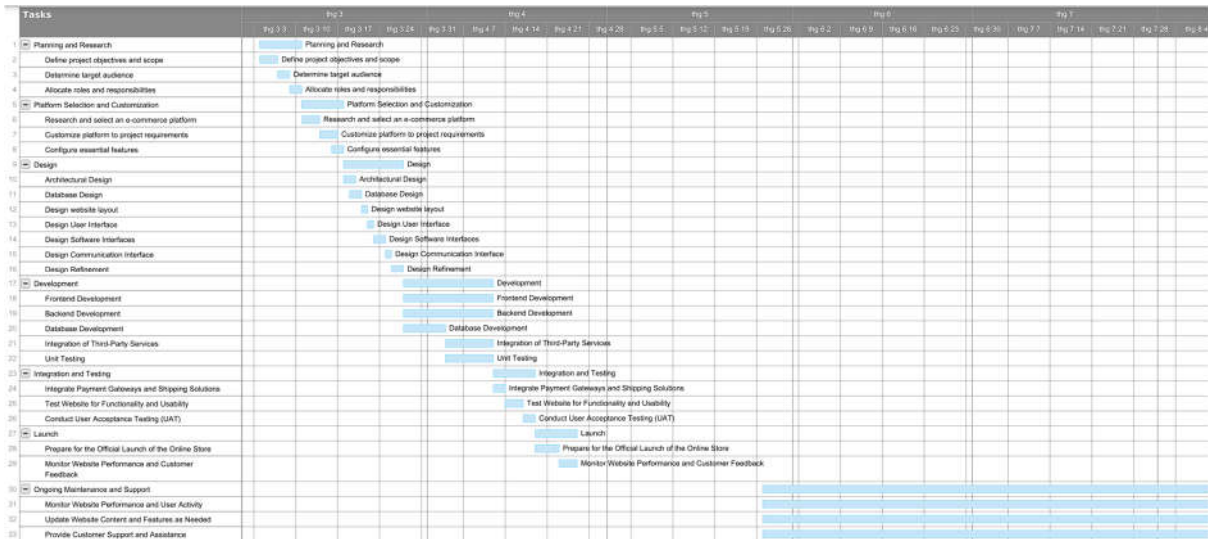


Figure 1. Gantt Chart for project schedule

### 3. Resource Allocation

#### 3.1. Software

#### *3.1.1. Integrated Development Environment (IDE):*

**GitHub:** Utilized for collaborative development, overseeing version control, and handling alterations to the codebase.

#### *3.1.2. Frameworks:*

**Backend Development:** NodeJs + ExpressJs

#### *3.1.3. Programming Languages:*

**Node.JS:** Used for building the backend server and API endpoints.

#### *3.1.4. Database Management System (DBMS):*

**MySQL:** Relational DMS used for storing user data, items, orders, etc.

#### *3.1.5. Frontend Development:*

Programming Languages and Frameworks:

**HTML, CSS, JavaScript:** Programming languages utilized for constructing the frontend user interface.

**React.js:** A JavaScript library employed for creating interactive UI elements..

#### *3.1.6. API Integration:*

Third-Party APIs (Anticipated):

Google Translate API: Using for switch two language: Vietnamese and English

## **3.2. Hardware**

Development devices: Personal Computer and personal laptop with excellent multitasking and powerful cores (e.g. AMD Ryzen 7, Intel Core i7), great RAM (e.g. 16GB RAM) that be able to meet the condition of development and high-performance compilation.

Responsible person: Individual developer (personal machine).

Responsibilities: Ensuring equipment meets project requirements, basic maintenance (individual).

