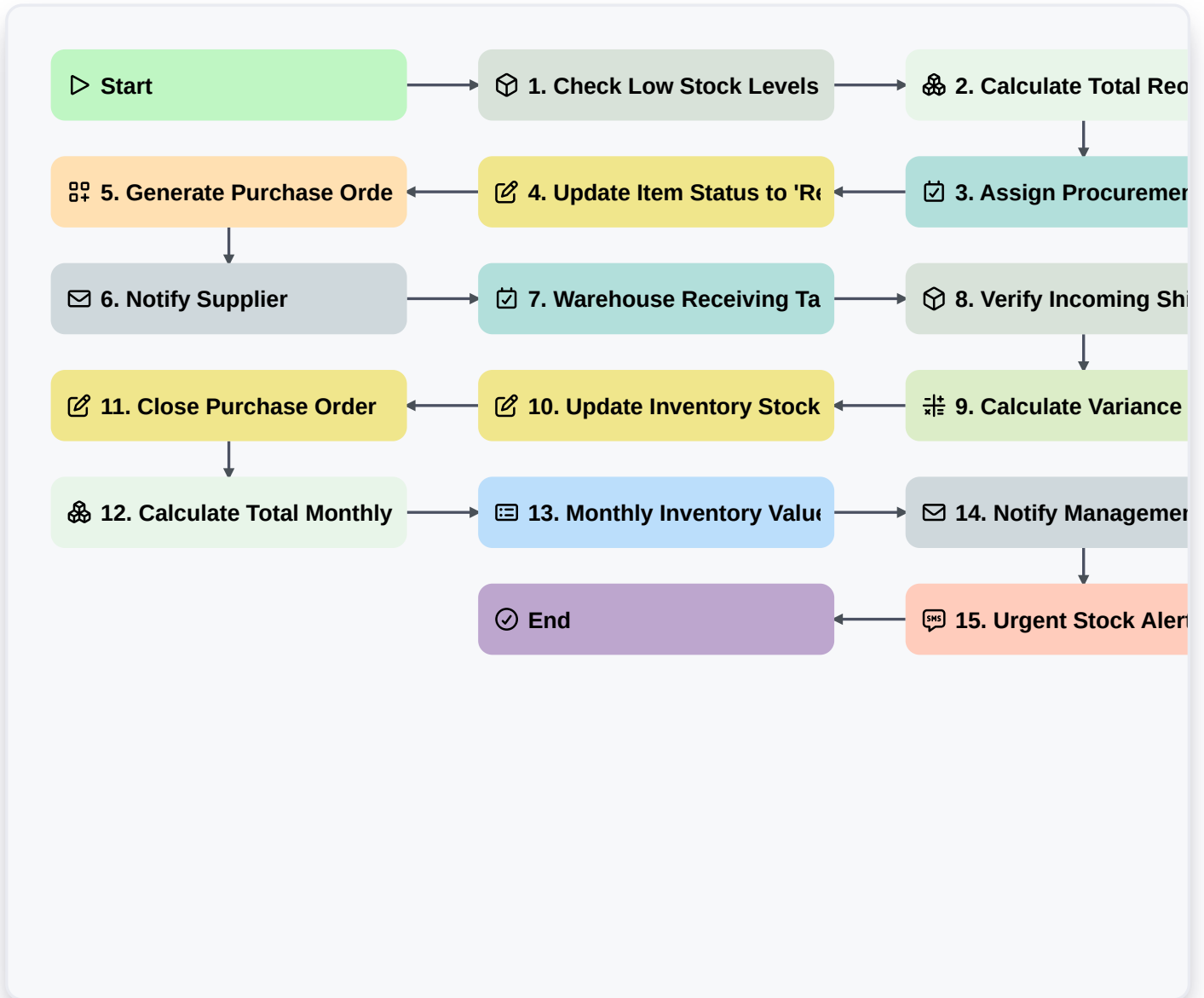


Inventory And Spare Parts Management Process



Start

Start of the Workflow/Process.

1. Check Low Stock Levels

Retrieve all items from the Inventory Data Model where current stock is below the defined reorder point.

2. Calculate Total Reorder Value

Sum the 'Unit Cost' of all items identified in the low stock list to determine the total procurement budget needed.

3. Assign Procurement Officer

Create a task for the Procurement Manager to review the identified low-stock items and approve the purchase.

4. Update Item Status to 'Reordering'

Change the status field of the selected inventory items to 'Reordering' to prevent duplicate purchase orders.

5. Generate Purchase Order

Create a new entry in the Purchase Order Data Model containing the selected items, quantities, and supplier info.

6. Notify Supplier

Send an email to the vendor's contact address with the details of the new Purchase Order.



7. Warehouse Receiving Task

Create a task for the Warehouse Clerk to inspect and receive the parts when the shipment arrives.

8. Verify Incoming Shipment

Retrieve the original Purchase Order data to compare against the physical items received.

9. Calculate Variance

Calculate the difference between the 'Ordered Quantity' and the 'Received Quantity' to identify discrepancies.

10. Update Inventory Stock Levels

Update the 'Quantity on Hand' in the Inventory Data Model by adding the newly received quantities.

11. Close Purchase Order

Update the status of the Purchase Order entry to 'Completed'.

12. Calculate Total Monthly Spend

Aggregate the total cost of all completed Purchase Orders for the current month for financial reporting.

13. Monthly Inventory Value Report

Generate a report showing the total value of all stock on hand and the turnover rate.

14. Notify Management

Send an email to the Operations Manager with the summary of the monthly inventory report.

15. Urgent Stock Alert

Send an SMS to the Warehouse Supervisor if a critical spare part (Safety Stock = 0) is detected.

End

End of the Workflow/Process.