

JAVA Haulage and Trucking System



Faculty of Engineering and Computing (FENC)

School of Computing and Information Technology (SCIT)

Advanced Programming (CIT3009)

STUDENT NAMES:

Ramon Johnston (2008317)

Jonathan Masters (2100098)

Delroy Forbes (2001604)

Geovanni Stewart (2006510)

LECTURER: Christopher Panther

User Manual and Documentation

Submitted in Partial Fulfillment of the Requirements for the

Course Advanced Programming

University of Technology, Jamaica

Students Names:

Ramon Johnston

Jonathan Masters

Delroy Forbes

Geovanni Stewart

March 29, 2024 (23:59)

School of Computing and Information Technology

Faculty of Engineering and Computing

Introduction

Welcome to the comprehensive user manual for the JAVA Haulage and Trucking (JHT) System.

This guide is designed to provide detailed instructions for the effective use of the JHT system, enabling the JHT team to manage operations with increased efficiency and accuracy.

System Overview

Purpose

The JHT System digitalizes the previously manual, paper-based operations of the JAVA Haulage and Trucking company. It provides functionalities for managing customer accounts, orders, payroll, and generating reports, all aimed at streamlining company operations across Jamaica.

Key Features

- Real-time Operations Management: Supports simultaneous operations across multiple locations.
- User Management: Manages staff and customer profiles comprehensively.
- Order and Trip Management: Automates the order processing with integrated invoicing and rate calculation.
- Payroll System: Simplifies payroll processing with automatic calculations.
- Dynamic Reporting: Generates customizable reports for strategic insights.
- Route and Rate Optimization: Facilitates trip bookings with an easy-to-use route and rate management module.

Minimum System Requirements

For Windows Client Machines

Operating System: Windows 10 (64-bit) or later

Processor: Intel Core i3 or equivalent AMD processor, 2.0 GHz or faster

Memory: 4 GB RAM minimum (8 GB recommended)

Storage: At least 1 GB of free disk space for installation and additional space for data

Network: Broadband Internet connection for initial setup and updates

Java Runtime Environment (JRE): Version 8 or later

For Windows Server Machines

Operating System: Windows Server 2016 or later

Processor: 2.4 GHz 64-bit processor or faster

Memory: 8 GB RAM minimum (16 GB recommended)

Storage: At least 10 GB of free disk space for the server application, database, and logs

Network: Gigabit Ethernet connection (10/100/1000baseT) for local network connectivity

Java Runtime Environment (JRE): Version 8 or later

Database: Relational database management system (RDBMS) compatible with the server application

Installation Guide

Server Installation

1. Prepare the Server Machine: Ensure the server machine meets the minimum requirements and has network connectivity.
2. Install the Server Application: Run the server application installer and follow the on-screen instructions.
3. Database Setup: Configure the relational database system and connect it to the server application.

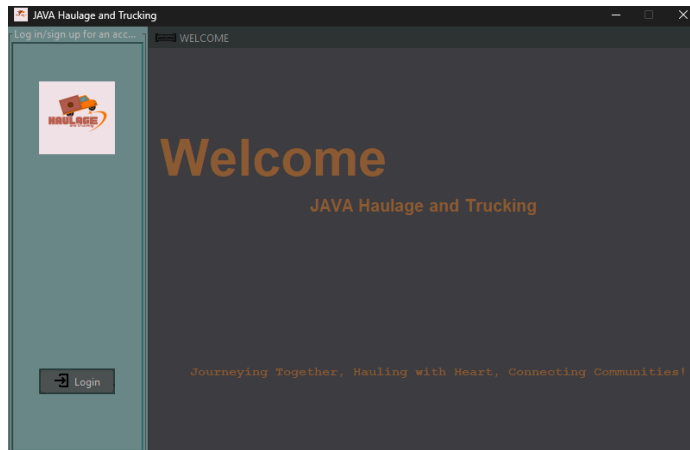
Client Installation

1. Prepare Client Machines: Verify that each client machine meets the minimum requirements.
2. Install Client Application: Execute the client application installer on each machine, following the instructions provided.