## **3.3. People**

Project Manager: Phan Anh Tú

Development Team:

Lead Developer: Nguyễn Ngọc Hưng

Frontend Developer: Nguyễn Đức Phát, Nguyễn Nhật Phong

Backend Developer: Nguyễn Ngọc Hưng, Phan Anh Tú, Mai Anh Tuấn

UI/UX Designer: Nguyễn Nhật Phong, Phan Anh Tú

Quality Assurance (QA) Team:

QA Leader: Phan Anh Tú

QA Testers: Nguyễn Nhật Phong, Nguyễn Ngọc Hưng, Nguyễn Đức Phát

### 3.4. Materials

**Data Sets:** For projects involving MySQL, data sets may be sourced from various sources or generated internally for testing purposes. The backend developers will be responsible for setting up and managing the MySQL database and integrating it with the Node.js backend. Data sets contain customers' information (e.g. phone number, email, username, password, etc.)

**Online Marketing Laws and Licenses:**

Laws safeguard consumers from misleading ads, privacy invasions, and unfair practices.

Regulations cover data privacy (e.g., GDPR, CCPA), email marketing (e.g., CAN-SPAM), advertising transparency, and intellectual property.

Licenses or permits might be needed depending on users' location and activities.

Terms of use and privacy policy:

**Terms of Use (TOU)**, also known as **Terms and Conditions (T&C)** or **Terms of Service**: This agreement outlines the rules and regulations that govern how users interact with your website.

**Privacy Policy**: This policy explains how our e-commerce website collects, uses, and discloses user data.

**Research and Documentation**: Team members may need access to technical documentation, tutorials, and resources related to Node.js, MySQL, HTML, CSS, and JavaScript. They can utilize online documentation, textbooks, and reputable websites for reference and learning purposes.

## 4. Task Breakdown and Roles

Phase	Task	Task Description	Assignee(s)	Estimated Time (Days)
Planning and Research	Define project objectives and scope	This task involves clarifying the goals and boundaries of the project. It includes identifying what the project aims to achieve, outlining its deliverables, and defining the scope of work. The objective is to establish a clear direction for the project.	Phan Anh Tú	3
	Determine target audience	This task focuses on understanding the target audience demographics, behaviors, and preferences. It includes defining customer segments, identifying their pain points and	Phan Anh Tú	2



		motivations, and determining how the business will address their needs.		
	Allocate roles and responsibilities	Allocating roles and responsibilities involves assigning specific tasks and duties to team members based on their skills, expertise, and availability. It includes defining each team member's role within the project, establishing communication channels, and ensuring clarity about expectations and accountability. The goal is to maximize efficiency and collaboration throughout the project lifecycle.	Nguyễn Ngọc Hưng	2
<b>Platform Selection and Customization</b>	Research and select an e-commerce platform	This task involves conducting thorough research exploring different platforms (e.g., Shopee, Shopify, WooCommerce) to identify suitable e-commerce platforms that align with the project's requirements and goals. It includes evaluating factors such as scalability, flexibility, ease of use, available features, pricing, and support options. Once potential platforms are identified, a comprehensive analysis is conducted to select the most appropriate one for the project.	Phan Anh Tú	3
	Customize platform to project requirements	After selecting the e-commerce platform, this task focuses on customizing it to meet the specific needs and branding of the project. It involves configuring design elements, layouts, and functionalities to align with the project's aesthetic and functional requirements. Customization may include adjusting themes, adding or removing features, and integrating third-party plugins or extensions as needed.	Phan Anh Tú, Nguyễn Ngọc Hưng, Mai Anh Tuấn	3
	Configure essential features	Configuring essential features entails setting up core functionalities required for the e-commerce platform to operate effectively. This includes configuring product listings, payment gateways, shipping options, tax settings, and user authentication processes. The goal is to ensure that the platform is equipped with all necessary features to support online transactions, streamline order processing, and provide a seamless shopping experience for customers.		2

