



PROJECT DOCUMENTATION

System Integration and Architecture



GROUP 7

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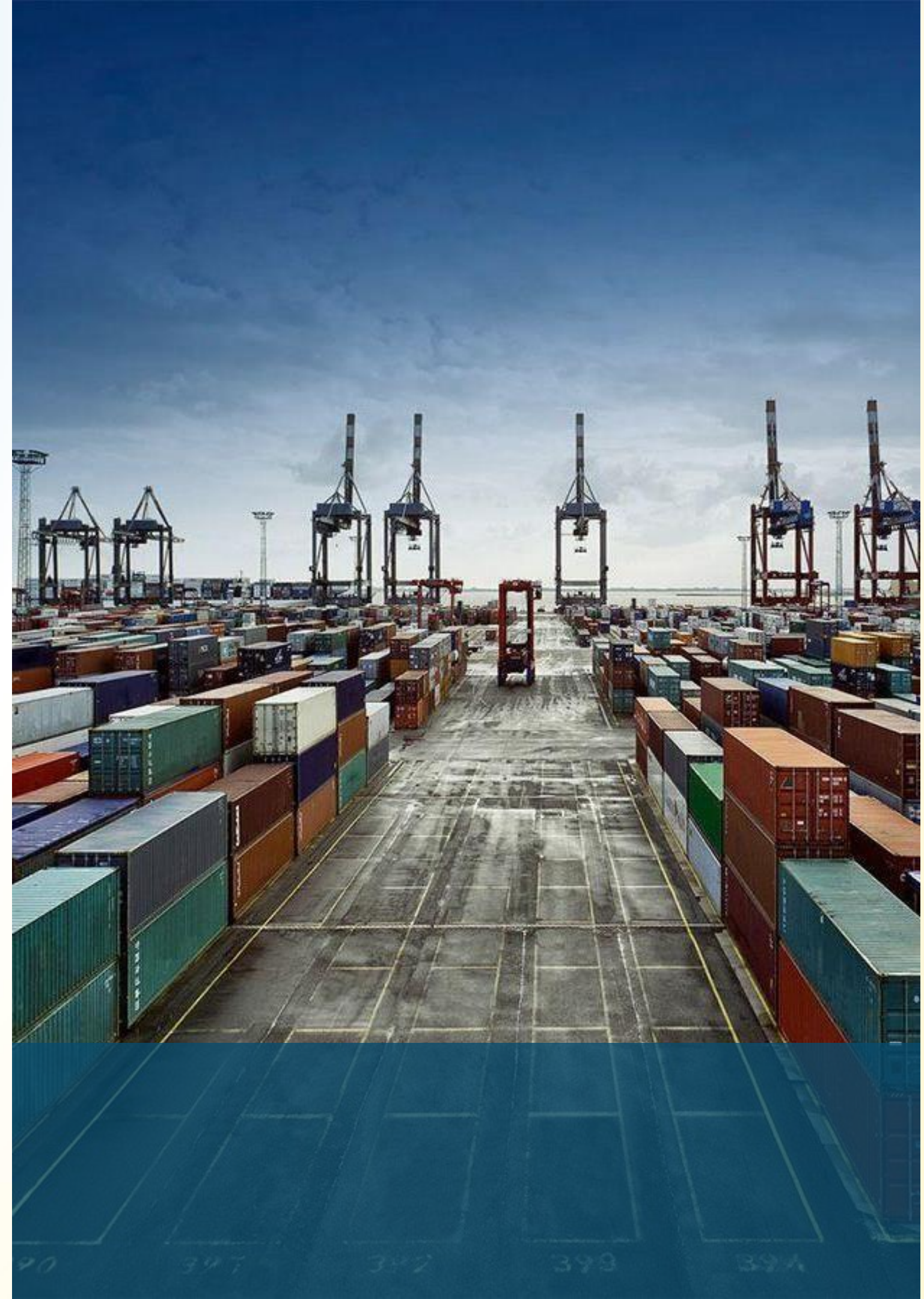
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ROLLS LOGISTICS

- Roll Logistics is an online platform that involves transportation services, shipping companies, and logistics providers that move any kind of item around the world.
- This platform can be very helpful to group of people such as businessmen, people who work in shipping and logistic companies.





