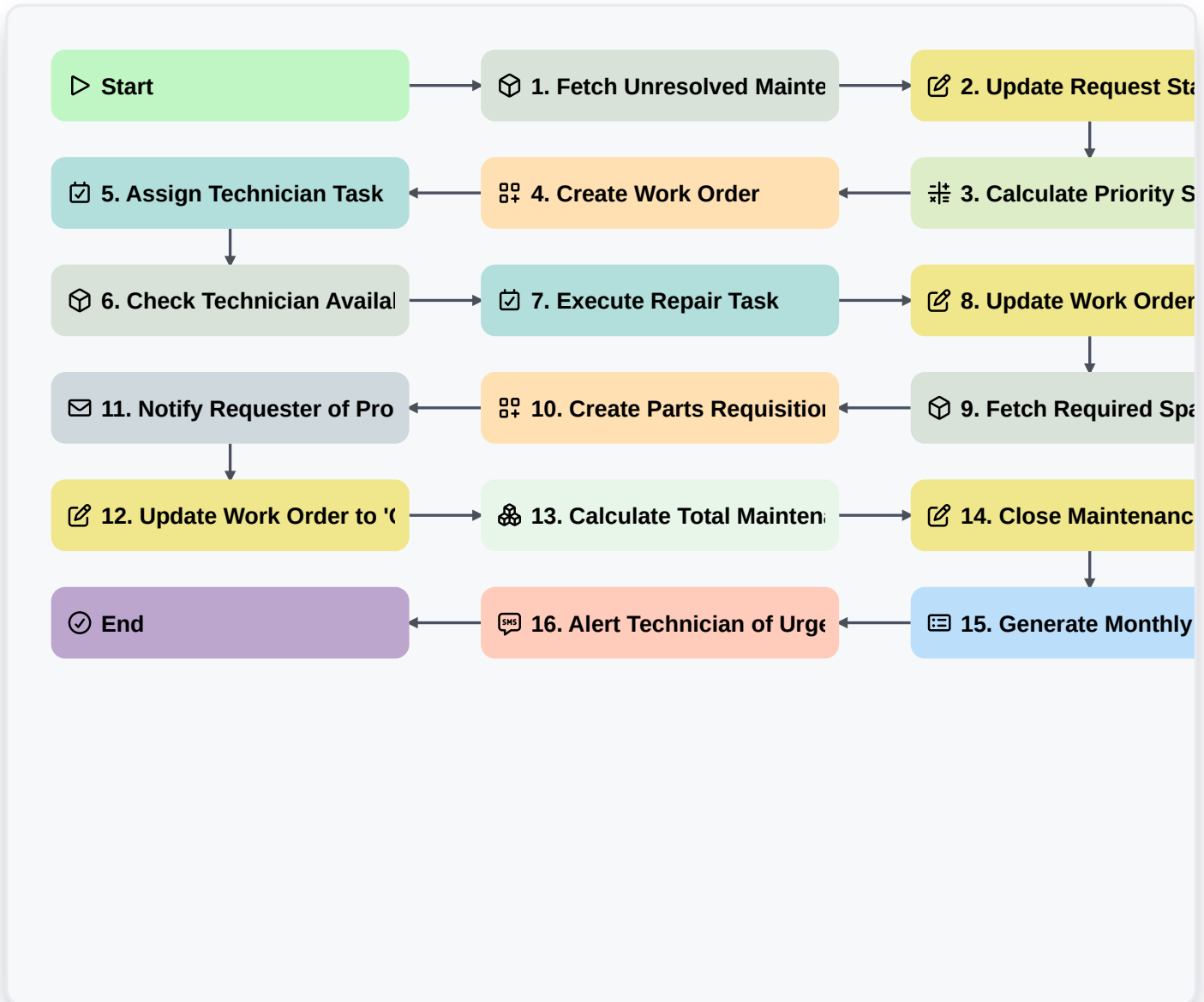


Maintenance Backlog Management Process



Start

Start of the Workflow/Process.

1. Fetch Unresolved Maintenance Requests

Retrieve all entries from the Maintenance Request data model where status is 'New' or 'Pending'.

2. Update Request Status to 'In Review'

Update the status of the selected maintenance entry to indicate the triage process has started.

3. Calculate Priority Score

Calculate priority based on $(\text{Asset_Criticality} * \text{Impact_Severity}) / \text{Time_Since_Reported}$.

4. Create Work Order

Generate a new entry in the Work Order data model linked to the original Maintenance Request.

5. Assign Technician Task

Create a task assigned to the Maintenance Lead to review and assign the new Work Order to a technician.

6. Check Technician Availability

Get entries from the User/Staff data model to check for available technicians with the required skills.



7. Execute Repair Task

Create a task for the assigned technician containing the repair checklist and instructions.

8. Update Work Order to 'In Progress'

Update the Work Order status when the technician starts the assigned task.

9. Fetch Required Spare Parts

Retrieve entries from the Inventory data model to verify if parts needed for the repair are in stock.

10. Create Parts Requisition

If parts are missing, create a new entry in the Purchase Request data model.

11. Notify Requester of Progress

Send an automated email to the original requester notifying them that their request is being processed.

12. Update Work Order to 'Completed'

Update the Work Order status once the technician completes the task and the checklist is verified.

13. Calculate Total Maintenance Cost

Sum the 'Cost' property from all related parts and labor entries associated with the Work Order.

14. Close Maintenance Request

Update the original Maintenance Request status to 'Closed'.

15. Generate Monthly Backlog Report

Create a report summarizing total open work orders, average resolution time, and total costs incurred.

16. Alert Technician of Urgent Task

Send an SMS notification to the technician when a high-priority repair task is assigned.

End

End of the Workflow/Process.