

# SmartShip Package Management System User Manual



University of Technology, Jamaica

Faculty of Engineering and Computing

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## Introduction



The SmartShip Package Management System is a client-server Java application designed for SmartShip Ltd., a courier company that manages both local and international shipments. This system uses modern operations by providing customers with an online portal to create shipment requests, track packages, and pay invoices, while employees (clerks, drivers, and managers) use their assigned portals to manage logistics, vehicles, and reporting.

## Overview of the User Manual

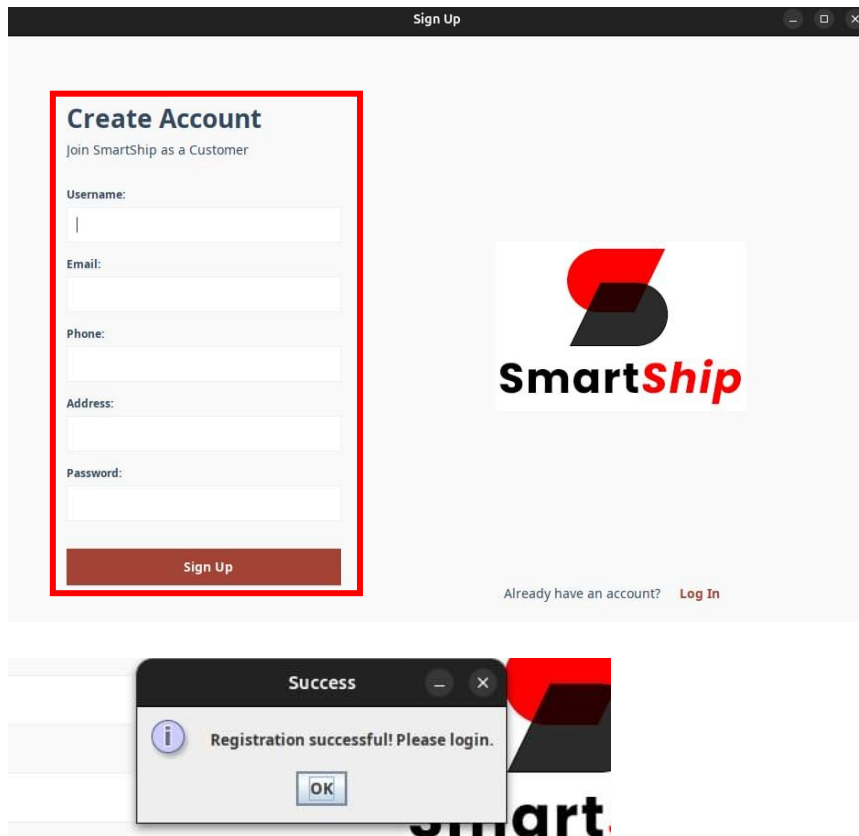
This manual serves as a guide for all user roles:

- **Customers:** Creating accounts, creating shipments, tracking packages, and paying invoices.
- **Clerks:** Processing shipment requests, assigning packages to vehicles, and handling payments.
- **Drivers:** Viewing assigned deliveries and updating package statuses.
- **Managers:** Overseeing operations, generating reports, and managing fleet utilization.

The SmartShip Package Management System has been meticulously developed to enhance courier service delivery through efficient shipment scheduling, secure customer and package management, and comprehensive reporting capabilities. By integrating customer, clerk, driver, and manager portals into a unified platform, the system ensures that all stakeholders can maximize its potential to improve operational efficiency, transparency, and customer satisfaction.

# SmartShip Customer Portal

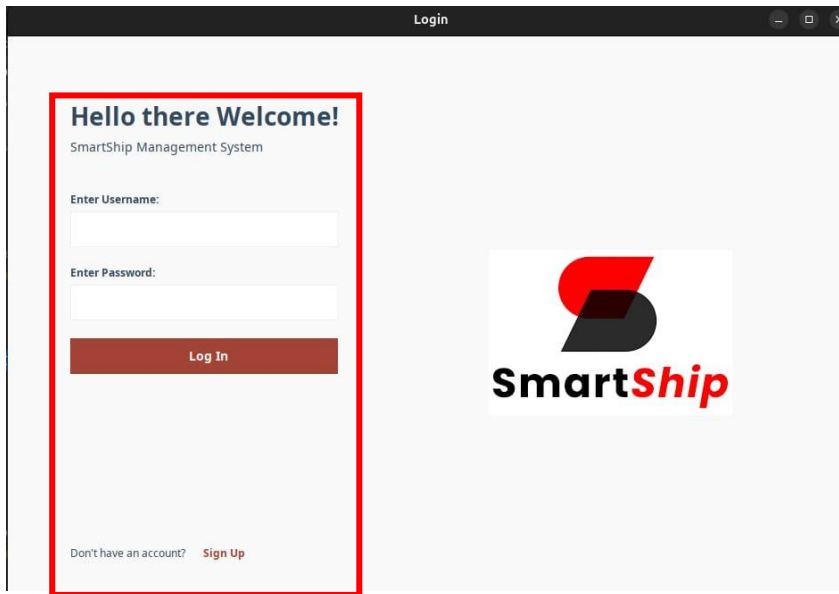
## 1. Sign-Up



The image displays the SmartShip Sign-Up page and a subsequent success message. The top screenshot shows the 'Sign Up' window with a 'Create Account' section highlighted by a red border. This section includes the text 'Join SmartShip as a Customer' and input fields for Username, Email, Phone, Address, and Password. A 'Sign Up' button is located at the bottom of this section. To the right of the form is the SmartShip logo, which consists of a stylized 'S' in red and black, followed by the text 'SmartShip'. Below the form, there is a link that says 'Already have an account? Log In'. The bottom screenshot shows a 'Success' dialog box with the message 'Registration successful! Please login.' and an 'OK' button.

The Sign-Up page allows new customers to register by entering their username, email, phone number, address, and password. Once submitted, the system confirms registration with a success message. Customers can then log in to access the portal.

