SmartShip Package Management System User Manual

University of Technology, Jamaica

Faculty of Engineering and Computing

Produced for: Mr. Christopher Panther

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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.
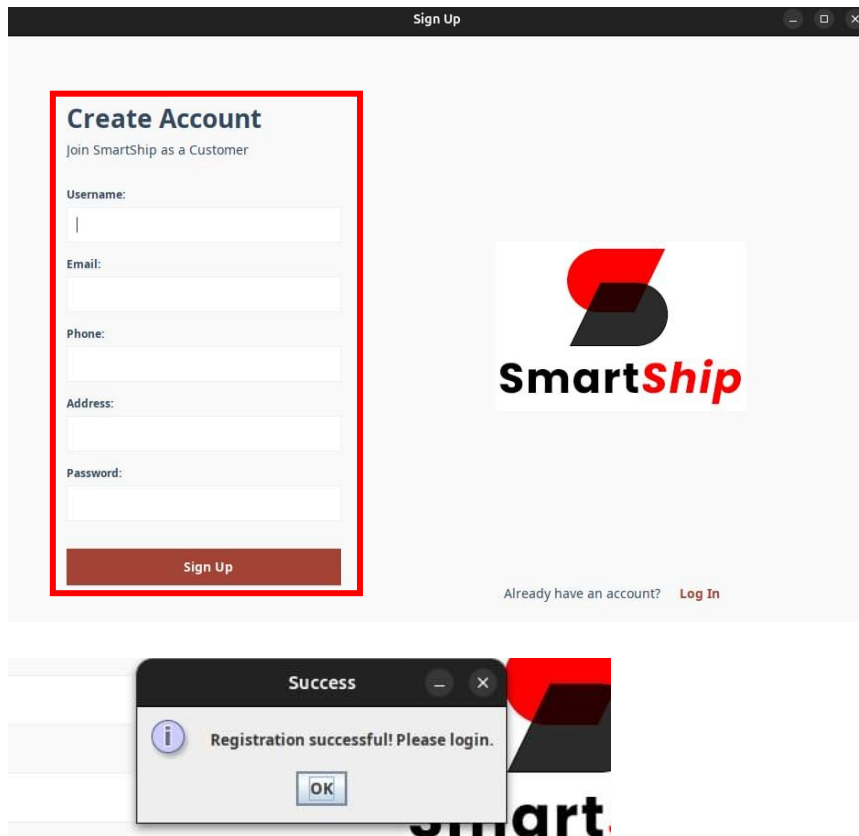
Overview of the User Manual

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
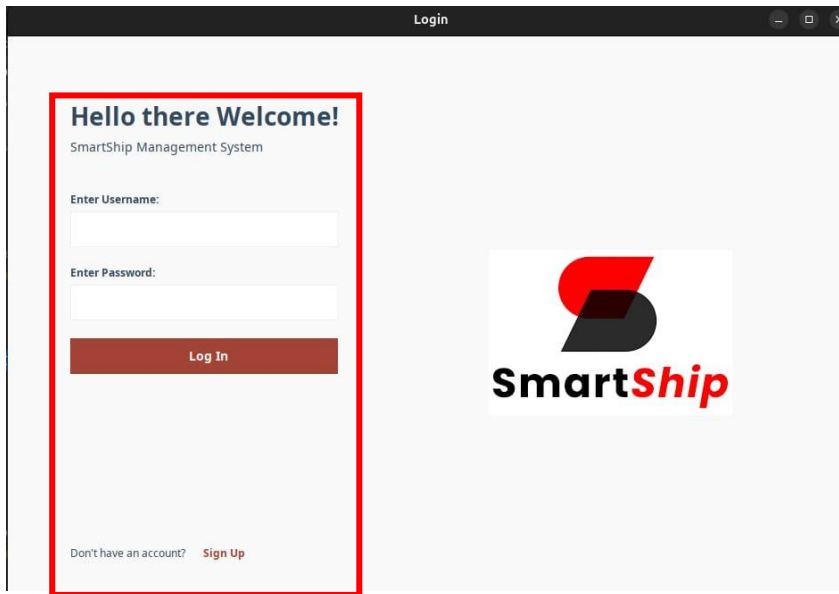
1. **Sign-Up**