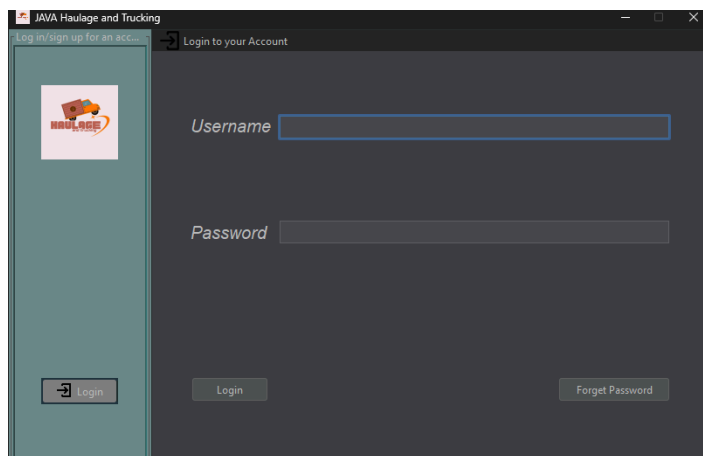
User Guide

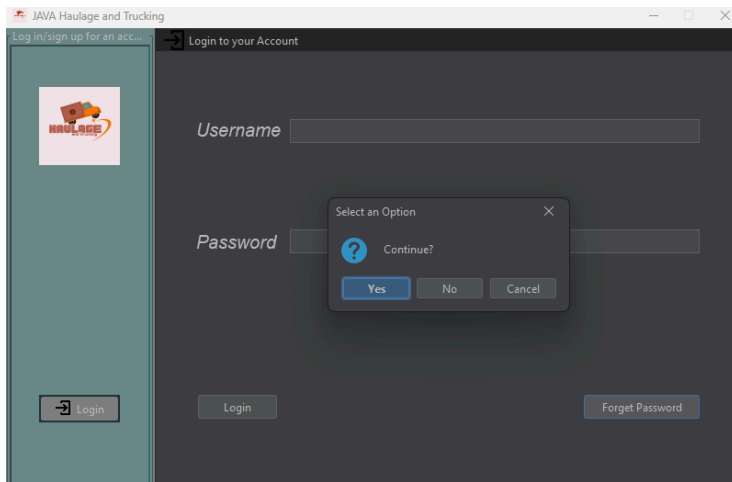
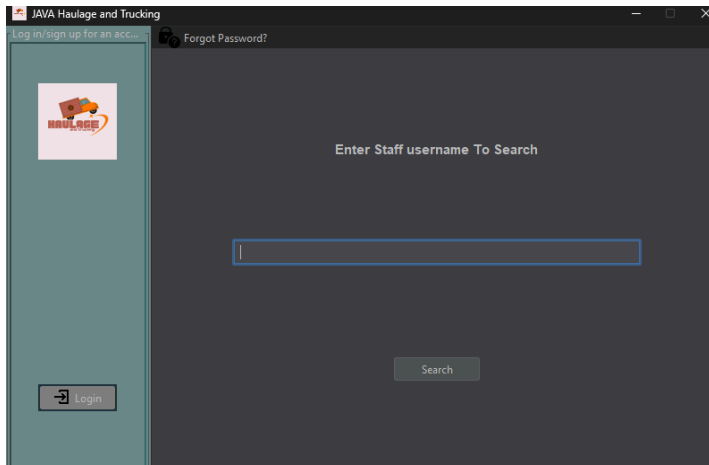
Logging In

Start the application and log in using the credentials provided by your system administrator.



Enter Username and Password.



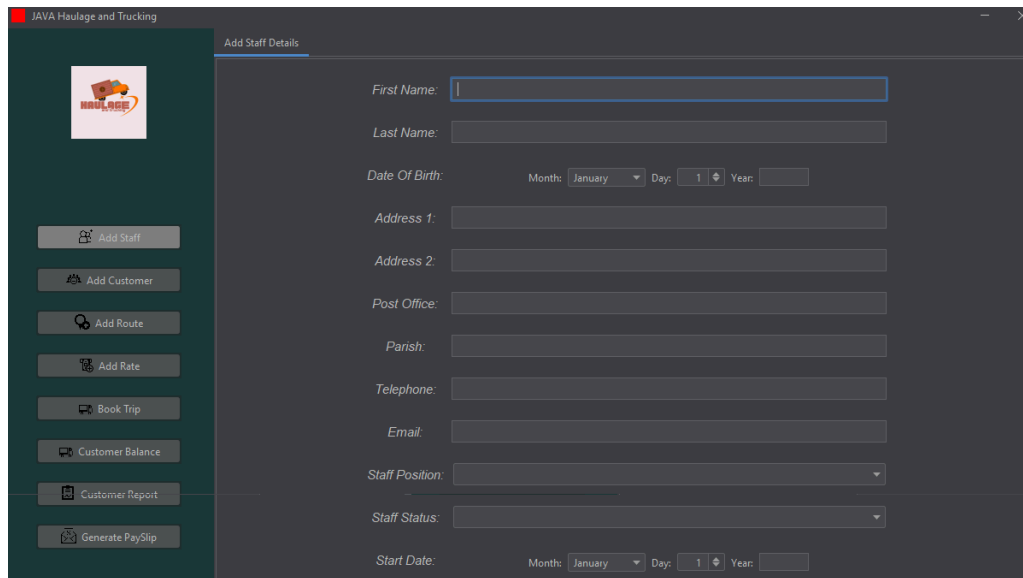


Managing Users

Adding a New User Profile

1. Navigate to the 'User Management' module.
2. Fill in the user's details in the provided fields.
3. Click 'Save' to create the new profile.

