



# Goals & Scope of the POC



# Primary goals:



- **Demonstrate scheduling and booking of dock appointments (create, reschedule, edit, cancel).**
- **Show real time updates and conflict detection (i.e. preventing double booking).**
- **Provide a dashboard or listing of scheduled appointments.**
- **Send notifications (e.g. email / SMS) on changes to appointments.**

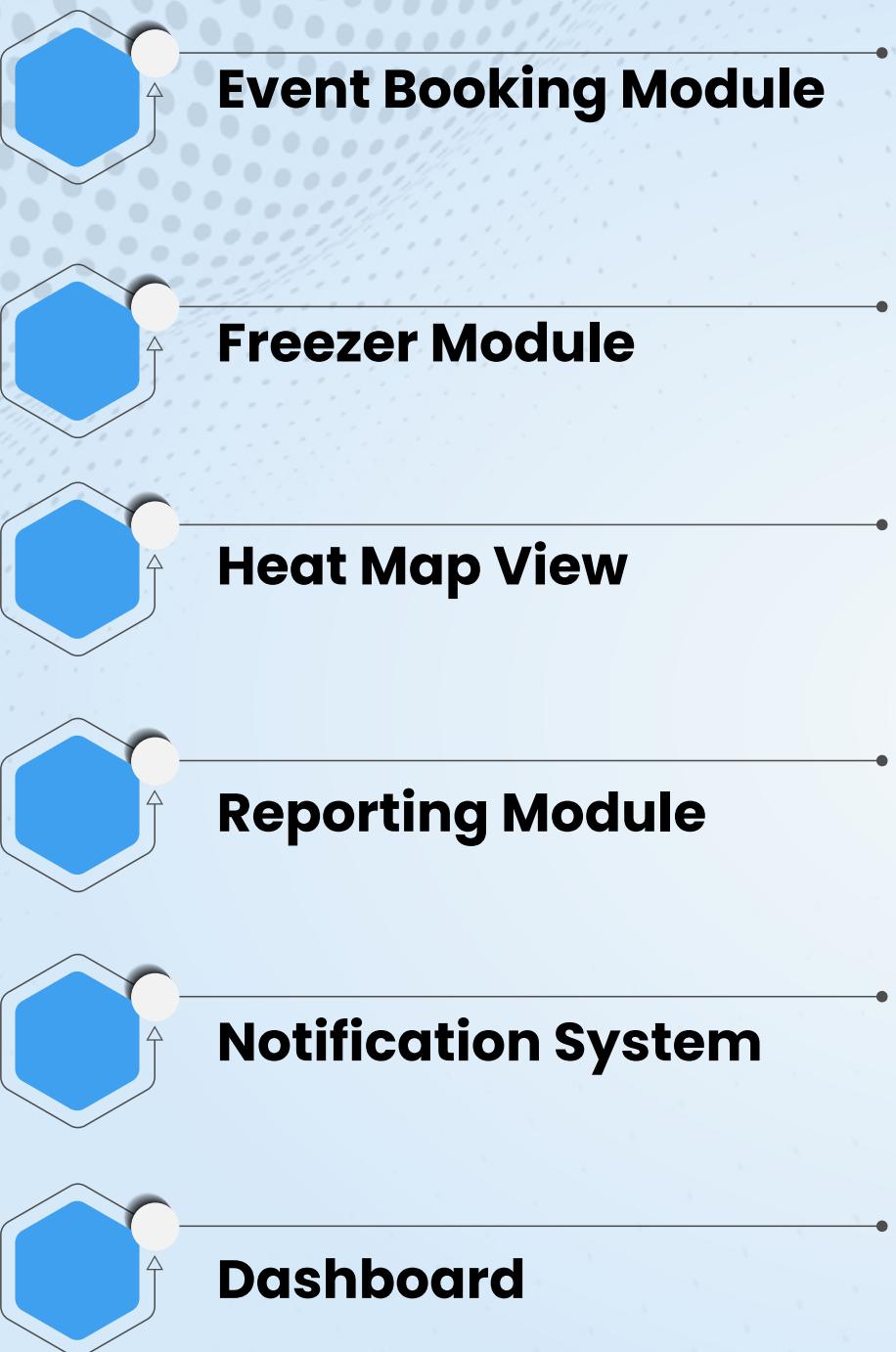


# Scope Constraints

## Modules Covered in POC

- User & Role Management**
- Company Module**
- Facility / Warehouse Module**
- Event Type Module**
- Door Management Module**





# User & Role Management



- Creation of Admin User who has full access to all system modules
- Admin can create Company Users with limited access based on their organization
- Role based access control to distinguish between:
  - Admin
  - Company User
  - Public User



# Company Module

- **Admin can create and manage Company profiles**
- **Each Company can have one or more:**
  - **Associated users**
  - **Facilities**



# Facility / Warehouse Module

- Companies can manage one or more facilities (warehouses)
- Each facility can store its own configuration:
  - ◆ **Operational hours**
  - ◆ **Location details**
- Facilities act as the parent entity for:
  - ◆ **Doors**
  - ◆ **Event types**



# Event Type Module



- Company users can define custom event types per facility (e.g., Loading, Unloading, Maintenance)
- Event types allow categorizing and filtering scheduled activities



# Door Management Module



- Facilities will have multiple dock doors, each identified uniquely
- **Doors can be:**
  - Pre assigned to specific event types
  - Left open to be assigned dynamically during event booking
- Admin and Company Users can manage door availability, assign or block doors





# Event Booking Module

- **Booking Channels**

- **Public Portal:**

- External users (vendors, carriers) access a unique public URL to submit booking requests

- **Internal Portal:**

- Admin or Company Users create bookings directly within the main portal



# Event Booking Core Functionality

- Create, Reschedule, Cancel, and Edit events
- View assigned door and event details
- Validate booking conflicts  
(door/time overlaps)



# Freezer Module Controls



**01** Allows filtering and reporting on freezer related events

Events can be marked as "Freezer Required" **02**

**03** Only freezer enabled doors can be assigned

Helps warehouses segregate and manage temperature sensitive operations **04**

# Heat Map View

- Visual representation of slot utilization across days and time ranges
- Helps Admins identify:
  - Peak hours
  - Free slots
- Enables proactive planning and load balancing