The 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.
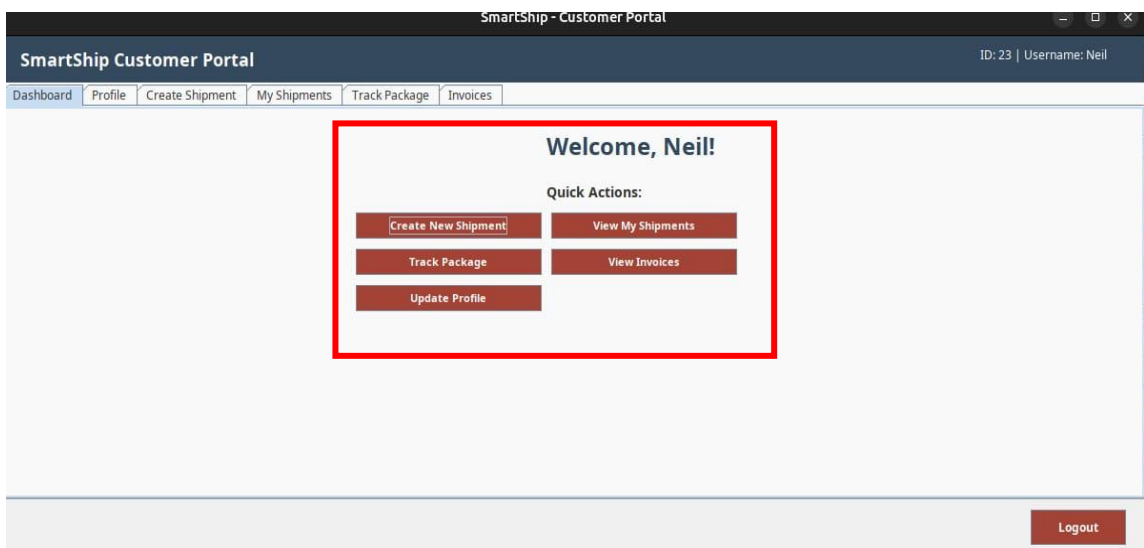
2. Log In

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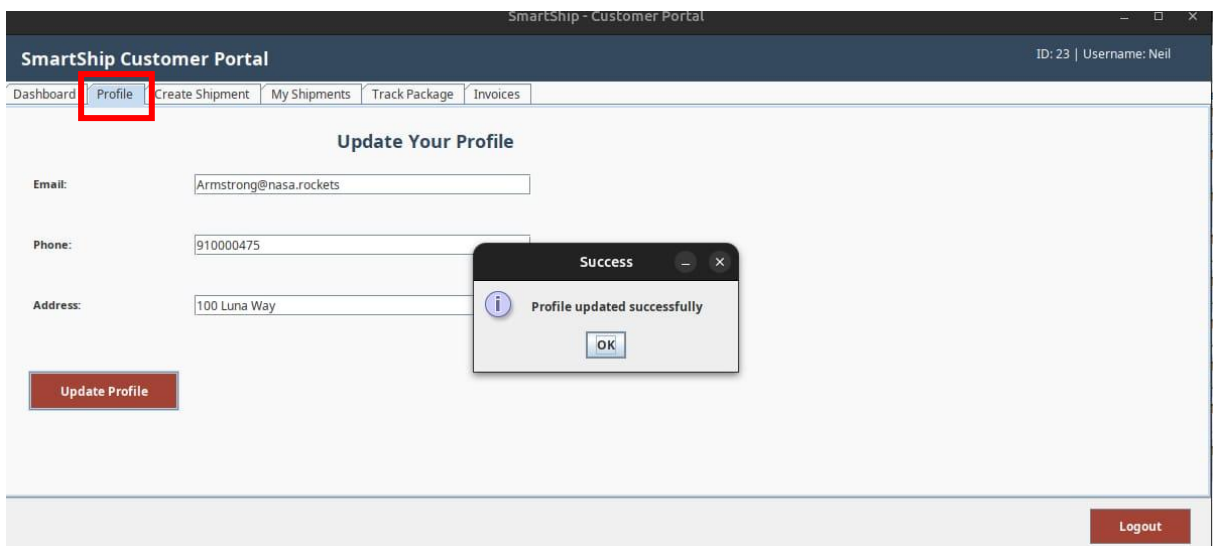
3. Dashboard

