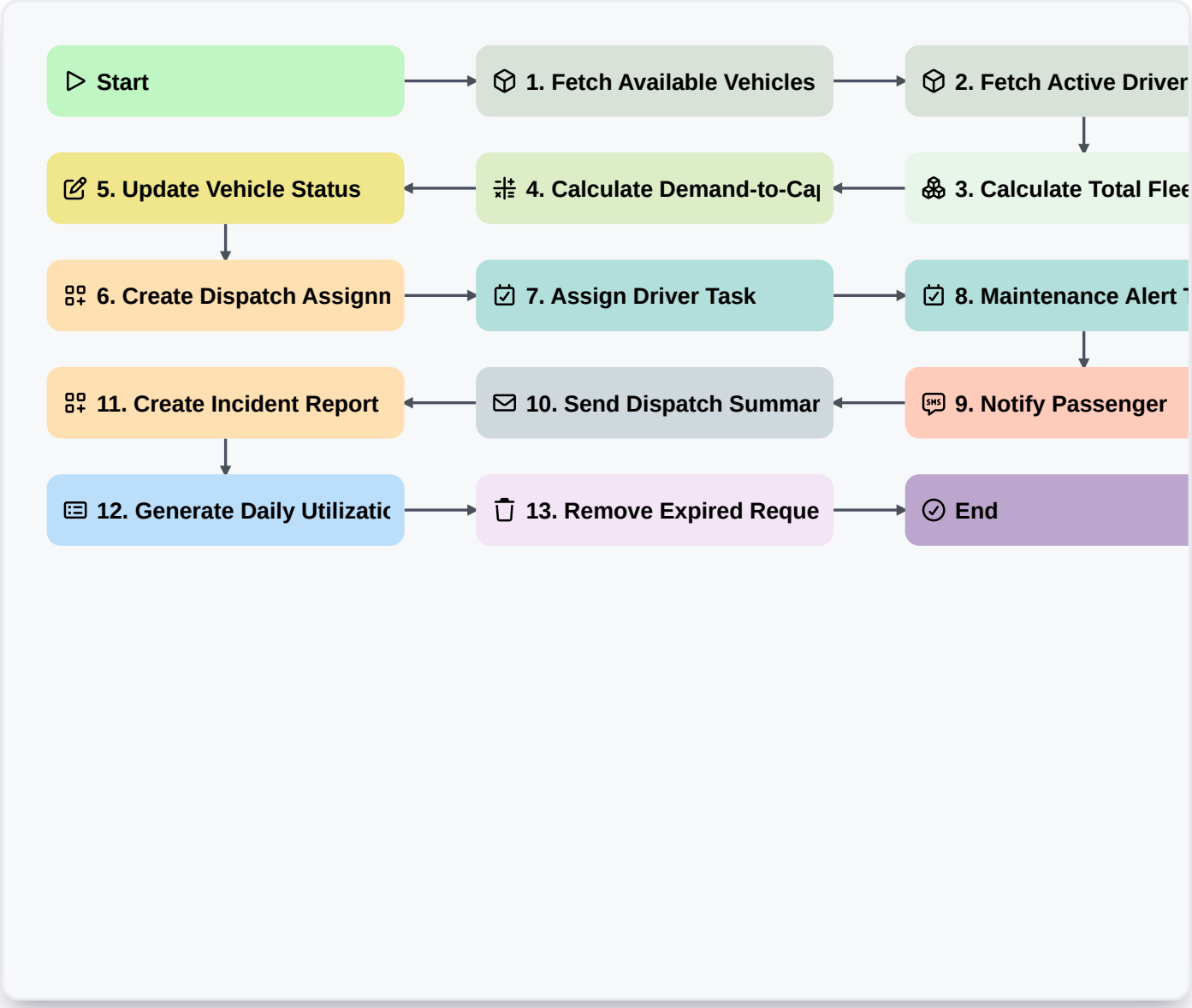
ChecklistGuro

Public Transport Resource Allocation And Dispatching



Start
Start of the Workflow/Process.

1. Fetch Available Vehicles
Retrieve all vehicle entries from the Fleet Data Model where status is 'Available' and capacity meets requirements.

2. Fetch Active Driver Requests
Retrieve all pending dispatch requests from the Service Requests Data Model.

3. Calculate Total Fleet Capacity
Sum the total passenger capacity of all currently available vehicles to determine if the fleet can meet demand.

4. Calculate Demand-to-Capacity Ratio
Divide the total number of passengers in pending requests by the total available fleet capacity to determine urgency.

5. Update Vehicle Status
Change the status of the selected vehicle from 'Available' to 'In Transit' or 'Assigned'.

6. Create Dispatch Assignment
Create a new entry in the Dispatch Log linking a specific Vehicle ID to a specific Request ID.

7. Assign Driver Task
Create a task for the assigned driver containing the route details and pickup location.

8. Maintenance Alert Task
Create a task for the Fleet Manager if the vehicle's mileage exceeds the threshold after the trip.

9. Notify Passenger
Send an SMS to the passenger's phone number confirming the vehicle type and estimated arrival time.

10. Send Dispatch Summary
Send an email to the Operations Supervisor with a summary of all completed dispatches for the shift.

11. Create Incident Report
Create a new entry in the Incident Data Model if a delay or breakdown is reported during the process.

12. Generate Daily Utilization Report
Create a performance report summarizing vehicle uptime and total trips completed during the 24-hour period.

13. Remove Expired Requests
Delete service requests from the queue that have exceeded their maximum wait time threshold.

End
End of the Workflow/Process.