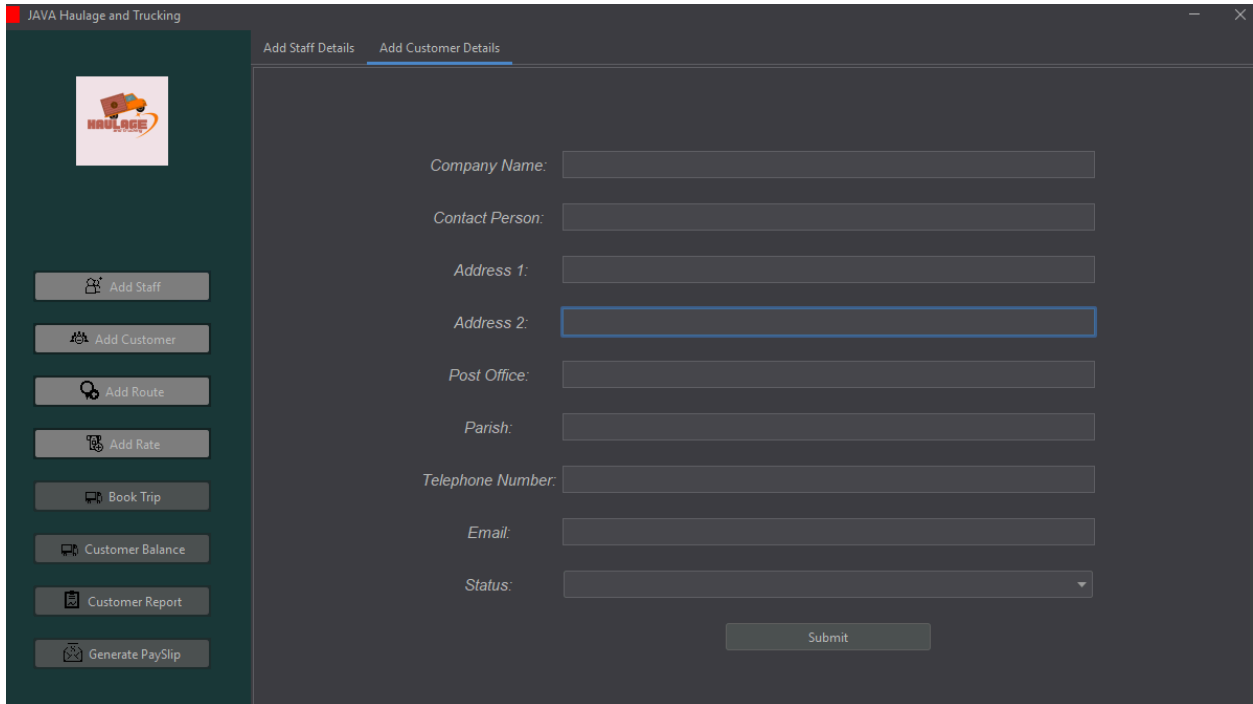
Enter a staff record:



The screenshot shows a web application window titled "JAVA Haulage and Trucking". On the left is a dark sidebar with a logo and a list of buttons: "Add Staff", "Add Customer", "Add Route", "Add Rate", "Book Trip", "Customer Balance", "Customer Report", and "Generate PaySlip". The main area is titled "Add Staff Details" and contains the following form fields:

- First Name:** A text input field.
- Last Name:** A text input field.
- Date Of Birth:** A date picker with "Month" (January), "Day" (1), and "Year" (empty) dropdowns.
- Address 1:** A text input field.
- Address 2:** A text input field.
- Post Office:** A text input field.
- Parish:** A text input field.
- Telephone:** A text input field.
- Email:** A text input field.
- Staff Position:** A dropdown menu.
- Staff Status:** A dropdown menu.
- Start Date:** A date picker with "Month" (January), "Day" (1), and "Year" (empty) dropdowns.

