## Checkin - reservation for restaurants

# Overview

The proposed startup is a 3D-based digital platform designed to streamline and enhance the reservation experience for both customers and businesses such as restaurants, cafes, and wedding/event halls. The platform offers a live, interactive seating map tailored to each business's unique layout, enabling customers to view and reserve available tables or spaces in real time. In addition to availability, users can optionally see the names of other guests who’ve reserved tables — especially in shared-table venues (e.g., wedding halls or social evenings) — fostering community engagement and transparency.

For business owners, the platform provides a powerful backend for managing bookings, visualizing occupancy, reducing overbooking errors, and improving operational efficiency.

# Problem statment

* Current reservation systems are static, often not reflecting real-time table availability or layout.
* Many restaurants and halls still rely on manual or phone-based bookings.
* Customers lack the ability to see which tables are taken, and by whom (when relevant).
* Businesses struggle to track utilization, seat optimization, and reservation trends.

# Goals and objectives

* Build a 3D seating/reservation map for each business.
* Enable customers to reserve tables/seats in real time.
* Allow halls to publicly display reservations by name (if allowed).
* Give business owners analytics, occupancy insights, and control over reservations.

# Key features

## **Customer Side:**

## Browse venue in 3D with full seating layout.

## See real-time availability by table/seat.

## Optional visibility of reserved guests (wedding halls).

## Make or cancel a reservation.

## Notifications & confirmations.

## **Business Owner Dashboard:**

## Create/edit 3D table layout.

## Set reservation time windows.

## View current & upcoming reservations.

## Analytics dashboard (table utilization, popular times).

## Customer list management.

## 

# User roles

* **Guest/Customer:** Browse, view availability, reserve.
* **Business Admin:** Manage tables, time slots, see stats.
* **Super Admin (Platform owner):** Monitor users, manage payment plans, support, etc.

# Research and validation plans

* **Scouting & Interviews:**
  + Meet with 10 local restaurant and hall owners.
  + Identify current pain points with reservation tracking.
  + Ask what data they wish they had about seating.
* **Market Study:**
  + Research existing reservation platforms (e.g., Resy, OpenTable, Zefaf).
  + Identify gaps: Do any support 3D visualization? Social features?
* **Customer Survey:**
  + Ask 50 people how they currently book.
  + Test reaction to seeing reserved guests' names for social events.

# Technical planing

**Frontend:** React.js or Vue + Three.js for 3D layout.

* **Mobile App:** React Native or Flutter.
* **Backend:** Node.js + PostgreSQL or Firebase.
* **3D Layout Builder:** Internal tool for admins to define seating shapes.
* **API:** Real-time updates via WebSockets.

# Deployment phases

* **Phase 1: Ideation & Research (1-2 weeks)**
  + Stakeholder interviews
  + Feature prioritization
* **Phase 2: Wireframing & UX (2 weeks)**
  + Build mockups of customer and admin dashboards
  + Test with 2-3 businesses
* **Phase 3: MVP Development (6–8 weeks)**
  + Build booking engine + 3D UI
  + Deploy limited beta
* **Phase 4: Feedback & Polish (2–3 weeks)**
  + Add needed features (e.g. cancellation, table grouping)
* **Phase 5: Marketing & Launch**
  + Soft launch with pilot partners
  + Targeted campaign in local markets

# Business model

* Free for customers
* Monthly subscription for businesses
* Premium add-ons (SMS reminders, analytics, branded layout)

# considerations

* Privacy: Only show guest names when explicitly allowed
* Multi-language support (Arabic, Hebrew, English)
* Accessibility: Mobile-first and desktop support
* Offline backup plan (printable layout if needed)