OBJECTIVES



- The objective of this project is to create an accessible website for transporting and shipping any kind of items around the world. .
- This online platform helps people around the world to ship their items into their desired locations.
- Moreover, this website can significantly benefit businesses to import and export their products in various countries. Therefore, transporting goods and products can contribute to the economic growth of a country.



USE CASE DOCUMENTATION

System Integration and Architecture



USE CASE 1: SIGN-UP



Actor

- User

Use Case Goal

- To register an account in Rolls Logistic in order to book online, manage and pay for shipments, and access a suite of products and services designed to simplify your supply chain.

Precondition

- If user does not have an account yet.



Basic Flow

The user will fill-up the following:



- Username
- Password
- Current Address
- First Name
- Last Name
- Phone Number
- Email

Alternative Flow & Business Rules

- The user must enter a unique username, or else, a prompt “username is already existing” will show.






 Username is already existing. 

Username*


azbul

Password*

..... 

2. The user must follow the criteria for creating password, or else the system won't accept it.

Password*

sia123 

Password must contain at least one special character, one digit, one lowercase letter, one uppercase letter, and be at least 8 characters long.



3. The user's first and last name must only contain letters.

First name*	Last name*
<input type="text" value="Marky123"/>	<input type="text" value="Mapanoo2"/>
Firstname must not contain numbers.	Last must not contain numbers.

4. The user's contact number must contain 11 digits.

Contact number*
<input type="text" value="0912289"/>
Mobile must contain 11 numbers.

5. The user's email account must contain the '@' symbol

Email*
<input type="text" value="markygmail"/>
Email must contain '@'




6. The user must fill all the blanks in order to create an account in Rolls Logistics.

Username*	Password*
<input type="text" value="username"/>	<input type="password" value="password"/>
Username must not be empty	Password must not be empty.
Current address*	
<input type="text" value="address"/>	
Address must not be empty.	
First name*	Last name*
<input type="text" value="first name"/>	<input type="text" value="last name"/>
Firstname must not be empty.	Lastname must not be empty.
Contact number*	Email*
<input type="text" value="ex: 09556654021"/>	<input type="text" value="ex: john@gmail.com"/>
Mobile must not be empty.	Email must contain '@'
<input type="submit" value="Submit"/>	



