

# Business Documentation for Rental Process Application

## Landing Page (log-in)

This part outlines the general specifications applicable across all pages of the Laurel Rental Application. These specifications ensure consistency and standardization throughout the application.

### *1. Navigation and Layout*

#### *1.1 Minimize & Global Search*

- **Position:** Left top side of the screen.
- **Functionality:** Enable full screen mode/or revert full screen mode. Global search allows searching across the application.

#### *1.3 Sidebar Menu*

- **Position:** Left side of the screen.
- **Menu Sections:**
  - **Master Data:**
    - Subsections include Products, Warehouse, Customers, and Account Managers.
  - **Rent Process:**
    - Related to the management of rental transactions.
  - **Stock Adjustment:**
    - Access to the Stock Adjustment interface.
  - **Reports:**
    - For generating and viewing various reports.
  - **Authorizations:**
    - Access to user roles and permissions management.
  - **Workflow:**
    - Management of workflow processes and notifications.
  - **Inbox:**
    - Access to messages and notifications within the application.
- **Functionality:**
  - **Expandable/Collapsible Sections:** Each section in the sidebar can be expanded or collapsed by clicking on it.
  - **Active Highlighting:** The active section is highlighted to indicate the current page or section the user is viewing.

- **Icons:** Each section and subsection are accompanied by a relevant icon to enhance usability.

### 1.3 Breadcrumb Navigation

- **Position:** Below the header, above the main content.
- **Functionality:** Displays the current page and its hierarchy within the application, allowing users to navigate back to previous sections easily.
- **Styling:** Simple text with arrows separating each level in the navigation hierarchy.

## 3. Security and Authentication

### 3.1 User Authentication with Microsoft Login

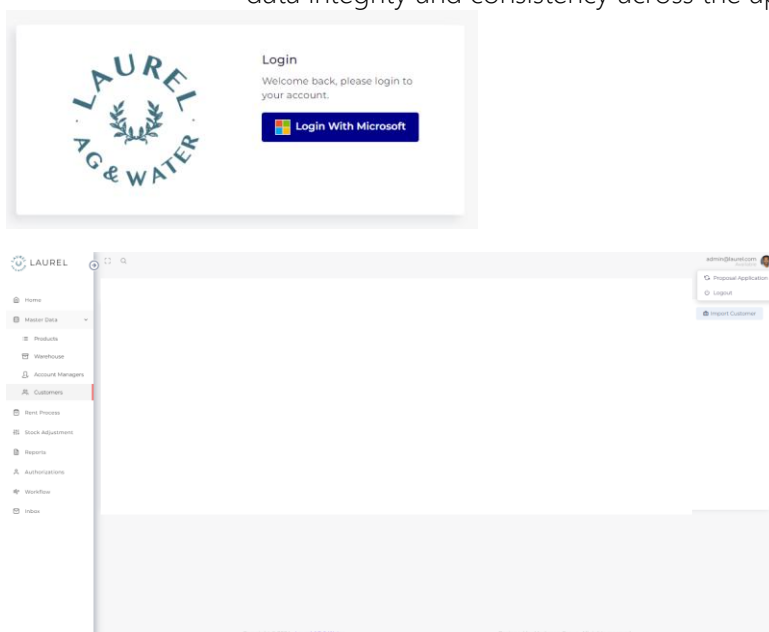
- **Single Sign-On (SSO):**
  - Integrated with Microsoft Login, allowing users to sign in using their Microsoft credentials.

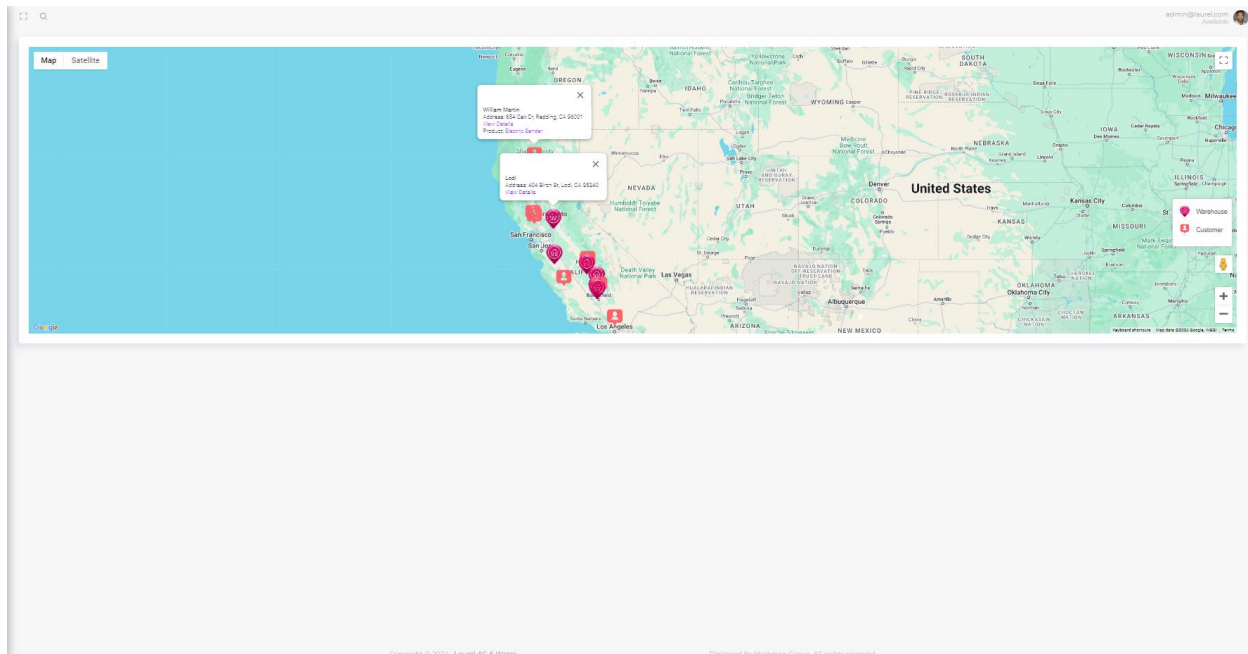
### 3.1 User Authentication

- **Login and Logout:**
  - Secure login and logout mechanisms are in place, using industry-standard encryption protocols.
- **Session Management:**
  - User sessions are managed securely with automatic timeouts for inactivity.

### 4.1 Data Import/Export

- **File Formats:**
  - The application supports importing and exporting data in Excel (.xlsx) and CSV (.csv) formats across relevant sections like Customers, Products, and Warehouses.
- **Validation:**
  - Comprehensive validation processes are in place for all data imports, ensuring data integrity and consistency across the application.





## 1. Purpose

The Home page is the main interface that displays a map showing the locations of warehouses and customers. The map allows users to interact with location pins, view detailed information, and navigate to specific product listing pages.

## 2. User Interface Components

### 2.2. Location Pins

#### Pin Behavior:

##### Tooltip on Hover:

- On mouse hover, a tooltip will appear above the pin displaying:
  - Warehouse:** "Warehouse Name" (bold) and "Full Address".
  - Customer:** "Customer Name" (bold) and "Full Address".

##### Info Window on Click:

*Display:* When a pin is clicked, an info window should pop up next to the pin showing:

- Warehouse:** "Warehouse Name" (bold), "Full Address", and a button labeled "View Products".
- Customer:** "Customer Name" (bold), "Full Address", and a button labeled "View Products".

*Interaction:*

#### *View Products Button*

*Design Specification:*

- The **"View Products"** button should be styled as a **primary button**.
- The button should have a **blue background (#007bff)** with **white text** and an **underline** to indicate it functions as a hyperlink.

*Functionality:*

- Clicking the **"View Products"** button will open a **new browser tab or window**.
- The new tab/window will display the **product listing page** for the respective **warehouse or customer**.

#### *View Documents Button*

*Design Specification:*

- The **"View Documents"** button should match the design styling of the **"View Products"** button.
- It should also have a **blue background (#007bff)** with **white text** and an **underline** to indicate it functions as a hyperlink.

*Functionality:*

- Clicking the **"View Documents"** button will open a **list of opportunities and deliveries** for the respective customer.
- The content will be displayed in a **new browser tab or window** for easy navigation.

#### *General Behavior*

- Both buttons will provide easy navigation options:
  - **"View Products"** focuses on the product listings.
  - **"View Documents"** focuses on opportunities and deliveries.
- The buttons should maintain a consistent look and feel across the application for a seamless user experience.

John Deo

Show 10 entries

Search:

ITEM NO	ITEMS	QUANTITY	ORDER DATE	ORDER ADDRESS
121	SN BL10.6CPH STK30" LD LRSS	6	June 25,2024	456 Oak Avenue, Smallville, USA
122	SN PC HEAD 18.5CPH BLU W/DFLTR	5	June 25,2024	123 Main Street, Anytown, USA

Showing 1 to 2 of 2 entries

Previous

1

Next

# Rent Process

Page Name: Order Management – Orders

Order

Order

Open Recurring Order

Open Return Order

Import Order

Create Order

Show 10 entries

ORDER ID	DELIVERY	STATUS	CUSTOMER	ORDER AMOUNT	PROJECT MANAGER	START DATE	END DATE	RECCURENCE TYPE	LAST UPDATED DATE	ACTIONS
C00240200001	<div>C00240200001-1</div> <div>C00240200001-2</div>	<div>Pick Up</div> <div>Check out</div>	C005888 Rocha Junior Berry Farms LLC	\$ 1500.00	Matthew Waterman	-	-	Recurring	25/10/2024	<div></div> <div></div>
C00240200004	<div>C00240200004-1</div> <div>C00240200004-2</div>	<div>Delivered</div> <div>Check In</div>	C005897 Rio Farms	\$ 1800.00	Matthew Waterman	01/04/2024	30/09/2024	Recurring	25/10/2024	<div></div> <div></div>
C00240200006	<div>C00240200006-1</div> <div>C00240200006-2</div>	<div>New</div> <div>New</div>	C005897 Rio Farms	\$ 1500.00	Matthew Waterman	01/04/2024	30/09/2024	One Time	25/10/2024	<div></div> <div></div>
C00240200007	<div>C00240200007-1</div> <div>C00240200007-2</div>	<div>Create Return Delivery</div> <div>Create Return Delivery</div>	C006219 Braga Ranch	\$ 1500.00	Matthew Waterman	01/04/2024	30/09/2024	Recurring	25/10/2024	<div></div> <div></div>
C00240200008	<div>C00240200008-1</div> <div>C00240200008-2</div>	<div>Pick Up</div> <div>Check out</div>	C005414 3-Brand Cattle	\$ 1500.00	Anthony Freitas	01/04/2024	31/05/2024	Recurring	25/10/2024	<div></div> <div></div>
C00240200009	<div>C00240200009-1</div> <div>C00240200009-2</div>	<div>Pick Up</div> <div>Pick Up</div>	C005477 H & H Farms Inc.	\$ 1800.00	Anthony Freitas	01/04/2024	30/09/2024	One Time	25/10/2024	<div></div> <div></div>
C00240200010	<div>C00240200010-1</div> <div>C00240200010-2</div>	<div>Create Delivery</div> <div>Create Delivery</div>	C005477 H & H Farms Inc.	\$ 1500.00	Anthony Freitas	01/04/2024	30/09/2024	Recurring	25/10/2024	<div></div> <div></div>
C00240200011	<div>C00240200011-1</div> <div>C00240200011-2</div>	<div>Pick Up</div> <div>Check In</div>	C005941 Top Flavor Farms San Juan	\$ 1500.00	Matthew Waterman	01/04/2024	30/09/2024	One Time	25/10/2024	<div></div> <div></div>
C00240200012	<div>C00240200012-1</div> <div>C00240200012-2</div>	<div>Check In</div> <div>Check In</div>	C005941 Top Flavor Farms San Juan	\$ 1500.00	Matthew Waterman	01/04/2024	30/09/2024	One Time	25/10/2024	<div></div> <div></div>
C00240200013	<div>C00240200013-1</div> <div>C00240200013-2</div>	<div>Check In</div> <div>Check In</div>	C003823 Gledstone Land	\$ 1800.00	Anthony Freitas	-	-	One Time	25/10/2024	<div></div> <div></div>

Showing 1 to 10 of 20 entries

Previous

1

2

Next

## 1. Purpose

The Order Management screen is designed for administrators and project managers to manage rental orders, including viewing, creating, and updating orders. This interface provides an overview of all orders, allows for the creation of new orders, and offers tools to manage existing orders, including recurring and return orders.

## 2. UI Components

### 1.1 Order List Panel

#### 1. *Component:* Order Table

- Position:* Central area of the screen.
- Structure:*
  - Columns:*
    - Order ID:** Displays the unique identifier for each order. Clicking the Order ID navigates to a detailed view of the order. Hyperlinked to order overview page.
    - Delivery:** Shows the associated delivery IDs linked to the order. Each delivery ID is clickable, leading to its specific details. Hyperlinked to specific delivery and its active stage.