## 2. Log In

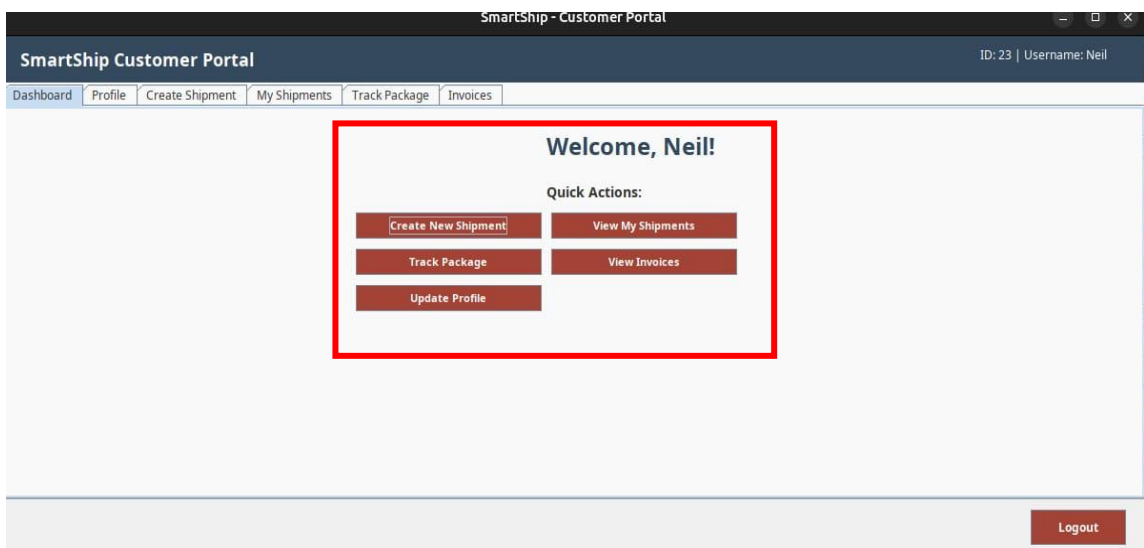


The image shows a web browser window titled "Login". Inside, there is a login form on the left and the SmartShip logo on the right. The form is enclosed in a red rectangular box. The form contains the following elements:

- Greeting: "Hello there Welcome!"
- System Name: "SmartShip Management System"
- Username Field: "Enter Username:" followed by a text input box.
- Password Field: "Enter Password:" followed by a password input box.
- Login Button: A red button labeled "Log In".
- Footer: "Don't have an account? [Sign Up](#)"

The **Login screen** requires a username and password. If credentials are correct, the customer is redirected to their dashboard. Incorrect credentials prompt an error message.

## 3. Dashboard



The image shows a web browser window titled "SmartShip - Customer Portal". The dashboard is displayed with a navigation bar at the top and a main content area. The navigation bar includes the following tabs: "Dashboard", "Profile", "Create Shipment", "My Shipments", "Track Package", and "Invoices". The main content area is enclosed in a red rectangular box and contains the following elements:

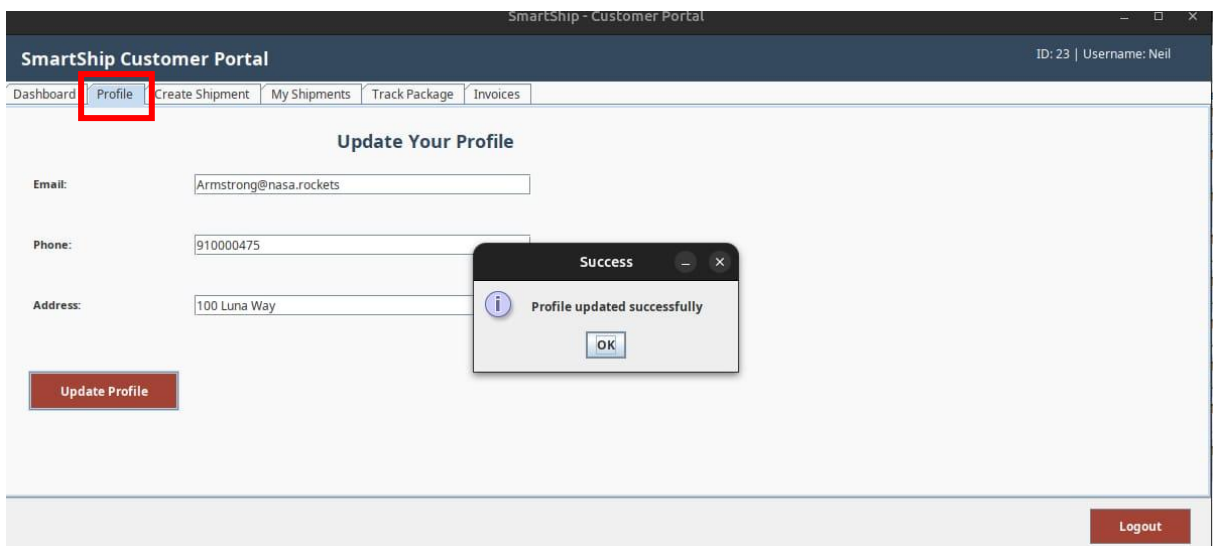
- Greeting: "Welcome, Neil!"
- Quick Actions: A section titled "Quick Actions:" containing five buttons: "Create New Shipment", "View My Shipments", "Track Package", "View Invoices", and "Update Profile".
- Logout Button: A red button labeled "Logout" located at the bottom right of the dashboard.

The Dashboard is the central hub for customers. It provides quick access to:

Profile: Update personal details, Create Shipment: Book new deliveries, My Shipments: View shipment history, Track Package: Monitor delivery status, Invoices: Manage billing and payments.

The dashboard reflects the core functionality of the system, giving customers full control over their shipments.

#### 4. Customer Profile Update



The screenshot displays the 'SmartShip Customer Portal' interface. The top navigation bar includes links for 'Dashboard', 'Profile', 'Create Shipment', 'My Shipments', 'Track Package', and 'Invoices'. The 'Profile' link is highlighted with a red box. The main content area is titled 'Update Your Profile' and contains three input fields: 'Email' (Armstrong@nasa.rockets), 'Phone' (910000475), and 'Address' (100 Luna Way). A red 'Update Profile' button is located below these fields. A modal dialog box titled 'Success' is open, displaying the message 'Profile updated successfully' and an 'OK' button. The bottom right corner of the page features a 'Logout' button. The user's ID (23) and username (Neil) are visible in the top right corner of the portal.