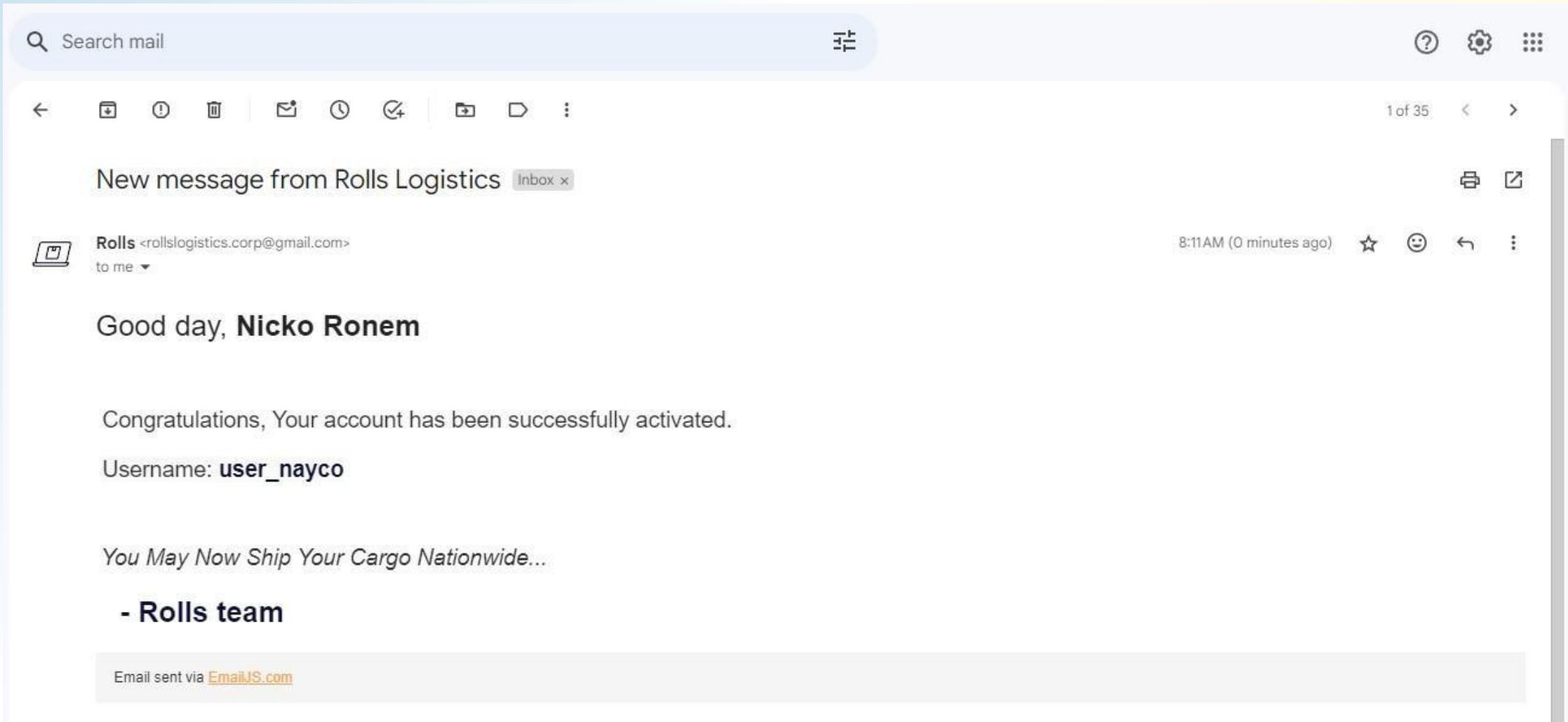
Termination Outcome

- Once the user has filled-up all the required information, an email verification will be sent to the email the user used in creating the account.



Sign up Form
Create your account and start your session!
[Already an account?](#)

Username*	Password*
<input type="text" value="user_nayco"/>	<input type="password" value="....."/>
Current address*	
<input type="text" value="Blk 12 Lot 16 Guijo street Celina Mansion subdivision"/>	
First name*	Last name*
<input type="text" value="Nicko Ronem"/>	<input type="text" value="Geronaga"/>
Contact number*	Email*
<input type="text" value="09298292919"/>	<input type="text" value="nickoronemgeronaga@gmail.com"/>





USE CASE 2: LOG-IN



Actor

- User

Use Case Goal

- To log in the system using the registered account.

Precondition

- If user already has a registered account.



Basic Flow

- The user will enter the username he/she registered on the system.
- The user will enter the password he/she created on the system.

Alternative Flow & Business Rules

- If the user did not enter the exact username and password he/she created on the system, a prompt “invalid username or password” will show.

A screenshot of a login form. At the top, there is a red error banner with a white exclamation mark icon, the text "Invalid Username or Password.", and a white 'X' icon. Below the banner, there are two input fields. The first field contains the text "Azbul". The second field contains a series of dots, indicating a password, and has an eye icon on the right side. At the bottom of the form is a dark blue button with the text "Login" in white.



Termination Outcome

- After the user logged-in, he/she can now book a shipment for an item.

The screenshot displays the 'Rolls' Shipment Form interface. At the top, the 'Rolls' logo is followed by 'Shipment Form' and 'My booking'. A user profile icon is in the top right. The main section is titled 'Book-Your-cargo' and features a progress bar with two steps: 'Information' (active, marked with a document icon) and 'Booked' (inactive, marked with a circle icon). Below this is the 'Cargo Details' section, which includes two numbered steps: '1. Item & Packaging' and '2. Weight Calculator'. The 'Item & Packaging' step contains two input fields: 'Declared items:' with a text box containing 'Commodity', and 'Package type:' with a dropdown menu labeled 'Choose package:'. The 'Weight Calculator' step is partially visible at the bottom, showing a 'Calculate Weight' button with an information icon.



USE CASE 3: CHANGE PASSWORD...

Actor

- User

Use Case Goal

- To change user password in log-in form.