The 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

5. Create New Shipment

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

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

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

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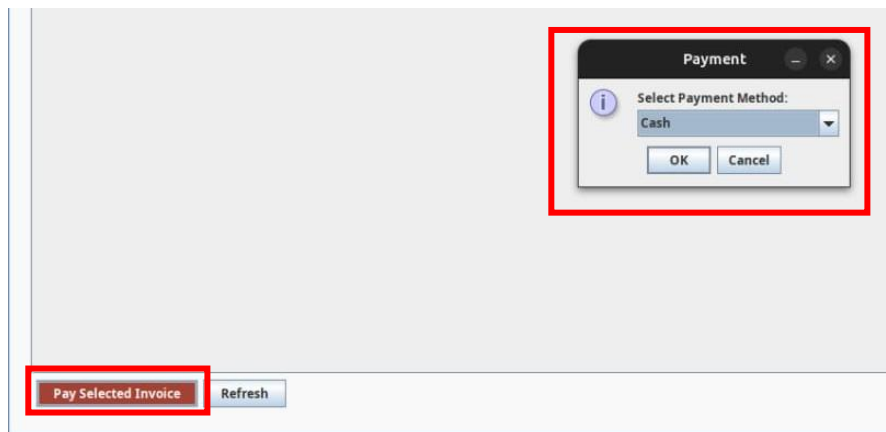
