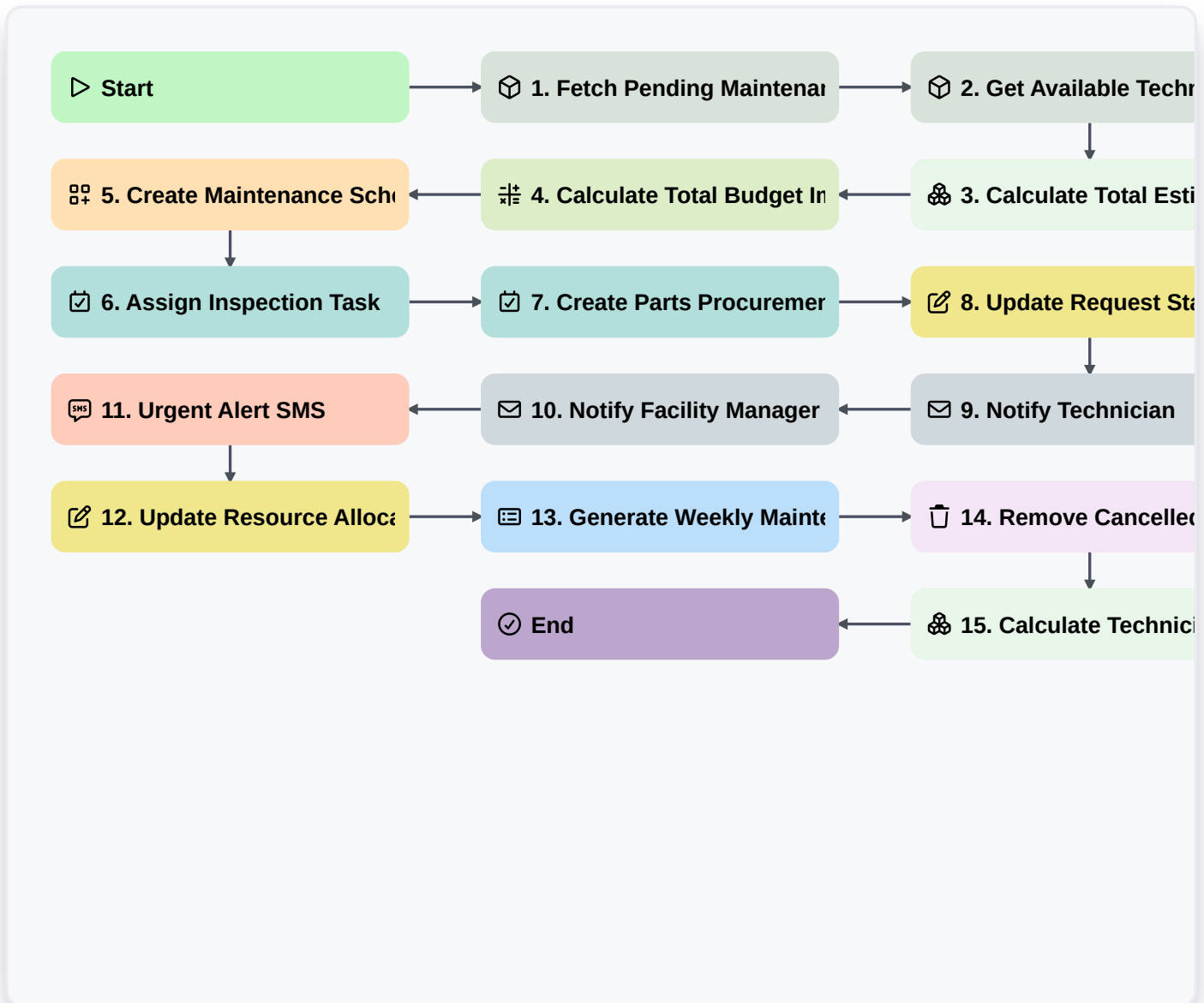


Maintenance Resource Planning Workflow



Start

Start of the Workflow/Process.

1. Fetch Pending Maintenance Requests

Retrieve all entries from the Maintenance Request data model with a status of 'Pending'.

2. Get Available Technicians

Retrieve entries from the Staff data model where role is 'Technician' and status is 'Available'.

3. Calculate Total Estimated Cost

Sum the 'estimated_parts_cost' and 'estimated_labor_cost' from the selected maintenance requests.

4. Calculate Total Budget Impact

Calculate the total cost including a 10% contingency buffer ($Total_Cost * 1.10$).

5. Create Maintenance Schedule

Create a new entry in the Maintenance Schedule data model with the assigned technician and date.

6. Assign Inspection Task

Create a task for the assigned Technician to perform the initial site inspection.



7. Create Parts Procurement Task

Create a task for the Procurement Officer to order necessary parts identified in the request.

8. Update Request Status to 'Scheduled'

Update the status field of the original Maintenance Request to 'Scheduled'.

9. Notify Technician

Send an email to the assigned technician with the details of the new maintenance task and schedule.

10. Notify Facility Manager

Send an email notification to the Facility Manager confirming that the maintenance has been scheduled.

11. Urgent Alert SMS

Send an SMS to the technician if the maintenance priority is set to 'Emergency'.

12. Update Resource Allocation

Update the Technician's data model entry to change their status from 'Available' to 'Busy'.

13. Generate Weekly Maintenance Forecast

Create a summary report of all scheduled maintenance activities for the upcoming week.

14. Remove Cancelled Requests

Delete entries from the Maintenance Request model that have been marked as 'Duplicate' or 'Invalid'.

15. Calculate Technician Utilization

Calculate the average number of assigned tasks per technician to monitor workload.

End

End of the Workflow/Process.