- **Status:** Indicates the current status of the delivery order, such as "Pick Up", "Check Out", "Delivered", etc. Each status is color-coded for quick identification.
- **Customer:** Displays the customer associated with the order, identified by a customer ID or name.
- **Order Amount:** Shows the total monetary value of the order.
- **Account Manager:** Indicates the account manager responsible for the order.
- **Start Date:** Displays the start date of the order.
- **End Date:** Displays the end date of the order.
- **Recurrence Type:** Indicates whether the order is recurring or a one-time order.
- **Last Updated Date:** Shows the last date when the order was modified.
- **Actions:** Provides icons for editing, deleting, and managing the order.

## 2. *Component:* Actions Column

- *Position:* Rightmost column of the order table.
- *Structure:*
  - **Edit Button:** A pencil icon that opens the "Edit Order" modal, allowing the admin to modify order details.
  - **Delete Button:** A trash icon that allows the admin to delete the order (only in status new)
  - **Delivery Management Button:** An icon representing a truck, which opens a modal for managing deliveries related to the order.
  - **Order Analytics Button:** A bar chart icon that provides access to analytics related to the order's performance and history.

## 1.2 Create Order Modal

This stage allows users to input key details related to an order. The application provides full control over mandatory and optional fields, ensuring flexibility in data entry while maintaining consistency. By default, all fields are set as mandatory, but users can manage this setting in the new **Control Panel** tab.

### 1. *Component:* Create Order Modal

- *Trigger:* Activated by clicking the "Create Order" button located in the top right corner of the Order Management screen.
- *Structure:*
  - *Fields:*
    - **Customer:** Dropdown to select the customer associated with the order.
    - **Link NetSuite:** Button to link the order to NetSuite for financial tracking and reporting.
    - **Account Manager:** Dropdown to select the account manager responsible for the order.
    - **Region:** Dropdown to select the region.

- **Customer Email:** Input field for the customer's email address.
- **Pick-Up Location:** Input field for the location where items will be picked up (google-drop).
- **Delivery Location:** Input field for the delivery location of the items (google-drop).
- **Water Source:** Input field specifying the water source if applicable to the order.
- **Crop:** Input field for specifying the crop involved in the order, if applicable.
- **Items:**
  - **Items No.:** Dropdown to select the item number.
  - **Items:** Dropdown to select the material name.
  - **Quantity:** Input field for the quantity of items.
  - **Per Unit Price:** Input field for the price per unit.
- **Rent Amount:** Calculated field for the total rent amount.
- **Rental Period:** Date picker to specify start and end date of the order.
- **Rent Per Month:** Input field to specify the monthly rent amount.
- **Recurring Order:** Checkbox to indicate if the order is recurring.
  - **Recurrence Settings:**
    - **Repeats:** Dropdown to select the frequency of recurrence (e.g., daily, weekly, monthly).
    - **Rental Period:** Date picker to specify start and end date of the order.
- *Buttons:*
  - **Close:** Closes the modal without saving changes.
  - **Add Order:** Saves the new order to the system, including all specified details and scheduling.

### 1.3 Validation Errors

- **Missing Fields:** If required fields (e.g., customer, items, delivery locations) are not filled in the Create or Edit Order modals, the system should highlight the missing fields and provide a message indicating that all fields are required.
- **Invalid Data:** If invalid data is entered (e.g., incorrect date formats, negative quantities), the system should prevent the order from being saved and provide a descriptive error message.

### Control Panel: Manage Field Requirements

A new **Control Panel** tab will be added to the navigation panel, enabling admins to manage which fields are mandatory or optional.

#### *Key Features of the Control Panel:*

##### *1. Field Selection:*

- A list of all fields available in the **Create Order** stage is displayed in the Control Panel.
- Each field is accompanied by a toggle button to set it as **mandatory** or **optional**.

## 2. Mandatory Field Indicator:

- Fields marked as mandatory will display a red asterisk \* in the form to indicate they are required.

## 3. Default Configuration:

- All fields are set as **mandatory** by default.

## 4. Real-Time Updates:

- Changes in the Control Panel will immediately reflect in the **Create Order** form.

## Page Name: Order Management – Open Recurring Orders

ORIGINAL ORDER ID	RECURRING ORDER ID	CUSTOMER	ORDER AMOUNT	PROJECT MANAGER	RECURRING TYPE	RECURRING START	RECURRING END	NUMBER OF ORDERS	ACTIONS
000240300058	0R00270300058	Vermont Industries	\$300.00	LINDA GARCIA	Weekly	01/06	3/12	3	[Edit] [Delete]
000240300058	0R00270300058	Vermont Industries	\$300.00	WILLIAM MARTINEZ	Weekly	01/06	3/12	3	[Edit] [Delete]
000240300058	0R00298300058	China Lasso Group	\$3750.00	ELIZABETH HERNANDEZ	Monthly	15/06	30/09	5	[Edit] [Delete]
000240300058	0R00296300058	McWane	\$4500.00	DAVID MILLER	Yearly	01/06	3/12	2	[Edit] [Delete]
000240300058	0R00240300058	Mueller Industries	\$2700.00	SUSAN DAVIS	Monthly	15/05	30/11	5	[Edit] [Delete]
000240300058	0R00266300058	Mueller Industries	\$2700.00	JAMES SMITH	Monthly	15/05	30/11	5	[Edit] [Delete]
000240300058	0R00270300058	Nord Stream AC	\$1800.00	MARY JOHNSON	Monthly	15/05	30/11	5	[Edit] [Delete]
000240300058	0R00286300058	Nord Stream AC	\$1800.00	ROBERT WILLIAMS	Yearly	15/05	30/11	5	[Edit] [Delete]
000240700045	0R00267000045	Saint-Gobain	\$500.00	JAMES SMITH	Yearly	01/06	3/12	5	[Edit] [Delete]
000240700045	0R00270700045	Wavin	\$200.00	MARY JOHNSON	Monthly	01/06	30/09	2	[Edit] [Delete]

## 1. Purpose

The Open Recurring Order screen is designed to manage and track recurring orders within the rental process application. This screen lists all recurring orders that are still active and those that remain open up to 30 days after the contract end date. The interface allows administrators and project managers to view, edit, and manage recurring orders efficiently.

## 1. UI Components

### 1.1 Recurring Order List Panel

#### 1. *Component:* Recurring Order Table

- *Position:* Central area of the screen.
- *Structure:*
  - **Columns and Database Mapping:**
    - **Original Order ID:** Displays the unique identifier for the original order that initiated the recurring order series.
    - **Recurring Order ID:** Displays the unique identifier for the specific instance of the recurring order.
    - **Customer:** Displays the customer associated with the recurring order.
    - **Order Amount:** Shows the total monetary value of the recurring order.



- **Project Manager:** Indicates the project manager responsible for the recurring order.
- **Recurring Type:** Indicates the frequency of recurrence (e.g., Weekly, Monthly, Yearly).
- **Recurring Start:** Displays the start date of the recurring order series.
- **Recurring End:** Displays the end date of the recurring order series.
- **Number of Orders:** Displays the number of orders that have been generated from this recurring order template.
- **Actions:** Provides icons for editing and deleting the recurring order.

## 2. *Component:* Actions Column

- *Position:* Rightmost column of the recurring order table.
- *Structure:*
  - **Edit Button:** A pencil icon that opens the "Edit Recurring Order" modal, allowing the admin to modify recurring order details.
  - **Delete Button:** A trash icon that allows the admin to delete the recurring order (only orders in status 'New')

*Page Name: Order Management – Open Return Deliveries*

ORDER ID	DELIVERY ID	STATUS	CUSTOMER	PROJECT MANAGER	START DATE	END DATE	LAST UPDATED DATE	ACTIONS
OR020406000002	DEL07890	Pick Up	Jane Doe	John Smith	01/01/2024	01/15/2024	01/15/2024	
OR020406000001	DEL07891	Check Out	Alan Brown	Emily Davis	01/05/2024	01/20/2024	01/15/2024	
OR020406000002	DEL07892	Inspection	Mary Johnson	Michael Wilson	01/10/2024	01/25/2024	01/22/2024	
OR020406000003	DEL07893	Check Out	Robert Lee	Sarah Taylor	01/15/2024	01/30/2024	01/28/2024	
OR020406000004	DEL07894	Inspection	Emily Clark	James Carter	02/01/2024	02/16/2024	01/28/2024	
OR020406000005	DEL07895	Return Pick Up	Robert Wilson	Linda Scott	02/02/2024	02/17/2024	01/30/2024	
OR020406000006	DEL07896	Inspection	Susan Harris	Daniel Adams	01/25/2024	02/10/2024	02/01/2024	
OR020406000007	DEL07897	Create Return Delivery	William Robinson	Jessica Green	01/30/2024	02/20/2024	02/04/2024	
OR020406000008	DEL07898	Return Pick Up	Lauren Walker	Michael Hall	02/01/2024	02/25/2024	02/10/2024	
OR020406000009	DEL07899	Inspection	Charles Allen	Karen Young	02/05/2024	03/01/2024	02/16/2024	

Purpose:

The Open Return Order screen is designed to manage and track return orders within the rental process application. This screen lists all return orders associated with deliveries that have not been completed. The data for this screen is sourced from the delivery\_details table, specifically where the delivery\_type is "Return Delivery" and deliver\_to\_customer is False. The interface allows administrators and project managers to view, edit, and manage return orders efficiently.

## 1. UI Components

### 1.1 Return Order List Panel

#### 1. **Component:** Return Order Table

- **Position:** Central area of the screen.
- **Structure:**
  - **Columns and Database Mapping:**
    - **Order ID:** Displays the unique identifier for each return order.

- **Delivery ID:** Displays the unique identifier for the delivery associated with the return order.
- **Status:** Indicates the current status of the return order, such as "Pick Up", "Check Out", "Inspection", etc. Each status is color-coded for quick identification.
- **Customer:** Displays the customer associated with the return order.
- **Project Manager:** Indicates the project manager responsible for the return order.
- **Start Date:** Displays the start date of the return order.
- **End Date:** Displays the end date of the return order.
- **Last Updated Date:** Shows the last date when the return order was modified.
- **Actions:** Provides icons for editing, managing, and viewing analytics related to the return order.

## 2. Component: Actions Column

- **Position:** Rightmost column of the return order table.
- **Structure:**
  - **Edit Button:** A pencil icon that opens the "Edit Return Order" modal, allowing the admin to modify return order details.
  - **Delivery Management Button:** An icon representing a truck, which opens a modal for managing the delivery associated with the return order.
  - **Order Analytics Button:** A bar chart icon that provides access to analytics related to the return order's performance and history.

## Rental Process

### General Notes

#### *Navigation & Steps:*

- Once a stage is completed and the user clicks Next, they can revisit and update the stage if needed.
- If updates are made to quantities, the system will notify the user:
  - For Increases: The user must validate and confirm the changes. If confirmed, the higher quantity will be reflected in the order and applied to the previous stages.
  - For Decreases: The user will be notified that the update reflects a reduction in quantity and that the original order quantity will remain unchanged. If fulfillment of the reduced quantity is required, a new delivery must be created.
- Users cannot proceed to the next screen without completing the current screen.
- The status will change to "Completed" at the delivery level once the inspection is completed.
- The status displays as "New" if no delivery is created for the order.
- **Delete Option:** Users can delete an order if it is in the "New" status, meaning no delivery has been created for the order. Delivery and return delivery can be deleted if the subsequent

steps have not been completed. A confirmation popup window will appear before the deletion is finalized.



Rental Process  
Laurel.pdf

## Order Overview Page

### *Purpose:*

The "Order Overview" screen provides a comprehensive summary of the order details, allowing users to quickly review all relevant information. This includes customer details, internal order management details, order duration, and line item details. The screen is intended to ensure that all order information is accurately captured and readily accessible for reference or auditing purposes.

### *General Layout:*

#### *Sections:*

1. **Customer Details:**
  - **Positioning:** Displayed in a horizontal card format, aligned at the top of the screen.
  - **Fields:**
    - **Customer ID:** Displayed with a label.
    - **Customer Name:** Displayed next to the customer ID.
    - **Customer Email:** Positioned next to the customer's name.
    - **Delivery Location:** Positioned on the far right within the same card.
  - **Design:** Use a card layout with subtle borders and shading to separate the "Customer Details" from other sections.
2. **Internal Details:**
  - **Positioning:** Positioned directly below the "Customer Details" section.
  - **Fields:**
    - **Account Manager:** Displayed at the left.
    - **Link Netsuite:** Positioned next to the account manager.
    - **Region:** Positioned next to the Link Netsuite field.
    - **Pick-Up Location:** Positioned next to the Region field.
    - **Water Source:** Positioned next to the pick-up location.
    - **Crop:** Positioned next to the water source.
  - **Design:** Similar card layout as "Customer Details" but with slightly darker shading to create visual hierarchy.
3. **Duration Details:**
  - **Positioning:** Positioned beneath the "Internal Details" section.
  - **Fields:**
    - **Recurring Order ID:** Positioned at the top-left.