Once a payment is complete, the status will be changed to "Paid":
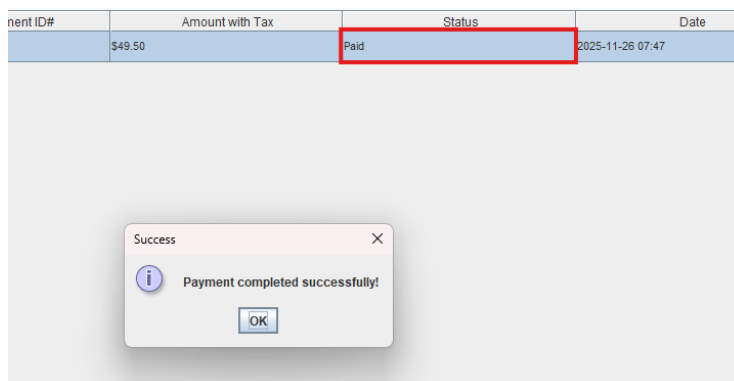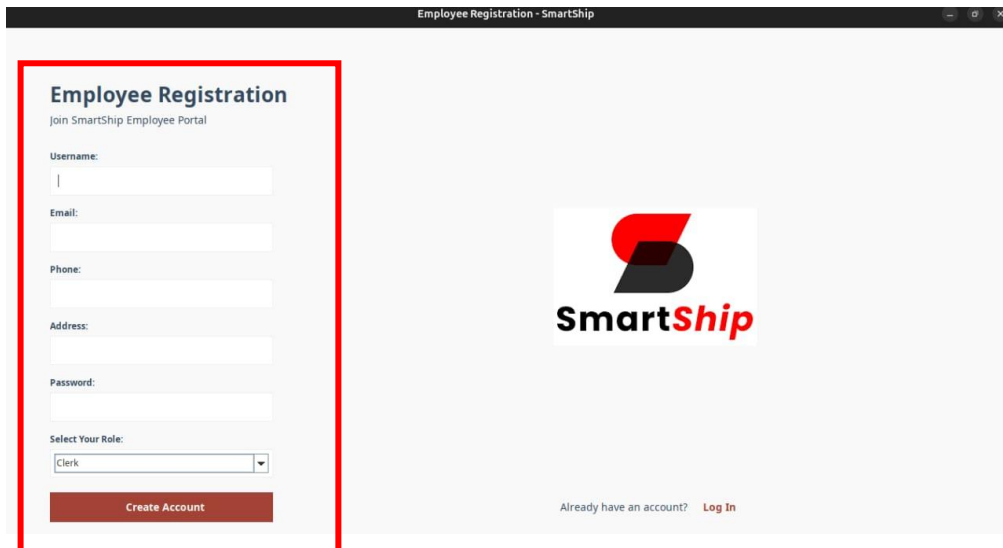
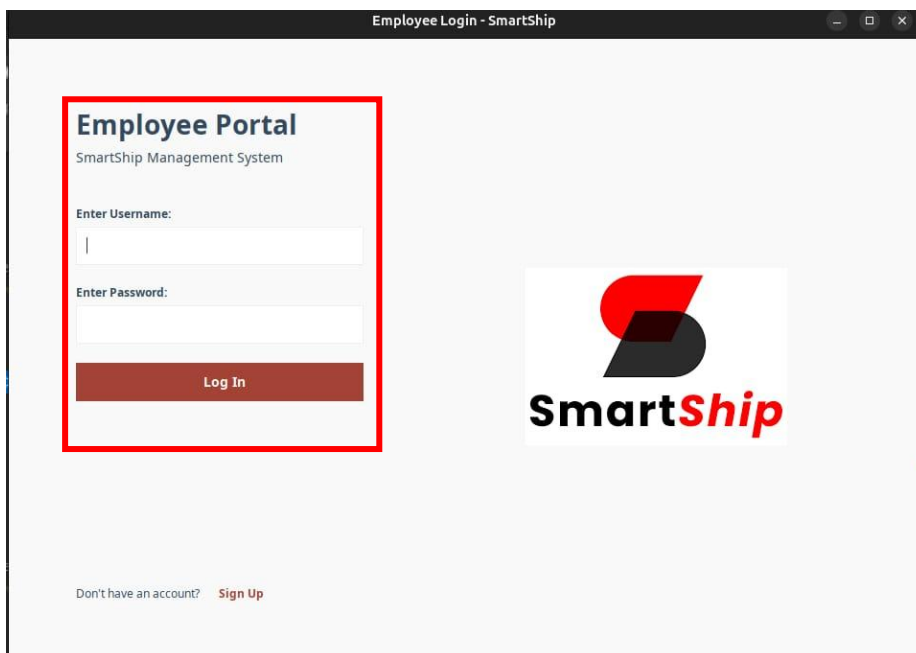

The payment will be processed and a receipt is then generated:
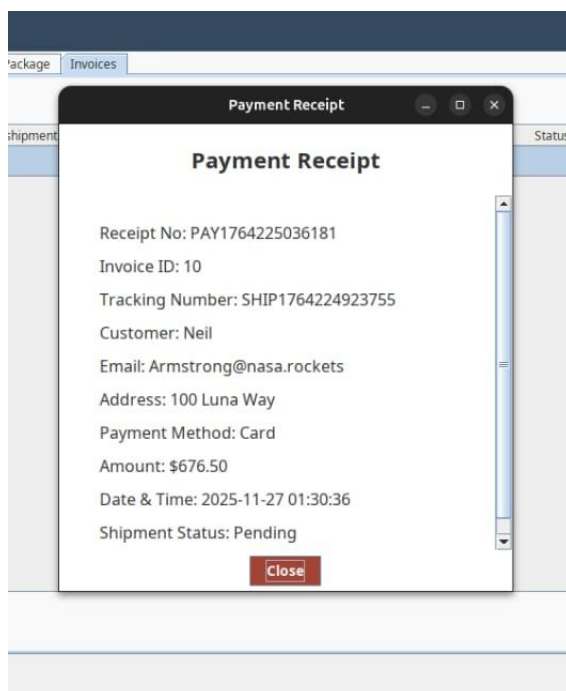
SmartShip Employee Portal

