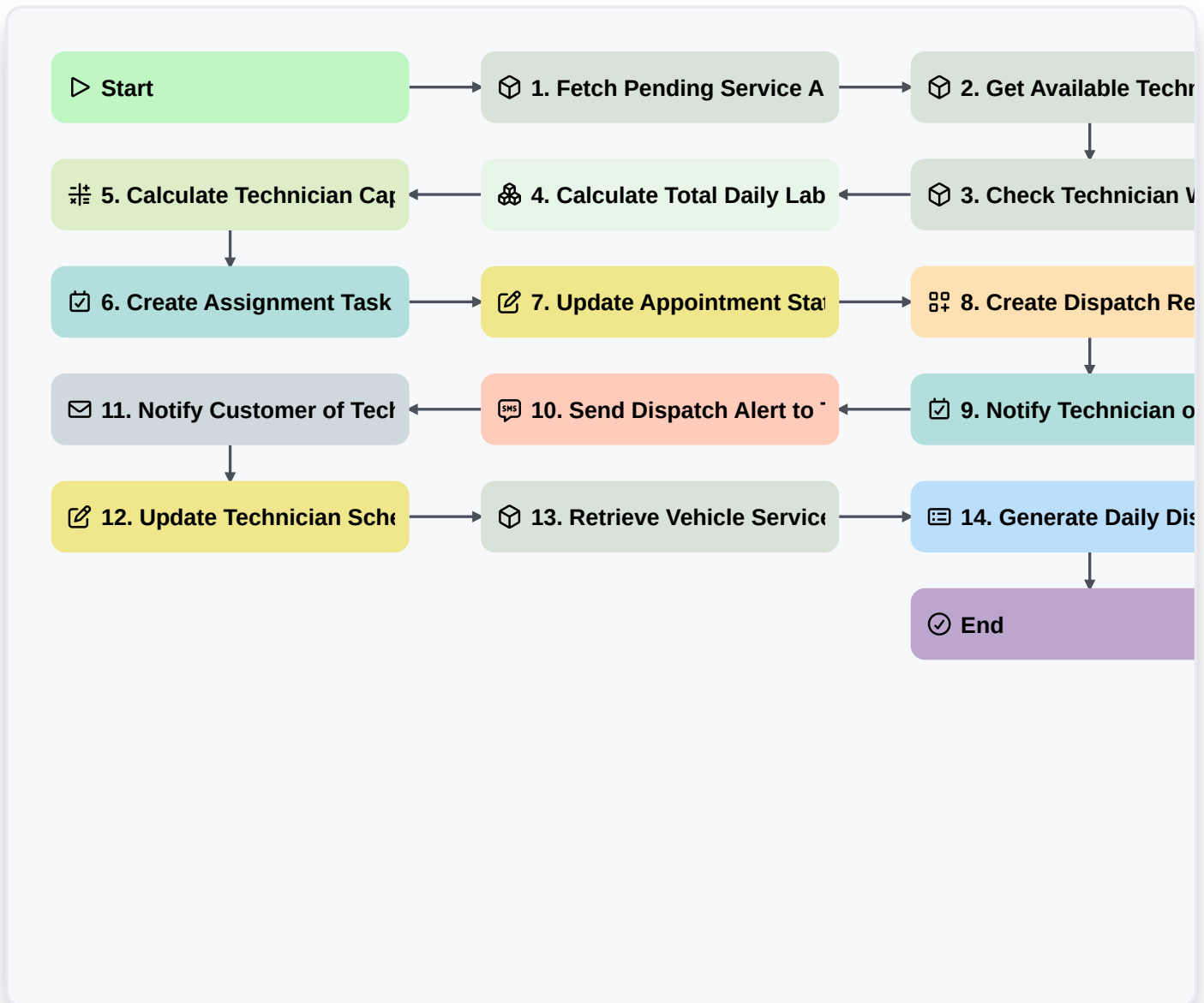


# Automotive Technician Dispatching Process



## ▷ Start

Start of the Workflow/Process.

## 📦 1. Fetch Pending Service Appointments

Retrieve all upcoming vehicle service appointments from the Appointments data model.

## 📦 2. Get Available Technicians

Retrieve a list of technicians currently marked as 'On Duty' in the Technician data model.

## 📦 3. Check Technician Workload

Get all active tasks assigned to each available technician to determine current capacity.

## 🔗 4. Calculate Total Daily Labor Hours

Sum the estimated duration of all scheduled tasks to compare against total technician availability.

## ⚖️ 5. Calculate Technician Capacity Gap

Subtract total scheduled labor hours from total available technician hours to identify over or under-utilization.

## 📋 6. Create Assignment Task

Create a task for the Service Manager to review and approve the proposed technician-to-vehicle assignments.



### **7. Update Appointment Status**

Change the status of the Appointment entry from 'Scheduled' to 'Assigned'.

### **8. Create Dispatch Record**

Create a new entry in the Dispatch Log data model containing the technician ID, Vehicle ID, and Timestamp.

### **9. Notify Technician of New Job**

Create a task in the Technician's personal queue containing the vehicle details and repair instructions.

### **10. Send Dispatch Alert to Technician**

Send an SMS to the technician's mobile number notifying them of the new assignment.

### **11. Notify Customer of Technician Assignment**

Send an email to the vehicle owner confirming which technician will be working on their car.

### **12. Update Technician Schedule**

Update the Technician's availability data model to reflect the newly blocked time slot.

### **13. Retrieve Vehicle Service History**

Fetch previous maintenance records for the specific vehicle to provide context to the technician.

### **14. Generate Daily Dispatch Summary**

Create a daily report showing total vehicles dispatched, technician utilization, and pending arrivals.

### **End**

End of the Workflow/Process.