- **Rental Period:** Positioned directly below the Recurring Order ID.
  - **Recurring Order Number List:** Positioned to the right of the Rental Period.
  - **Design:** Use a visually distinct card with a light background to make this section stand out. Consider using icons to represent recurring orders and rental periods to make the information more intuitive.
4. **Line Details:**
- **Positioning:** Positioned at the bottom of the screen.
  - **Fields:**
    - **Item No.:** Displayed at the left.
    - **Item Name:** Positioned next to the Item No.
    - **Quantity:** Positioned next to the Item Name.
    - **Per Unit Price:** Positioned next to the Quantity field.
    - **Rent Amount:** Positioned next to the Per Unit Price.
    - **Rent Per Month:** Positioned next to the Rent Amount field.
  - **Design:** Use a table format with alternating row colors to improve readability. Headers should be bold, and use borders to separate the rows and columns clearly.


Order Overview : O20240200018

Customer Details :					
Customer ID	Customer Name	Customer Email	Delivery Location		
1021	John Smith	johnsmith@acme.com	3876 Allen Rd, Bakersfield, CA 93314		

Internal Details :					
Account Manager	Link Netsuite	Region	Pick-up Location	Water Source	Crop
Brawley Smith	brawley.smith	WEST	325 Rd 192, Delano, CA 93215	325 Rd 192, Delano, CA 93215	325 Rd 192, Delano, CA 93215

Duration Details :

Recurring Order 

Rental Period	Recurring Order Number List
 July 24, 2024 - August 22, 2024	O202402000008-1 O202402000008-2

Line Details :					
Item No.	Item Name	Quantity	Per Unit Price	Rent Amount	Rent per month
17727	10' Clamp	10	\$ 100.00	\$ 1000.00	July - \$ 800.00 August - \$ 500.00

## Create Order

### Purpose:

The "Create Order" screen is designed to facilitate the creation of new orders by allowing users to input both header data (related to the customer and general order information) and line data (detailing the specific items and quantities involved in the order). This screen ensures that all necessary information is collected in a structured and efficient manner.

**Validation:** Immediate visual feedback on errors (e.g., red border around required fields if left empty).

### Technical Specification:

#### Header Data:

1. **Customer:**
  - **Type:** Single selection dropdown list.
2. **Link Netsuite:**

- Type: Free text
- 3. **Account Manager:**
  - Type: Single selection dropdown list
- 4. **Region:**
  - Type: Single selection dropdown list
- 5. **Customer Email:**
  - Type: Free text
- 6. **Pick-up Location:**
  - Type: Single selection dropdown list
- 7. **Delivery Location:**
  - Type: Free text
- 8. **Water Source:**
  - Type: Free text
  - **Data Source:** Manually entered
- 9. **Crop:**
  - Type: Single selection dropdown list

*Line Data:*

1. **Item No.:**
  - Type: Single selection dropdown list
  - **Behavior:** Automatically populates the "Items" field upon selection.
2. **Items:**
  - Type: Single selection dropdown list
  - **Behavior:** Automatically populates the "Item No." field upon selection.
3. **Quantity:**
  - Type: Free text
  - **Data Source:** Manually entered
  - **Validation:** Must be a positive number
  - **Changeable:** Yes
4. **Price:**
  - Type: Free text
  - **Data Source:** Manually entered
  - **Validation:** Must be a positive number

*Recurring Order:*

1. **Recurring Order Toggle:**
  - Type: Selection button
  - **Behavior:** If selected, the screen expands to show recurring options.
  - **Changeable:** Yes
2. **Rent Amount:**
  - Type: Calculation (Price \* Quantity) – sum for all lines
  - **Changeable:** No

3. **Rent per Month:**
  - **Type:** Calculation
  - **Data Source:** Rent Amount / Rental Period (months)
  - **Display:** Listed per month, e.g., "August: \$5,000.00"
  - **Changeable:** No
4. **Rental Period:**
  - **Type:** Calendar selection
  - **Behavior:** Available only if "Recurring Order" is not selected
5. **Repeats:**
  - **Type:** Dropdown list (Weekly, Monthly, Yearly, etc.)
  - **Behavior:** Available only if "Recurring Order" is selected
6. **For:**
  - **Type:** Free text
  - **Validation:** Must be a positive integer
  - **Behavior:** Available only if "Recurring Order" is selected

*Notes:*

- The system will display a confirmation popup when the user attempts to create an order without filling in all mandatory fields

## Create Delivery

### Purpose:

The "Create Delivery" screen is designed to initiate and manage the details of a new delivery. It allows the user to input key delivery information, including delivery address, recipient details, delivery date, and any special instructions. The screen ensures that all critical data is captured accurately to facilitate the delivery process.

To enhance user experience and streamline access to delivery-specific and order-level details, secondary tabs to be added within the "Create Delivery Ticket" stage. This feature provides users with a clear separation between delivery-specific information and the overall order summary.

- **Create Delivery Ticket Tab:**  
Focused on capturing and managing delivery-specific details. This is the default tab, and users will be navigated to and see this screen upon entering the stage.
- **Order Details Tab:**  
Dedicated to displaying and managing overall order-level details, providing a summary of the entire order.

**Validation:** Immediate feedback is provided if the entered delivery quantity exceeds the ordered quantity, ensuring all inputs align with the order details before proceeding.

*Technical Specification:*

*Header Data:*

*Header Data:*

1. **Pick Up Date:**
  - **Type:** Calendar selection
  - **Default:** Contract start date from order
  - **Changeable:** Yes, through calendar input
2. **Delivery Date:**
  - **Type:** Calendar selection
  - **Default:** Contract end date
  - **Changeable:** Yes, through calendar input
3. **Shipping Carrier:**
  - **Type:** Single selection dropdown
  - **Options:** Internal, Hired
4. **PO Number:**
  - **Type:** Free text
  - **Behavior:** Highlighted if empty, applicable only if shipping carrier is hired
5. **Pick Up Site:**
  - **Type:** Free text
  - **Default:** Pick up site from order
  - **Changeable:** Yes
6. **Delivery Site:**
  - **Type:** Free text
  - **Default:** Delivery location from order
  - **Changeable:** Yes

*Line Data:*

This table should display only materials with remaining quantities available for delivery. Materials for which the full delivery quantity has already been created must be visible but disabled for selection or updates.

Create Delivery

×

PICK UP DATE

mm/dd/yyyy

DELIVERY DATE

mm/dd/yyyy

SHIPPING CARRIER

Select Shipping Carrier

▼

PICK UP SITE

425 Webster Street

DELIVERY SITE

US Irrigation - Old River Road - Old

Show on Map

<input type="checkbox"/>	Material name	Requested Qty	Quantity
<input checked="" type="checkbox"/>	VENT-1"CAV X 2"COUP	2	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	Ball Valve Riser 3/4" FHTxMHT	75	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	Cement - Dauber for Pint Can (HOSE FITTINGS)	2	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	CEMENT - RED HOT CLEAR, PINT (HOSE FITTINGS)	2	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	FIGURE 8 062	150	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	MALE HOSE ADAP X 1/2"5(3/4"SP)	75	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	PERMA-LOC COUPLING 062	25	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	PERMA-LOC X SWIVEL-W TEE 062	75	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	UNIRAM .62/45 E.S336 COIL	24000	<div>Enter Qty</div>
<input checked="" type="checkbox"/>	COUPLER BLACK 1/2"	25	<div>Enter Qty</div>

Close

Save

1

Create Delivery

2

Pickup Ticket

3

Check out

4

Delivered to customer

5

Create Return Deliveries

6

Pickup Ticket

7

Check In

8

Inspection completed

Print

+ Create Delivery

Delivery ID	Total Quantity	Contract Start Date	Delivery Date	Action
O20240200018-1	28	2 Apr, 2024	3 Apr, 2024	
Items Information				
Sr No	Internal Id	Items	Quantity	
1	20315	Rental: 10" Plain Coupler	14	
2	20314	Rental: 10" Tapped Coupler	14	
O20240200018-2	28	2 Apr, 2024	3 Apr, 2024	
Items Information				
Sr No	Internal Id	Items	Quantity	
1	20313	Rental: 10" Tapped Coupler	28	



## Pick Up Ticket

### *Purpose:*

The "Pickup Ticket" screen is designed to manage and finalize the details of a delivery. It allows the user to set the pickup date, update the status of the delivery, and confirm the completion of the delivery process. This screen ensures that each delivery is properly documented and the status is accurately reflected in the system.

**Validation:** Immediate visual feedback is provided on actions (e.g., status updates), ensuring that all necessary fields are completed before moving forward.

### *Technical Specification:*

#### *Header Data:*

1. **Pick Up Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Loaded
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.

#### *Line Data:*

1. **Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Loaded
  - **Behavior:** Changing the status here updates only the specific line item selected.

### *Business Logic:*

- **Delivery Confirmation:**
  - Upon clicking "Next" for the first time, the delivery\_details table is updated to reflect the current state of the delivery.
  - Once the step is completed, no further updates are allowed on the table, and all fields that were previously editable become unchangeable.
  - **Confirmation Dialog:** A popup confirmation will appear when "Next" is clicked, confirming that the user is ready to complete the step.
- **Delivery Management:**
  - Each delivery must have a separate pick-up ticket.
  - Only one delivery can be managed per page to ensure clarity and prevent confusion.

## Check Out

### Purpose:

The "Check Out" screen is designed to finalize the details of a delivery as it is prepared to be sent out. This screen allows the user to confirm the checkout date, update the status of the delivery, and ensure that all quantities match the expected amounts before finalizing the process.

**Validation:** Immediate feedback is provided when quantities do not match the quantity from delivery ticket, preventing the user from proceeding without addressing the issue.

### Technical Specification:

#### Header Data:

1. **Check Out Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Check Out
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.

#### Line Data:

1. **Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Check Out

- **Behavior:** Changing the status here updates only the specific line item selected.
2. **Quantity:**
- **Type:** Free text
  - **Behavior:** If the quantity entered does not match the expected quantity (from the delivery), a warning is displayed to the user. The user cannot proceed until the discrepancy is resolved.

### Business Logic:

- **Delivery Confirmation:**
  - Upon clicking "Next" for the first time, the delivery\_details table is updated to reflect the current state of the delivery.
  - Once this step is completed, no further updates are allowed on the table, and all fields that were previously editable become unchangeable.
  - **Confirmation Dialog:** A popup confirmation will appear when "Next" is clicked, confirming that the user is ready to finalize the checkout.
- **Delivery Management:**
  - Each delivery must have a separate check-out ticket. Although the current example only demonstrates one delivery, this logic applies to all deliveries.
  - Only one delivery can be managed per page to ensure clarity and prevent confusion.

### Delivered to Customer

#### Purpose:

The "Delivered to Customer" screen finalizes the delivery process by confirming the delivery date and updating the status of the delivery. This step ensures that the delivery details are locked in, marking the items as delivered to the customer.

**Validation:** Immediate feedback if there are any mismatches or issues with the data entered.

### *Technical Specification:*

#### *Header Data:*

1. **Delivery Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Delivered
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.

#### *Line Data:*

1. **Quantity:**
  - **Type:** Free Text
  - **Behavior:** Prefilled from previous stages. If the quantity entered does not match the expected quantity (from the delivery), a warning is displayed to the user. The user can proceed with the discrepancy in quantity.
2. **Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Delivered
  - **Behavior:** Changing the status here updates only the specific line item selected.

#### *Business Logic:*

- **Delivery Confirmation:**
  - Upon clicking "Next" for the first time, the delivery\_details table is updated to reflect the current state of the delivery.
  - Once this step is completed, no further updates are allowed on the table, and all previously editable fields become unchangeable.
  - **Confirmation Dialog:** A popup confirmation will appear when "Next" is clicked, ensuring the user is ready to finalize the delivery.
- **Delivery Management:**
  - Each delivery has a separate "Delivered to Customer" entry. While this example demonstrates the process for one delivery, the same logic applies to all deliveries.
  - Only one delivery is managed per page to maintain clarity and prevent errors.

The screenshot displays the 'Pick Up Ticket' interface. At the top, a progress bar shows eight steps: 1. Create Delivery, 2. Pickup Ticket (active), 3. Check out, 4. Delivered to customer, 5. Create Return Deliveries, 6. Pickup Ticket, 7. Check in, and 8. Inspection completed. Below the progress bar, a 'GLOBAL STATUS' dropdown is set to 'Delivered'. The main section contains delivery details: Delivery ID (020240200008-1), Total Quantity (28), Contract Start Date (2 Apr, 2024), and Delivery Date (08/28/2024). A table titled 'Items Information' lists two items: 'Rental 10' Plain Coupler' and 'Rental 10' Tapped Coupler', both with a quantity of 14 and status 'Delivered'. Below this is an 'ATTACH DOCUMENTS' section with a text input field for comments. At the bottom, a table shows document entries with columns for DOCUMENTS, CREATED AT, and COMMENTS. The first entry is a 'File' icon, created on 20-05-2024, with a comment about farming pumps and pipes. Navigation buttons for 'Previous' and 'Next' are at the bottom right.