## 5. Create New Shipment

SmartShip Customer Portal

ID: 23 | Username: Neil

Dashboard Profile **Create Shipment** My Shipments Track Package Invoices

### Create New Shipment

**Sender Information**

Sender Name:

Sender Phone:

**Recipient Information**

Recipient Name:

Recipient Phone:

Recipient Address:

**Package Information**

Weight (kg):

Dimensions (cm):

Package Type:

Destination Zone:

Logout

Customers are able to create a new shipment but entering the required information into the form. The system automatically calculates shipping cost based on weight, type, and zone. A tracking number is generated for each shipment.

## 6. View Shipments

SmartShip - Customer Portal

SmartShip Customer Portal

ID: 4 | Username: Asher

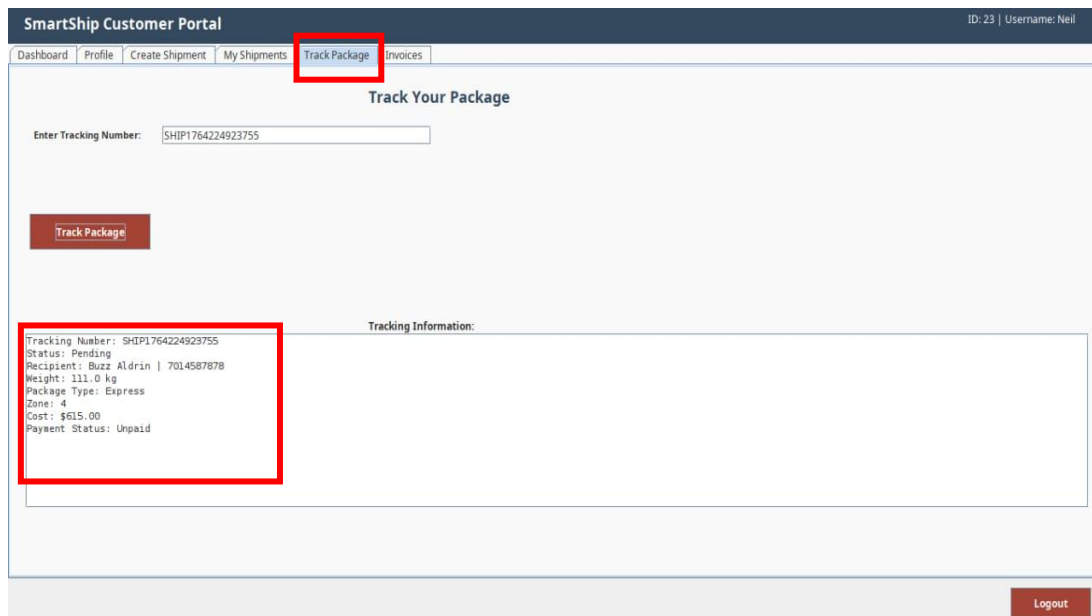
Dashboard Profile Create Shipment **My Shipments** Track Package Invoices

### My Shipments

Tracking #	Recipient	Weight (kg)	Type	Zone	Status	Cost	Payment
SHIP1764161263047	Jack   62773567	3.0	Express	1	Pending	\$45.00	Unpaid

This page simply allows customers to monitor their shipment status and outstanding payments. Customers can fulfil their payments at the “Invoice” tab.

## 7. Track Package



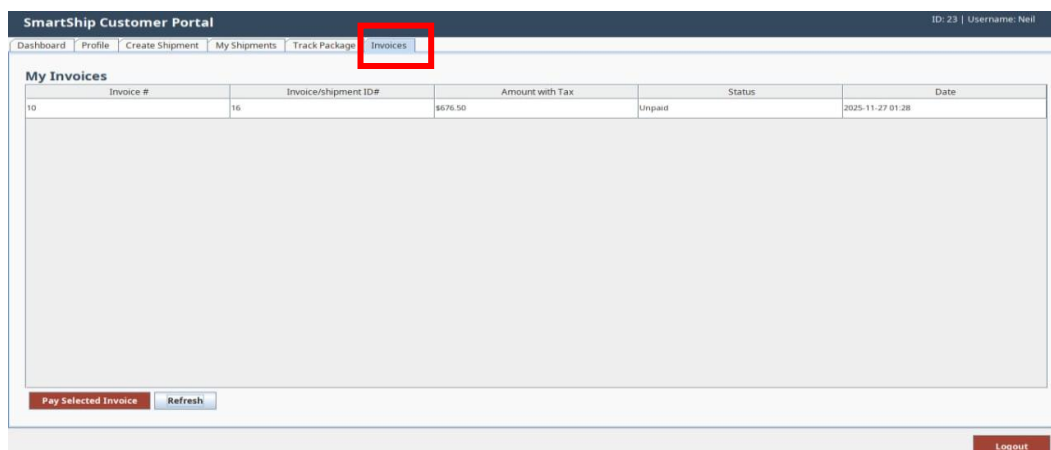
The screenshot shows the 'Track Your Package' section of the SmartShip Customer Portal. The 'Track Package' tab is highlighted in the navigation bar. A tracking number 'SHIP1764224923755' is entered in the 'Enter Tracking Number' field. A 'Track Package' button is visible. Below, the 'Tracking Information' section displays the following details:

Tracking Number:	SHIP1764224923755
Status:	Pending
Recipient:	Buzz Aldrin   7014587878
Weight:	111.0 kg
Package Type:	Express
Zone:	4
Cost:	\$615.00
Payment Status:	Unpaid

A 'Logout' button is located at the bottom right of the page.

Customers can enter their tracking number to view real-time shipment status. A display of the package details, cost, and payment status is shown.

