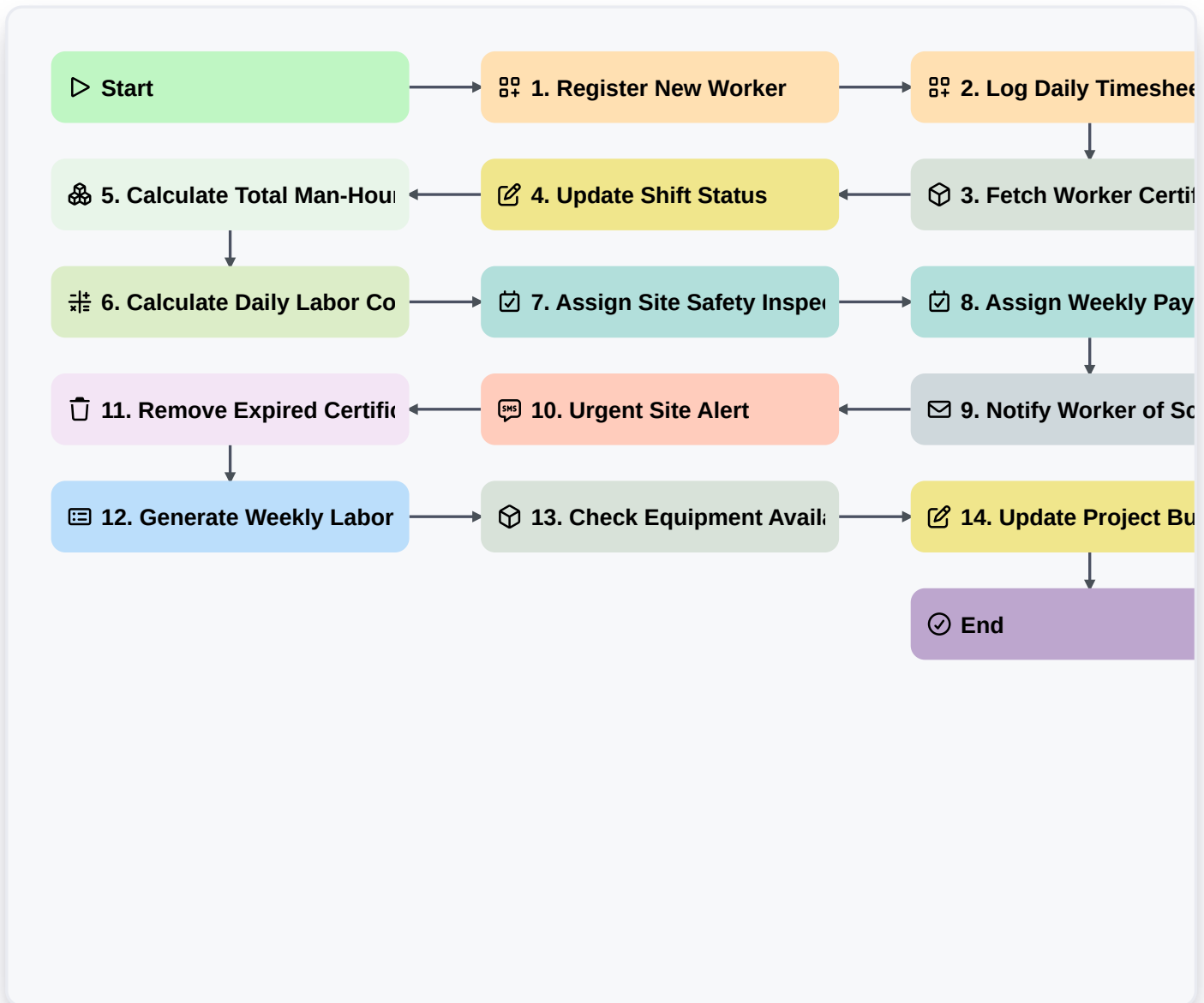


# Construction Labor Management And Tracking



## ▷ Start

Start of the Workflow/Process.

## ☰ 1. Register New Worker

Create a new entry in the 'Workers' data model with personal details, certifications, and contact info.

## ☰ 2. Log Daily Timesheet

Create a new entry in the 'Timesheets' data model recording hours worked, site location, and date.

## 📦 3. Fetch Worker Certification Status

Retrieve specific worker records from the 'Certifications' data model to verify if safety training is valid.

## ✍️ 4. Update Shift Status

Update the 'Active Shift' status in the 'Daily Schedule' data model when a worker clocks in.

## 🔗 5. Calculate Total Man-Hours

Sum the 'hours\_worked' property from all 'Timesheet' entries for a specific project/date.

## ⚙️ 6. Calculate Daily Labor Cost

Execute a formula:  $(\text{Total Man-Hours} * \text{Hourly Rate}) + \text{Overtime Multiplier}$ .



### **7. Assign Site Safety Inspection**

Create a task for the Safety Officer to perform a site walk-through based on the new project start.

### **8. Assign Weekly Payroll Review**

Create a task for the Payroll Manager to verify completed timesheets for the week.

### **9. Notify Worker of Schedule Change**

Send an email to the worker's email address recorded in the 'Workers' data model regarding updates to their shift.

### **10. Urgent Site Alert**

Send an SMS to all active workers on-site regarding weather delays or emergency site closures.

### **11. Remove Expired Certifications**

Delete entries from the 'Certifications' data model that have reached their expiration date and are no longer valid.

### **12. Generate Weekly Labor Productivity Report**

Create a report aggregating man-hours vs. completed task milestones for stakeholders.

### **13. Check Equipment Availability**

Retrieve entries from 'Equipment' data model to ensure tools needed for the assigned task are not checked out.

### **14. Update Project Budget Consumption**

Update the 'Project Budget' data model by adding the calculated daily labor cost to the 'Total Spent' field.

### **End**

End of the Workflow/Process.