Appointment app -The perfect booking system

Overview

The Appointment App is based on a scheduling and booking system that allows users to book appointments with one or multiple providers based on real-time availability. The application supports flexible scheduling rules, slot management, capacity control, and end-to-end appointment lifecycle management.

User Roles

1. Customer (End User)
2. Admin
3. Organiser

Core Features & Functionalities

1. Authentication & Onboarding

Applicable to all roles

- Log in using email and password
- Signup with:
    - Full name
    - Email
    - Password
- OTP verification after signup
- Forgot password flow

Customer (End User) Features

2. Home / Appointment Overview

Purpose: Help users discover and book appointments quickly

- View available appointment types/services
- Quick action: "Book Appointment."

3. Appointment Booking Flow

Purpose: Allow users to book published appointments easily based on availability

- Select service/appointment type
- Select user/Resource
- Choose preferred date
- View available time slots in real time
- Select slots
- Select capacity(if manage capacity is enabled)
- System validates availability and capacity
- Fill the questions form in appointment
- Confirm booking / Make payment(if Advance payment is on)
- Confirmation page - Display appointment summary (date, time, provider, status, venue, confirmation message)
- Redirect to booking page if user cancels the appointment

4. Profile Management

- View and update personal details
- See upcoming and past appointments under my profile

Organiser/Admin view

5. Service & Appointment Configuration

- Create appointment types
- Can share unpublished appointment with share links
- Define duration (e.g., 30 min, 1 hour)
- Select Type of appointment User/Resources
- Manage Resources/users
- Define working hours
- Set weekly schedules
- Add questions to ask on bookings
- Visual calendar view

- Preview appointment
- Can publish/unpublish appointment
- Set booking rules:
    - Max bookings per slot
    - Advance payment
    - Manual confirmation
    - Assignment of user/resources(auto/manual)
    - Slot Creation

- View all bookings
- Booking details:
  - Customer name
  - Time & service
  - Status

7. Reports & Insights

- Total appointments
- Peak booking hours
- Provider utilization

Admin view

8. Admin Dashboard

Purpose: System-level monitoring and control

- Total users
- Total service providers
- Total appointments

9. User & Provider Management

- View all users
- Activate/deactivate accounts
- Role management

Key Challenges to Solve (Hackathon Focus)

- Real-time availability calculation
- Preventing double bookings
- Flexible slot and capacity rules
- Clean and intuitive booking UX

Mockup:- https://app.excalidraw.com/l/65VNwvy7c4X/9BVkzolwcEd