## 8. View Invoices



The screenshot shows the 'My Invoices' section of the SmartShip Customer Portal. The 'Invoices' tab is highlighted in the navigation bar. The table below lists the invoices:

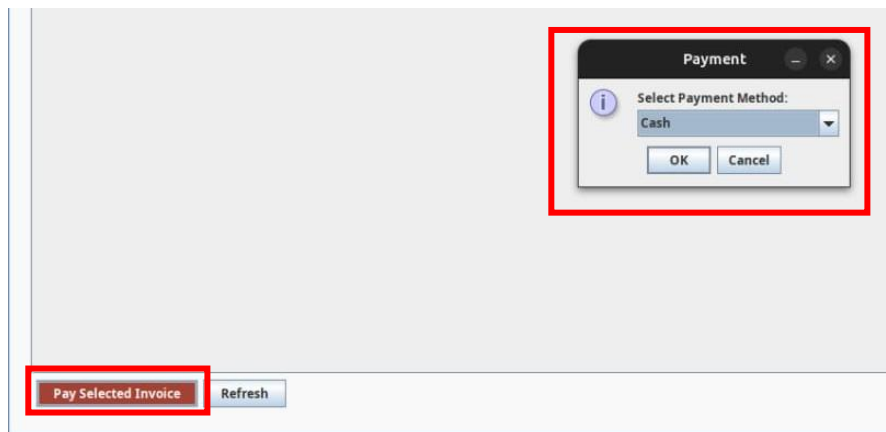
Invoice #	Invoice/Shipment ID#	Amount with Tax	Status	Date
10	16	\$676.50	Unpaid	2025-11-27 01:28

At the bottom of the table, there are two buttons: 'Pay Selected Invoice' and 'Refresh'. A 'Logout' button is located at the bottom right of the page.

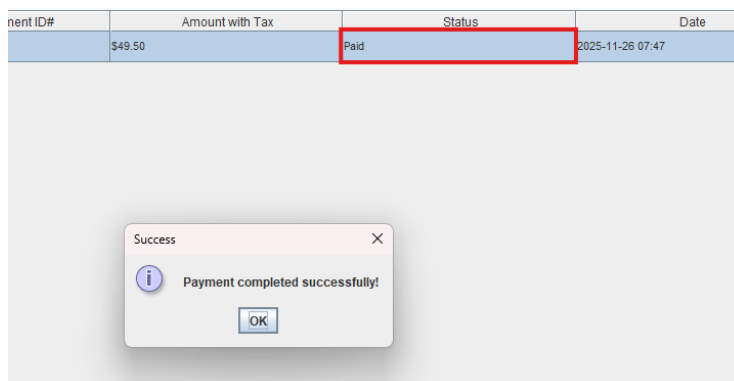
From this tab, customers can pay for an invoice when they select the “Pay Selected Invoice” button.



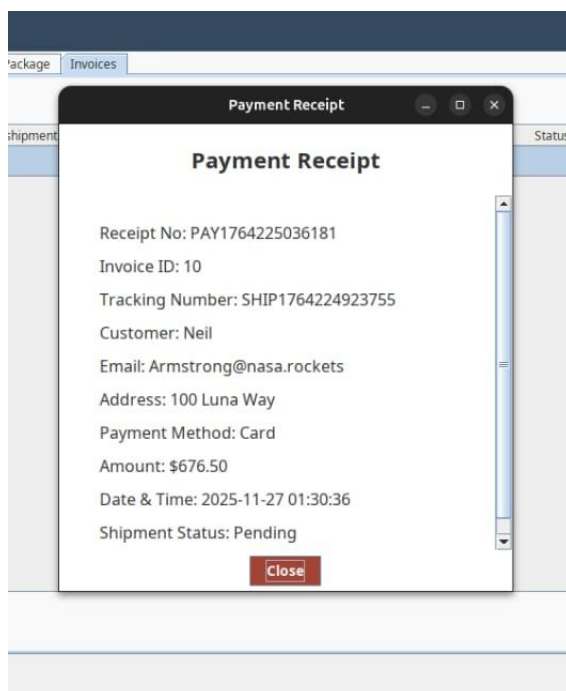
They can choose their desired payment method from here:



Once a payment is complete, the status will be changed to “Paid”:

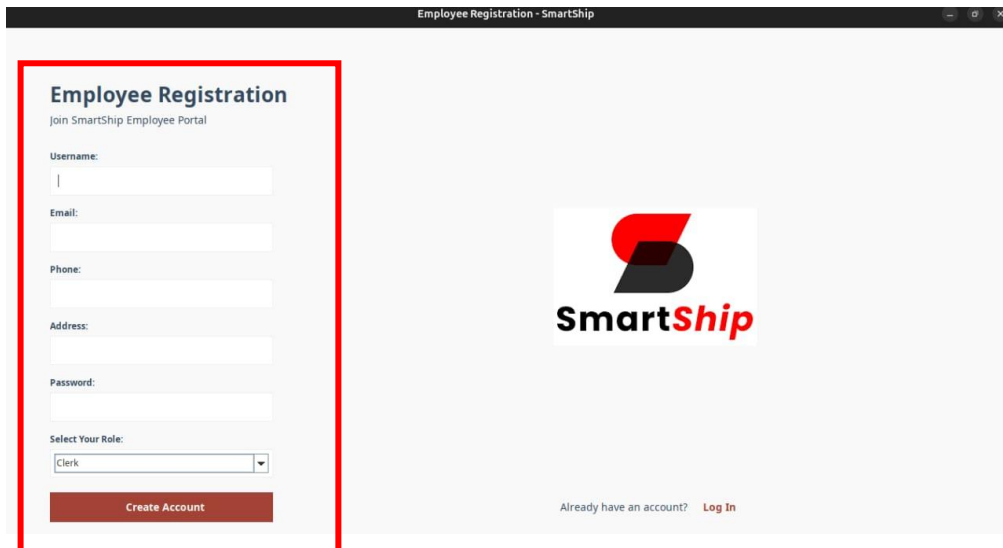


The payment will be processed and a receipt is then generated:



