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**Goods Flow Logistics System**

**Software Requirements Specification Version <1.0>**

**Revision History**

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**Software Requirements Specification**

# Introduction

The introduction of Software Requirements Specification (SRS) for the Goods Flow logistics System covers an overview of an entire SRS, which is its purposes, scope of use, definitions, acronyms, and other abbreviations and references. The focus of this document is to collect, analyze, and give deep insight into a distribution center and tracking services. That is possible by defining a detailed description of the problem by focusing on the functions and needs of stakeholders while finding problems while defining product characteristics at a high level. Exact tracking requirements can be provided in this document

## Purpose

The purpose of this document is to collect and analyze: The definition of package tracking and the requirements that consumers and stakeholders expect. Also, we can increase our understanding of the Package Tracking project by collecting and analyzing these things.

In a nutshell, the purpose of this document is to provide a high-level overview and detailed description of Package Tracking. It will describe the information of the target users of this project and the user interface. Furthermore, we can expect that it will be able to help designers and developers working on similar projects.

## Scope

Primarily the scope is related to the e-Logistics function. It focuses on the needs of sellers, carriers, and shopping malls. Package Tracking aims to improve the quality of logistics services by solving problems with sellers, delivery companies, and shopping malls expected as main stakeholders with online technology. We can also help customers choose another tracking service. It can be used as a standard model for logistics services because it covers the overall functions of logistics. Customers can also get a description of what kind of information and features are required for the Goods Flow Logistics System.

## Definitions, Acronyms, and Abbreviations

|  |  |
| --- | --- |
| Tracking number | numbers assigned to packages when they are shipped. |
| Courier contract code | Code issued when contracting with a courier company |
| e-SCM | Electronic Supply Chain Management |
| ILCP | Integrated Logistics Controlling Program |
| FAQ | Frequently Asked Questions |

## References

Currently, there are no references.

## Overview

The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware, and the product's environmental, functional, and data requirements. Section 2 gives the environmental requirements, functional requirements, data requirements, constraints, and assumptions made while designing the E-Logistics. It also gives the user viewpoint of the product. Section 2 also gives the specific requirements of the product. Section 2 also discusses the external interface requirements and gives a detailed description of functional requirements. Section 3 is for supporting information.

# Specific Requirements

The specific requirements are –

## Functionality

Introduction –

This subsection contains the requirements for e-Logistics.

### Receive order information from the customer company.

The system shall display all the products that can be configured.

The system shall receive order information from the customer company.

### Request delivery to the carrier.

The system shall request delivery to the carrier.

The system shall link the courier contract code to the shipping company.

### Receive tracking information from the carrier.

The system shall receive the tracking number from the courier.

The system shall receive the delivery status for the tracking number.

The system shall receive the delivery status when the data is updated.

The system shall receive real-time delivery information for overseas.

The system shall receive an estimated delivery date from the courier.

### Transfer tracking information to the customer company.

The system shall inform the customer company of the invoice number.

The system shall update the delivery status when the package arrives at the hub.

### Offer services for the client.

2.1.5.1 Give information to the client.

The system shall inform the customer company of the delivery status automatically.

The system shall display the status when the package arrives at the hub.

The system shall display the tracking number.

The system shall display the product name.

The system shall display the shipper and consignee.

The system shall display the delivery point.

The system shall display the customer’s phone number.

The system shall display the delivery man’s name.

The system shall check the delivery status at any time.

2.1.5.2 Check transit requests from the client.

The system shall provide a temporary phone number for safety.

The system shall vouch for a communication through the temporary number.

The system shall terminate the temporary number at the end of the transaction.

### Monitoring

The system shall monitor the whole process.

### Delivery system

The system shall provide abundant courier companies.

The system shall provide various contract terms.

The system shall provide ILCP.

The system shall provide logistics center.

The system shall construct an integrated logistics warehouse for companies.

The system shall negotiate courier contracts (case-by-case payment, guarantee insurance, margin, etc.)

The system shall define the procedures for using affiliate courier service as affiliated courier service use procedure, customer subscription application, manager approval, courier service contract conclusion, e-SCM.

The system shall provide installation and use of e-SCM free of charge.

The system shall construct an integrated logistics warehouse for companies.

The system shall provide various delivery services (courier, freight, quick).

The system shall provide fast delivery in the metropolitan area.

### Returns.

The system shall provide a return service.

The system shall define the procedures for the package returns system as the customer’s subscription application, manager approval, and return application process.

The system shall sign a new contract with the courier company dedicated to the customer.

### Sell Configured to Ordered Products.

2.1.9.1 The system shall display all the products that can be configured.

2.1.9.2 The system shall allow the user to select the product to configure.

2.1.9.3 The system shall display all the available components of the product to configure

2.1.9.4 The system shall enable the user to add one or more components to the configuration.

2.1.9.5 The system shall notify the user about any conflict in the current configuration.

2.1.9.6 The system shall allow the user to update the configuration to resolve conflict in the current configuration.

2.1.9.7 The system shall allow the user to confirm the completion of the current configuration

### Provide comprehensive product details.

3.1.2.1 The system shall display detailed information about the selected products.

3.1.2.2 The system shall provide browsing options to see product details.

### Detailed product Categorizations

The system shall display detailed product categorization to the user.

### Provide Search facility.

The system shall enable the user to enter the search text on the screen

The system shall enable the user to select multiple options on the screen to search

The system shall display only 10 matching results on the current screen

The system shall notify the user when no matching product is found on the search

### Maintain customer profile.

The system shall allow the user to create a profile and set his credential.

The system shall authenticate user credentials to view the profile.

The system shall allow the user to update the profile information.

### Provide personalized profile.

The system shall display both the active and completed order history in the customer profile.

The system shall allow the user to select the order from the order history.