1. Sign Up

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

2. Log In

Login provides secure access to their respective dashboards.

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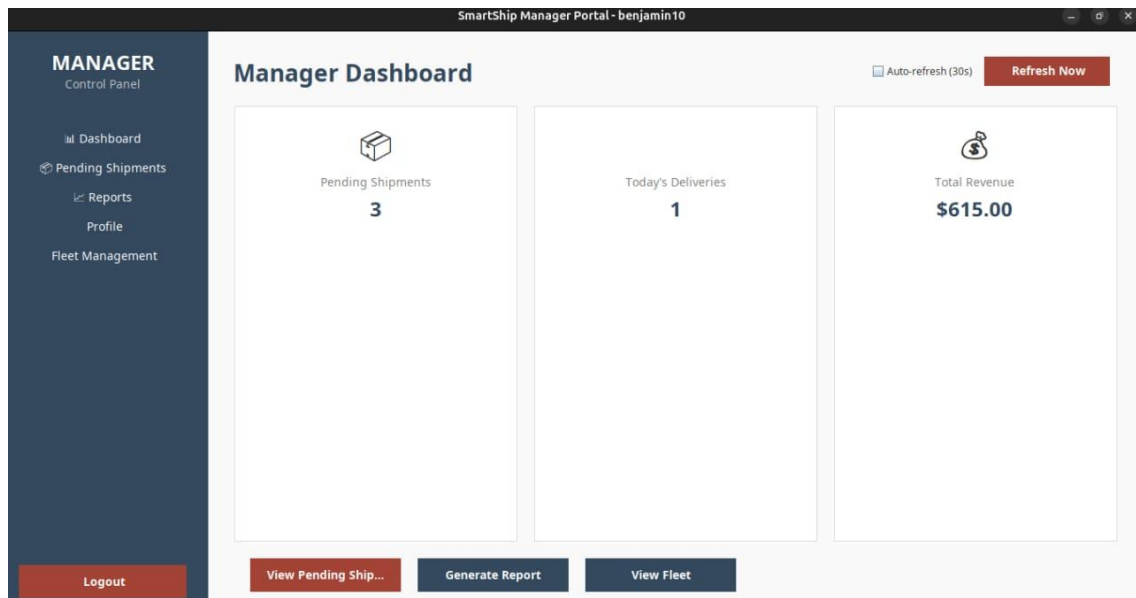
Managers oversee operations with metrics such as: Pending shipments, Today's Deliveries and Total Revenue.

