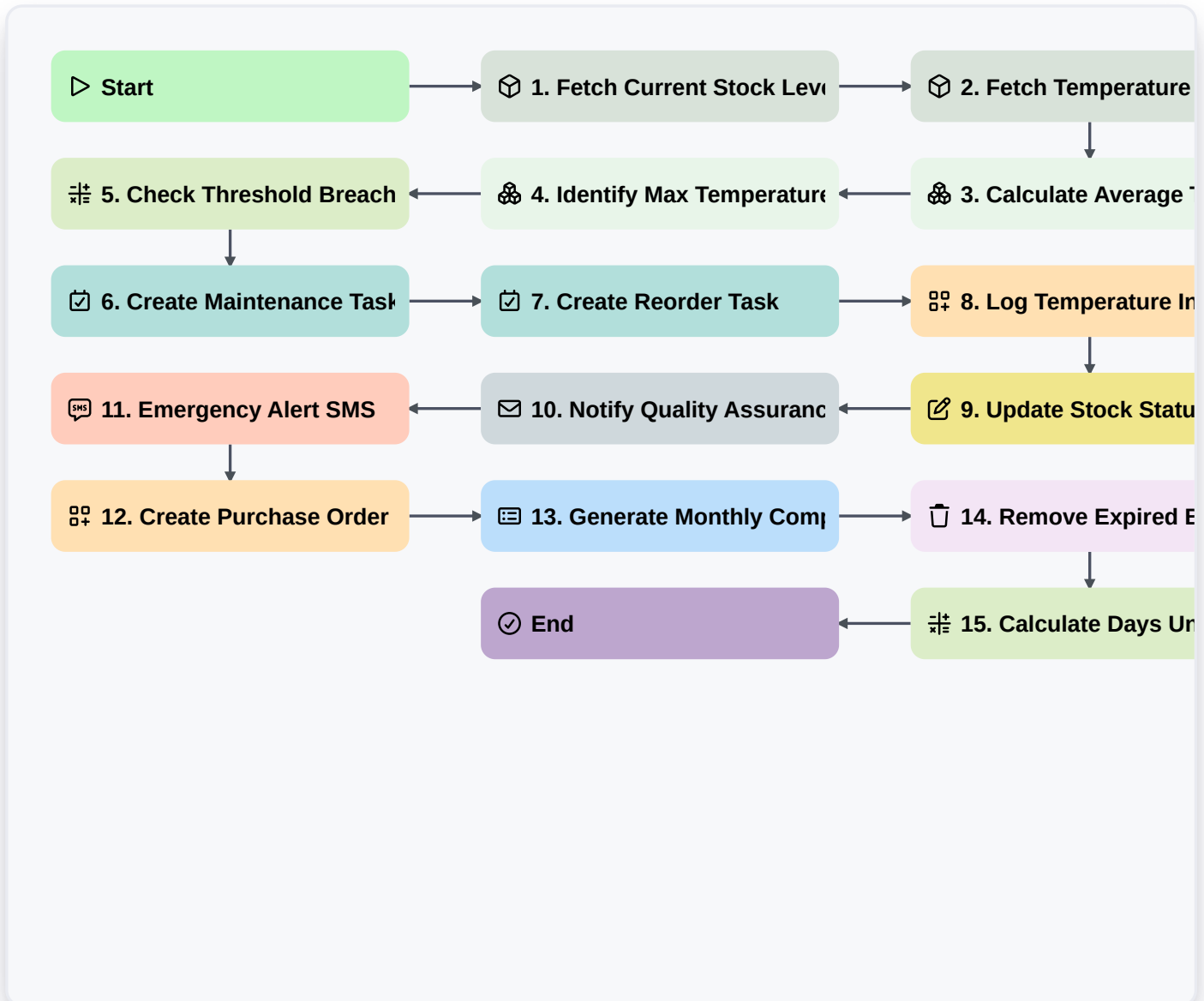


Inventory Management And Cold Chain Monitoring



▶ Start

Start of the Workflow/Process.

📦 1. Fetch Current Stock Levels

Retrieve all active entries from the Inventory Data Model to check current quantities.

📦 2. Fetch Temperature Logs

Retrieve recent sensor data entries from the Cold Chain Monitoring Data Model.

🔗 3. Calculate Average Temperature

Calculate the average temperature from the retrieved temperature logs to identify trends.

🔗 4. Identify Max Temperature Deviation

Find the maximum temperature value recorded in the last monitoring period.

⚠️ 5. Check Threshold Breach

Compare the Max Temperature against the pre-defined safety threshold for the specific product category.



6. Create Maintenance Task

Create a task for the Warehouse Manager if temperature excursions are detected.

7. Create Reorder Task

Create a task for the Procurement Officer when stock levels fall below the reorder point.

8. Log Temperature Incident

Create a new entry in the 'Incident Logs' data model when a cold chain breach occurs.

9. Update Stock Status

Update the 'Status' field in the Inventory Data Model to 'Quarantined' if a breach is detected.

10. Notify Quality Assurance

Send an email alert to the QA team containing the details of the temperature excursion.

11. Emergency Alert SMS

Send an urgent SMS to the On-call Technician if the temperature exceeds critical limits.

12. Create Purchase Order Draft

Create a new entry in the 'Purchase Orders' data model to replenish low stock.

13. Generate Monthly Compliance Report

Create a summary report showing all temperature stability logs for regulatory compliance.

14. Remove Expired Batch

Delete or archive entries from the 'Active Inventory' model once a batch is marked as expired.

15. Calculate Days Until Expiry

Subtract the current date from the 'Expiry Date' field in the inventory entry.

End

End of the Workflow/Process.