## Return Pick Up Ticket

### Purpose:

The "PickUp Ticket" screen facilitates the scheduling and confirmation of pickup dates for deliveries. This screen ensures that all relevant details regarding the pickup process are captured, and the status of each item in the delivery is appropriately managed.

**Validation:** Immediate feedback if there are any mismatches or issues with the data entered.

### Technical Specification:

#### Header Data:

1. **Pick Up Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Loaded
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.
3. **Removal Date:**
  - **Type:** Calendar selection
  - **Default:** Contract End Date
  - **Changeable:** Yes, through calendar input

#### Line Data:

1. **Status:**

- **Type:** Single selection dropdown
- **Options:** None, Loaded
- **Behavior:** Changing the status here updates only the specific line item selected.

### Business Logic:

- **Pickup Confirmation:**
  - Upon clicking "Next" for the first time, the delivery\_details table is updated to reflect the current state of the delivery.
  - Once this step is completed, no further updates are allowed on the table, and all previously editable fields become unchangeable.
  - **Confirmation Dialog:** A popup confirmation will appear when "Next" is clicked, ensuring the user is ready to finalize the pickup details.
- **Delivery Management:**
  - Each delivery has a separate "PickUp Ticket." While this example demonstrates the process for one delivery, the same logic applies to all deliveries.
  - Only one delivery is managed per page to maintain clarity and prevent errors.

The screenshot displays a delivery management interface. At the top, a progress bar shows eight steps: 1. Create Delivery, 2. Pickup Ticket, 3. Check out, 4. Delivered to customer, 5. Create Return Deliveries, 6. Pickup Ticket, 7. Check In, and 8. Inspection completed. Step 6 is currently active.

Below the progress bar, there is a "Print" button and a "GLOBAL STATUS" dropdown menu set to "None".

The main section displays two delivery records. The first record, OR20240200078-1, has a total quantity of 28 and a pickup date of 08/28/2024. It contains a table of items:

Sr No	Internal Id	Items	Quantity	Status
1	20335	Rental 10" Plain Coupler	34	None
2	20334	Rental 10" Tapped Coupler	34	None

The second record, OR20240200078-2, has a total quantity of 28 and a pickup date of 08/28/2024. It contains a table of items:

Sr No	Internal Id	Items	Quantity	Status
1	20333	Rental 10" Tapped Coupler	28	None

Below the delivery details, there is an "ATTACH DOCUMENTS" section with a text input field for "Add a comment".

At the bottom, there is a "SHOW 10" and "ENTRIES" link, a "DOCUMENTS" table with a "File" icon, a "CREATED AT" field showing "20-05-2024", and a "COMMENTS" section with a search bar and a text area containing the text: "Farming pumps and pipes are indispensable tools, ensuring efficient irrigation and water management. They're the lifeline of agriculture, delivering sustenance to crops, fostering growth, and... [Read More](#)".

At the bottom right, there are "Previous" and "Next" buttons.

### Check In

#### Purpose:

The "Check In" screen is designed to allow users to confirm the receipt of goods or items. This step ensures that all delivered items are accounted for and any discrepancies in quantities are addressed before finalizing the delivery process.

**Validation:** Instant feedback provided if the quantity does not match, as demonstrated in the screenshot.

### *Technical Specification:*

#### *Header Data:*

1. **Inspection Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Check In
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.

#### *Line Data:*

1. **Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Check In
  - **Behavior:** Changing the status here updates only the specific line item selected.
2. **Quantity:**
  - **Type:** Free text
  - **Validation:** If the quantity does not match the delivery quantity, a warning is displayed to the user.
  - **Behavior:** Allows the user to manually enter the quantity checked in.

#### *Business Logic:*

- **Check-In Confirmation:**
  - When "Next" is clicked for the first time, the delivery\_details table is updated to reflect the inspection's outcome.
  - After this step is confirmed, no further updates are allowed, and all previously editable fields become unchangeable.
  - **Confirmation Dialog:** A popup will confirm the user's intent to finalize the check-in, preventing accidental completion.
- **Delivery Management:**
  - Each delivery is associated with a separate "Check In" record. This documentation is focused on one delivery for demonstration purposes, but the logic applies universally across all deliveries.
  - Only one delivery is handled per page to maintain simplicity and prevent errors.

## Inspection

### Purpose:

The "Inspection Completed" screen finalizes the delivery process by allowing the user to verify and confirm the inspection of all delivered items. This step ensures that all items have been inspected, and their statuses are correctly recorded before closing the delivery process.

**Validation:** Instant feedback provided if the quantity does not match the quantity listed in the delivery, as demonstrated in the screenshot.

### Technical Specification:

#### Header Data:

1. **Inspection Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
2. **Global Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Loaded
  - **Behavior:** Changing this status updates the status of all line items displayed for the delivery.

#### Line Data:

1. **Status:**
  - **Type:** Single selection dropdown
  - **Options:** None, Loaded
  - **Behavior:** Changing the status here updates only the specific line item selected.
2. **Quantity:**



- **Type:** Free text
- **Validation:** If the quantity does not match the delivery quantity, a warning is displayed to the user.
- **Behavior:** Allows the user to manually enter the quantity inspected.

### Business Logic:

- **Inspection Confirmation:**
  - When "Submit" is clicked for the first time, the delivery\_details table is updated to reflect the inspection's outcome.
  - After this step is confirmed, no further updates are allowed, and all previously editable fields become unchangeable.
  - **Confirmation Dialog:** A popup will confirm the user's intent to finalize the inspection, preventing accidental completion.
- **Delivery Management:**
  - Each delivery is associated with a separate inspection record.
  - Only one delivery is handled per page to maintain simplicity and prevent errors.

### Stock Adjustment (valid for Check In and Inspection)

#### Purpose:

The "Stock Adjustment" screen is used during the Check-in and Inspection stages when there is a discrepancy between the delivered quantity and the quantity recorded in the system. This screen allows the user to adjust the stock levels accordingly before finalizing the check-in or inspection process.

#### Technical Specification:

#### Fields and Data Handling:

1. **Item Number:**

- **Type:** Preloaded, non-editable
- **Changeable:** No
- 2. **Location:**
  - **Type:** Preloaded, non-editable
  - **Changeable:** No
- 3. **Date:**
  - **Type:** Calendar selection
  - **Default:** Today's date
  - **Changeable:** Yes, through calendar input
- 4. **Current Quantity:**
  - **Type:** Preloaded, non-editable
  - **Source:** Loaded from the stock adjustment screen as current quantity to show the current warehouse stock
- 5. **Revised Quantity:**
  - **Type:** Auto-calculated
  - **Formula:** Current Quantity +/- (Plus Quantity or Minus Quantity)
  - **Behavior:** Reflects the updated stock level after adjustment
  - **Changeable:** No
- 6. **Plus Quantity:**
  - **Type:** Auto-calculated, pre-filled
  - **Source:** Based on user input during the Check-in or Inspection stage, reflects any addition to stock
- 7. **Minus Quantity:**
  - **Type:** Auto-calculated, pre-filled
  - **Source:** Based on user input during the Check-in or Inspection stage, reflects any deduction from stock
- 8. **Reason:**
  - **Type:** Single selection dropdown
  - **Options:** Set automatically based on the stage (e.g., "Check-in" or "Inspection")
- 9. **Comment:**
  - **Type:** Auto-populated, non-editable
  - **Source:** Set as the delivery number for reference

#### *Business Logic:*

- **Stock Adjustment Process:**
  - **Trigger:** This screen is accessed during the Check-in or Inspection process when a quantity discrepancy is detected.
  - **Data Update:** Upon completion and saving of the stock adjustment, the system updates the stock\_levels table with the revised quantity.
  - **Finalization:** After the stock adjustment is confirmed, the user can finalize the Check-in or Inspection process with the updated quantity for the specific delivery.
- **Validation and Confirmation:**

- **Reconciliation:** The system ensures the reconciliation on the quantity for specific rental stages reconciled with the stock adjustment.
- **Validation:** The system ensures that all required fields are filled and calculations are correct before allowing the user to save the adjustment.
- **Confirmation Dialog:** A popup window asks the user to confirm the stock adjustment before saving, preventing accidental changes.

×

PROJ016968 R1/2 : Stock Adjustment

ITEM NUMBER

20315

LOCATION

Colusa

DATE

08/29/2024

CURRENT QUANTITY

1593

REVISED QUANTITY

1589

PLUS QUANTITY

0

MINUS QUANTITY

4

REASON

Inspection

COMMENT

PROJ016968 R1/2

Cancel

Save

## Stock Adjustment

Stock Adjustment

Equipment ID

Equipment Material Group

Equipment Name

Location

Download Stock Adjustment Report CSV

Mass Stock Adjustment

Show 10 entries

EQUIPMENT ID	EQUIPMENT MATERIAL GROUP	EQUIPMENT NAME	QUANTITY	LOCATION	ACTION
17727	001	Rental 12" X 45" Aluminum Mainline		1508 Colusa	
17728	002	20" X 30" Steel Reinforced Pipe		2,487 Los Angeles	
17729	003	6" X 20" PVC Pipe		876 San Diego	
17730	004	18" X 50" Galvanized Steel Pipe		1,234 New York	
17731	005	6" X 10" Copper Pipe		345 Chicago	
17732	006	4" X 25" Fiber Optic Cable		987 Houston	
17733	007	10" X 15" Reinforced Concrete Pipe		762 Philadelphia	
17734	008	18" X 40" PVC Drainage Pipe		1,122 San Jose	
17735	009	24" X 10" Ductile Iron Pipe		542 San Diego	
17736	010	12" X 60" High-Density Polyethylene Pipe		1546 Miami	

Showing 1 to 10 of 15 entries

Previous

1

2

Next

## 1. Purpose

The Stock Adjustment screen is an integral part of the Laurel Rental Application. It is designed to provide real-time visibility into the current inventory levels across various warehouse locations. Users can make adjustments to the stock quantities for different pieces of equipment either individually or in bulk. The screen interacts closely with the stock\_adjustment database table, ensuring all changes are logged and immediately reflected in the interface.

## 2. User Interface (UI) Components

### 1.1 Filters and Search Panel

- *Equipment ID Filter:*
  - **Type:** Text Input
  - **Functionality:** Filters the displayed records by the specific equipment\_id.
  - **Validation:** Must match an equipment\_id existing in the warehouse\_product\_list table.
- *Equipment Material Group Filter:*
  - **Type:** Text Input
  - **Functionality:** Filters records by the equipment\_material\_group, allowing users to focus on specific categories.
  - **Validation:** Must match valid material group categories present in the system.
- *Equipment Name Filter:*
  - **Type:** Text Input
  - **Functionality:** Filters records by the name or description of the equipment.
  - **Validation:** Must match names as listed in the warehouse\_product\_list.
- *Location Filter:*
  - **Type:** Text Input
  - **Functionality:** Filters the displayed records by the warehouse or location name.
  - **Validation:** Must match a valid location name from the warehouse\_list table.
- *Search Box:*
  - **Type:** Global Search Input
  - **Functionality:** Provides a keyword search across all displayed fields, enabling quick access to specific records.

### 1.3 Action Buttons

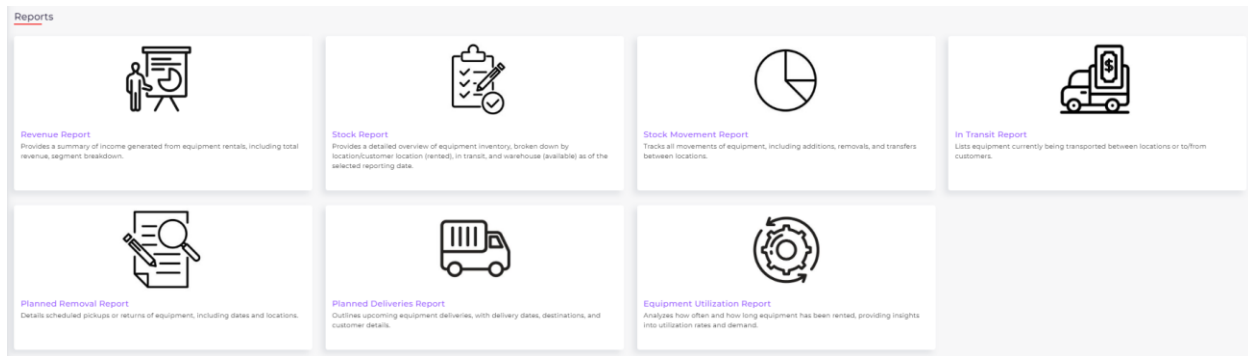
- *Mass Stock Adjustment Button:*
  - **Type:** Action Button
  - **Functionality:** Opens a bulk adjustment interface for modifying quantities of multiple equipment items across locations.
  - **Database Interaction:** Submits bulk changes to the stock\_adjustment table and refreshes the screen upon completion.
- *Stock Adjustment Report CSV Button:*
  - **Type:** Action Button
  - **Functionality:** Exports the current view of the stock adjustment data to a CSV file for offline use.
  - **Data Source:** Pulls from the currently displayed data in the table.
- *Action Column:*
  - **Type:** Action Buttons
  - **Functionality:** Opens a editor for adjusting the quantity of the selected equipment at the specified location.
  - **Database Interaction:** On submission, updates the stock\_adjustment table and refreshes the displayed data.