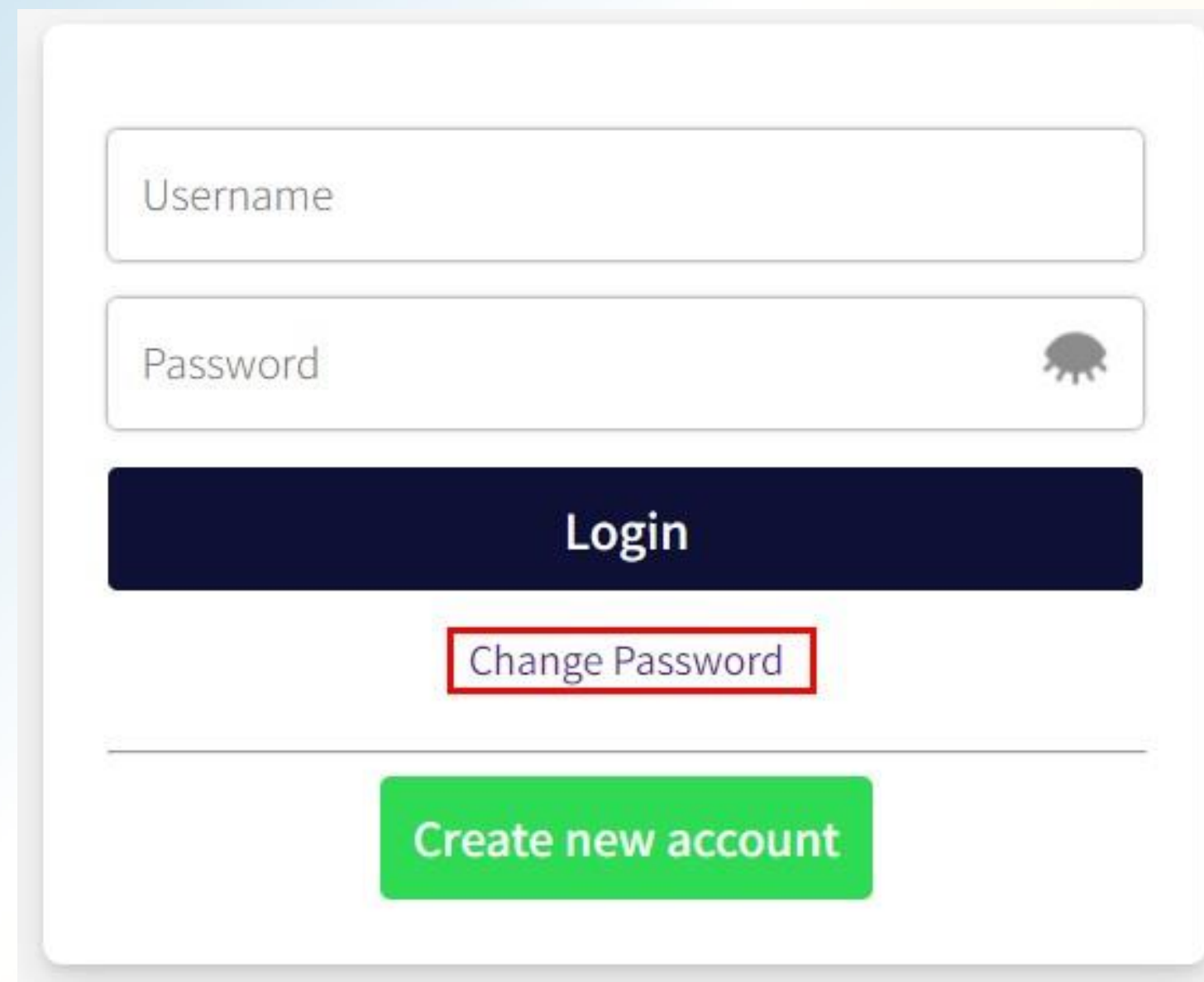
Precondition

- If user forgot the password of the account he registered on the system.




Basic Flow

- The user can just click the 'change password' in the log-in form, and it will be directed to the page of change password.



A login form UI mockup with a white background and rounded corners. It features a 'Username' input field, a 'Password' input field with a toggle icon, a dark blue 'Login' button, a red-outlined 'Change Password' link, and a green 'Create new account' button at the bottom.