Pending Shipments

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

Report & Analytics
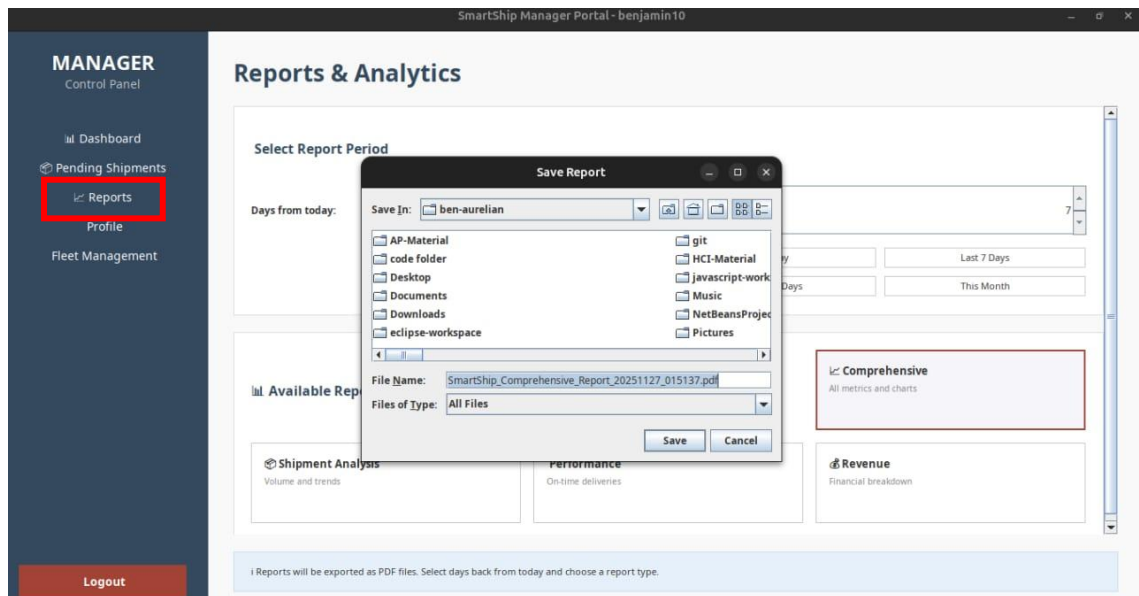
Managers generate PDF reports with shipment analysis, revenue breakdown, and delivery performance. Reports include charts for shipment volume, package type distribution, and vehicle utilization. Managers can save the report as a file.
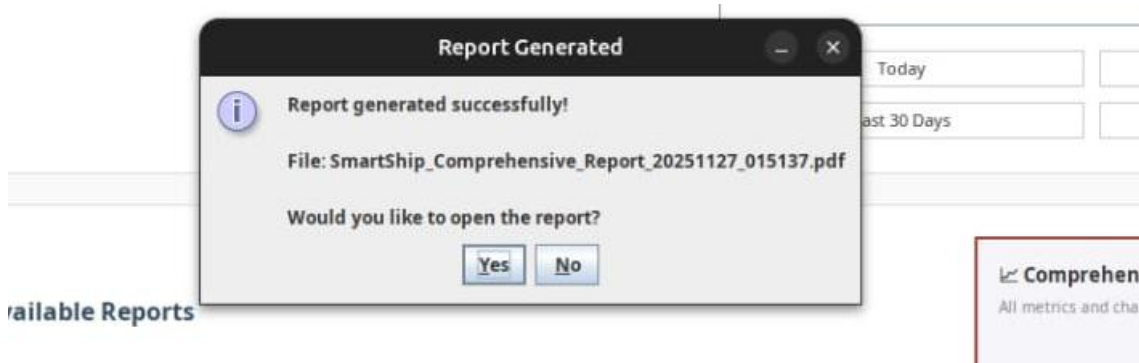
Results when a report is generated:

SMARTSHIP
Comprehensive Report

Report Period: November 20, 2025 - November 27, 2025

SmartShip Package Management System

Generated by: benjamin10
Generated on: November 27, 2025 01:51

Confidential - Internal Use Only

Executive Summary

Total Shipments	11
Total Revenue	$3697.50
Delivered Shipments	0
On-Time Delivery Rate	0.0%
Average Shipment Value	$336.14
Total Weight Shipped	794.50 kg

Key Insights

Shipment Analysis

Daily Shipment Volume

Shipment Status Distribution

Pending (3) ● Assigned (8)

Package Type Distribution

Standard (3)
Express (8)

● Express (8) ● Standard (3)