<b>Design</b>	Architectural Design	Architectural design involves creating a blueprint for the overall structure and organization of the website's backend and frontend components. It includes defining the system architecture, such as server infrastructure, databases, application servers, and caching layers. The goal is to design a scalable, secure, and efficient system that meets the project's requirements and supports future growth.	Phan Anh Tú	2
	Database Design	Database design focuses on designing database schema and data model to efficiently store and manage the website's data. It includes defining database tables, relationships, indexes, and constraints based on the project's requirements and data access patterns. The goal is to create a well-structured database that ensures data integrity, performance, and scalability.	Mai Anh Tuấn	2
	Design website layout	This task involves conceptualizing and creating a blueprint for the overall structure and organization of the website's pages. It includes defining the arrangement of key elements such as headers, navigation menus, content sections, and footers to ensure a logical and visually appealing layout.	Phan Anh Tú	1
	Design User Interface	Designing the user interface focuses on crafting visually engaging and intuitive elements for user interaction. This includes designing elements such as buttons, forms, icons, typography, and color schemes to enhance usability and provide a seamless browsing experience for website visitors.		1
	Design Software Interfaces	This task involves designing interfaces for any software tools or applications integrated into the website, such as content management systems (CMS), customer relationship management (CRM) systems, or inventory management software. The goal is to ensure consistency in design language and smooth integration with the website's overall aesthetics and functionality.		2
	Design Communication Interface	Designing the communication interface entails creating visual components and interaction patterns		1

		for communication features on the website.		
	Design Refinement	The design refinement task involves iteratively reviewing and refining the visual aspects of the website design. This includes gathering feedback from stakeholders and usability testing to identify areas for improvement and making necessary adjustments to enhance the overall design quality and user experience.	Phan Anh Tú	2
Development	Frontend Development	<ul style="list-style-type: none"> <li>- Write HTML, CSS, and JavaScript code to create the user interface based on the design specifications.</li> <li>- Implement responsive design to ensure the website is accessible and usable across different devices and screen sizes.</li> <li>- Integrate frontend frameworks or libraries to enhance UI/UX and streamline development.</li> </ul>	Nguyễn Nhật Phong, Nguyễn Đức Phát	15
	Backend Development	<ul style="list-style-type: none"> <li>- Set up server infrastructure and configure web servers (e.g., Apache, Nginx) and databases (e.g., MySQL, MongoDB).</li> <li>- Develop server-side logic and business logic using programming languages (e.g., Python, Node.js, Ruby) and frameworks (e.g., Django, Flask, Express.js).</li> <li>- Implement authentication and authorization mechanisms to secure access to sensitive data and functionalities.</li> </ul>	Phan Anh Tú, Nguyễn Ngọc Hưng	15
	Database Development	<ul style="list-style-type: none"> <li>- Design and create the database schema based on the data model defined in the design phase.</li> <li>- Write SQL queries and database scripts to create tables, indexes, and constraints.</li> <li>- Implement database optimization techniques to improve performance and scalability.</li> </ul>	Mai Anh Tuấn	7
	Integration of Third-Party Services	<p>Integrate external APIs (e.g., payment gateways, shipping providers, social media platforms) to enable additional functionalities.</p> <p>Implement OAuth or other authentication mechanisms to enable</p>		8

		<p>seamless integration with third-party services.</p> <p>Test and troubleshoot integration points to ensure data consistency and reliability.</p>		
	Unit Testing	Unit testing focuses on testing individual components or units of code in isolation to ensure they function correctly. Developers write test cases for each unit of code and execute them to validate its behavior. Unit testing helps identify bugs early in the development process and ensures that individual components work as expected before integration.		8
	Integrate Payment Gateways	This task involves integrating payment gateways and shipping solutions into the e-commerce platform to facilitate seamless online transactions and order fulfillment. It includes configuring settings, API integration, and testing to ensure smooth functionality.		2
<b>Integration and Testing</b>	Test Website for Functionality and Usability	This task involves conducting comprehensive tests to evaluate the website's functionality and usability. Functional testing ensures that all features work as intended, including navigation, form submission, and checkout processes. Usability testing assesses the website's ease of use, intuitiveness, and accessibility for users. The goal is to identify any issues or usability concerns and address them before launch.	Phan Anh Tú, Mai Anh Tuấn, Nguyễn Ngọc Hưng, Nguyễn Đức Phát, Nguyễn Nhật Phong	3
	Conduct User Acceptance Testing (UAT)	User acceptance testing (UAT) involves having real users interact with the website to validate its functionality, usability, and overall user experience. Test scenarios are defined based on typical user workflows, and participants are recruited to perform tasks and provide feedback. UAT helps ensure that the website meets user expectations and business requirements before it is released to the public.	Phan Anh Tú, Mai Anh Tuấn, Nguyễn Ngọc Hưng, Nguyễn Đức Phát, Nguyễn Nhật Phong	2
<b>Launch</b>	Prepare for the Official Launch of the Online Store	This task involves preparing all necessary elements for the official launch of the online store. It includes finalizing website content, ensuring all products/services are properly listed and categorized, configuring payment gateways and shipping	Phan Anh Tú, Mai Anh Tuấn, Nguyễn Ngọc Hưng, Nguyễn	4