# SmartShip Employee Portal

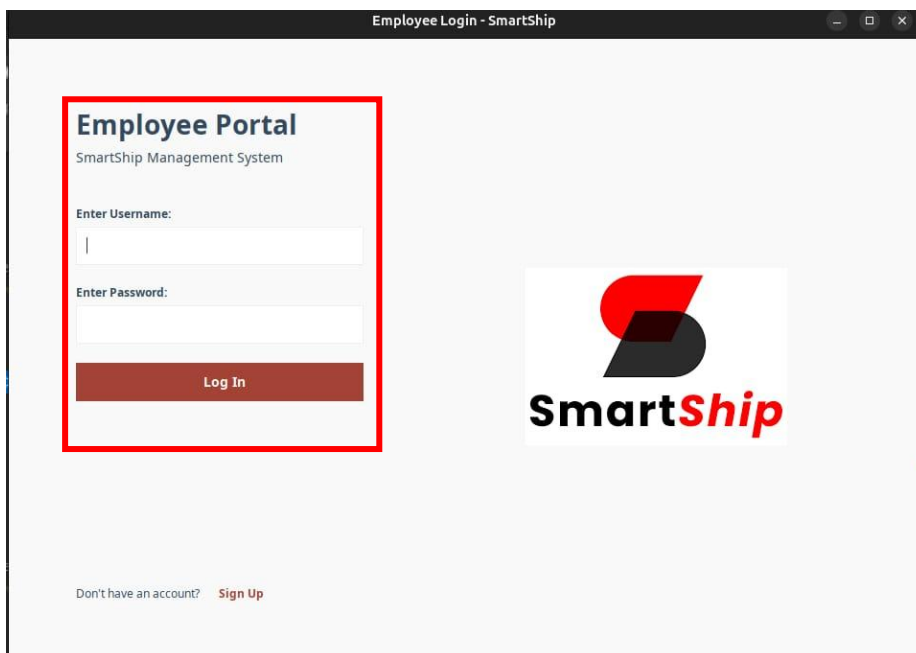
## 1. Sign Up



The image shows a web browser window titled "Employee Registration - SmartShip". On the left, there is a registration form titled "Employee Registration" with the subtitle "Join SmartShip Employee Portal". The form fields are: Username (text input), Email (text input), Phone (text input), Address (text input), Password (text input), and a dropdown menu for "Select Your Role" with "Clerk" selected. A red rectangle highlights the entire form area. Below the form is a "Create Account" button. On the right side of the page is the SmartShip logo, which consists of a stylized red and black 'S' above the text "SmartShip". At the bottom right, there is a link "Already have an account? Log In".

Employees (clerks, drivers, managers) register with their role specified.

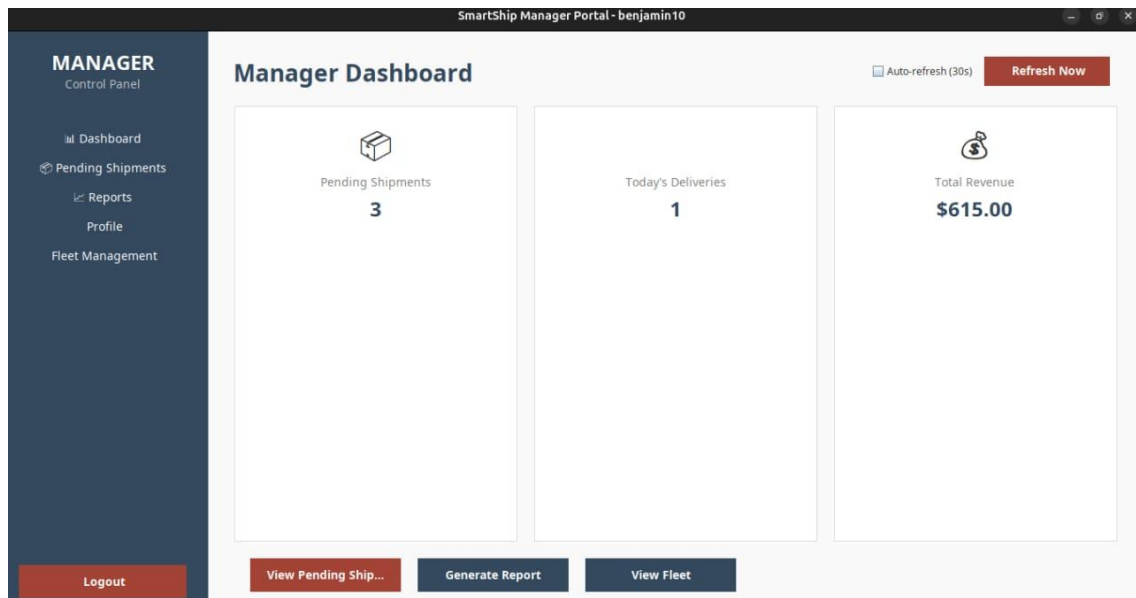
## 2. Log In



The image shows a web browser window titled "Employee Login - SmartShip". On the left, there is a login form titled "Employee Portal" with the subtitle "SmartShip Management System". The form fields are: "Enter Username:" (text input) and "Enter Password:" (text input). A red rectangle highlights the entire form area. Below the form is a "Log In" button. On the right side of the page is the SmartShip logo, which consists of a stylized red and black 'S' above the text "SmartShip". At the bottom left, there is a link "Don't have an account? Sign Up".

Login provides secure access to their respective dashboards.

### 3. Manager Dashboard



Managers oversee operations with metrics such as: Pending shipments, Today's Deliveries and Total Revenue.

