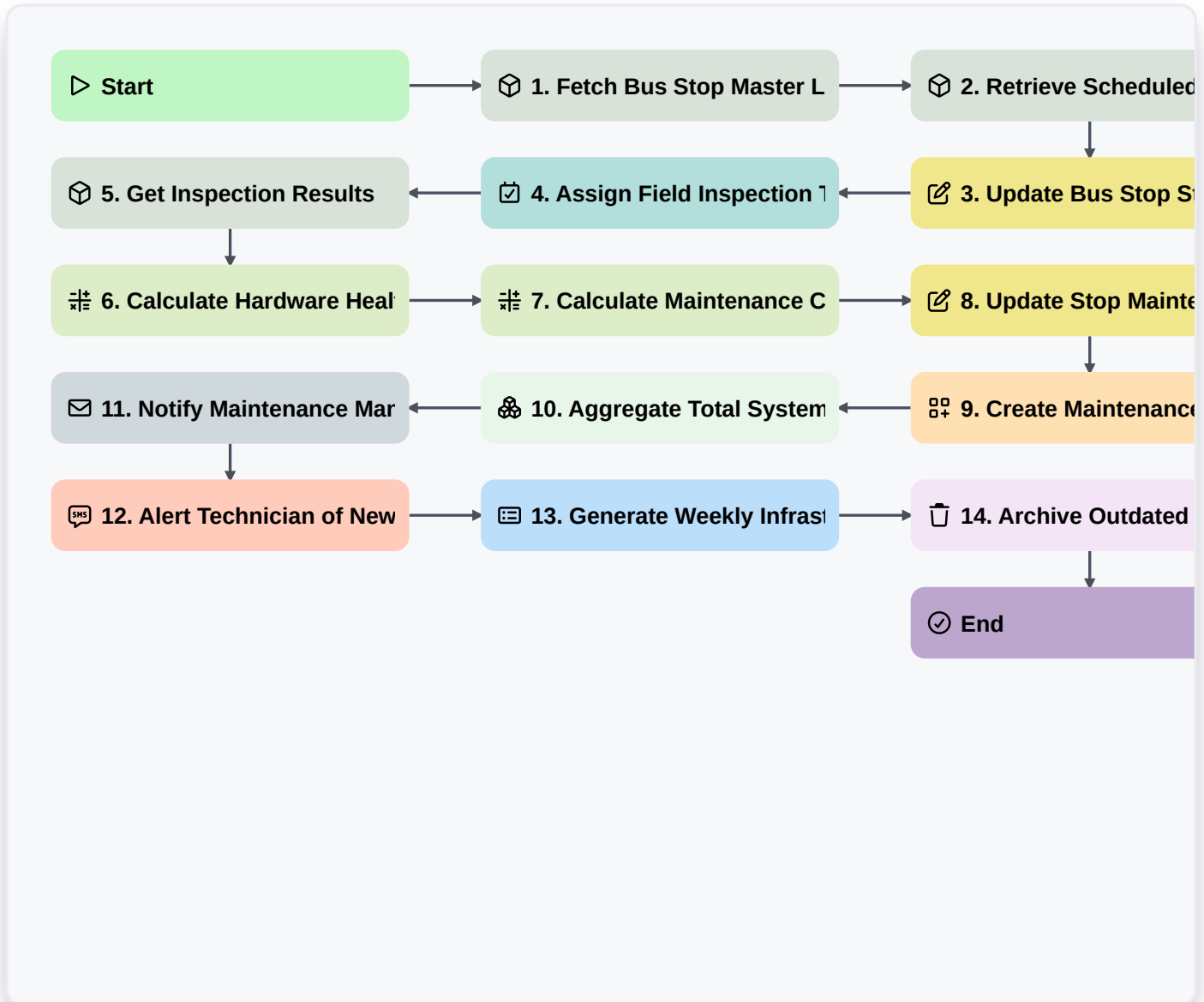


Smart Bus Stop Information Update Process



▷ Start

Start of the Workflow/Process.

📦 1. Fetch Bus Stop Master List

Retrieve all active bus stop records from the Bus Stop Data Model to identify which stops require updates.

📦 2. Retrieve Scheduled Maintenance Data

Get recent maintenance logs to identify stops that have undergone hardware or signage changes.

✍️ 3. Update Bus Stop Status

Update the status of specific bus stops to 'Under Review' once the update process has been triggered.

☑️ 4. Assign Field Inspection Task

Create a task for the Field Technician to physically verify the information displayed at the bus stop.

📦 5. Get Inspection Results

Fetch the data entered by the technician via the inspection form (e.g., screen brightness, physical damage, connectivity).

🔢 6. Calculate Hardware Health Score

Apply a formula to the inspection metrics (e.g., $\text{connectivity \%} * 0.6 + \text{screen_integrity} * 0.4$) to determine urgency.



7. Calculate Maintenance Cost Estimate

Calculate the estimated cost of repairs based on the detected hardware damage and labor rates.

8. Update Stop Maintenance Record

Update the specific Bus Stop entry with the new inspection findings and health score.

9. Create Maintenance Work Order

If the health score is below a certain threshold, create a new entry in the Maintenance Work Order data model.

10. Aggregate Total System Health

Sum and average the health scores of all bus stops to provide a high-level overview of the network status.

11. Notify Maintenance Manager

Send an email to the manager containing the summary of stops that failed inspection and require immediate repair.

12. Alert Technician of New Task

Send an SMS to the assigned technician to notify them that a new inspection task is pending in their queue.

13. Generate Weekly Infrastructure Health Report

Generate a formal report aggregating all completed updates and maintenance needs for the week for stakeholders.

14. Archive Outdated Info

Delete or move obsolete temporary maintenance notes from the data model once the update is finalized.

End

End of the Workflow/Process.