		options, and conducting thorough testing to verify that everything is functioning correctly. Additionally, tasks may include setting up marketing campaigns, preparing promotional materials, and coordinating with stakeholders to ensure a smooth launch process.	Đức Phát, Nguyễn Nhật Phong	
	Monitor Website Performance and Customer Feedback	Monitoring website performance and customer feedback is crucial during the launch phase and beyond. It involves continuously tracking key performance indicators (KPIs) such as website traffic, conversion rates, page load times, and customer engagement metrics. Additionally, collecting and analyzing customer feedback through surveys, reviews, and support inquiries helps identify areas for improvement and address any issues or concerns promptly. Regular monitoring allows for timely adjustments and optimizations to enhance the overall user experience and maximize the success of the online store.	Phan Anh Tú, Mai Anh Tuấn, Nguyễn Ngọc Hưng, Nguyễn Đức Phát, Nguyễn Nhật Phong	3
<b>Ongoing Maintenance and Support</b>	Monitor Website Performance and User Activity	Regularly monitor the website's performance metrics such as load times, server response times, and user engagement. Use analytical tools to track user activity, analyze traffic patterns, and identify any potential issues or areas for improvement. This task involves proactive monitoring to ensure optimal website performance and user experience.	Phan Anh Tú, Mai Anh Tuấn, Nguyễn Ngọc Hưng, Nguyễn Đức Phát, Nguyễn Nhật Phong	About 1 - 2 months (After 27/05/2024 )
	Update Website Content and Features as Needed	Keep the website content fresh, relevant, and up to date by regularly updating information, images, and multimedia content. Additionally, evaluate and implement new features or improvements based on user feedback, technological advancements, or changes in business requirements. This task ensures that the website remains dynamic and aligned with the organization's goals and user expectations.		
	Provide Customer Support and Assistance	Offer responsive and effective customer support to address user inquiries, troubleshoot technical issues, and provide assistance with using the website's features or services. This may involve		

		responding to emails, messages, or support tickets in a timely manner, offering guidance through FAQs or knowledge base resources, and escalating complex issues to appropriate teams for resolution. The goal is to ensure a positive user experience and foster customer satisfaction.		
--	--	--	--	--

## 5. Communication Plan

### 5.1. Meeting Schedule

Regular meetings serve as the backbone of the communication strategy, ensuring alignment, progress tracking, and issue resolution. The strategic importance of these meetings cannot be overstated, as they provide the foundation for effective collaboration and decision-making. The proposed meeting schedule is designed with the following objectives in mind:

#### *5.1.1. Weekly Team Meetings:*

- Frequency: Every Monday
- Purpose: These sessions are vital for initiating the week with clarity and focus. They serve to align team members with project objectives, discuss overarching strategies, and address any emerging issues that may impact progress. Moreover, these meetings foster a sense of unity and purpose among team members, promoting cohesion and collaboration.
- Format: The weekly team meetings will be conducted virtually via video conferencing platforms such as Zoom or Microsoft Teams. This format allows for real-time communication and engagement, facilitating seamless collaboration regardless of team members' locations.