Fleet Management

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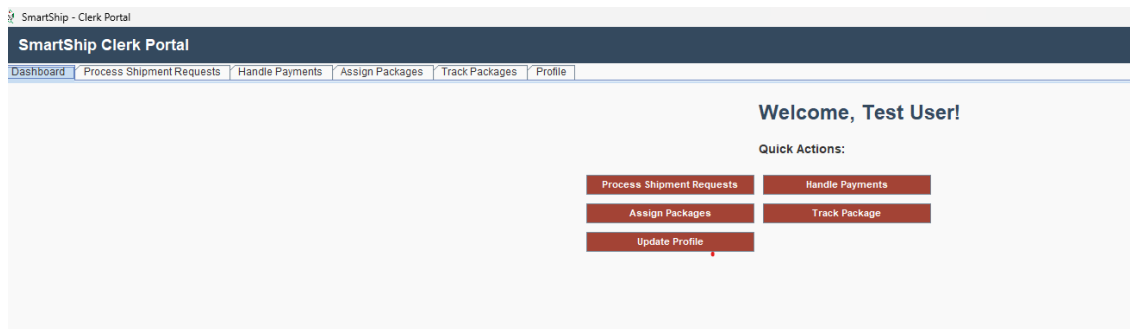
From here, clerks have quick access to operations such as shipment requests, payment management and the assignment of packages to drivers, vehicles and routes.

Process Shipment Requests

The clerk is able to oversea all customer shipments:
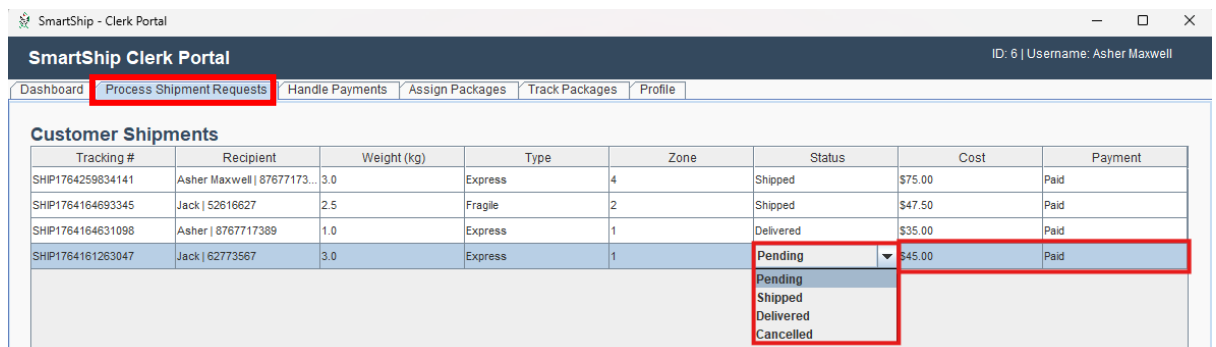
The clerk can change the shipment and payment status:
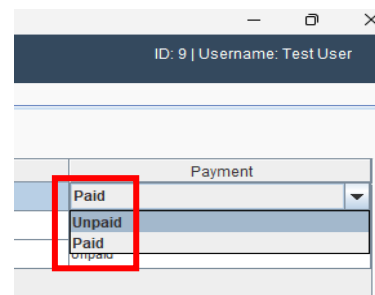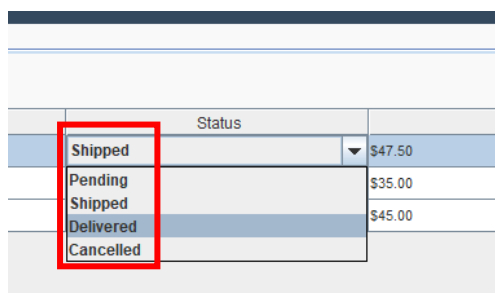
The clerk can handle all customer payments and view the invoices:

The clerk can assign packages:

Driver assigned:

Vehicle assigned:

Route Assigned:

END OF MANUAL

Last Reviewed: November 27, 2025