### Pending Shipments

MANAGER Control Panel

- Dashboard
- Pending Shipments
- Reports
- Profile
- Fleet Management

Logout

Assign to Vehicle

SmartShip Manager Portal - benjamin10

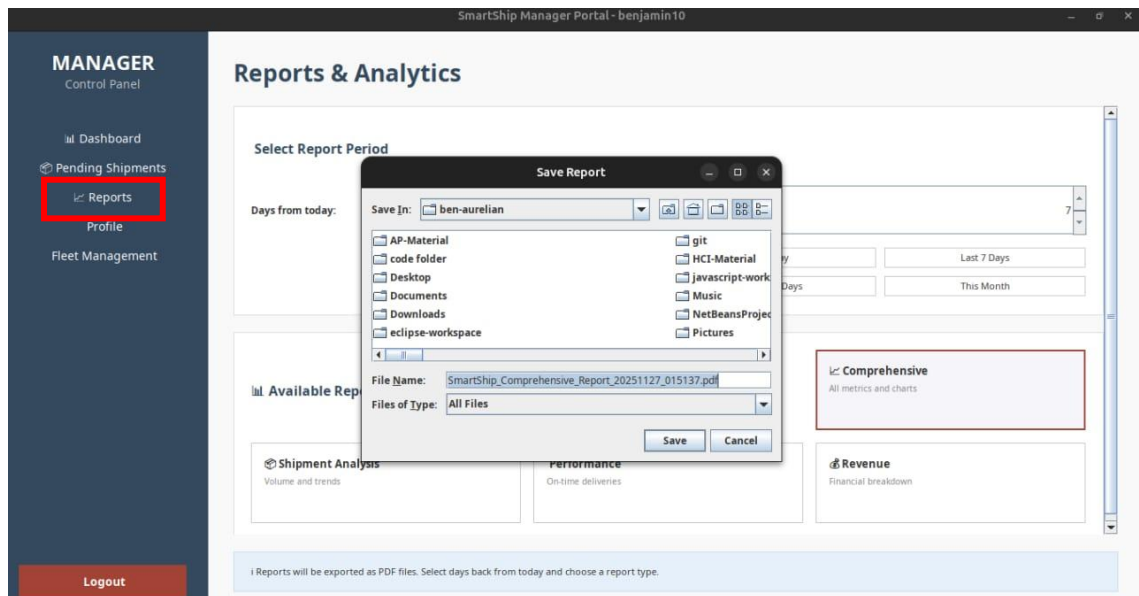
### Pending Shipments

Refresh

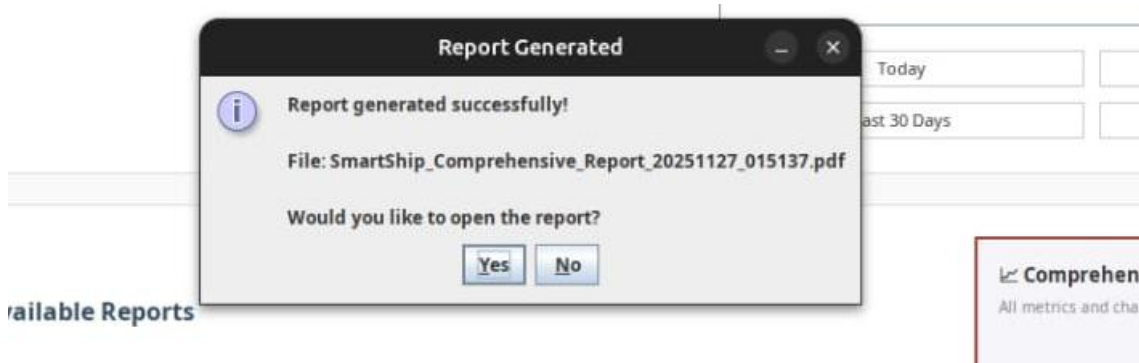
Shipment ID	Tracking #	Customer	Weight (kg)	Zone	Type
4	SHIP1763864383778	benjamin	2.5	3	Standard
12	SHIP1763909485035	benjamin	4.0	4	Express
16	SHIP1764224923755	Neil	111.0	4	Express

From this tab, employees can assign a shipment to a vehicle.

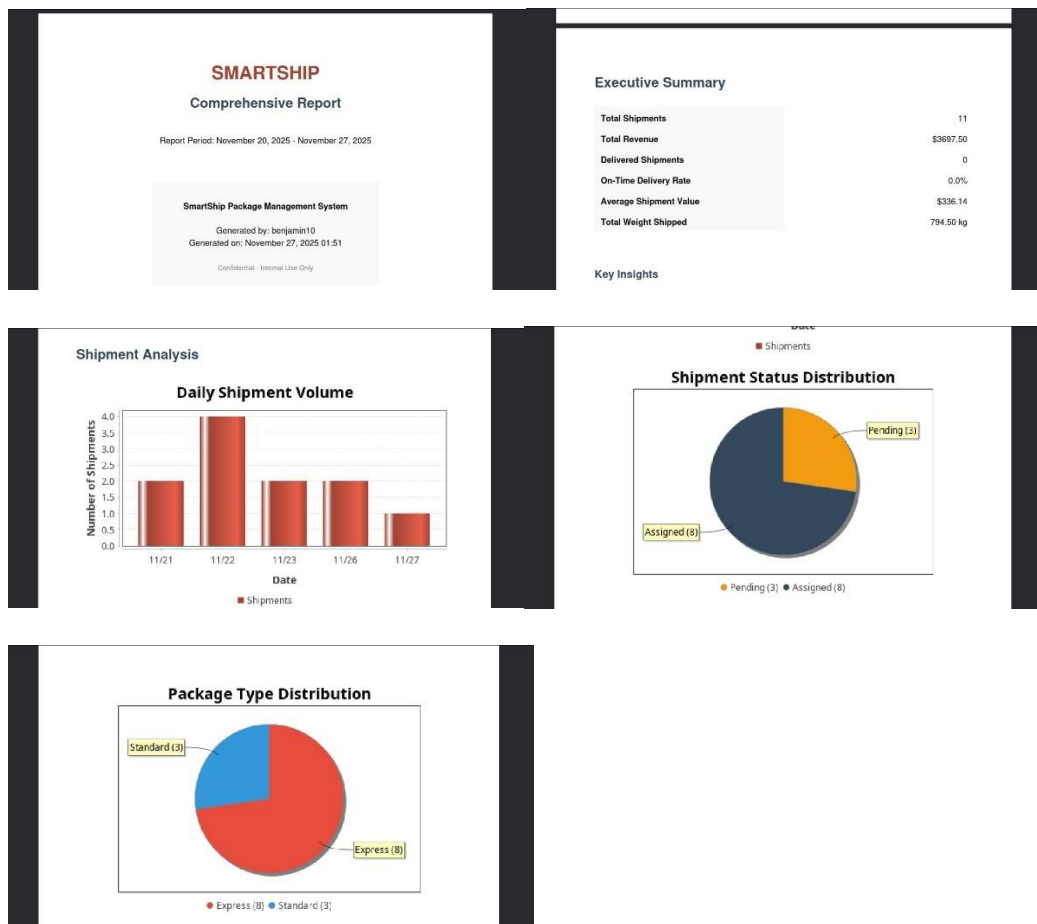
## Report & Analytics



Managers generate PDF reports with shipment analysis, revenue breakdown, and delivery performance. Reports include charts for shipment volume, package type distribution, and vehicle utilization. Managers can save the report as a file.