#### *5.1.2. Bi-Weekly Progress Review Meetings:*

- Frequency: Every other Friday
- Purpose: These gatherings are dedicated to evaluating project progress, assessing milestone achievements, and identifying areas for improvement. By conducting these meetings regularly, the project team ensures that timelines are adhered to and any deviations from the plan are promptly addressed. Furthermore, these sessions provide an opportunity to recalibrate strategies and resources, ensuring alignment with project goals.
- Format: The bi-weekly progress review meetings will be held offline to capitalize on face-to-face interaction. In-person discussions foster deeper engagement, promote active participation, and facilitate more dynamic brainstorming and problem-solving sessions. This format encourages open dialogue and strengthens team cohesion, contributing to a more productive work environment.

### 5.2. Communication Tools

Effective communication is paramount to ensure seamless collaboration, transparency, and timely decision-making. To facilitate communication among team members and streamline information sharing, the following communication tools will be utilized:

#### *5.2.1. Email:*

- Email serves as a formal communication channel for disseminating important updates, sharing project-related documents, and scheduling meetings. It provides a centralized platform for official announcements, documentation, and external communication. Team members are expected to check their emails regularly and respond promptly to any inquiries or updates.

#### *5.2.2. Project Management Platform (Jira):*

- Jira will serve as our primary project management platform, offering robust tools for task tracking, issue management, and agile project management. Its flexibility and customization options make it ideal for our project's needs. Tasks will be created, assigned, and tracked within Jira, allowing team members to monitor progress, update statuses, and collaborate effectively on project deliverables.

#### *5.2.3. Video Conferencing (Zoom or Microsoft Teams):*

- Video conferencing tools such as Zoom or Microsoft Teams will facilitate virtual meetings, allowing for face-to-face interactions, real-time discussions, and document collaboration. These platforms enhance communication and foster engagement, particularly in remote or distributed team settings. Team members will utilize video conferencing for regular team meetings, progress reviews, and ad-hoc discussions as needed.

#### *5.2.4. Instant Messaging (Slack):*

- Slack will be utilized for real-time messaging, informal discussions, and quick updates among team members. It provides a platform for ad-hoc communication, brainstorming sessions, and sharing non-critical information in a more casual manner. Slack channels will be set up for different project aspects or teams, allowing for organized communication and easy access to relevant discussions.

## **5.3. Decision-Making Process**

Establishing a clear decision-making process is crucial to ensure that project decisions are made efficiently, transparently, and in alignment with project objectives. The following decision-making process will be implemented:

#### *5.3.1. Collaborative Discussions:*

- Major decisions will be discussed collaboratively during team meetings, providing each team member with the opportunity to contribute their insights, perspectives, and expertise. These discussions will be guided by the project manager or designated facilitator, ensuring that all relevant viewpoints are considered, and decisions are informed by diverse perspectives.

#### *5.3.2. Data-Driven Approach:*

- Decisions will be based on data, evidence, and objective analysis whenever possible. Relevant information and insights will be shared transparently, allowing team members to make informed decisions that are aligned with project goals and priorities. Data-driven decision-making minimizes biases and ensures that decisions are grounded in facts and analysis.

#### *5.3.3. Decision Documentation:*

- Once a decision is made, it will be documented along with any relevant context, rationale, and action items. Decision documentation ensures transparency, accountability, and clarity regarding the reasoning behind each decision. This documentation will be stored in a centralized location accessible to all team members, facilitating reference and alignment.

#### *5.3.4. Timely Resolution:*

- In cases where immediate decisions are required, such as addressing urgent issues or responding to unforeseen challenges, the project manager or designated decision-maker will have the authority to make timely decisions. Input from relevant stakeholders may be sought as needed to ensure that decisions are well-informed and aligned with project objectives.

## 6. Risk Assessment and Mitigation Strategies

### 1. Scope Creep:

Description: Project scope expands beyond initial requirements, leading to additional work and delays.

