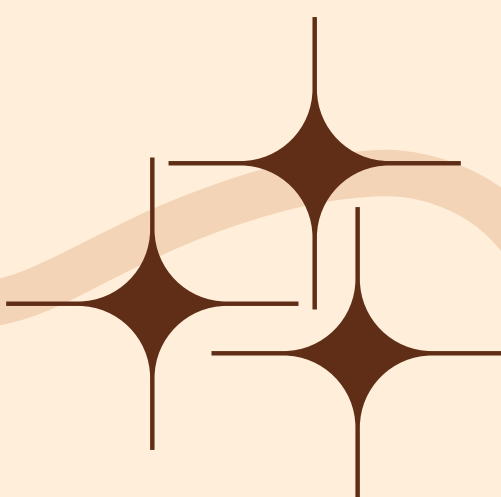


OFFICE STATIONERY WEBSITE SOLUTION DEVELOPMENT PLAN AND ASSESSMENT



Presented by: Nguyen Quang Linh

PROJECT INTRODUCTION

- **Objective:** Build a modern, user-friendly stationery sales website.
- **Target users:** Customers and system administrators.
- **System type:** Multi-page website, supporting inventory management, purchasing and promotions.

SURVEY REPORT - INTERVIEW

Form: In-person and via Google Forms.

Sample size: 5 people

Key results:

- Almost everyone wants a simple, easy-to-use interface.
- Managers need real-time inventory tracking functionality.

The survey is the basis for forming system requirements.

Kim Tien Hai - Chief Technology Officer (CTO)

Person interviewed: Kim Tien Hai - Chief Technology Officer (CTO)

Interviewer:

Date: 15/3/2025

Primary Purpose: Assessing technical performance and requirements of the current and new office supply management system.

Summary of Interview:

- The current system meets basic performance standards but lacks updated security protocols.
- The CTO expects the new system to include better encryption, automated backups, and flexible APIs for easier integration with other platforms.
- The system has encountered technical issues such as security vulnerabilities and performance slowdowns during peak usage.

Nguyen Van Linh - Procurement Coordinator

Person interviewed: Nguyen Van Linh - Procurement Coordinator

Interviewer:

Date: 16/3/2025

Primary Purpose: Gathering information on how the current office supply management system supports procurement needs and how it can be improved.

Summary of Interview:

- The current system is inefficient in handling large volumes of supply orders, especially during peak office supply restocking periods.
- Desired improvements include better reporting tools, automated order tracking, and a more intuitive interface for procurement teams.
- Delays in updating supply records and a complicated interface have been significant challenges.

Nguyen Huy Hoang - Head of Inventory Management

Person interviewed: Nguyen Huy Hoang - Head of Inventory Management

Interviewer:

Date: 17/3/2025

Primary Purpose: Understanding how the current system supports inventory management and identifying areas for improvement.

Summary of Interview:

- The current system does not meet real-time inventory tracking needs and struggles with managing complex cases such as urgent restocking requests.
- The new system should include real-time inventory tracking, better communication tools, and a unified view of office supply distribution.
- Challenges include system crashes during high demand periods and delays in updating supply status.

Tran Van Dat- IT Support Specialist

Person interviewed: Tran Van Dat- IT Support Specialist

Interviewer:

Date: 18/3/2025

Primary Purpose: Understanding technical support challenges with the current system and requirements for improved maintenance.

Summary of Interview:

- The current system is outdated and requires manual intervention for many maintenance tasks.
- Expectations for the new system include automation of routine maintenance tasks and real-time monitoring for improved efficiency.
- Common technical issues include server downtime, slow performance during peak usage, and difficulties in managing outdated security protocols.

FUNCTIONAL REQUIREMENTS OF THE OFFICE SUPPLY MANAGEMENT SYSTEM

User Management:

- The system must allow administrators to create, update, and delete user accounts (employees, suppliers, and managers).
- The system must provide role-based access control, enabling users to access features according to their roles (e.g., employee, supplier, admin).
- Each user can view their own personal information and order history.

