P&T Express - Chuyển Phát Nhanh System

**Software Requirements Specification**

Version 4.0

Danang, Jan 2025

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# **DOCUMENT HISTORY**

| **Date** | **Summary of Changes** | **Version** |
| --- | --- | --- |
| 21/01/2025 | Analyse software requirements for P&T Express System | RMS\_SRS\_sample\_v1.0 |
|  |  |  |
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# **REFERENCE DOCUMENTS**

| **Document Name** | **Description** |
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# 

# **INTRODUCTION**

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

## ***Purpose***

* The Software Requirements Specification (SRS) will provide a detailed description of the requirements for the P&T Express - Express System. This SRS will allow for a complete understanding of what is expected of the P&T Express to be built. A clear understanding of the P&T Express and its functionality will allow for the development of the correct software for the end user and will be used to develop future phases of the project. This SRS will provide the foundation for the project. From this SRS, the P&T Express can be designed, built and finally tested.
* This SRS will be used by the software engineers building the P&T Express and the hotel end users. The software engineers will use the SRS to fully understand the expectations of this P&T Express in order to build the appropriate software. The hotel end users will be able to use this SRS as a “test bed” to see if the software engineers have built the system to their expectations. If it is not to their expectations, the end users can indicate how it is not to their liking and the software engineers will modify the SRS to suit the end users’ needs.

## ***In Scope***

* The scope of the P&T Express Management System includes the development and implementation of core features to automate and enhance the operations of the express delivery service. The system will support three primary user roles: admins, customers, and drivers. Admins will have access to features such as user management, order monitoring, report generation, and system configuration, allowing them to oversee and control all operations effectively. Customers will be able to place new delivery orders, track their orders in real-time, make secure payments, and view order history and receipts through the Order Placement and Tracking System and the Billing and Payment Processing System. Drivers will be equipped with tools to manage their assigned deliveries, update delivery statuses, and confirm successful deliveries with proof, such as digital signatures or photos. The system will also include real-time notifications, role-based access control, and error recovery mechanisms to ensure smooth operations. With an intuitive interface and robust functionality, the system will enable P&T Express to streamline its workflows, improve accuracy, and deliver exceptional service to all users.

# **REQUIREMENT**

***4.1 Purpose***

+ Customer management

+ Place orders and refuse Order management

+ Manage order status

+ Service management

+ Cost management

+ Human resource management

***4.2 Requirement specification***

***4.2.1 The organization of P&T Express***

The department with the highest power is the management board. The management board includes many people divided into three main tasks: order management, transportation, and customer support. Order management includes the Order Processing Department, which is responsible for verifying orders, preparing products, and packaging, as well as the Inventory Management Department, which manages stock levels and ensures efficient warehouse operations. Transportation consists of the Delivery Operations Department, which organizes delivery vehicles, assigns routes, and ensures timely delivery, and the Logistics Coordination Department, which works with external logistics partners and monitors shipping processes. Customer support includes the Customer Support Department, responsible for handling customer inquiries, complaints, and returns, and the Feedback and Quality Control Department, which collects feedback and evaluates service quality.

***4.2.2 P&T Express Express Delivery Process:***

***4.2.2.1 Receive shipping requests (Parcel Booking):***

When customers need to send goods via P&T Express, they can do it in many different ways, such as: calling, directly at the branch, via the website, or mobile application. The process is as follows:

a. Receiving shipping information:

-P&T Express staff receive requests from customers and collect detailed information including:

+Sender's name.

+Contact phone number.

+Delivery address (if picking up goods at home).

+Receiver's name and phone number.

+Delivery address.

b. Checking and quoting:

-Staff check and calculate shipping costs based on:

+Size, weight of goods.

+Transportation distance (domestic, inter-provincial, international).

+Type of service (fast, regular, economical).

+Quote to customers and confirm special requests (such as cargo insurance).

c. Receiving goods:

+Staff receive goods from customers, physically check goods, pack if necessary, and provide invoices/receipts.

***4.2.2.2 Parcel Processing and Shipping***

Order management is the process from receiving a customer order to completing delivery. The system needs to automate the steps from order recording, sorting, processing and delivery to minimize errors and optimize the process.

a. Order management:

+When customers place an order, order information will be saved in the system.

+The system automatically classifies orders by delivery area, delivery date and service type (Fast or Economy Delivery).

+The system will display the status of the order (Processing, Shipping, Delivered, Failed Delivery).

b. Store delivery route information:

+The system will record and track stops in the delivery route.