Username

Password 

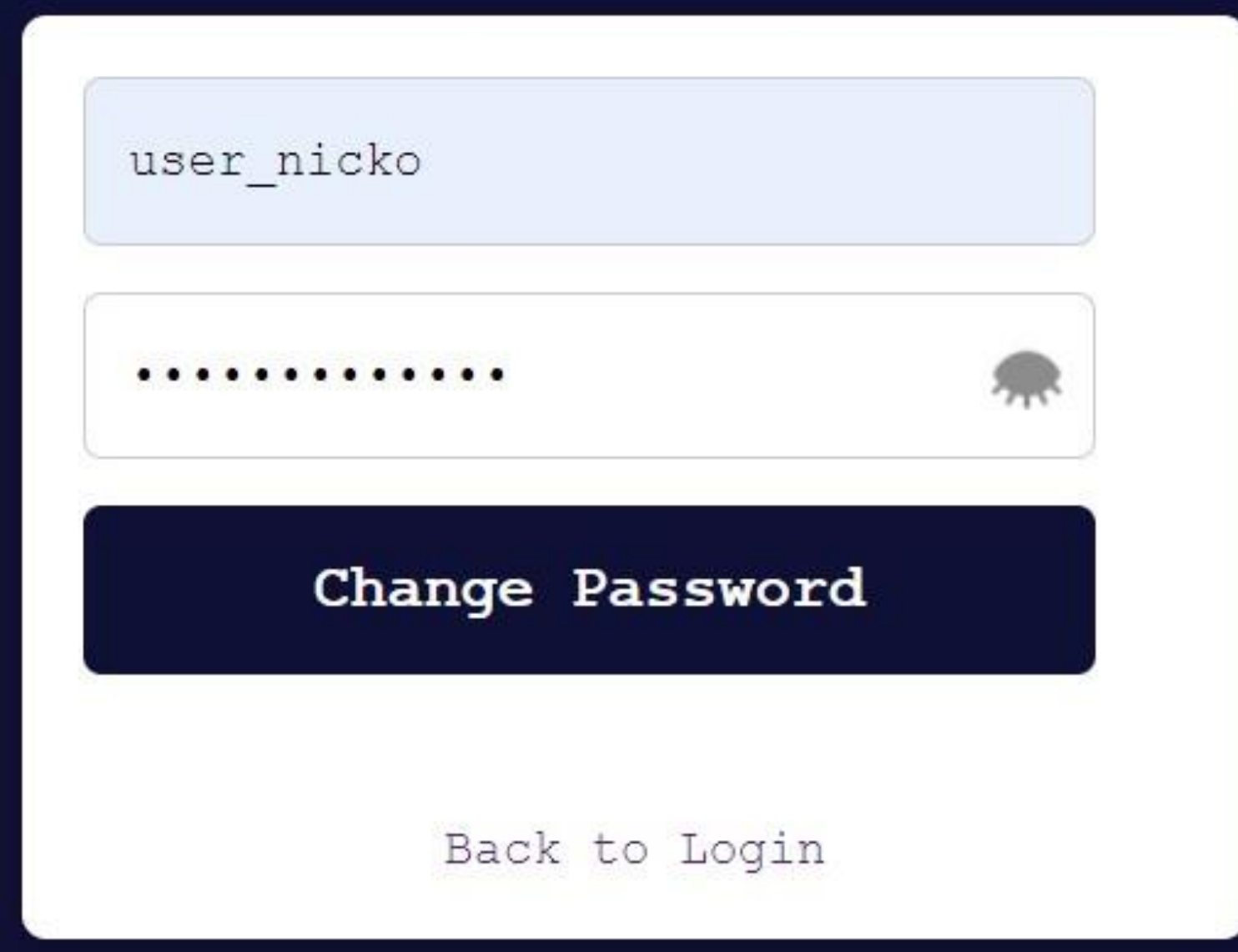
Login

Change Password

Create new account



2. The user must enter the username he registered in the system and enter a new password.



A screenshot of a 'Change Password' form. The form is white with rounded corners and a dark blue border. It contains two input fields: the first is a light blue box with the text 'user_nicko'; the second is a white box with ten dots and a grey eye icon on the right. Below the fields is a dark blue button with the text 'Change Password' in white. At the bottom of the form is a link that says 'Back to Login'.

user_nicko

.....

Change Password

[Back to Login](#)



Termination Outcome

- The user's password be successfully updated.

```
Password updated successfully.
```



USE CASE 4: UPLOAD A PROFILE...

Actor

- User

Use Case Goal

- To upload a profile photo of the user.

Precondition

- If user wants to upload a photo in his profile.



Basic Flow

- The user can just upload any image file of him.

A screenshot of a web form with a white background and a light gray border. The form contains three dark blue buttons with white text. The top button is labeled 'Choose File' and has 'Profile-pick.jpg' displayed next to it. The middle button is labeled 'UPLOAD PROFILE'. The bottom button is labeled 'Logout'.

Termination Outcome:

- The user has now a profile photo.



Shipment Form My booking

Welcome, user_nicko!





