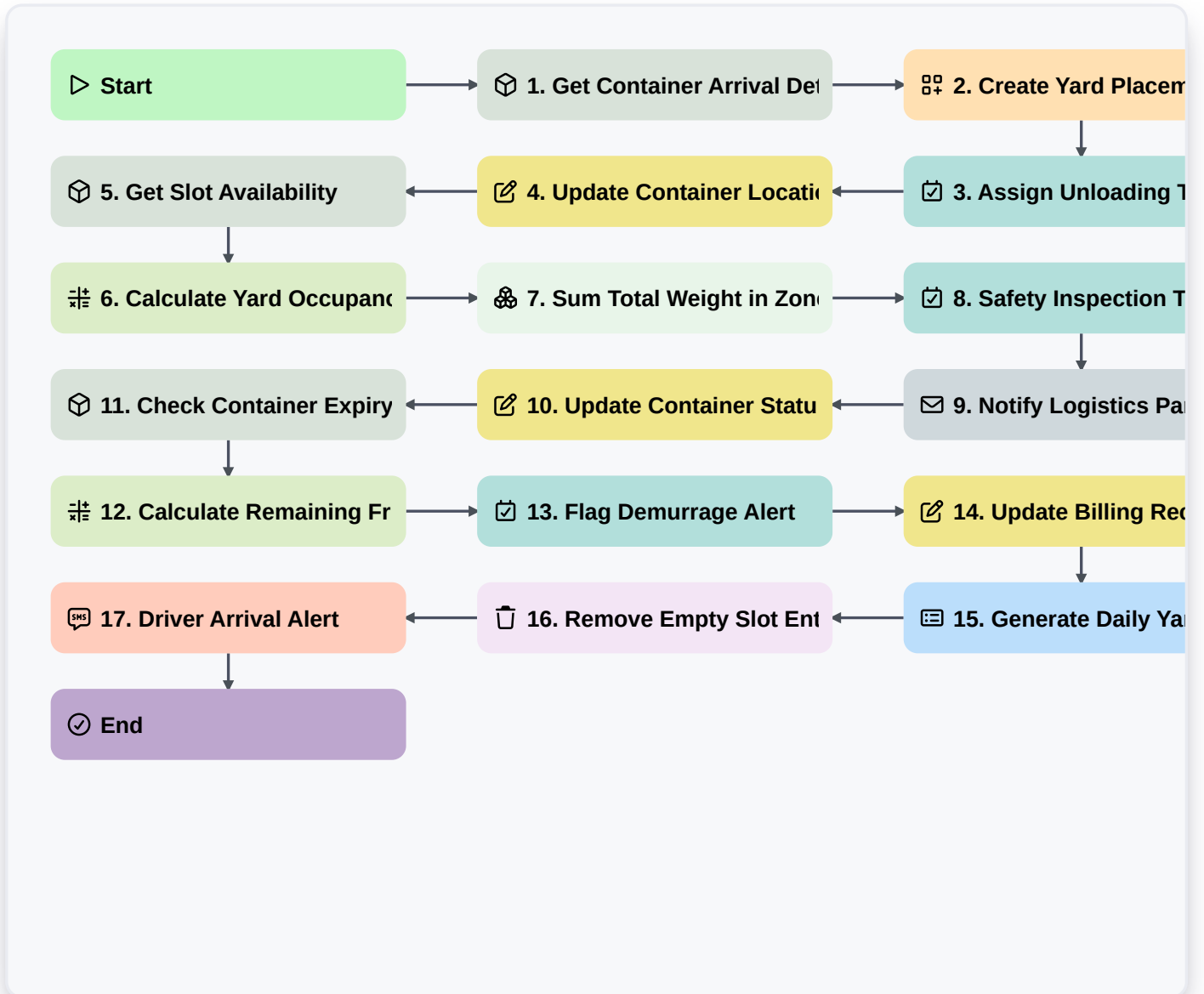


Container Yard Management Workflow



Start

Start of the Workflow/Process.

1. Get Container Arrival Details

Retrieve incoming container information (ID, type, weight) from the Container Arrival data model.

2. Create Yard Placement Record

Create a new entry in the Yard Inventory model to log the container's arrival and initial status.

3. Assign Unloading Task

Create a task for the Crane Operator to move the container from the gate to the designated slot.

4. Update Container Location

Update the 'Current Slot' field in the Container Inventory model once the move is completed.

5. Get Slot Availability

Check the Yard Map data model to identify empty slots compatible with the container dimensions.

6. Calculate Yard Occupancy Rate

Calculate the percentage of occupied slots vs. total capacity using current inventory data.



7. Sum Total Weight in Zone

Aggregate the weight property of all containers currently assigned to a specific Yard Zone.

8. Safety Inspection Task

Create a task for the Yard Supervisor to verify container integrity (seal check) upon arrival.

9. Notify Logistics Partner

Send an email to the shipping line confirming the container has been successfully offloaded and placed.

10. Update Container Status to 'Stored'

Update the status field in the Container model to reflect it is now in storage.

11. Check Container Expiry/Demurrage

Retrieve the 'Free Time' end date from the Container entry to monitor upcoming demurrage charges.

12. Calculate Remaining Free Time

Calculate the number of days remaining before demurrage costs are applied (Expiry Date - Today's Date).

13. Flag Demurrage Alert

Create a high-priority task for the Yard Manager if the calculated remaining free time is less than 2 days.

14. Update Billing Record

Update the Finance data model to include the storage duration for upcoming invoicing.

15. Generate Daily Yard Throughput Report

Create a report summarizing total containers moved, arrivals, and departures within the last 24 hours.

16. Remove Empty Slot Entry

Delete the temporary 'Pending Placement' entry from the staging queue once the container is physically placed.

17. Driver Arrival Alert

Send an SMS to the truck driver when their specific container is ready for pickup at the exit gate.

End

End of the Workflow/Process.