Impact: Increased development time, budget overruns, missed deadlines.

Mitigation Strategies:

- Establish clear project objectives and requirements during the planning phase.
- Implement a change management process to evaluate and approve scope changes.
- Regularly review project scope with stakeholders to ensure alignment and prevent scope creep.

### 2. Resource Constraints:

Description: Team members become unavailable due to illness, vacation, or reassignment.

Impact: Inadequate availability of skilled team members or hardware, leading to project delays and compromising quality.

Mitigation Strategies:

- Develop a cross-functional team with overlapping skill sets.
- Identify and train backup resources in case of team member absence.
- Maintain clear documentation of project tasks and progress.

### 3. Integration Challenges:

Description: Delays or issues with third-party libraries, frameworks, or APIs and difficulties in integrating frontend and backend components or third-party services

Impact: Delays in development and testing phases.

Mitigation Strategy:

- Prioritize API design and documentation to streamline integration efforts.
- Implement continuous integration and automated testing practices to detect integration issues early.
- Establish clear communication channels between frontend and backend teams to address integration challenges promptly.

### 4. Security Vulnerabilities

Description: Unidentified security flaws in code or database could be exploited.

Impact: Data breaches, system outages, reputational damage.

Mitigation Strategies:

- Implement secure coding practices and regular code reviews.
- Utilize security testing tools to identify and fix vulnerabilities.
- Employ secure authentication and authorization mechanisms.



## 5. Unforeseen Technical Challenges

**Description:** Encountering unexpected technical problems or limitations with chosen technologies.

**Impact:** Delays in development, additional resources needed to overcome challenges.

**Mitigation Strategies:**

- Conduct thorough technical research and proof-of-concept work before development.
- Allocate buffer time in the project schedule for resolving unforeseen issues.
- Maintain open communication within the team to share and address technical challenges.

## 6. Legal and Regulatory Challenges

**Description:** An e-commerce website involves many legal and regulatory problems

**Impact:** Illegal product or trade activities may lead to serious problems and be taken down of the website, or even the site could be banned by the government

**Mitigation Strategies:**

- Research and comply with all relevant product safety and labelling regulations for our region.
- Source products from reputable suppliers who adhere to safety standards.
- Only sell genuine products and avoid using copyrighted content or trademarks without permission.

# 7. Review and Approval

## 7.1. Project Scope and Requirements

**Approved by:** Stakeholders (Project Sponsor, Product Owner)

**Purpose:** Ensure congruence with project objectives and stakeholder anticipations.

## 7.2. Design Review

**Approved by:** Design Lead, Project Manager

**Purpose:** valuating the user interface (UI) and user experience (UX) design elements to ensure they meet usability standards and align with the project's goals.

## 7.3. Feature Approval

**Approved by:** Project Manager, Product Owner

**Purpose:** Reviewing proposed features and functionalities to determine their feasibility, relevance, and potential impact on the overall system.

## 7.4. Content and Security Review

**Approved by:** QA Leader, Project Manager

**Purpose:** Assessing product descriptions, images, and other content to ensure accuracy, relevance, and alignment with the target audience and brand identity. Assessing the security measures implemented within the ecommerce system to safeguard customer data and prevent unauthorized access or breaches.

## **7.5. Performance Testing Approval**

**Approved by:** QA Leader, Project Manager

**Purpose:** Reviewing the results of performance testing to ensure the ecommerce system can handle expected traffic volumes without slowdowns or downtime.

## **7.6. Final System Acceptance**

**Approved by:** QA Leader, Project Manager, Stakeholders

**Purpose:** Approving the overall ecommerce system for launch after ensuring that all components meet quality standards, functional requirements, and stakeholder

## **7.7. Evaluation and Analysis of Post-Release Feedback:**

**Approval:** Project Manager, Stakeholders

**Purpose:** Examine user feedback, performance metrics, and analytics data to guide future iterations and enhancements.