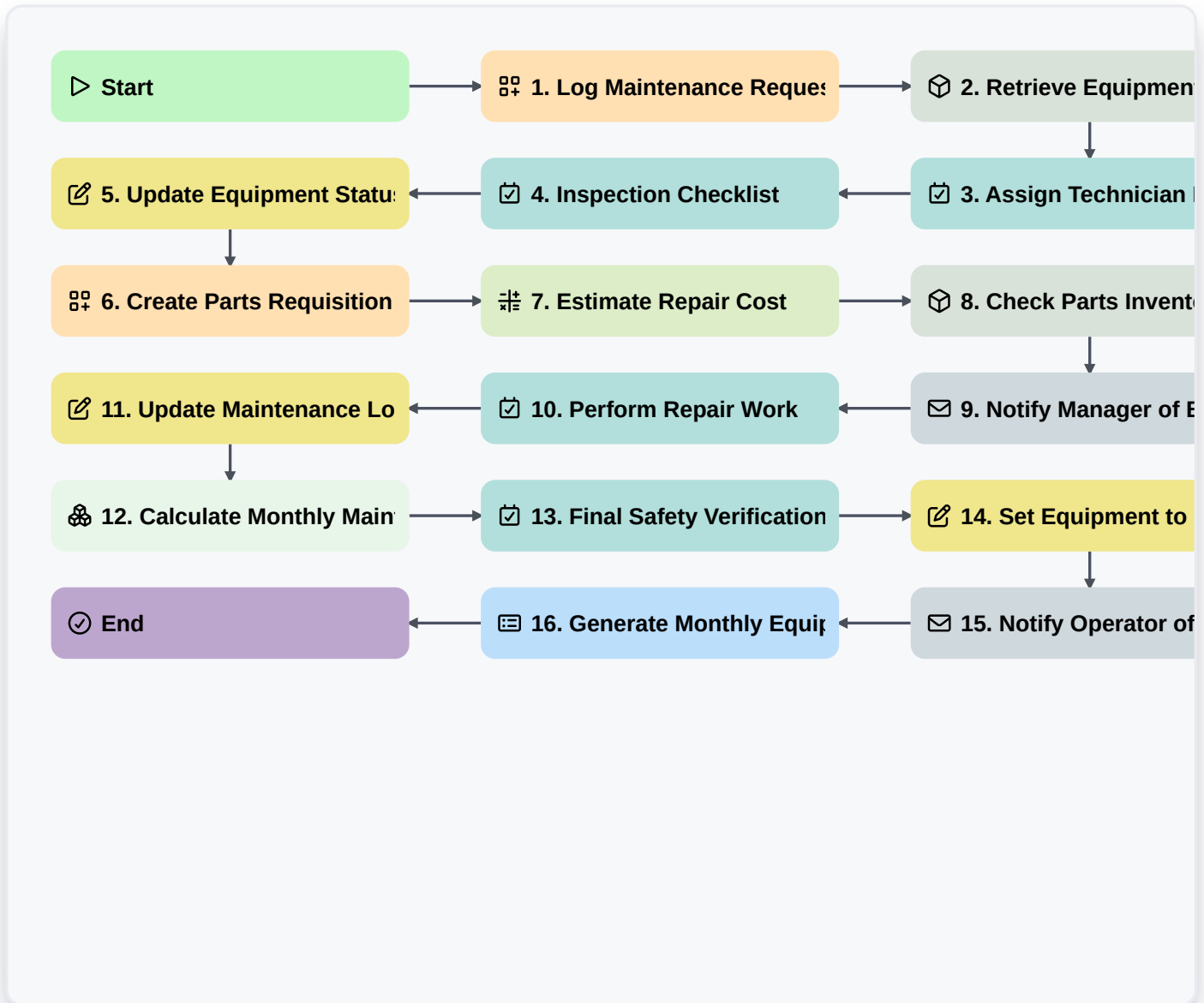


Farm Equipment Maintenance And Repair Process



▶ Start

Start of the Workflow/Process.

🛠️ 1. Log Maintenance Request

Create a new entry in the Maintenance Request data model to initiate the repair process.

📦 2. Retrieve Equipment Profile

Fetch equipment details (model, age, service history) from the Equipment data model based on the ID provided in the request.

👤 3. Assign Technician Inspection

Create a task for the assigned technician to perform a physical inspection of the identified equipment.

📝 4. Inspection Checklist

A set of sub-tasks within the inspection task: Check hydraulic fluids, inspect tire pressure, check engine oil, and inspect battery terminals.



5. Update Equipment Status

Update the 'Status' field in the Equipment data model to 'Under Repair' once inspection begins.

6. Create Parts Requisition

Create a new entry in the Parts Order data model for any components identified as damaged during inspection.

7. Estimate Repair Cost

Calculate the total estimated cost by summing the price of parts and the estimated labor hours multiplied by the technician's hourly rate.

8. Check Parts Inventory

Query the Inventory data model to check if the required parts are currently in stock.

9. Notify Manager of Budget Overrun

Send an email to the Farm Manager if the calculated repair cost exceeds the predefined maintenance budget threshold.

10. Perform Repair Work

Create a task for the technician to execute the mechanical repairs using the identified parts.

11. Update Maintenance Log

Update the Maintenance Log entry with the completion date, parts used, and total cost incurred.

12. Calculate Monthly Maintenance Spend

Aggregate all completed maintenance entries for the current month to sum the total expenditure.

13. Final Safety Verification

Create a task for a supervisor to verify that the equipment is safe to return to the field.

14. Set Equipment to 'Operational'

Update the status in the Equipment data model to 'Operational' after safety verification is passed.

15. Notify Operator of Availability

Send an email to the equipment operator notifying them that the machine is ready for use.

16. Generate Monthly Equipment Health Report

Create a summary report containing downtime statistics and frequent failure points for the month.

End

End of the Workflow/Process.