

## **Project Charter: Conference Room Booking App**

**Project Name:** Conference Room Booking and Availability System

**Date:** September 18, 2025

**Prepared By:** Nishant Tambewagh (Beginner Developer using AI Assistance)

### **Description:**

Develop a cross-platform application (web, Android, iOS) using open-source tools (Flutter for frontend, Node.js for backend, PostgreSQL for database) to allow users to book conference rooms, check availability in real-time, handle check-ins via QR codes, auto-release unused bookings, and sync with external calendars like Google Calendar. The app addresses issues like meeting overruns and manual availability checks.

### **Objectives:**

- Provide an efficient, user-friendly booking system for offices or shared spaces.
- Incorporate smart features for better utilization (e.g., auto-release after 10 minutes no-show).
- Ensure scalability for up to 100 users initially, with on-prem hosting on a VM/server.
- Complete a minimum viable product (MVP) in 12 weeks using AI agents for coding.

### **Scope:**

- **In Scope:** User authentication, room management, booking/availability logic, QR check-in/out, auto-release, calendar sync (Google/Outlook), basic admin tools.
- **Out of Scope:** Advanced integrations (e.g., payment, hardware sensors), multi-tenant support, custom AI analytics.

### **Success Criteria:**

- App deploys successfully on web, Android, and iOS.
- Core features (booking, QR, sync) pass manual testing with no major bugs.
- At least 95% uptime in initial use; positive feedback from 5+ test users.
- Project completed within 12 weeks, using open-source tools only.

### **Assumptions & Constraints:**

- **Assumptions:** Access to Claude AI for code generation; stable internet for development; free tools suffice. Claude AI will handle most coding.
- **Constraints:** No prior coding experience; solo developer; no budget for paid tools/apps; on-prem hosting limits cloud features.

### **Stakeholders:**

- **Developer/Owner:** [You] – Responsible for all phases.
- **Testers:** Friends/family – Provide feedback during testing.
- **End Users:** Office/team members – Use the app post-launch.

**Approval:** Nishant Tambewagh

**Approved on:** September 18, 2025