USE CASE 5: SHIPMENT FORM



Actor

- User

Use Case Goal

- To fill-up specific information about the item/cargo the user will book and manage.

Precondition

- If user will book or ship any item.



Basic Flow

The shipment form includes four particular parts that must be filled-up by the user.
These are:

- Cargo Details
 - Item and Packaging
- 2. Calculate & Metrics
 - Weight Calculator
- 3. Sender & Recipient
 - Point to Destination
- 4. Date
 - Departure and Arrival
- 5. Pricing
 - Gross Weight Price (no information needed)



- The user may put any item he/she wants to ship and must choose the packaging type of his/her cargo.

Cargo Details

1. Item & Packaging

Declared items:

Whey Protein

Package type:

Choose package: ▾

Cardboard Boxes

Pallets

Crates

Bags/Sacks

Tubes

Refrigerated Containers

Flexible Packaging

Plastic Containers

Calculate & Metrics

2. Weight Calculator



2. The user must insert the declared weight, delicate type, and mode of transportation of the item he/she will ship.

- The weight unit will be in kilograms
- Delicate type: sturdy or fragile
- Mode of transportation: inland, vessel, plane

Calculate Weight ⓘ

Declared weight:

10

kg

Delicate type:

Sturdy

▼

Mode of Transpo:

Inland

▼

Total Price:

700.00

Calculate



- The total price of the shipment will depend on the information of how the item the user wants to be shipped.
- The price for sturdy items is 70 per kilo in inland, 95 per kilo in vessel, 120 per kilo in plane. Meanwhile for fragile items is 85 per kilo in inland, 110 per kilo in vessel, 135 per kilo in plane.

Calculate Weight ⓘ

Declared weight:

10

kg

Delicate type:

Sturdy

▼

Mode of Transpo:

Inland

▼

Total Price:

700.00

Calculate



3. The user must choose pick-up and delivery country for the shipment. Also, the user must specify the pickup and delivery address.

Sender & Recipient

3. **Point to destination**

Pickup country:

Philippines

Pickup address:

Manila, Tondo luwalhati 43rd street

Delivery country:

Philippines

Delivery address:

1330 Carmona Caviite



4. The user must choose the exact pick-up and arrival date of the item he/she wants to ship.

Date

4. **Departure & Arrival**

Pickup date:

06/02/2024

Arrival date:

06/05/2024

5. After filling-up all the required information for the shipment, a total gross weight price of the product will show upon booking.

Pricing

5. **Gross Weight Price:**

Total Price: 1350.00



Alternative Flow & Business Rules

- If the user chose an arrival date that is the same or before the pick-up date of the shipment, an error message will appear that says “must pick a date after the current date.”

The screenshot shows a form with two date input fields. The first field, labeled 'Pickup date:', contains the date '06/02/2024' and has a calendar icon to its right. The second field, labeled 'Arrival date:', also contains '06/02/2024' and has a calendar icon. Below the 'Arrival date:' field, a red error message reads: 'Must pick a date after the current date.'

2. All the field information of the shipment form must be filled by the user in order to book.



Cargo Details

1. Item & Packaging i

Declared items:

Commodity

Declared items must not be empty

Package type:

Choose package:

Declared package must pick atleast one.

Calculate & Metrics

2. Weight Calculator i

Calculate Weight i

Declared weight:

Weight in kg

kg

Declared weight must not be empty.

Delicate type:

Choose Delicate


Declared delicate must pick atleast one.


Mode of Transpo:



Termination Outcome

- A shipment information will show as a proof that the user has booked an item or cargo with shipping updates.

 **Rolls**

 **Shipping updates**


Shipping Status:
To Ship


Expected arrival date:
02/29/2024

Current location:
Angola


Transit number:
4Wod1l@


Shipping code#
ym\$6sYui





 **Official receipt**


Shipment Information


 **Cargo item**
Oil lubricant
Gross weight: 23 kg

 **Pickup country**
Angola
Address: Manila, Tondo luwalhati 43rd street

 **Pickup date:**
02/01/2024
mm/dd/yyyy


 **Packaging & State**
Sturdy
Delicate state: (Tubes)

 **Delivery country**
Algeria
Address: Blk 12 Lot 16 Guijo street Celina Mansion
Subdivision, Brgy. Loma City of Binan

 **Arrival date:**
02/29/2024
mm/dd/yyyy

Transportation & Pricing

Mode of Transportation

 — **Vessel**

Pricing

₱1535



USE CASE 6: MY BOOKING PAGE...

