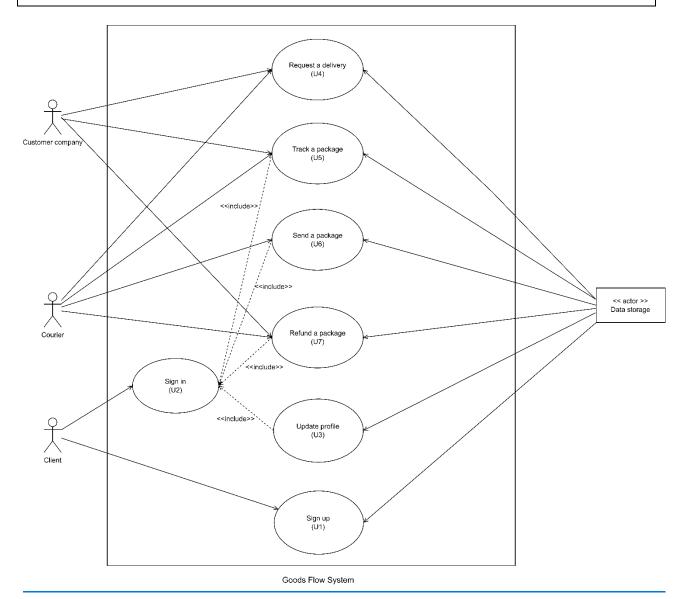
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Andre Kim

Use Case Specification: Goods Flow e-Logistics System

Version <24.0>

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Revision History

Date	Version	Description	Author
<10/22/22>	<1.0>	First Draft	Kim Dongln, Ahn ChanJun, Lee ChangMin
<11/12/22>	<2.0>	Add use-case. Modified use-case name. Modify all use-case basic flow. Add linked requirements all use-case. Add preconditions all use-case.	Kim Dongln, Ahn ChanJun, Lee ChangMin
<11/26/22>	<3.0>	Modify linked requirement, title grammar, actor, pre-condition, and use-case diagram	Kim Dongln, Ahn ChanJun, Lee ChangMin
<12/01/22>	<4.0>	Add use-case1, 2, 3, and 4. Delete 'Exchange a package' use-case. Modify all use-case contents.	Kim Dongln, Ahn ChanJun, Lee ChangMin

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Use Case Specification: < Sign up >

U1. Sign up

1. Brief Description

The system provides the client with the creation of an account, through which the system obtains information by which the client can be identified. The client has been granted access to the system by creating an account.

2. Actors

- 2.1. Client: A consumer who wants to use the system.
- 2.2. Data Storage: A object which stores the client's account information.

3.Flow of Events.

3.1 Basic Flow

- 1. The client requests sign-up to the system.
- 2. The system provides sign-up process to the client.
- 3. The client writes sign-up information.
- 4. The system receives the client's sign-up information.
- 5. The system stores the client's sign-up information.
- 6. The system shows sign-up result to the client.

4. Pre-Conditions

There are no preconditions.

5. Post-Conditions

5.1. The client makes an account.

6. Linked Requirements

R24.

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Use Case Specification: < Sign in >

U2. Sign in

1. Brief Description

The system provides a login function to the client. The system receives the information entered by the client, and based on this, the system determines whether the client is authorized to access the system. Clients who have been granted access to the system can use the system.

2. Actors

- 2.1. Client: A consumer who wants to use the system.
- 2.2. Data Storage: A object which checks the client's account information.

3.Flow of Events.

3.1 Basic Flow

- 1. The client requests sign-in to the system.
- 2. The system provides sign-in process to the client.
- 3. The client writes sign-in information.
- 4. The system receives the client's sign-in information.
- 5. The system checks the client's sign-in information.
- 6. The system shows sign-in result to the client.

4. Pre-Conditions

4.1. U1 must precede.

6. Post-Conditions

5.1. The client sign in the system.

6. Linked Requirements

R27, R28.

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Use Case Specification: < Update a profile >

U3. Update a profile

1. Brief Description

The system provides the ability to modify the profile of the client. The system receives the information entered by the client, and through this, the system modifies or deletes the client's profile information. As a result, the client can use the system with the modified profile.

2. Actors

- 2.1. Client: A consumer who wants to use the system.
- 2.2. Data Storage: A object which checks the client's account information.

3.Flow of Events.

3.1 Basic Flow

- 1. The client requests a profile update service to the system.
- 2. The system provides the profile update service to the client.
- 3. The client writes a profile information.
- 4. The system receives the client's profile information.
- 5. The system updates the client's profile information.
- 6. The system shows the result to the client.

4. Pre-Conditions

4.1. U2 must precede.

7. Post-Conditions

5.1. The client updates a profile.

6. Linked Requirements

R25, R26.

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<u>Use Case Specification: < Request a delivery > </u>

U4. Request a delivery

1. Brief Description

The system receives data from the customer company, processes it into data that meets the specifications of the shipping company, and delivers it to the shipping company. The system receives the tracking information and sends it to the customer company. In conclusion, the customer company receive the tracking information through the system.