## Results when a report is generated:



## Fleet Management

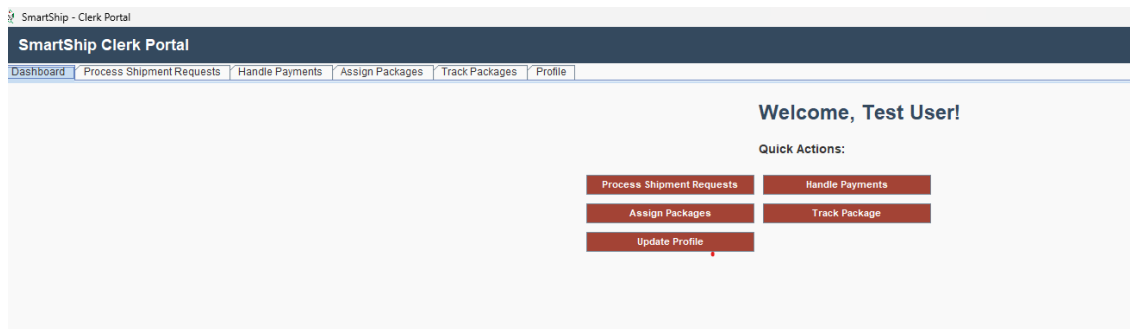
The screenshot shows the 'Fleet Management' section of a 'MANAGER Control Panel'. On the left is a dark sidebar with navigation links: 'Dashboard', 'Pending Shipments', 'Reports', 'Profile', and 'Fleet Management' (which is highlighted with a red box). At the bottom of the sidebar is a 'Logout' button. The main content area is titled 'Fleet Management' and includes a 'Refresh' button and an 'Add Vehicle' button. Below these is a table with the following data:

Vehicle ID	Vehicle #	Type	License Plate	Driver	Capacity (kg)	Current Load (kg)	Available (kg)	Items	Zone	Status
9	VEH-001	Van	ABC-1234	john_driver	500.00	500.00	0.00	1	1	Available
10	VEH-002	Truck	DEF-5678	jane_driver	1000.00	153.50	846.50	2	1	In Use
11	VEH-003	Van	GHI-9012	bob_driver	500.00	11.00	489.00	2	2	In Use
12	VEH-004	Truck	JKL-3456	Unassigned	1500.00	12.50	1487.50	3	2	Available

Below the table are two buttons: 'View Details' and 'View Packages'.

This tab displays all vehicle details as well as its availability status. Managers can add vehicles, assign packages, and monitor utilization. This ensures no vehicle is overbooked and this supports fleet scheduling.

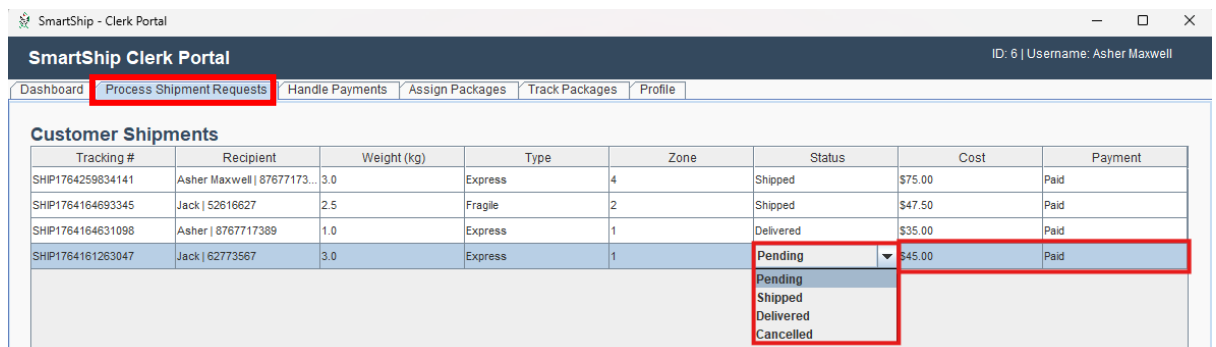
## 4. Clerk Dashboard



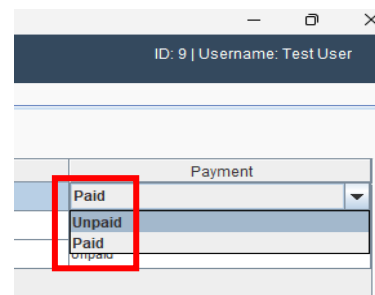
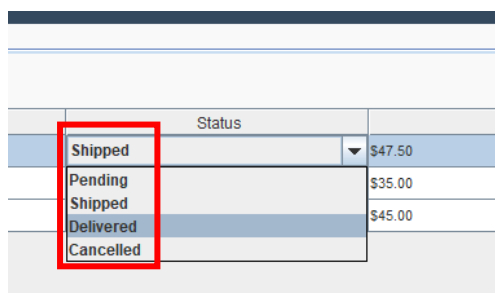
From here, clerks have quick access to operations such as shipment requests, payment management and the assignment of packages to drivers, vehicles and routes.