Actor

- User

Use Case Goal

- To manage and modify any of the shipment the user booked.

Precondition







- If user wants to modify any of his bookings.



Basic Flow


The booking page shows the lists of the cargo/item that the user booked for a shipment.

- The user can choose to any of his bookings that he wants to cancel or modify.


Your Cargo List		
★ Mango • Your Shipment Gross Weight was <u>24</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland 	Pickup Date: 2024-02-01 
★ Oil lubricant • Your Shipment Gross Weight was <u>23</u> kg - Declared as: <u>Sturdy</u> state.	Pickup Via: Vessel 	Pickup Date: 2024-02-01 
★ Motor • Your Shipment Gross Weight was <u>400</u> kg - Declared as: <u>Sturdy</u> state.	Pickup Via: Vessel 	Pickup Date: 2024-02-09 
★ Apple • Your Shipment Gross Weight was <u>40</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland 	Pickup Date: 2024-02-02 
★ vape • Your Shipment Gross Weight was <u>25</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland 	Pickup Date: 2024-02-05 
★ Whey Protein • Your Shipment Gross Weight was <u>10</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Plane 	Pickup Date: 2024-02-06 




2. If the user wants to modify one of his bookings. The user will be redirected to the shipment form. Therefore, the user can change any details or information about the item he wants to ship.

 **Rolls**

Shipment form My booking




Edit-cargo

 Information

Booked

Cargo Details

1. Item & Packaging 


Declared items:


Mango

Package type:

Pallets

Calculate & Metrics

2. Weight Calculator 

Calculate Weight 



3. If the user wants to delete any of his bookings, he can just click the delete button of the cargo and it will be deleted.

Your Cargo List		
★ Mango • Your Shipment Gross Weight was <u>25</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland	Pickup Date: 2024-02-01
★ Oil lubricant • Your Shipment Gross Weight was <u>23</u> kg - Declared as: <u>Sturdy</u> state.	Pickup Via: Vessel	Pickup Date: 2024-02-01
★ Motor • Your Shipment Gross Weight was <u>400</u> kg - Declared as: <u>Sturdy</u> state.	Pickup Via: Vessel	Pickup Date: 2024-02-09
★ Apple • Your Shipment Gross Weight was <u>40</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland	Pickup Date: 2024-02-02
★ vape • Your Shipment Gross Weight was <u>25</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Inland	Pickup Date: 2024-02-05
★ Whey Protein • Your Shipment Gross Weight was <u>10</u> kg - Declared as: <u>Fragile</u> state.	Pickup Via: Plane	Pickup Date: 2024-02-06



Alternative Flow & Business Rules

- The user must still follow the criteria for the pick-up and arrival date of the item and must fill all the required information of the shipment, in order to edit his booking.

Termination Outcome:

- The user's booking page will be updated.



USE CASE 7: TRACKING CODE



Actor

- User

Use Case Goal

- To track any of the shipment that the user booked.