2. Actors

- 2.1. Customer Company: A company or organization that needs courier service.
- 2.2. Courier: A company in charge of courier service.
- 2.3. Data Storage: Manage data received from the courier, and customer company.

3.Flow of Events.

3.1 Basic Flow

- 1. The customer company sends the order information to the system.
- 2. The system receives the order information.
- 3. The system sends the order information to the courier.
- 4. The courier receives the order information in the system.
- 5. The courier sends the courier contract code and tracking number to the system.
- 6. The system receives the courier contract code and tracking number from the courier.
- 7. The system sends the tracking information to the customer company.
- 8. The customer company receives the tracking information from the system.

4. Pre-Conditions

- 4.1. The customer company allocated the ID.
- 4.2. The courier allocated the ID.

8. Post-Conditions

5.1. The customer company receives the tracking information.

6. Linked Requirements

R1, R2, R3, R4, R5, R6, R7, R8, R9, R30, R31, R32, R33.

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Use Case Specification: < Track on a package >

U<u>52</u>1. Delegate on data management Track a package.

1. Brief Description

The system receives data from the customer company, processes it into data that meets the specifications of the shipping company, and delivers it to the shipping company. The system receives the tracking information and sends it to the customer company and the client. In conclusion, the customer company and the client receive the tracking information through the system. Also, the client checks the delivery information visualized through the application.

The system receives a tracking request from the client, the system sends the tracking information to the client. When the tracking information is updated, the courier sends the information to the system. The system receives this information, then transfer the information and sends to the client. In conclusion, the client receives the tracking information while a package is arrived.

2. Actors

- 2.1. <u>Data storage: Manage data received from the client, courier, and customer company. Authenticated user: Who has access to the system.</u>
- 2.2. Client: Individuals who purchase products while using the applicationsystem.
- 2.3. Courier: A company in charge of courier service.
- 2.4. Customer company: A company or organization that needs courier service.
- 2.5. Internet provider: An object that provides the Internet for system communication.

3.Flow of Events.

3.1 Basic Flow

- 1. The client login the application,
- 2. The client orders a product.
- 3. The customer company sends the order information to the system.
- 4.—The system receives the order information.
- 5. The system sends the order information to the courier.
- 6. The courier receives the order information to in the system.
- 7. The courier sends the courier contract code and tracking number to the system.
- 8. The system receives the courier contract code and tracking number from the courier.
- 9. The system sends the tracking information to the customer company.
- 10.—The customer company receives the tracking information from the system.
- 1. The client requests a tracking service to the system.
- 2. The system receives the request from the client.
- 4.3. The system sends the tracking information to the client.
- 4. The courier sends the tracking information which is updated to in the system.

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- 5. The system receives the tracking information when it is updated from the courier.
- 6. The system sends the tracking information to the client.
- 7. The client receives the tracking information from the system.
- 11. The system sends tracking information to the customer company.
- 12.—The customer company receives the tracking information from the system.
- 13. The client receives the package sent by courier.

4. Pre-Conditions

- 4.1. U2 must precede. The client signs up for the application.
- 4.2. U4 must precede
- 4.2. The customer company allocated the ID.
 - 4.3 The system provides help system to the customer company.
 - 4.4 The system provides help system to the client.
- 4.5 The system provides help system to the courier.
- —4.3. The system provides authenticated account.
- 4.4 The client log in the system.

5. Post-Conditions

5.1. The client receives the shipment from Couriertracking information.

6. Linked Requirements

R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R24, R25, R26, R27, R28, R30, R31, R32, R33, R34R32, R35R33, R36R34, R37R35, R38R36, R39, R40, R41, R42, R43, R44, R45.

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Use Case Specification: <Send on a package>

U632.Send on a package.

1. Brief Description

When the client applies for delivery service by selecting information about the delivery item and transportation method, the system processes the delivery information sent by the client into data that meets the standards of the courier and delivers it to the courier. When the sequence is finished, The system receives shipping information from the courier. In conclusion, the system visualizes the delivery result through the app and delivers it to the client. When the tracking information is updated, the courier sends the information to the system. The system receives this information, then transfer the information and sends to the client. In conclusion, the client receives the tracking information while a package is arrived.

2. Actors

- 2.1 <u>Data storage: Manage data received from the client, courier, and customer company.</u>
 Authenticated user: Who has access to the system.
- 2.2. Client: Individuals who purchase products while using the appsystem.
- 2.3. Courier: A company in charge of courier service.
- 2.4. Internet provider: An object that provides the Internet for system communication.

3. Flow of Events

3.1 Basic Flow

- The client login the application,
- 2.1. The client requests sends the a delivery information service to the system.
- 3.—The system receives the delivery information request.
- 4.2. The system sends the received delivery information to the courier.
- 5.3. The courier sends the tracking number and the courier contact code information to the system.
- <u>4.</u> The system receives the tracking number and the courier contract code information from the courier.
- 6.5. The system sends the tracking information to the client.
- 7.6. The courier sends the tracking information when it is updated to in the system.
- 7. The system receives the tracking information which is updated from the courier.
- 8. The system sends the tracking information which is updated to the client.
- 9. The client receives the delivery result from the system.