## 3. Business Logic

### 1.4 Validation and Error Handling

- *Validation:*
  - Equipment and location validations are performed both on the client-side and server-side to ensure data integrity.
  - Quantity fields are validated to ensure they contain positive integers, and the reasons for adjustments are verified against a list of predefined reasons.
- *Error Handling:*
  - User-friendly error messages are displayed in case of validation failures or system errors during the adjustment process.

# Reports



## 1. Revenue Report

### Overview:

The Revenue Report provides a detailed summary of income generated from equipment rentals, including total revenue segmented by customer, equipment, and rental duration. Users can filter the report by revenue period, customer name, and equipment material group to gain insights into the financial performance of their rental operations. This report is essential for tracking revenue streams, understanding customer contributions, and optimizing rental strategies.

### Key Features and Business Logic:

#### 1. Revenue Calculation:

- The report summarizes the total revenue generated from equipment rentals within the specified period. It accurately reflects the income for each month, ensuring that revenue is split correctly even when contracts span multiple months.
- **Business Logic:**
  - If the rental period (contract start and end dates) spans multiple months, the revenue is distributed evenly across the months. For example, if an order has a total value of \$10,000 for August to September, the report will show \$5,000 for each month when filtered separately.
  - The report calculates revenue based on the number of units rented, the price per unit, and the rental duration within the specified revenue period.

#### 2. Segment Breakdown:

- The report provides a breakdown of revenue by customer, equipment material group, equipment name, and rental duration, helping to identify key revenue drivers.
- **Business Logic:**
  - Segmenting revenue by these categories allows users to pinpoint which customers and equipment contribute most to the overall revenue, enabling more informed business decisions.
  - The rental duration is displayed in months, giving a clear picture of how long each equipment unit was rented, further aiding in assessing equipment utilization and profitability.

#### 3. Customer Insights:

- The report highlights the contribution of each customer to the total revenue, supporting targeted customer management.
- **Business Logic:**
  - By analyzing the revenue generated by each customer, businesses can focus on retaining high-value customers and improving relationships with those who contribute less.
  - The account manager responsible for each customer is also shown, which helps in evaluating the effectiveness of account management strategies.

#### *Business Logic and Special Considerations:*

- **Revenue Period Splitting:**
  - The revenue period filter splits the revenue according to the duration of the contract within the selected months. If an order spans multiple months, the revenue is divided equally among those months.
  - **Example:**
    - For an order with a total revenue of \$10,000 spanning August and September, the report will show \$5,000 for each month when filtered individually.
- **Data Integrity:**
  - Ensure that all referenced foreign keys (e.g., customer\_id, equipment\_id, account\_manager\_id) are valid and exist in their respective tables to avoid inconsistencies.
- **Export Functionality:**
  - The report can be exported as a CSV file, maintaining the filtered data and calculations as displayed on the screen.

#### *Use Case Example:*

- **Scenario:** A user wants to analyze the revenue generated in August 2024.
  - **Steps:**
    1. The user selects the revenue period as August 2024.
    2. The system retrieves orders with a contract start date before August 31, 2024, and an end date after August 1, 2024.
    3. The system calculates the revenue for each order within the specified period.
    4. The report is generated, showing each customer's contribution, the equipment involved, and the duration of the rental.

#### *Table Example:*

##### Filters

Users can select multiple options, and as they type the name of a customer or equipment, it will be displayed as a selectable option in a dropdown list.

- **Revenue Period:** Calendar filter option with ability to select date or date range.

- **Customer Name:** Dropdown with multi-select options. As the user types, available locations will be suggested.
- **Parent Equipment Group:** Dropdown with multi-select options. As the user types, available locations will be suggested.

The **Revenue Period** filter must be selected for the report to populate.

#### Date Fields

- **Revenue Period:** The period during which the revenue was generated.
- **Customer Name:** Name of the customer associated with the rental.
- **Order Number:** Unique identifier for the rental order.
- **Parent Equipment Group:**
- **Equipment ID:** Unique identifier for the equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **Quantity:** Number of units rented.
- **Price:** Price of unit rented.
- **Revenue:** Total revenue generated from the rental.
- **Rental Duration:** The duration for which the equipment was rented.
- **Account Manager:** The account manager responsible for overseeing the rental transactions

Filters: Revenue Period

Filters: Customer

Filters: Equipment Material Group

Calendar Selection

Dropdown with suggestions

Dropdown with suggestions

Customer Name	Order Number	Equipment Parent Group	Equipment ID	Equipment Name	Quantity	Price	Revenue	Rental Duration	Account Manager
ABC Corp	ORD12345	Bulldozer	EQ001	Bulldozer	50	10	\$500	120 days	John Smith
XYZ Inc.	ORD12346	Crane	EQ002	Crane	60	30	\$1,800	415 days	Eva Mark
DEF Ltd.	ORD12347	Generator	EQ003	Generator	100	1	\$100	90 days	John Smith
ABC Corp	ORD12348	Excavator	EQ004	Excavator	10	50	\$500	10 days	John Smith
XYZ Inc.	ORD12349	Forklift	EQ005	Forklift	21	71	\$1,491	600 days	Eva Mark
DEF Ltd.	ORD12350	Drill	EQ006	Drill	1	900	\$900	360 days	John Smith
ABC Corp	ORD12351	Backhoe	EQ007	Backhoe	65	3	\$195	176 days	Eva Mark
XYZ Inc.	ORD12352	Compactor	EQ008	Compactor	98	6	\$588	219 days	Eva Mark
DEF Ltd.	ORD12353	Loader	EQ009	Loader	45	15	\$675	100 days	John Smith
ABC Corp	ORD12354	Mixer	EQ010	Mixer	100	140	\$14,000	780 days	Eva Mark



## 2. Stock Report

### Overview

The Stock Report provides a comprehensive snapshot of the equipment inventory as of a specific date, segmented by location—customer, warehouse, and in transit. The report is designed to track the current status, location, and quantity of each equipment unit. This documentation outlines how the quantity for each location type (customer, in transit, available) is calculated, ensuring precise inventory management.

### *Business Logic and Report Features:*

- **Dynamic Date Filtering:**
  - The report supports filtering by a specific date to view inventory levels as of that date. The logic ensures that quantities are adjusted dynamically based on the selected date.
- **Status Tracking:**
  - Equipment status is precisely tracked using key dates (delivery, pick-up, check-in, check-out) to determine whether equipment is available, with customers, or in transit.
- **Location Accuracy:**
  - The report accurately identifies where each piece of equipment is located—be it a customer site, in transit, or in a warehouse—based on the selected date.
- **Quantity Precision:**
  - The report precisely calculates quantities at each location by summing up relevant data from orders and stock adjustments. This ensures accurate stock levels for effective inventory management.
- **Customer Location:**
  - When equipment is with a customer, the location reflects the customer's name, ensuring clear visibility into where rented equipment is situated.
- **Warehouse Location:**
  - Available equipment is linked to its warehouse name, providing a clear understanding of stock available for future rentals.

### *Table Example:*

#### Filters

Users can select multiple locations, statuses, or equipment name as they type the name of a location, it will be displayed as a selectable option in a dropdown list.

- **Date:** Calendar filter option with ability to select date or date range. (Past, current, or future dates)
- **Equipment Name:** Dropdown with multi-select options. As the user types, available locations will be suggested.
- **Location:** Dropdown with multi-select options. As the user types, available locations will be suggested.

The **Date** filter must be selected for the report to populate.

Data Fields

Users will have an overview of current inventory levels across locations, including the number of units available or rented.

- **Date:** The date on which we want to see stock inventory.
- **Equipment ID:** Unique identifier for each piece of equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **Location:** Current location of the equipment (e.g., customer site, warehouse, in transit).
- **Quantity:** Number of units rented, available or in transit.

Sample Report

Filters: Date      Filters: Equipment Name      Filters: Location

Calendar selection Dropdown with suggestions    Dropdown with suggestions

Date	Equipment ID	Equipment Name	Location	Quantity
2024-08-10	EQ001	Bulldozer	Customer Site 1	30
2024-08-10	EQ001	Bulldozer	Warehouse A	35
2024-08-10	EQ001	Bulldozer	In Transit	100
2024-08-10	EQ003	Generator	Customer Site 2	45
2024-08-10	EQ003	Generator	Warehouse A	0
2024-08-10	EQ003	Generator	In Transit	20
2024-08-10	EQ007	Backhoe	Customer Site 3	56
2024-08-10	EQ007	Backhoe	Customer Site 4	46
2024-08-10	EQ007	Backhoe	Warehouse C	0
2024-08-10	EQ007	Backhoe	Warehouse D	90
2024-08-10	EQ007	Backhoe	In Transit	0

3. Stock Movement Report

Overview

The Stock Movement Report provides a detailed record of all equipment movements within the organization, covering additions, removals, and transfers between locations. This report is critical for maintaining accurate inventory records, ensuring transparency in stock handling, and supporting audits of equipment movements. The report integrates data from both rental-related movements (tracked via the delivery process) and stock adjustments, providing a comprehensive view of all stock activities.

## Detailed Logic for Stock Movement Calculation

1. **Movement Identification:**
  - **Movement Types:** The report categorizes movements into several predefined types:
    - **Check-in:** Equipment is returned to the warehouse from a customer.
    - **Check-out:** Equipment is dispatched from the warehouse to a customer.
    - **Not Returned from Customer:** Equipment expected to be returned by a customer but not received.
    - **Inspection:** Equipment movements related to inspection processes.
    - **Purchase:** Additions to inventory through purchase.
    - **Warehouse (WH) Differences:** Discrepancies identified during stock audits or adjustments.
    - **Other:** Miscellaneous movements not covered by the above categories.
2. **Movement Tracking:**
  - **Inbound Movements:**
    - **Check-In:** Recorded when equipment is marked as checked in at the warehouse, as noted in the `delivery_table.check_in_date`.
    - **Purchase:** Recorded as inbound when equipment is added to stock via a purchase, logged in the `stock_adjustment_table`.
  - **Outbound Movements:**
    - **Check-Out:** Recorded when equipment is dispatched from the warehouse to a customer, based on the `delivery_table.check_out_date`.
    - **Not Returned from Customer:** Recorded if equipment is not returned by the customer on the expected pick-up date.
  - **Transfers:**
    - Equipment transfers between warehouses are tracked using `stock_adjustment_table` and are recorded as a transfer movement type.
3. **Data Merging:**
  - The report merges data from the `delivery_table` and `stock_adjustment_table` using:
    - **equipment\_id:** To match equipment records.
    - **movement\_date:** To track the date of each movement.
    - **movement\_type:** To categorize the movement appropriately.
4. **Reason for Movement:**
  - For each movement, the reason is recorded, providing context for the movement. This could include reasons like:
    - **Inspection:** Equipment was moved for inspection purposes.
    - **Not Returned from Customer:** Equipment was not returned as expected by the customer.
  - The reason is pulled directly from the `stock_adjustment_table.reason` or inferred from the `delivery_table` stage.
5. **User Accountability:**
  - The report captures details about the user who performed the movement, providing accountability for each action.
  - **Source:**

- For stock adjustments: stock\_adjustment\_table.movement\_done\_by.
- For deliveries/pick-ups: delivery\_table.check\_in\_by, delivery\_table.check\_out\_by.

### Table Example:

#### Filters

Users can select multiple pieces of equipment, and as they type the name of an equipment, it will be displayed as a selectable option in a dropdown list.

- **Date:** Calendar filter option with ability to select date or date range.
- **Equipment Name:** Dropdown with multi-select options. As the user types, available locations will be suggested.

The **Date** filter must be selected for the report to populate.

#### Data Fields

Users will have an overview of all equipment movements between locations, including the date and type of each movement, to track the transfer history and ensure timely and accurate stock management.

- **Date:** The date on which the movement occurred/or period during which the movements occurred.
- **Equipment ID:** Unique identifier for each piece of equipment.
- **Type:** Indicates whether the movement resulted in an increase or decrease in the stock quantity.
- **Quantity:** The number of units involved in the movement.
- **Movement Type:** Type of movement, such as rental, inspection et.
- **Warehouse Location:** The warehouse location of the equipment.
- **Note:** Additional details related to the movement, such as the delivery id for rental-related movements.
- **User:** The user responsible for executing the movement.