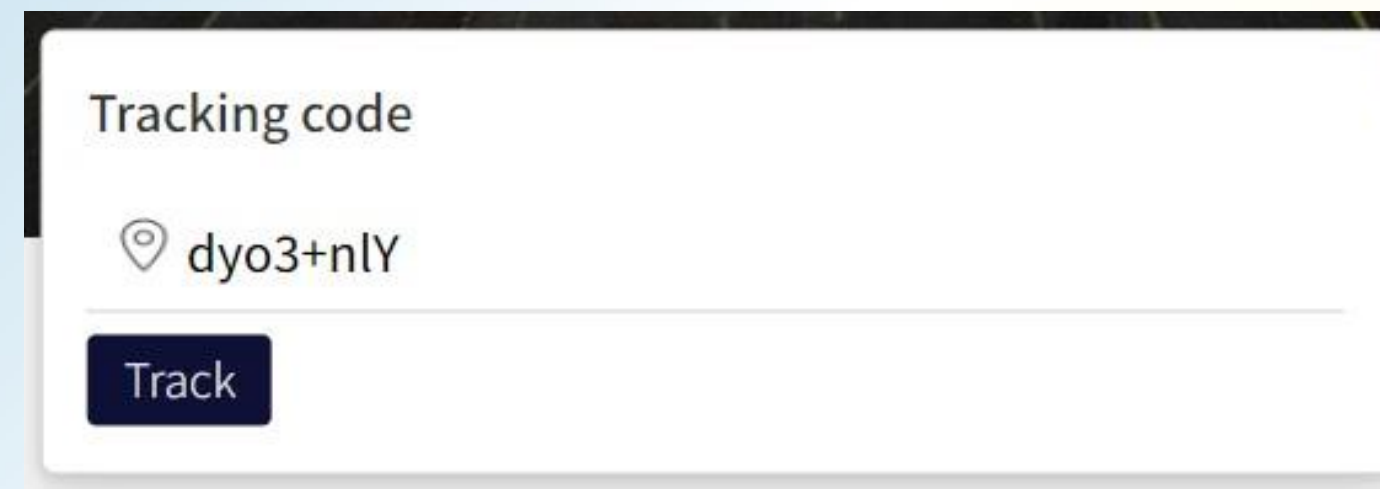
Precondition

- If the user wants to check the receipt of one of his bookings.



Basic Flow

- The user will insert the shipping code of his cargo.

A screenshot of a web form for tracking a cargo. It features a text input field with the placeholder text "Tracking code". Inside the field, there is a location pin icon followed by the text "dyo3+nLY". Below the input field is a dark blue button with the word "Track" in white text.

Alternative Flow & Business Rules


- The user must insert the correct shipping code, or else the user will be redirected to a page that shows that his shipping code is invalid.












Termination Outcome:

- If the user has entered a correct shipping code, he will be redirected to the receipt page of the corresponding shipment.

 Official receipt

Shipment Information		Transportation & Pricing
 Cargo item Mango Gross weight: 25 kg	 Packaging & State Fragile Delicate state: (Pallets)	Mode of Transportation  — Inland
 Pickup country Bangladesh Address: Manila, Tondo luwalhati 43rd street	 Delivery country Angola Address: Blk 12 Lot 16 Guijo street Celina Mansion Subdivision, Brgy. Loma City of Binan	
 Pickup date: 02/01/2024 mm/dd/yyyy	 Arrival date: 02/29/2024 mm/dd/yyyy	Pricing ₱1750



MODULES

System Integration and Architecture



10 Functions of Rolls Logistics System

- Account Registration
- Shipment Transaction
- View shipment Transaction
- Delete Transaction
- Edit shipment Transaction
- View Transaction via shipping code



- Account Logout
- User profile customization
- Sender and Recipient Details
- Tracking Code

Account Registration: This function allows users to create their accounts within the Rolls Logistic System. Users can provide necessary information, such as contact details and login credentials, to establish their presence in the system securely.

Shipment Transaction: With this feature, users can initiate new shipment transactions within the Rolls Logistic System. They can



input essential details like the sender's and recipient's addresses, package dimensions, and shipping preferences to kickstart the logistics process.

View Shipment Transaction: This function enables users to access and review existing shipment transactions stored in the Rolls Logistic System. Users can track the progress of their shipments, review delivery statuses, and obtain essential details regarding past transactions.

Delete Transaction: Users can utilize this function to remove unwanted or outdated shipment transactions from the system. Whether it's



canceling a shipment or removing redundant data, this feature offers users the flexibility to manage their transaction records efficiently.

Edit Shipment Transaction: This feature empowers users to modify details of existing shipment transactions as needed. Whether it's updating delivery addresses, changing shipping preferences, or adjusting package information, users can make necessary alterations to ensure accurate logistics processing.

View Transaction via Shipping Code: Users can swiftly retrieve specific shipment transactions by inputting their unique shipping codes.



This function streamlines the tracking process, allowing users to access pertinent transaction details quickly and conveniently.

Account Logout: Ensuring security and privacy, this function enables users to log out of their accounts securely. By terminating active sessions, users can protect their account information and prevent unauthorized access to the Rolls Logistic System.

User Profile Customization: This feature allows users to personalize their profiles within the Rolls Logistic System. From updating contact information to setting preferences and notifications,



users can tailor their profiles to suit their specific needs and preferences.

Sender and Recipient Details: Users can input and manage sender and recipient information for each shipment transaction. This function ensures accurate and efficient delivery by providing essential details for both the origin and destination of packages.

Tracking Code: Each shipment transaction is assigned a unique tracking code, allowing users to monitor its progress throughout the logistics process. By entering the tracking code, users can obtain real-time updates on their shipments' whereabouts and delivery status.