+Provide a tracking number to customers to track the delivery process online.

***4.2.2.3 Parcel Delivery***

Delivery confirmation is an important step in the delivery process, ensuring that the goods have been delivered to the correct address and the customer has received the product. This confirmation helps complete the transaction and update the delivery status in the system, while protecting the interests of both the shipper and the recipient.

a. Delivery confirmation:

+When the delivery staff arrives at the receiving address, the customer will sign the confirmation on the mobile application or web to complete the delivery.

+The shipping code will be updated with the status "Delivered" in the system.

b. Unsuccessful delivery:

+If the delivery is unsuccessful (customer is not present), the delivery staff will report on the web, the customer can automatically reschedule the delivery.

+The system will send a notification via email or SMS so that the customer knows and selects a new time to receive the goods

***4.2.3 Information Flow***

Information flow is an important element of delivery management, providing both customers and delivery staff with a clear and transparent view of the status of their orders throughout the shipping process. Providing accurate and timely information not only ensures that customers can track their orders, but also reduces uncertainty and errors.

a. Order status update:

+After each step in the shipping process, the system updates the order status on the web, helping customers track.

+Order received.

+On the way to delivery.

+Successfully delivered.

b. Customer data management:

+Each customer has a separate account on the website, where they can review their shipping history, the status of previous orders and payment details.

c. Payment management and processing:

+The system stores payment information and sends electronic invoices via email to customers after successful payment.

***4.2.4 UseCase descriptions***

| ID | Use Case | Actors | Use Case Description |
| --- | --- | --- | --- |
| UC-1 | Login | Customer,Hotel Owner, Admin | Allow Customer,Admin,Drive login into Platform |
| UC-2 | Login by Google | Customer | Allows customers to log in using Google |
| UC-3 | Register | Guest | Allow Guest create an account on platform |
| UC-4 | Sign out | Customer,Hotel Owner, Admin | Allow Customer,Driver,Admin log out of platform |
| UC-5 | Forgot Password | Customer,Hotel Owner, Admin | Allow Customer,Driver,Admin reset password if they forgot password of their account |
| UC-6 | View personal information | Customer, Hotel Owner | Allow Customer, Driver,Admin to view their information on platform |
| UC-7 | Confirm the ordering request | Admin | Allows admin to confirm order requests from customers and drivers |
| UC-8 | Select the shipper | Admin | Allows admins to choose drivers to transport orders |
| UC-9 | Order statistic | Admin | Allows admin to compile order statistics |
| UC-10 | See list of accounts | Admin | Allows admins to view a list of customer and driver accounts |
| UC-11 | Statistics of orders being delivered | Admin | Allows admin to compile statistics on orders being delivered |
| UC-12 | Statistics of delivered orders | Admin | Allows admin to report successfully delivered orders |
| UC-13 | Statistics on undelivered orders | Admin | Allows admin to report undelivered orders |
| UC-14 | Change profile | Customer, Admin, Driver | Allows customers, admins, drivers to change profiles on personal pages |
| UC-15 | View revenue | Customer, Admin, Driver | Allows Customer, Admin, Driver to view order revenue. |
| UC-16 | View order list | Customer, Admin, Driver | Allows customers, Admin, and drivers to view the list of completed orders |
| UC-17 | Manage order | Customer, Admin, Driver | Allows customers, admins, drivers to manage their orders. |
| UC-18 | Make schedule | Customer, Admin, Driver | Allow customer, admin, driver make schedule |
| UC-19 | Search order | Customer, Admin, Driver | Allows customers, admins, drivers to search for orders |
| UC-20 | Create order | Customer, Admin, Driver | Allows customers, administrators, drivers to create orders |
| UC-21 | Delete order | Customer, Admin, Driver | Allow customers, administrators, drivers to delete orders |
| UC-22 | Update order | Customer, Admin, Driver | Allows customers, administrators, and drivers to update orders |
| UC-23 | Remind order | Customer, Admin, Driver | Allows customers, admins, and drivers to remind customers of orders |
| UC-24 | Chat | Customer, Admin, Driver | Customers, admins, drivers can chat with each other |
| UC-25 | Update order status | Driver | Allows driver to update your order status |
| UC-26 | View order history | Driver | Allows driver to view order history |
| UC-27 | View order list | Driver | Allows driver to view order list |
| UC-28 | View customer’s profile | Driver | Allows driver to view customer’s profile |

# **OVERVIEW**

## ***Actors***

+ Customer

+ Driver

+Admin

## ***System Use Case Diagram***

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