Enter a customer record:




The screenshot displays the 'JAVA Haulage and Trucking' application window. On the left is a dark sidebar with a logo and a list of menu items: 'Add Staff', 'Add Customer', 'Add Route', 'Add Rate', 'Book Trip', 'Customer Balance', 'Customer Report', and 'Generate PaySlip'. The main area has two tabs: 'Add Staff Details' and 'Add Customer Details', with the latter being active. The form contains the following fields: 'Company Name', 'Contact Person', 'Address 1', 'Address 2' (which is highlighted with a blue border), 'Post Office', 'Parish', 'Telephone Number', 'Email', and 'Status' (a dropdown menu). A 'Submit' button is located at the bottom right of the form area.

Managing Orders and Trips

Creating an Order

1. Go to the 'Orders' module.
2. Input the order details, including selecting the route for auto rate calculation.
3. Confirm and save the order.

JAVA Haulage and Trucking



Add Staff

Add Customer

Add Route

Add Rate

Book Trip

Customer Balance

Customer Report

Generate PaySlip

Add Staff DetailsAdd Customer DetailsAdd Route

Source:

Source Address

Address 1:

Address 2:

Post Office:

Parish:

Destination Address

Address 1:

Address 2:

Post Office:

Parish:

RATE

Destination Address

Address 1:

Address 2:

Post Office:


Parish:

RATE

Rate Description:

Rate Value:

Submit



Add Staff

Add Customer

Add Route

Add Rate

Book Trip

Customer Balance

Customer Report


Generate PaySlip

Add Staff DetailsAdd Customer DetailsAdd RouteAdd Rate

Rate Description:

Rate Value:

Submit



Add Staff

Add Customer

Add Route

Add Rate

Book Trip

Customer Balance

Customer Report

Generate PaySlip

Add Staff DetailsAdd Customer DetailsAdd RouteAdd RateBook A Trip

Company:

Route:

Driver:

Billed By:

Delivery Date:

Month: JanuaryDay: 1Year:

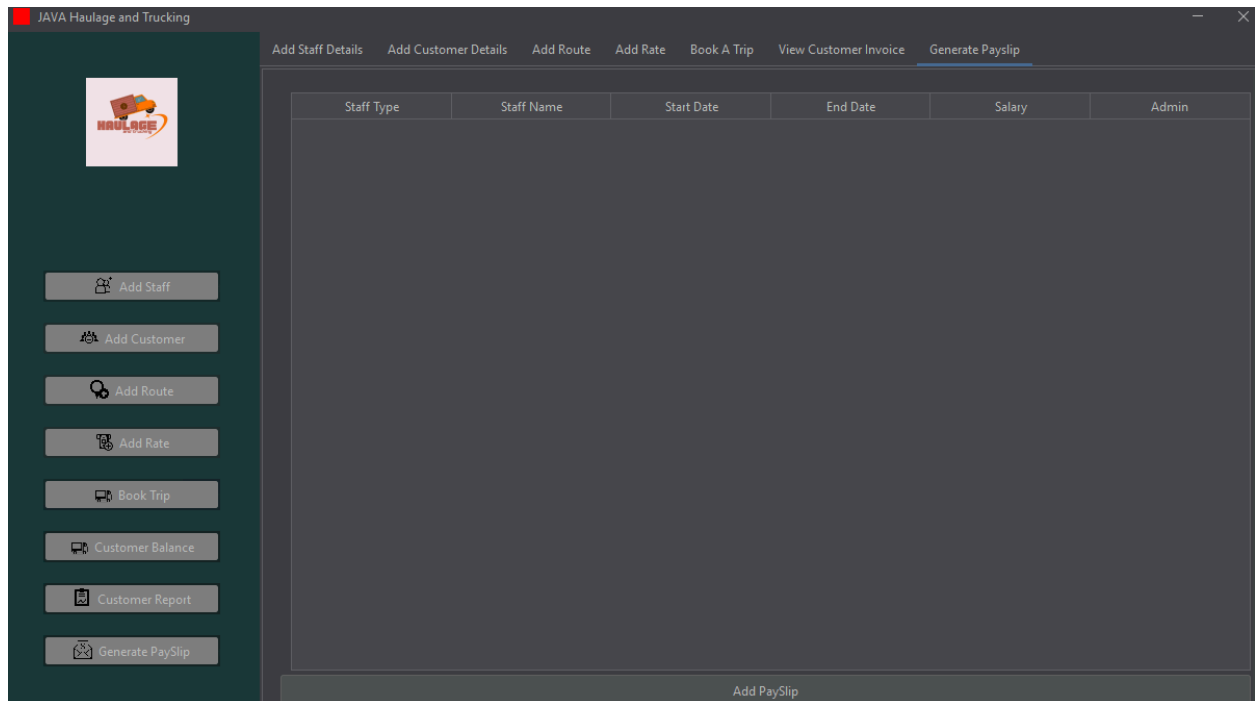
Pay Status:

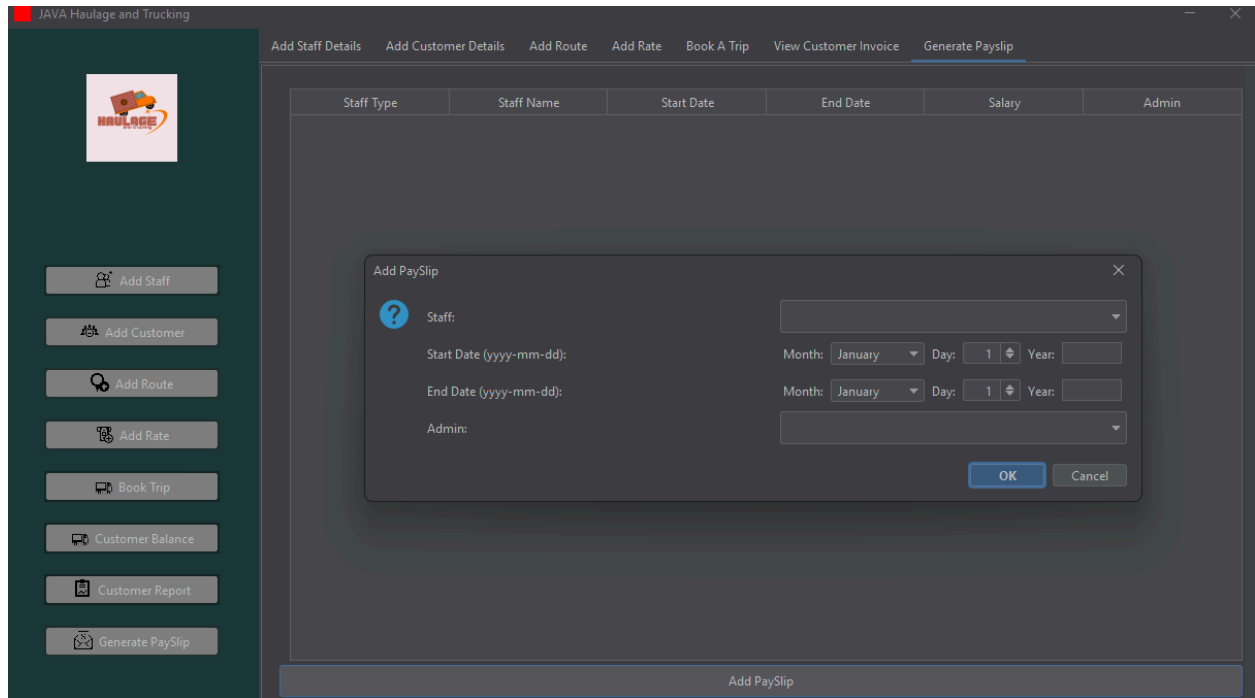
Submit

Payroll Management

Generating Payslips

1. Access the 'Payroll' section.
2. Choose the period and employees.
3. Review and finalize payroll calculations.






Reporting

Custom Report Generation

1. Open the 'Reports' module.
2. Set your criteria for the report.
3. Generate and review the report.

JAVA Haulage and Trucking



Add Staff

Add Customer

Add Route

Add Rate

Book Trip

Customer Balance

Customer Report

Generate PaySlip

Add Staff Details

Add Customer Details

Add Route

Add Rate

Book A Trip

View Customer Invoice

Start Date:

Month: January

Day: 1

Year:

End Date:

Month: January

Day: 1

Year:

Driver Name:

Generate Report

Invoice Number	Company	Source Address	Destination Address	rate	Driver Name	Billed By
----------------	---------	----------------	---------------------	------	-------------	-----------

Maintenance and Troubleshooting

Regular Maintenance

Data Backups: Regularly schedule database backups to prevent data loss.

Updates: Regularly check for and apply system and software updates to ensure optimal performance and security.

Troubleshooting

Consult the help documentation for troubleshooting tips.

Use the activity logs to diagnose and understand system behavior.

Support

Contact your system administrator or IT support team for assistance beyond this manual.

By following this user manual, you will be able to navigate and utilize the JAVA Haulage and Trucking System effectively, leveraging its full suite of features for the betterment of JHT operations.