4. Pre-Conditions

4.1. The client signs up for the application. U2 must precede.

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4.2. The courier allocated the ID.

- 4.2 The system provides help system to the client.
- 4.3 The system provides help system to the courier.
- 4.2 The system provides authenticated account.
- 4.3 The client log in the system.

5. Post-Conditions

5.1. The client checks the delivery result sent by Courier.

6. Linked Requirements

R3, R4, R5, R6, R7, R10, R11, R12, R13, R15, R16, R17, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R36R34, R37R35, R38R36, R39,R40,R41,R42,R43,R45.

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Use Case Specification: < Exchange on a package>

U6. Exchange on a package

1. Brief Description

When the customer applies the exchange process for the delivery request, the system sends the client's request to the customer company and progresses the exchange by contacting a courier. Also, the system processes the exchange information according to the specifications and sends it to the courier. And when the exchange is finished, the system receives the delivery completion information. In conclusion, the system visualizes the exchange result and sends it to the client.

2. Actors

- 2.1. Authenticated userData storage: Manage data received from the client, courier, and customer company. Who has access to the system.
- 2.2. Client: Individuals who purchase products while using the app.
- 2.3. Courier: A company in charge of courier service.
- 2.4. Customer company: A company or organization that needs courier service.
- 2.5. Internet provider: An object that provides the Internet for system communication.

3. Flow of Events

3.1 Basic Flow

- 1. The client login the application,
- 2. The client requests an exchange to the system.
- 3. The system receives an exchange request.
- 4.—The system sends the received exchange request to the customer company.
- 5.—The system signs a new contract with the courier.
- 6. The system sends the exchange information to the courier.
- 7.—The system sends the exchange request to the courier.
- 8. The courier receives the package from the client.
- 9. The courier sends the package to the customer company.
- 10. The courier sends the new package to the client.
- 11. The client receives the new package.

4. Pre-Conditions

- 4.1. The client signs up for the application.
- 4.2. The customer company allocated the ID.
- 4.3. The system provides help system to the customer company.
- 4.4. The system provides help system to the client.

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- 4.5. The system provides help system to the courier.
- 4.63. Use-case 1 must be carried out first.
- 4.4. The system provides authenticated account.
- 4.5 The client log in the system.

5. Post-Conditions

5.1. The client receives the new package.

6. Linked Requirements

R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R30, R31, R32, R33, R34R32, R35R33, R36R34, R37R35, R38R36, R39,R40,R41,R42,R43,R44,R4

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-Use Case Specification: <Refund on a package>

U74. Refundon a package

1. Brief Description

When the customer applies the refund process for the delivery request, the system sends the client's request to the customer company and progresses the refund by contacting a courier. Also, the system processes the refund information according to the specifications and sends it to the courier. And when the refund is finished, the system receives the refund completion information. In conclusion, the system visualizes the refund result and sends it to the client.

2. Actors

- 2.1. <u>Data storage: Manage data received from the client, courier, and customer company.</u> Authenticated user: Who has access to the system.
- 2.2. Client: Individuals who purchase products while using the appsystem.
- 2.3. Courier: A company in charge of courier service.
- 2.4. Customer company: A company or organization that needs courier service.
- 2.5. Internet provider: An object that provides the Internet for system communication.

3. Flow of Events

3.1 Basic Flow

- 1. The client login the application,
- 2.1. The client requests a refund service to the system.
- 3.2. The system receives thea refund request.
- 4.3. The system sends the received refund request to the customer company.
- 5.4. The system signs a new contract with the courier.
- 6.5. The system sends the refund information to the courier.
- 6. The courier receives the package from the client.
- 7. The courier sends the return information to the system until the return is done.
- 8. The <u>systemcourier</u> sends the <u>package-return information</u> to the customer company <u>and until the return is done.</u>
- 9. -The customer company receives the return information to the system until the return is done.
- 8.10. The system sends the refund result to the client.
- 9. The customer company sends the money to the client for the returned package.
- 10.11. The client receives the money refunded result.

4. Pre-Conditions

4.1. <u>U5 must precede. The client signs up for the application.</u>

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- 4.2. The customer company allocated the ID.
- 4.3. The system provides help system to the customer company.
- 4.4. The system provides help system to the client.
- 4.5. The system provides help system to the courier.
- 4.63. Use-case 1 must be carried out first.
- 4.4. The system provides authenticated account.
- 4.5 The client log in the system.

5. Post-Conditions

5.1. The client receives the money refunded result.

6. Linked Requirements

R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R30, R31, R32, R33, R34R32, R35R33, R36R34, R37R35, R38R36, R39,R40,R41,R42,R43,R44,R45.