### Process Shipment Requests

The clerk is able to oversee all customer shipments:



The clerk can change the shipment and payment status:



The clerk can handle all customer payments and view the invoices:

SmartShip - Clerk Portal

SmartShip Clerk Portal ID: 6 | Username: Asher Maxwell

Dashboard Process Shipment Requests Handle Payments Assign Packages Track Packages Profile

### Handle Customer Payments

Tracking #	Customer	Recipient	Status	Cost	Payment	Payment Method
SHIP1764259834141	Hannah	Asher Maxwell   8767717389	Shipped	\$75.00	Paid	Cash
SHIP1764164693345	Hannah	Jack   52616627	Shipped	\$47.50	Paid	Card
SHIP1764164631098	Hannah	Asher   8767717389	Delivered	\$35.00	Paid	N/A
SHIP1764161263047	Asher	Jack   62773567	Shipped	\$45.00	Paid	Card

SmartShip - Clerk Portal

SmartShip Clerk Portal ID: 6 | Username: Asher Maxwell

Dashboard Process Shipment Requests Handle Payments Assign Packages Track Packages Profile

### Handle Customer Payments

Tracking #	Customer	Recipient	Status	Cost	Payment	Payment Method
SHIP1764259834141	Hannah	Asher Maxwell   8767717389	Shipped	\$75.00	Paid	Cash
SHIP1764164693345	Hannah	Ja	Invoice Details		Paid	Card
SHIP1764164631098	Hannah	Al			Paid	N/A
SHIP1764161263047	Asher	Ja			Paid	Card

SHIPMENT INVOICE

Tracking Number: SHIP1764161263047

Recipient: Jack | 62773567

Weight: 3.0 kg

Package Type: Express

Zone: 1

Status: Shipped

Subtotal: \$45.00

Tax (10%): \$4.50

TOTAL: \$49.50

Payment Status: Paid

OK

View Customer Invoice Refresh

Logout

The clerk can assign packages:

SmartShip - Clerk Portal

SmartShip Clerk Portal ID: 6 | Username: Asher Maxwell

Dashboard Process Shipment Requests Handle Payments Assign Packages Track Packages Profile

### Assign Customer Shipments

Tracking #	Recipient	Weight (kg)	Type	Zone	Status	Cost	Payment	Assign Driver	Assign Vehicle	Assign Route
SHIP1764259834141	Asher Maxwell   8...	3.0	Express	4	Shipped	\$75.00	Paid	Select Driver	Select Vehicle	Route E - Central
SHIP1764164693345	Jack   52616627	2.5	Fragile	2	Shipped	\$47.50	Paid	Adrian (ID: 2)	JM-EV-007 (ID: 6)	Route A - North
SHIP1764164631098	Asher   8767717389	1.0	Express	1	Delivered	\$35.00	Paid	Bob (ID: 1)	JM-BIKE-99 (ID: 3)	Route C - East
SHIP1764161263047	Jack   62773567	3.0	Express	1	Shipped	\$45.00	Paid	Adrian (ID: 2)	JM-VAN-001 (ID: 1)	Route A - North



Driver assigned:

The screenshot shows a web application window titled 'Assign Packages' with a user ID of 9 and username 'Test User'. The window has three tabs: 'Assign Packages', 'Track Packages', and 'Profile'. Below the tabs is a table with columns: Type, Zone, Status, Cost, Payment, Assign Driver, Assign Vehicle, and Assign Route. The table contains three rows of data. The first row has '2' in the Zone column, 'Shipped' in Status, '\$47.50' in Cost, 'Paid' in Payment, and 'Adrian (ID: 2...)' in the Assign Driver column. The second row has '1' in the Zone column, 'Shipped' in Status, '\$35.00' in Cost, 'Paid' in Payment, and '-- Select Driver --' in the Assign Driver column. The third row has '1' in the Zone column, 'Pending' in Status, '\$45.00' in Cost, 'Unpaid' in Payment, and '-- Select Driver --' in the Assign Driver column. A red box highlights the 'Adrian (ID: 2...)' dropdown in the first row. Below the table, a success message dialog box is displayed with the text: 'Success Driver assigned successfully to tracking #SHIP1764164693345'. The dialog box has an 'OK' button.

Type	Zone	Status	Cost	Payment	Assign Driver	Assign Vehicle	Assign Route
	2	Shipped	\$47.50	Paid	Adrian (ID: 2...)	Select Vehicle --	Select Route
	1	Shipped	\$35.00	Paid	-- Select Driver --	Select Vehicle --	Select Route
	1	Pending	\$45.00	Unpaid	-- Select Driver --	Select Vehicle	Select Route

Success  
Driver assigned successfully to tracking #SHIP1764164693345  
OK

Vehicle assigned:

The screenshot shows the same 'Assign Packages' window. The table is the same as in the previous screenshot. A red box highlights the 'Assign Vehicle' dropdown menu in the first row, which is currently open and showing a list of vehicle options: 'JM-EV-007 - Electri', 'JM-BIKE-99 - Motoc', 'JM-TRK-505 - Tru', and 'JM-VAN-001 - Van'. The dropdown menu also shows 'Select Vehicle --' and 'Select Ve...'. The 'Assign Route' column for the first row is 'Select Route'.

Type	Zone	Status	Cost	Payment	Assign Driver	Assign Vehicle	Assign Route
	2	Shipped	\$47.50	Paid	Adrian (ID: 2, Deliv...	Select Ve...	Select Route
	1	Shipped	\$35.00	Paid	-- Select Driver --	Select Vehicle --	Select Route
	1	Pending	\$45.00	Unpaid	-- Select Driver --	JM-EV-007 - Electri JM-BIKE-99 - Motoc JM-TRK-505 - Tru JM-VAN-001 - Van	Select Route

Route Assigned:

The screenshot shows the same 'Assign Packages' window. The table is the same as in the previous screenshots. A red box highlights the 'Assign Route' dropdown menu in the first row, which is currently open and showing a list of route options: 'Route A - N...'. The dropdown menu also shows 'Select route'. The 'Assign Vehicle' column for the first row is 'JM-EV-007 - Electri'. Below the table, a success message dialog box is displayed with the text: 'Success Route assigned successfully to tracking #SHIP1764164693345'. The dialog box has an 'OK' button.

Type	Zone	Status	Cost	Payment	Assign Driver	Assign Vehicle	Assign Route
	2	Shipped	\$47.50	Paid	Adrian (ID: 2, Deliv...	JM-EV-007 - Electri	Route A - N...
	1	Shipped	\$35.00	Paid	-- Select Driver --	-- Select Vehicle --	Select route
	1	Pending	\$45.00	Unpaid	-- Select Driver --	Select Vehicle	Select Route

Success  
Route assigned successfully to tracking #SHIP1764164693345  
OK

# END OF MANUAL

Last Reviewed: November 27, 2025