### Sample Report

Filters: Date

Filters: Equipment Name

Calendar Selection Dropdown with suggestions

Date	Equipment ID	Equipment Name	Type	Quantity	Movement Type	Warehouse Location	Reason	Movement done by
2024-08-10	EQ001	Bulldozer	Increase	2	Check in	Warehouse A	DEL-1	nnotova
2024-08-11	EQ001	Bulldozer	Decrease	202	Check out	Warehouse B		nnotova

2024-08-11	EQ001	Bulldozer	Decrease	809	WH differences	Warehouse A		nnotova
2024-08-12	EQ001	Bulldozer	Increase	20212	Purchase	Warehouse B		nnotova
2024-08-13	EQ001	Bulldozer	Decrease	200	not returned from customer	Warehouse D	DEL-1	nnotova
2024-08-15	EQ001	Bulldozer	Decrease	28	Inspection	Warehouse B		nnotova
2024-08-17	EQ001	Bulldozer	Decrease	411	Other	Warehouse C		nnotova
2024-08-17	EQ001	Bulldozer	Decrease	9	WH differences	Warehouse B		nnotova
2024-08-18	EQ001	Bulldozer	Decrease	10	Check out	Warehouse C	DEL-1	nnotova
2024-08-30	EQ001	Bulldozer	Increase	4082	Check in	Warehouse G		nnotova

## 5. In Transit Report

### Description:

The In Transit Equipment Report provides real-time tracking of equipment currently in transit between the company's warehouses and customers. This report is crucial for managing logistics, ensuring timely deliveries, and tracking the movement of equipment that has not yet been delivered to a customer or returned to the warehouse. The report can display equipment dispatched from the warehouse and not yet delivered or picked up from a customer and not yet checked back into the warehouse.

### Business Logic:

- **Identifying In-Transit Equipment:**
  - The report includes equipment records where:
    - **For outgoing deliveries:** The equipment has been checked out from a warehouse (dispatch\_date is set), but the delivery\_date is still NULL.
    - **For return deliveries:** The equipment has been picked up from a customer location, but the check\_in\_date at the warehouse is still NULL.
- **Location Handling:**
  - The from\_location and to\_location fields dynamically switch between customer and warehouse names based on the context of the delivery (whether it's being delivered to a customer or returned to the warehouse).
- **Dispatch and Expected Delivery Dates:**
  - The dispatch\_date is the date the equipment leaves the from\_location, marking the start of its in-transit status. The delivery\_date is expected but may be updated once the delivery is confirmed.
- **Filtering and Sorting:**
  - Users can filter the report based on from\_location, to\_location, equipment\_name, and dispatch\_date. This helps in pinpointing specific items in transit, understanding delays, or tracking equipment by date or location.

### Key Points:

- **Single Source of Truth:** The delivery\_details table serves as the primary source for identifying in-transit equipment, ensuring consistency across the report.
- **Flexible Location Identification:** The report dynamically adapts location fields based on the delivery type, offering clear insights into where equipment is coming from and going to.
- **Business Relevance:** The report is designed to assist logistics and warehouse managers in ensuring equipment is tracked efficiently, reducing the risk of misplaced or delayed items.
- **Custom Filters:** By allowing filters on from\_location, to\_location, equipment\_name, and dispatch\_date, the report empowers users to drill down into specific details and manage operations effectively.

### Table Example:

#### Filters

Users can select multiple locations (from/to), and as they type the name of a location, it will be displayed as a selectable option in a dropdown list.

- **From Location:** Dropdown with multi-select options. As the user types, available locations will be suggested.
- **To Location:** Dropdown with multi-select options. As the user types, available locations will be suggested.

No mandatory filters are required, as the report will automatically retrieve 'In Transit' items as of the current date.

#### Data Field

Users will have an overview of the equipment ship from and to specific location as of today, with information how many days is equipment in transit to track any delayed deliveries.

- **Equipment ID:** Unique identifier for each piece of equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **Customer Name:** Name of customer associated with the order.
- **Order Number:** Unique identifier for the order.
- **Delivery Number:** Unique identifier for tracking the delivery process.
- **From Location:** The location from which the equipment was dispatched.
- **To Location:** The destination location for the equipment.
- **Dispatch Date:** Date when the equipment was dispatched.

## Sample Report

Filters: From Location

Filters: To Location

Dropdown with suggestions Dropdown with suggestions

Equipment ID	Equipment Name	Customer Name	Order Number	Delivery Number	From Location	To Location	Dispatch Date
EQ001	Bulldozer	ABC Corp	ORD12345	DEL123	Warehouse A	Customer Site 1	2024-08-10
EQ002	Crane	XYZ Inc.	ORD12346	DEL124	Warehouse B	Customer Site 2	2024-08-11
EQ003	Generator	DEF Ltd.	ORD12347	DEL125	Warehouse A	Customer Site 3	2024-08-11
EQ004	Excavator	ABC Corp	ORD12348	DEL126	Warehouse C	Customer Site 4	2024-08-11
EQ005	Forklift	XYZ Inc.	ORD12349	DEL127	Warehouse D	Customer Site 1	2024-08-11
EQ006	Drill	DEF Ltd.	ORD12350	DEL128	Customer Site 1	Warehouse A	2024-08-11
EQ007	Backhoe	ABC Corp	ORD12351	DEL129	Customer Site 2	Warehouse B	2024-08-11
EQ008	Compactor	XYZ Inc.	ORD12352	DEL130	Customer Site 3	Warehouse A	2024-08-09
EQ009	Loader	DEF Ltd.	ORD12353	DEL131	Customer Site 4	Warehouse C	2024-08-10
EQ010	Mixer	ABC Corp	ORD12354	DEL132	Customer Site 1	Warehouse D	2024-08-12

## 6. Planned Removal Report

### Description:

The Planned Removal Report offers comprehensive insights into scheduled returns of equipment from customers, focusing exclusively on "return deliveries" where the equipment is being returned to the warehouse rather than directly to another customer. This report is designed to track equipment scheduled for pickup from customers based on the removal date, ensuring timely returns and optimal inventory management. The report only includes records where the `delivery_type` is "return" and `delivery_to_customer` is False.

### Business Logic and Data Handling:

#### 1. Return Deliveries Only:

- The report exclusively includes deliveries where `delivery_type` is "return" and `delivery_to_customer` is False. This ensures the report focuses solely on equipment returning to a warehouse, excluding any items that are being sent to another customer.

#### 2. Scheduled Removals:

- The report includes equipment records where the contract\_end\_date (used as the removal date) has been reached or is upcoming, and the equipment has not yet been picked up from the customer's location. This ensures that only equipment still awaiting removal is included in the report.

### 3. Exclusion of Completed Pickups:

- Equipment that has already been picked up from the customer (as indicated by a confirmed pickup\_date in the delivery\_details table) is excluded from this report. This prevents the inclusion of equipment that has already been returned to the warehouse.

### 4. Location Handling:

- The from\_location always references the customer\_list.customer\_name, representing the location from where the equipment is to be picked up.
- The to\_location references warehouse\_list.warehouse\_name, identifying the warehouse where the equipment is scheduled to be returned.

### 5. Date Handling:

- The removal\_date is directly derived from the contract\_end\_date in the order\_table. This date signifies when the equipment is expected to be removed from the customer's location.

### Key Points:

- **Source Identification:** Clear linkage of each report column to its corresponding table and field, ensuring that the report's structure is traceable and easily understandable.
- **Real-Time Monitoring:** Filters equipment by the current or future removal date and excludes any equipment that has already been picked up, allowing for accurate, real-time monitoring of equipment scheduled for removal.
- **Conditional Location Logic:** Uses business logic to determine whether the from\_location and to\_location should be based on customer or warehouse data, depending on the delivery type.

### Table Example:

#### Filters

Users can select multiple options, and as they type the name of a location or customer name, it will be displayed as a selectable option in a dropdown list.

- **Removal Date:** Calendar filter option with ability to select date or date range.
- **Customer Name: Dropdown** with multi-select options. As the user types, available locations will be suggested.
- **From Location: Dropdown** with multi-select options. As the user types, available locations will be suggested.

The **Removal Date** filter must be selected for the report to populate.

#### Data Fields

Users will have an overview of the equipment ship from and to specific location as of today, with information how many days is equipment in transit to track any delayed deliveries.

- **Removal Date:** The date when the removal is planned.



- **Customer Name:** Name of the customer from whom the equipment is to be removed.
- **Order Number:** Unique identifier for the order associated with the removal.
- **Equipment ID:** Unique identifier for the equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **From Location:** The location from which the equipment will be picked up.
- **To Location:** The destination location for the equipment after removal.
- **Quantity:** The quantity of equipment scheduled for removal.

Sample Report

Filters: Removal Date			Filters: Customer Name			Filters: From Location		
Calendar selection			Dropdown with suggestions			Dropdown with suggestions		
Removal Date	Customer Name	Order Number	Equipment ID	Equipment Name	Delivery Number	From Location	To Location	Quantity
2024-08-12	ABC Corp	ORD12345	EQ001	Bulldozer	DEL123	Customer Site 1	Warehouse A	2
2024-08-13	XYZ Inc.	ORD12346	EQ002	Crane	DEL124	Customer Site 2	Warehouse B	202
2024-08-11	DEF Ltd.	ORD12347	EQ003	Generator	DEL125	Customer Site 3	Warehouse A	809
2024-08-14	ABC Corp	ORD12348	EQ004	Excavator	DEL126	Customer Site 4	Warehouse C	20212
2024-08-12	XYZ Inc.	ORD12349	EQ005	Forklift	DEL127	Customer Site 1	Warehouse D	200
2024-08-14	DEF Ltd.	ORD12350	EQ006	Drill	DEL128	Customer Site 5	Warehouse B	28
2024-08-13	ABC Corp	ORD12351	EQ007	Backhoe	DEL129	Customer Site 6	Warehouse E	411
2024-08-12	XYZ Inc.	ORD12352	EQ008	Compactor	DEL130	Customer Site 7	Warehouse F	9
2024-08-11	DEF Ltd.	ORD12353	EQ009	Loader	DEL131	Customer Site 8	Warehouse C	10
2024-08-14	ABC Corp	ORD12354	EQ010	Mixer	DEL132	Customer Site 9	Warehouse G	4082

## 7. Planned Deliveries Report

### *Description:*

*The Planned Deliveries Report provides a comprehensive overview of upcoming equipment deliveries, focusing on deliveries where the delivery\_type is "delivery" or where delivery\_to\_customer is True. This report is crucial for managing and tracking equipment that is scheduled to be delivered to customers based on the contract start date. By ensuring that all planned deliveries are visible and managed efficiently, this report helps identify potential delays and optimize logistics.*

### *Business Logic and Data Handling:*

- **Inclusion Criteria:**
  - The report includes deliveries where delivery\_type is "delivery" or where delivery\_to\_customer is True. This ensures that the report focuses on equipment that is actively being delivered to customers, including both direct deliveries and deliveries as part of a return process where the equipment is sent directly to another customer.
- **Scheduled Deliveries:**
  - The report displays deliveries that are scheduled based on the contract\_start\_date from the order\_table. This date reflects when the equipment should arrive at the customer's location, allowing for precise tracking and management of delivery schedules.
- **Location Handling:**
  - The from\_location and to\_location fields are populated based on the source and destination of the delivery. For example, if the equipment is being delivered from a warehouse, from\_location will reference warehouse\_list.warehouse\_name. If it is being transferred from one customer directly to another, from\_location will reference the previous customer\_list.customer\_name, and to\_location will reflect the new customer's location.
- **Real-Time Data Accuracy:**
  - The report dynamically filters and displays only those deliveries that are planned within the specified delivery date range, ensuring that the information is up-to-date and actionable.

### *Key Points:*

- **Scheduled Deliveries Focus:** The report strictly includes planned deliveries where equipment is either being newly delivered to a customer or being transferred directly between customers without returning to a warehouse.
- **Location Management:** Accurately tracks the origin (from\_location) and destination (to\_location) of deliveries, whether they involve warehouses or direct customer-to-customer transfers.
- **Real-Time Monitoring:** Filters deliveries by the planned contract\_start\_date, ensuring the report reflects current and upcoming deliveries for effective planning and logistics management.

### Table Example:

#### Filters

Users can select multiple options, and as they type the name of a location or customer name, it will be displayed as a selectable option in a dropdown list.

- **Delivery Date:** Calendar filter option with ability to select date or date range.
- **Delivery Location: Dropdown** with multi-select options. As the user types, available locations will be suggested.
- **Customer Name: Dropdown** with multi-select options. As the user types, the available customer's name will be suggested.

The **Delivery Date** filter must be selected for the report to populate.

#### Data Fields

Users will have an overview of the equipment ship from and to specific location as of today, with information how many days is equipment in transit to track any delayed deliveries.