# Reporting Module



## Basic Downloadable / Exportable Reports

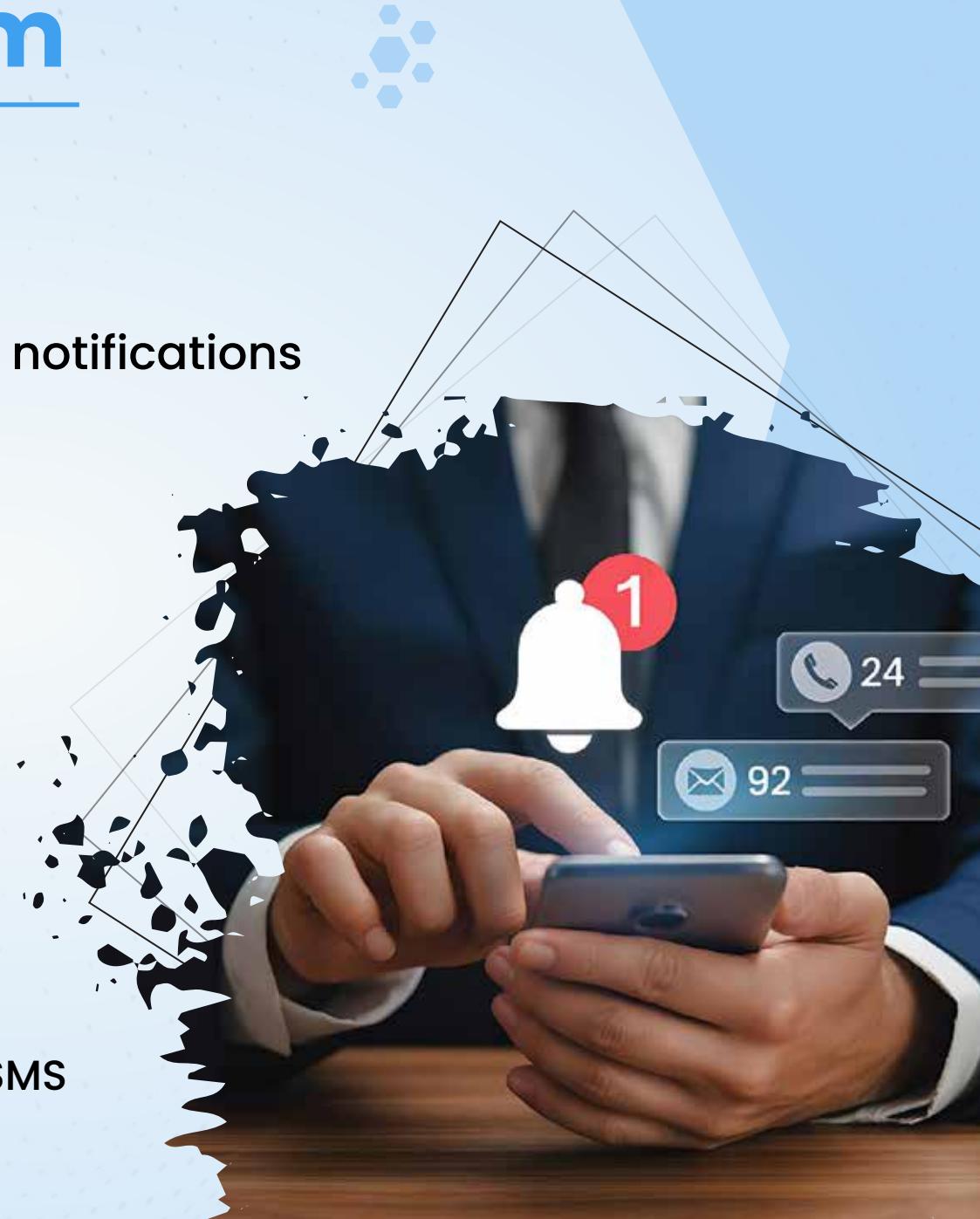
- Event Data Report:
  - Filter by facility, door, time range, event type, and user
- Door Utilization Report
  - Summary of how each door was used
  - Frequency
  - Idle periods



# Notification System

(Stub or Basic Implementation)

- System will send basic email or SMS notifications (real or mocked) for:
  - New event bookings
  - Reschedules
  - Cancellations
  - Edits
- Notification logic will be implemented
- Integration with production grade email/SMS gateways may be mocked or simulated



# Dashboard

- The system shall present a calendar or timeline view for each dock, organized by day. It shall display the current status of each booking, including Scheduled, In Progress, Completed, and Canceled.



# Actions & Real Time Updates

- The dashboard shall support quick actions, allowing users to reschedule or cancel bookings directly from the interface.
- The dashboard shall refresh in real time, either via auto refresh or web socket technology, to immediately reflect changes made by other users, system administrators, or company users.



# Check In / Check Out



- Additionally, both system administrators and company users shall be able to check in or check out events directly from the dashboard.



# Technology & Tools

## Layer Technology

- **Backend** – .NET Core API
- **Frontend** – Angular (Internal Portal), Simple HTML or Angular View for Public Booking
- **Database** – SQL Server
- **Hosting** – Local or Azure (optional)
- **Notifications** – SMTP (Email), SMS (stub/mock)



# Authentication

Basic login for Admin & Company users;

- Public users can access booking page without login  
JWT, Role based authorization mechanism

