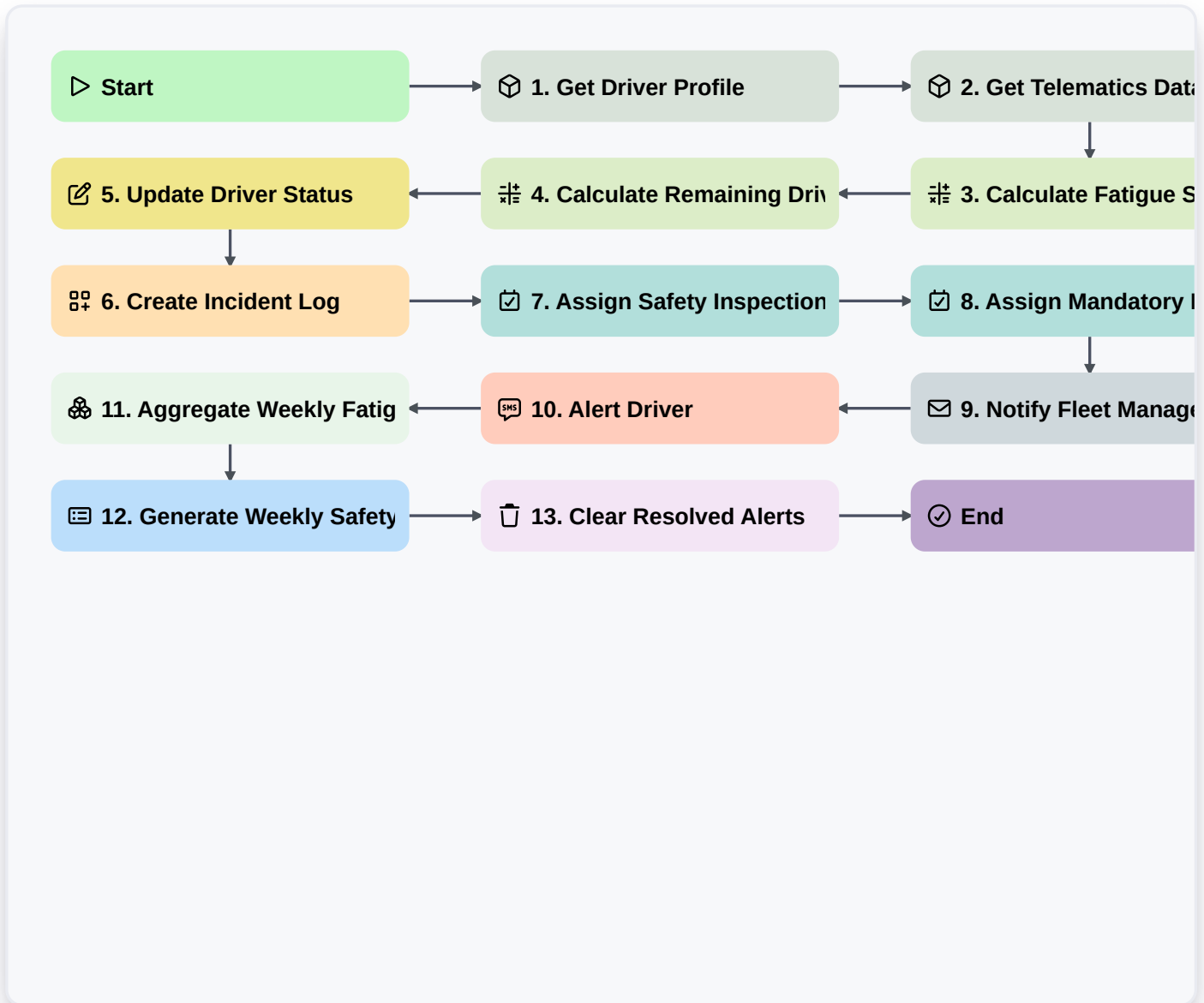


Bus Driver Fatigue And Safety Monitoring Workflow



▶ Start

Start of the Workflow/Process.

📦 1. Get Driver Profile

Retrieve driver details (license info, shift history, and fatigue threshold settings) from the Driver Data Model.

📦 2. Get Telematics Data

Retrieve recent vehicle telemetry, including braking intensity and driving duration, from the Telematics Data Model.

⚙️ 3. Calculate Fatigue Score

Execute a formula combining driving hours, time since last break, and recent braking incidents to calculate a real-time fatigue risk score.

⚙️ 4. Calculate Remaining Drive Time

Calculate the time remaining before the driver hits their mandatory rest period based on current shift start time.

✍️ 5. Update Driver Status

Update the Driver Data Model entry to reflect current status (e.g., 'Active', 'At Risk', or 'Mandatory Rest').



6. Create Incident Log

Create a new entry in the Safety Incident Data Model if the fatigue score exceeds the safety threshold.

7. Assign Safety Inspection Task

Create a task for the Fleet Manager to review the flagged fatigue incident.

8. Assign Mandatory Rest Task

Create a task for the Driver to perform a vehicle inspection and complete a rest period checklist.

9. Notify Fleet Manager

Send an email alert to the Fleet Manager when a high-risk fatigue event is detected.

10. Alert Driver

Send an urgent SMS to the Driver's mobile number instructing them to pull over safely.

11. Aggregate Weekly Fatigue Trends

Sum and average all fatigue score entries for a specific driver over the last 7 days to identify long-term patterns.

12. Generate Weekly Safety Compliance Report

Generate a summary report of all fatigue alerts, response times, and completed rest periods for the weekly management review.

13. Clear Resolved Alerts

Delete temporary high-priority alert entries once the safety task has been marked as completed.

End

End of the Workflow/Process.