- **Delivery Date:** Date when the delivery is scheduled (coming from the contract start date).
- **Customer Name:** Name of the customer who will receive the equipment.
- **Order Number:** Unique identifier for the order associated with the delivery.
- **Equipment ID:** Unique identifier for the equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **Shipping Type:** Specifies whether the removal is handled by internal resources or a hired service.
- **From Location:** The location from where the equipment will be dispatched.
- **To Location:** The destination location for the equipment.
- **Quantity:** The quantity of equipment scheduled for delivery.

### Sample Report

Filters: Delivery Date

Filters: Customer Name

Filters: Delivery Location

Calendar selection

Dropdown with suggestions

Dropdown with suggestions

Delivery Date	Customer Name	Order Number	Equipment ID	Equipment Name	Delivery Number	From Location	To Location	Quantity
2024-08-12	ABC Corp	ORD12345	EQ001	Bulldozer	DEL123	Customer Site 1	Warehouse A	2
2024-08-13	XYZ Inc.	ORD12346	EQ002	Crane	DEL124	Customer Site 2	Warehouse B	202
2024-08-11	DEF Ltd.	ORD12347	EQ003	Generator	DEL125	Customer Site 3	Warehouse A	809
2024-08-14	ABC Corp	ORD12348	EQ004	Excavator	DEL126	Customer Site 4	Warehouse C	20212

2024-08-12	XYZ Inc.	ORD12349	EQ005	Forklift	DEL127	Customer Site 1	Warehouse D	200
2024-08-14	DEF Ltd.	ORD12350	EQ006	Drill	DEL128	Customer Site 5	Warehouse B	28
2024-08-13	ABC Corp	ORD12351	EQ007	Backhoe	DEL129	Customer Site 6	Warehouse E	411
2024-08-12	XYZ Inc.	ORD12352	EQ008	Compactor	DEL130	Customer Site 7	Warehouse F	9
2024-08-11	DEF Ltd.	ORD12353	EQ009	Loader	DEL131	Customer Site 8	Warehouse C	10
2024-08-14	ABC Corp	ORD12354	EQ010	Mixer	DEL132	Customer Site 9	Warehouse G	4082

## 8. Utilization Report

### Description:

The Equipment Utilization Report provides a detailed analysis of equipment usage, highlighting rental frequency, duration, revenue generated, and the proportion of time equipment spends in the warehouse versus rented out. This report is essential for understanding the efficiency of equipment utilization, optimizing rental operations, and maximizing revenue.

### Business Logic and Data Handling:

- Percentage Metrics Calculation:**
  - The % warehouse and % rented metrics are calculated using data from the stock report. The time the equipment spends in different statuses (e.g., in transit, rented, or available) is measured and converted into percentages. These percentages show the balance between equipment being available for rent (in the warehouse) and actually rented out.
- Rental Duration:**
  - The duration\_of\_use metric is calculated by finding the difference between the delivery\_date and the pickup\_date from the delivery\_details table. This value is then used to assess the total time the equipment was actively rented out during the reporting period.
- Revenue Allocation:**
  - If a rental period spans multiple months or the reporting period, revenue is split proportionally across those periods. For instance, if an order covers both August and September, and the total revenue is \$10,000, the report will allocate \$5,000 to each month, provided that both months are included in the report period.
- Paid Period Handling:**
  - The paid\_period reflects the contractual dates during which the equipment is billed. This column provides a clear distinction between the official billing period and the actual usage duration, which may differ due to early returns or extended rentals.

### Key Points:

- **Utilization Focus:** The report primarily tracks how long and how frequently equipment is used (rented) during the specified period.
- **Revenue and Efficiency Insights:** By combining utilization data with revenue and warehouse availability, the report provides comprehensive insights into the financial and operational efficiency of the equipment fleet.
- **Time-Based Analysis:** The use of both duration\_of\_use and paid\_period allows for a comparison between the actual rental duration and the period for which the customer is billed, highlighting any discrepancies or opportunities for optimizing rental contracts.

### Table Example:

#### Filters

Users can select multiple options, and as they type the name of an equipment or customer name, it will be displayed as a selectable option in a dropdown list.

- **Reporting Period:** Calendar filter option with ability to select date or date range.
- **Equipment Name: Dropdown** with multi-select options. As the user types, available locations will be suggested.
- **Customer Name: Dropdown** with multi-select options. As the user types, the available customer's name will be suggested.

The **Report Period** filter must be selected for the report to populate. influences metrics like **rental duration**, **paid period**, **revenue generated**, and percentage calculations to reflect utilization within the selected dates.

#### Data Fields

Users will have an overview of the equipment ship from and to specific location as of today, with information how many days is equipment in transit to track any delayed deliveries.

- **Reporting Date:** Defines the period for analyzing equipment usage.
- **Equipment ID:** Unique identifier for the equipment.
- **Equipment Name:** Descriptive name of the equipment.
- **Rental Duration:** Total time the equipment has been rented out during the selected period.
- **Revenue Generated:** Total revenue generated from the rental of the equipment.
- **Percentage in Warehouse:** Percentage of equipment in the warehouse.
- **Percentage Rented:** Percentage of the equipment that is currently rented out.
- **Paid Period:** The difference between the contract end date and the actual removal date, representing the paid period for the rental.

### Sample Report

Filters: Report Period

Calendar selection

Filters: Customer Name

Dropdown with suggestions

Filters: Equipment Name

Dropdown with suggestions

Equipment ID	Equipment Name	Duration of Use	Order Number	Revenue Generated	% Warehouse	% Rented	Paid Period
EQ001	Bulldozer	120 days	ORD12345	\$50,000	30%	70%	120 days
EQ002	Crane	15 days	ORD12346	\$100,000	70%	10%	12 days
EQ003	Generator	10 days.	ORD12347	\$20,000	10%	90%	9 days
EQ004	Excavator	90 days	ORD12348	\$13,000	12%	88%	70 days
EQ005	Forklift	34 days	ORD12349	\$75,000	49%	50%	34 days
EQ006	Drill	21 days.	ORD12350	\$21,000	7%	93%	20 days
EQ007	Backhoe	80 days	ORD12351	\$1,000	21%	59%	76 days
EQ008	Compactor	110 days	ORD12352	\$37,000	78%	12%	110 days
EQ009	Loader	170 days	ORD12353	\$45,000	13%	87%	180 days
EQ010	Mixer	14 days	ORD12354	\$77,000	68%	22%	7 days

## Page Name: Authorizations

User List

Show 10 entries

USER	EMAIL	CONTACT NUMBER	PERMISSION	ACTIONS
Amy Davis	amydavis@laurel.com	+17894562301	Create Order	<a href="#">Edit</a> <a href="#">Delete</a>
Chloe Rodriguez	chloerodriguez@laurel.com	+17654329870	Check In	<a href="#">Edit</a> <a href="#">Delete</a>
David Miller	davidmiller@laurel.com	+15678901234	Check In	<a href="#">Edit</a> <a href="#">Delete</a>
Emily Johnson	emilyjohnson@laurel.com	+19876543210	Stock Up	<a href="#">Edit</a> <a href="#">Delete</a>
Emma Wilson	emmawilson@laurel.com	+13456789012	Maintain Master Data Again	<a href="#">Edit</a> <a href="#">Delete</a>
Isabella Brown	isabellabrown@laurel.com	+19876543210	Stock Adjustment	<a href="#">Edit</a> <a href="#">Delete</a>
James Peter	jamespeter@laurel.com	+18014567890	Stock Adjustment	<a href="#">Edit</a> <a href="#">Delete</a>
John Williams	johnwilliams@laurel.com	+12098765432	Maintain Master Data	<a href="#">Edit</a> <a href="#">Delete</a>
Liam Martinez	liammartinez@laurel.com	+19876543210	Maintain Master Data	<a href="#">Edit</a> <a href="#">Delete</a>
Michael Brown	michaelbrown@laurel.com	+16504321098	Stock Adjustment	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 10 of 15 entries

Previous 1 2 Next

### 1. Purpose:

The User Management screen is designed for administrators to manage user accounts and their associated permissions within the rental process application. This page allows admins to add new users, edit existing users, and manage the permissions assigned to each user. Permissions correspond to specific tasks or roles in the application, and these permissions are stored in the permissions column of the user\_list table in the database.

### 2. UI Components

#### 2.1. User List Panel

Component: User Table

- *Position:* Central area of the screen.
- *Structure:*

- *Columns:*
  - **User:** Displays the name of the user.
  - **Email:** The user's email address.
  - **Contact Number:** The user's contact phone number.
  - **Permissions:** Displays the list of permissions assigned to the user, represented as tags.
  - **Actions:** Provides options to edit or delete the user.

Component: Actions Column

- *Position:* Rightmost column of the user table.
- *Interaction:*
  - **Edit Button:** Clicking this button opens the "Edit User" modal where the admin can change the user's name, email, contact number, and permissions.
  - **Delete Button:** Clicking this button prompts the admin to confirm the deletion of the user. If confirmed, the user is removed from the `user_list` table.

## 2.2. Add User Modal

Component: Add User Modal

- *Trigger:* Activated by clicking the "+ Add User" button located in the top right corner of the User Management screen.
- *Structure:*
  - Fields:
    - **User Name:** Input field for the user's full name.
    - **Email:** Input field for the user's email address.
    - **Contact Number:** Input field for the user's contact number.
  - Buttons:
    - **Close:** Closes the modal without saving changes.
    - **Save:** Saves the new user to the `user_list` table in the database.
- *Interaction:*
  - **Save Button:** When clicked, the system validates the input fields and then adds the new user to the database. The new user is displayed in the user table upon successful addition.

## 2.3. Edit User Modal





















Component: Edit User Modal

- *Trigger:* Activated by clicking the Edit button in the Actions column for a specific user.
- *Structure:*
  - Fields:
    - **User Name:** Input field pre-populated with the current user's name.
    - **Email:** Input field pre-populated with the current user's email address.

- **Contact Number:** Input field pre-populated with the current user's contact number.
- **User Permissions:** A dropdown field that allows the admin to add or remove permissions for the user. The dropdown is populated with available permissions, and only those permissions that the user does not already have are shown in the dropdown.
- Buttons:
  - **Close:** Closes the modal without saving changes.
  - **Save:** Updates the user's information and permissions in the user\_list table.
- Interaction:
  - **Adding Permissions:** Admins can start typing in the permissions field to filter and select additional permissions. Selected permissions are added as tags in the field and simultaneously updated in the permissions column in the database.
  - **Removing Permissions:** Each permission tag has an "x" button that, when clicked, removes the permission from the user. This action also updates the permissions column in the database.

User List





















Show 10 of 10 items

USER	EMAIL	CONTACT NUMBER	PERMISSION	ACTIONS
Amy Davis	amydavis@taunet.com	+17854623231	Change Email	 
Chloe Rodriguez	chloerodriguez@taunet.com	+17854623870	Change Email	 
David Miller	davidmiller@taunet.com	+1587851234	Change Email	 
Emily Johnson	emilyjohnson@taunet.com	+19876543210	Change Email	 
Emma Wilson	emmawilson@taunet.com	+15432198765	Change Email	 
Isabella Brown	isabellabrown@taunet.com	+19876543210	Change Email	 
James Peter	jamespeter@taunet.com	+16543210987	Change Email	 
John Williams	johnwilliams@taunet.com	+10987654321	Change Email	 
Liam Martinez	liammartinez@taunet.com	+19876543210	Change Email	 
Michael Brown	michaelbrown@taunet.com	+16543210987	Change Email	 

Showing 1 to 10 of 10 entries

User List

Show 10 of 10 items

USER	EMAIL	CONTACT NUMBER	PERMISSION	ACTIONS
Amy Davis	amydavis@taunet.com	+17854623231	Change Email	 
Chloe Rodriguez	chloerodriguez@taunet.com	+17854623870	Change Email	 
David Miller	davidmiller@taunet.com	+1587851234	Change Email	 
Emily Johnson	emilyjohnson@taunet.com	+19876543210	Change Email	 
Emma Wilson	emmawilson@taunet.com	+15432198765	Change Email	 
Isabella Brown	isabellabrown@taunet.com	+19876543210	Change Email	 
James Peter	jamespeter@taunet.com	+16543210987	Change Email	 
John Williams	johnwilliams@taunet.com	+10987654321	Change Email	 
Liam Martinez	liammartinez@taunet.com	+19876543210	Change Email	 
Michael Brown	michaelbrown@taunet.com	+16543210987	Change Email	 

Showing 1 to 10 of 10 entries

**Add User**

USER NAME:

EMAIL:

CONTACT NO:

Close Save























## Page Name: Workflow

User List

Show 10 entries

+ Add user

Search:

USER	EMAIL	CONTACT NUMBER	PERMISSION	ACTIONS
Amy Davis	amydavis@laurel.com	+17894562301	Create Order	 
Chloe Rodriguez	chloerodriguez@laurel.com	+17654329870	Check In Maintain Master Data	 
David Miller	davidmiller@laurel.com	+15678901234	Check In	 
Emily Johnson	emilyjohnson@laurel.com	+19876543210	Pick Up	 
Emma Wilson	emmawilson@laurel.com	+13456789012	Maintain Master Data Appra	 
Isabella Brown	isabellabrown@laurel.com	+19876543210	Stock Adjustment Maintain Master Data	 
James Peter	jamespeter@laurel.com	+18245456456	Stock Adjustment Create Order	 
John Williams	johnwilliams@laurel.com	+12098675432	Maintain Master Data	 
Liam Martinez	liammartinez@laurel.com	+19876543210	Maintain Master Data	 
Michael Brown	michaelbrown@laurel.com	+16504321098	Stock Adjustment Create Order	 

Showing 1 to 10 of 15 entries

Previous

1

2

Next

### 1. Purpose:

The Workflow Permissions page is designed for administrators to manage user roles and permissions related to the rental workflow process. This interface allows admins to assign users to specific stages of the rental workflow, ensuring that only authorized personnel receive relevant notifications and can act on them. When access is granted or removed for a task, the changes are reflected in the user\_list database table by updating the permissions column, which stores multiple role names separated by commas.