Inventory Management:

- The system must allow users to add, update, view, and delete office supply inventory records.
- The system must support real-time inventory tracking to ensure stock levels are updated immediately after each transaction.

Order Management:

- The system must allow employees to place requests for office supplies.
- The system must enable managers to approve or reject supply requests before processing.
- The system must notify suppliers automatically when inventory levels fall below a specified threshold.

Supplier Management:

- The system must allow administrators to add, update, and remove supplier records.
- The system must maintain a history of past orders and supplier interactions.

Reporting and Analytics:

- The system must generate reports on supply usage, order trends, and stock levels.
- The system must provide data visualization tools to help managers make informed procurement decisions.

Login and Security: The system must implement a secure login and register process.

NON-FUNCTIONAL REQUIREMENTS OF THE OFFICE SUPPLY MANAGEMENT SYSTEM

Performance:

- The system must support concurrent access for up to 300 users without noticeable degradation in performance.
- Page loading time must not exceed 2 seconds under typical usage conditions.
- Reports must be generated within 5 seconds, even with a database containing 50,000 supply records.

Scalability:

- The system must be designed to handle a 20% increase in the number of users and data volume annually.
- The architecture must allow for adding new modules (e.g., additional reporting features or automated reordering) with minimal development effort.



Availability:

- The system must be available 99.9% of the time, equating to a maximum downtime of 8.76 hours per year.
- Scheduled maintenance should occur outside of peak hours and be communicated to users in advance.

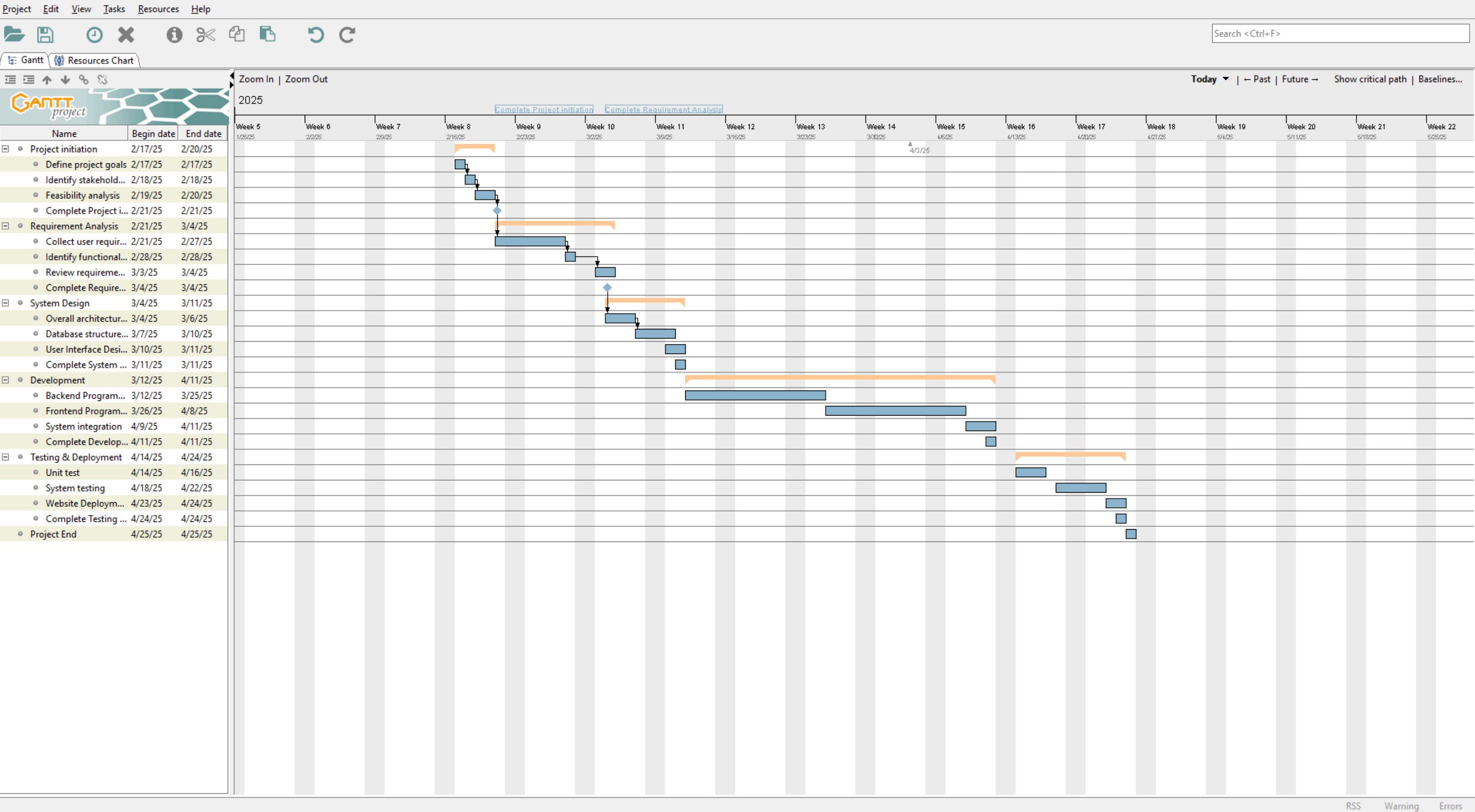
Security:

- The system must enforce role-based access control to restrict unauthorized access to sensitive data.
- Data must be encrypted during transmission (e.g., using SSL/TLS) and at rest.
- User accounts must include multi-factor authentication (MFA) to enhance login security.

Usability:

- The system must provide an intuitive user interface that requires minimal training for employees and managers.
- The system must support multiple languages, including English and Vietnamese, to accommodate international and local users.
- Error messages must be user-friendly and provide guidance on resolving issues.

GANTT CHART



TOOLS AND TECHNOLOGIES USED

- **Front-end:** React.js
- **Back-end:** Node.js (Express)
- **Database:** SQL Server
- **UI Design:** Figma
- **Project Management:** Gantt chart

REQUIREMENTS ANALYSIS TECHNIQUES

- Use Case Diagram
- Sample Wireframe for Main UI
- System Requirements List
- Communicate with Stakeholders Regularly to Refine Features

TESTING STRATEGY

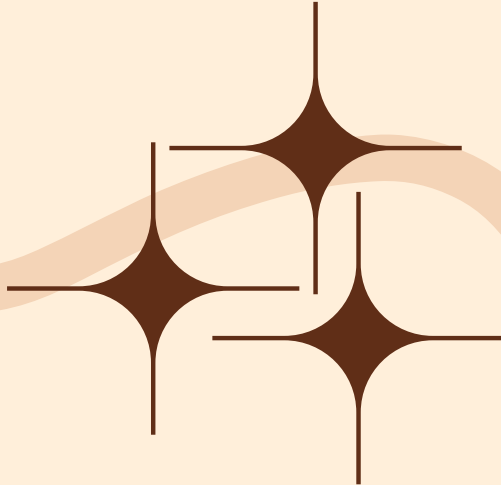
- **Functional Testing:** Each major function (shopping cart, checkout,...)
- **Performance Testing:** PageSpeed
- **Security Testing:** Check for login vulnerabilities, SQL

EVALUATION RESULTS

- Website runs stably on Chrome, Edge
- Average loading time: 2.5s
- Meets target customer needs well
- **Some limitations:** Support for older browsers is still low, Accessibility needs to be improved

SUGGESTED IMPROVEMENTS

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- Optimize page loading speed
 - Integrate screen readers (for the visually impaired)
 - Increase security (2-factor authentication)
 - Develop additional revenue statistics features
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- A decorative illustration of a starburst or sparkles in a dark brown color, located in the bottom left corner of the slide.

CONCLUSION

- Website Achieves Initial Goals
- Can be Expanded into a Larger E-Commerce System

THANK
YOU