The system shall display detailed information about the selected order.

The system shall display the most frequently searched items by the user in the profile.

The system shall allow the users to register for newsletters and surveys in the profile.

### Provide Customer Support.

The system shall provide online help, FAQ customer support, and sitemap options for customer support.

The system shall allow the user to select the support type he wants.

The system shall allow the users to enter the customer and product information for support.

The system shall display the customer support contact numbers on the screen.

The system shall display online help upon request.

The system shall display the FAQs upon request

### Kakao Message confirmation

The system shall maintain customer's Kakao ID information.

The system shall send a tracking information to the user through Kakao message.

### Provide multiple shipping methods.

The system shall provide different shipping options provided by the shipping department.

The system shall enable the users to select the shipping method during the payment process.

### online tracking of shipments

The system shall allow users to enter the order information for tracking.

The system shall display the current tracking information about the order.

### Provide detailed sitemap.

The system shall allow the user to view detailed sitemap

### Online Purchase of products.

The system shall allow the user to confirm the purchase.

The system shall enable the user to enter the payment information.

## Usability

### Graphical User Interface

The system shall provide a uniform look and feel between all the web pages.

The system shall provide a visualization of the process as a graph.

The system shall provide the use of icons and a menu.

The system shall display the name of the courier company as the logo.

The system shall support Unicode.

### Accessibility

The system shall provide web pages and app access.

The system shall provide multi-language support to countries that provide service

## Reliability & Availability

### Back-end Internal Computers

The system shall provide storage of all databases on enough computers with automatic switchover.

The system shall provide for the replication of databases to off-site storage locations.

The system shall provide data recovery on all database storage disks.

### Internet Service Provider

The system shall provide a contractual agreement with an internet service provider for T3 access with 99.9999% availability.

The system shall provide a contractual agreement with an internet service provider who can provide 99.999% availability through their network facilities on the internet

## Performance

The product shall be based on the web and must be run from a web server.

The product shall take an initial load time depending on internet connection strength which also depends on the media from which the product is run.

The performance shall depend upon the hardware components of the client/customer.

## Security

### Data Transfer

The system shall use secure sockets in all transactions that include any confidential customer information.

The system shall confirm all transactions with the customer’s web browser.

The system shall not leave any cookies on the customer’s computer containing the user’s phone number,

The system shall not leave any cookies on the customer’s computer containing the user’s phone address

The system shall not leave any cookies on the customer’s computer containing any of the user’s confidential information.

### Data Storage

The customer’s web browser shall never display a customer’s password. It shall always be echoed with special characters representing typed characters.

The system’s back-end servers shall never display a customer’s password. The customer’s password may be reset but never shown.

The system’s back-end servers shall never display a customer’s phone number. The customer’s phone number may be reset but never shown.

The system’s back-end servers shall never display a customer’s address. The customer’s address may be reset but never shown.

The system’s back-end servers shall only be accessible to authenticated administrators.

The system’s back-end databases shall be encrypted.

## Design Constraints

### Standard Development Tools

The system shall be built using python and MySQL and tested it can be driven in application and website by making a prototype.

### Web-Based Based Product

There are no memory requirements

The computers must be equipped with web browsers such as Chrome.

The product must be stored in such a way that allows the client easy access to it.

Response time for loading the product should take no longer than 30 seconds.

General knowledge of basic computer skills is required to use the product

### Application-Based Based Product

The app size should be less than 1GB.

The device must be equipped with a wireless internet connection

Response time for loading the product should take no longer than 30 seconds.

General knowledge of basic application skills is required to use the product

### On-line User Documentation and Help System Requirements

As the product is E-logistics, the Online help system becomes a critical component of the system which shall provide –

### 2.6.4.1 Help System for a client who is using an application and website

It shall provide specific guidelines to a user for using the webpage and application system

To implement online user help, link and search fields shall be provided.

To implement online user help, a menu bar shall be provided.

### Help System for Customer Company

The system shall provide specific guidelines to a user for using the E-logistics system.

The system shall provide link and search fields to implement online user help.

The system shall provide e-SCM program

### Help System for carrier

The system shall provide specific guidelines to a user for using the E-logistics system

The system shall provide link and search field.

## Interfaces

There are many types of interfaces as such supported by the E-logistics software system namely; User Interface, Software Interface, and Hardware Interface. However, in this prototype, you can test it on a local computer.

There shall be a logical address of the system in IPv4 format.

The test IP address will be 127.0.0.1.

### User Interfaces

The user interface for the software shall be compatible with the browser specified in this document: Chrome, Firefox, and Explorer

### Hardware Interfaces

Since the application must run over the internet, all the hardware shall require connecting internet will be the hardware interface for the system. E.g. Modem, WAN – LAN, Ethernet Cross-Cable.

### Wireless internet Interfaces

The wireless internet interface for the software shall be compatible with the browser specified on this document: Chrome, Firefox, and Explorer

### Software Interfaces

1. The e-logistics shall communicate with the customer company to get the order information.

2. The e-logistics system shall communicate with the CRM system to provide support.

3. The e-logistics system shall communicate with the shipping system for tracking orders and updating shipping methods.

9. The e-logistics shipping system shall communicate with the export regulation system to validate export regulations.

10. The system shall be VeriSign-like software which shall allow the users to complete the secured transaction. This usually shall be the third-party software system that is widely used for internet transactions.

### Communications Interfaces

The e-store system shall use the HTTP protocol for communication over the internet and the intranet communication will be through TCP/IP protocol suite.

The prototype shall use TCP/IP protocol in local IP for the test.

## Legal, Copyright, and Other Notices

E-logistics should display the Goods Flow disclaimers, copyright, wordmark, trademark, and product warranties.

## Applicable Standards

It shall be as per the industry standard.

# Supporting Information