### 2. UI Components

#### 2.1. Workflow Permissions Panel

#### Component: Workflow Permissions Panel

- *Position:* Central and most prominent area of the screen.
  - *Adding Users:*
    - Clicking within the dropdown field opens an input area where the admin can start typing a user's name.
    - Autocomplete: As the admin types, a dropdown appears showing only users from the user\_list database table who are marked as active (active = True).
    - Selection: The admin can select a user from this list, and the user is then added as a tag within the dropdown. Upon selection, the corresponding permission name (representing the task) is added to the permissions column for that user in the user\_list table.
  - *Removing Users:*

- Each user tag has an “x” button that, when clicked, removes the user from the task assignment. Upon removal, the corresponding permission name is deleted from the permissions column for that user in the user\_list table.

## 2.2. User Assignment Tags

### Component: User Tags

- *Interaction:*
  - **Adding Tags:** Typing in the dropdown field triggers an autocomplete, and selecting a user from the dropdown adds them as a tag. This action also updates the permissions column for the user in the database to include the task name.
  - **Removing Tags:** Each tag has a clickable “x” to remove the user from the assignment. This action also updates the permissions column for the user in the database to remove the task name.

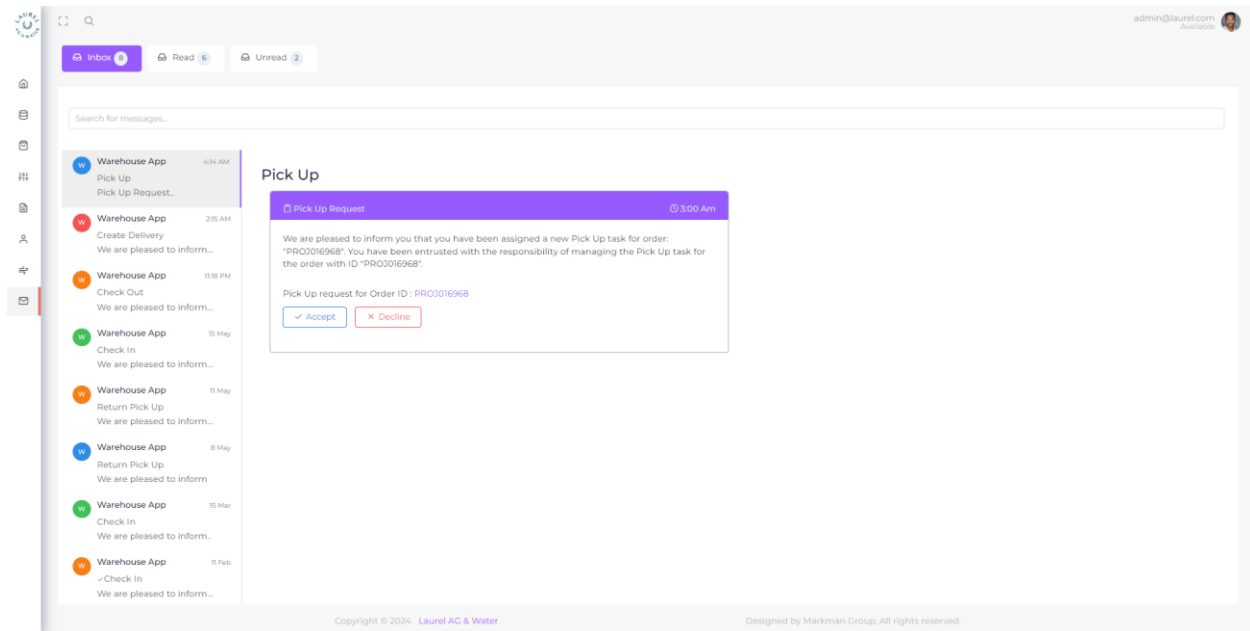
## 2.3. Task Management

- *Task List Structure:*
  - **Static Task List:** The tasks listed on the Workflow Permissions page are predefined and cannot be modified by the user.
  - **Task Order:** The tasks are displayed in the order they occur in the rental process, from initiation (e.g., "Create Order") to finalization (e.g., "Inspection").
  - **Expandable Rows (Future Consideration):** Each task row could be expanded to show additional details, such as the number of users assigned or a brief task description.

## 2.4. Access Control

- *Admin-Only Access:*
  - **Restrictions:** Only users with the admin role can access the Workflow Permissions page and make changes.
  - **Access Validation:** Before displaying the page, the system checks the user's role to ensure they have administrative privileges.
  - **Error Handling:** If a non-admin user attempts to access the page, they are redirected to the home screen or shown an access denied message.

## Page Name: Inbox



### 1. Purpose

The Inbox page is designed to efficiently manage and respond to various rental tasks communicated through system-generated messages. This interface enables users to access and act on messages related to different types of requests, each tailored to specific operational needs, ensuring a seamless workflow and enhancing user engagement with actionable insights.

### 3. Description

The UI components maintain the design structure focusing on navigation, message listing, and detail viewing, all of which are crucial for efficient task management and user interaction.

#### 1.2 Message List Panel

##### Component: Message List

- *Position:* Left side of the main content area.
- *Content:* A list of messages, each displaying:
  - *Icon:* An icon indicating the message type (e.g., delivery, pickup).
  - *Subject Line:* First line of the message (not full).
  - *Timestamp:* The time or date the message was received.
  - *Inbox/Read/Unread:* Option to filter messages
  - *Search:* A search box to search through the inbox e.g., by entering order id, etc.

### 1.3 Message Detail View

Component: Message Detail

- *Position*: Right side of the main content area.
- *Content*: Detailed information about the selected message, including:
  - *Header*: Message title and timestamp.
  - *Body*: Detailed message content.
  - *Action Buttons*: Relevant buttons like "Create Order", "Accept" etc. based on the message type.
  - *Hyperlinks*: Hyperlinked data such as Order IDs for quick navigation to detailed screens.

## 4. Message Types and User Interactions

### 2.1 Create Delivery Request

- *Purpose*: Initiates the creation of a new delivery order.
- *When*: Immediately upon order creation, with reminders sent 30 and 15 calendar days before the contract start date.
- *Control*: Notification not sent if deliveries created for full order amount/quantity.
- *Message Content*:
  - "Hello! A new delivery task awaits your expertise. Please review and create a delivery order for Order ID: [Hyperlinked Order ID]. We rely on your prompt action to keep things moving smoothly."
- *Action Buttons*:
  - *Create Delivery Order*: Directs the user to a form for creating a new delivery order. This action does not prefill any details, encouraging complete user-driven entry to ensure accuracy and detail adherence.
- *Hyperlinks*:
  - *Order ID*: Direct navigation to the order's detailed view for full context before proceeding.

### 2.2 Pick Up Request

- *Purpose*: Alerts the user to manage a pickup of goods.
- *When*: Immediately upon delivery order creation, with reminders sent 5 calendar days before, as well as on the contract start date.
- *Control*: Notification not sent if step completed.
- *Message Content*:
  - "You have been selected to manage a pickup for Delivery ID: [Hyperlinked Delivery ID]. Please confirm your availability and prepare to execute this task."
- *Action Buttons*:
  - *Accept*: Completes user consent to proceed, loading the pickup ticket step with all necessary details prefilled for quick action.

- *Review*: Navigate user to pick up stage without prefilled details.
- *Hyperlinks*:
  - *Delivery ID*: Direct navigation to the delivery's detailed view for full context before proceeding.

### 2.3 Check Out Request

- *Purpose*: Facilitates the checkout process for items ready for dispatch.
- *When*: Immediately upon delivery order creation, with reminders sent 5 calendar days before the contract start date, as well as on the contract start date.
- *Control*: Notification not sent if step completed.
- *Message Content*:
  - "A checkout task requires your attention for Delivery ID: [Hyperlinked Delivery ID]. Please ensure all items are accounted for and proceed to confirm the checkout."
- *Action Buttons*:
  - *Accept*: Navigates to a checkout screen with item details prefilled, ready for verification and confirmation.
  - *Review*: Navigate user to check out stage without prefilled details.
- *Hyperlinks*:
  - *Delivery ID*: Direct navigation to the delivery's detailed view for full context before proceeding.

### 2.4 Delivered to Customer Task

- *Purpose*: Confirms the successful delivery of items to a customer.
- *When*: Immediately upon delivery order creation, with reminders sent 5 calendar days before the delivery date, and again on the contract start date.
- *Control*: Notification not sent if step completed.
- *Message Content*:
  - "Please confirm the successful delivery of items for Delivery ID: [Hyperlinked Delivery ID]. Your confirmation is vital for our records and customer satisfaction."
- *Action Buttons*:
  - *Accept*: Leads to a confirmation screen with delivery details prefilled for final verification.
  - *Review*: Navigate user to delivered to customer stage without prefilled details.
- *Hyperlinks*:
  - *Delivery ID*: Direct navigation to the delivery's detailed view for full context before proceeding.

### 2.5 Create Return Deliveries Request

- *Purpose*: Manages the initiation of return deliveries from customers.
- *When*: Starting 30 and 15 calendar days before the contract end date.
- *Control*: Notification not sent if step completed.

- *Message Content:*
  - "A return delivery task has been initiated for Delivery ID: [Hyperlinked Delivery ID]. Please create the necessary documentation to process this return effectively."
- *Action Buttons:*
  - *Create Return Delivery:* Directs the user to a form for creating a new delivery order. This action does not prefill any details, encouraging complete user-driven entry to ensure accuracy and detail adherence.
  - *Review:* Navigate user to return delivery stage without prefilled details.
- *Hyperlinks:*
  - *Delivery ID:* Direct navigation to the delivery's detailed view for full context before proceeding.

## 2.6 Return Pickup Request

- *Purpose:* Manages the pickup of returned items from a customer.
- *When:* Five calendar days before and on the contract end date.
- *Control:* Notification is not sent if the step is completed and the return delivery is directed to the customer (refer to the rental process).
- *Message Content:*
  - "You are tasked with overseeing the pickup of returned items for Delivery ID: [Hyperlinked Delivery ID]. Please prepare and confirm when you are ready to proceed."
- *Action Buttons:*
  - *Accept:* Proceeds with a detailed task screen, prefilled with necessary pickup details to facilitate quick action.
  - *Review:* Navigate user to return pick up stage without prefilled details.
- *Hyperlinks:*
  - *Delivery ID:* Direct navigation to the delivery's detailed view for full context before proceeding.

## 2.7 Check In Request

- *Purpose:* Ensures the proper check-in of items into warehouse inventory.
- *When:* Five calendar days before and on the contract end date.
- *Control:* Notification is not sent if the step is completed and the return delivery is directed to the customer (refer to the rental process).
- *Message Content:*
  - "A check-in request has been issued for Delivery ID: [Hyperlinked Delivery ID]. Please verify all items and confirm their storage in our system."
- *Action Buttons:*
  - *Accept:* Navigates to a check-in screen with all relevant details prefilled for efficient processing.
  - *Review:* Navigate user to return check in stage without prefilled details.
- *Hyperlinks:*

- *Delivery ID*: Direct navigation to the delivery's detailed view for full context before proceeding.

## 2.8 Inspection Request

- *Purpose*: Calls for the inspection of items either returned or recently delivered.
- *When*: Five calendar days before and on the contract end date.
- *Control*: Notification is not sent if the step is completed and the return delivery is directed to the customer (refer to the rental process).
- *Message Content*:
  - "Your expertise is required for an inspection task concerning Delivery ID: [Hyperlinked Delivery ID]. Please review the items and provide your findings."
- *Action Buttons*:
  - *Accept*: Directs to an inspection detail screen with necessary information prefilled to assist in the inspection process.
  - *Review*: Navigate user to return inspection stage without prefilled details.
- *Hyperlinks*:
  - *Delivery ID*: Direct navigation to the delivery's detailed view for full context before proceeding.

## Appendix



Rental Process  
Laurel.pdf



rental app.docx