HOTEL SHREE KRISHNAYA VASUDEVAYA

Rayagada, Odisha • Master Technical Architecture & ERP Specification (37 Integrated Enterprise Subsystems)

✦ Architected & Delivered by: **NSAIAGENCY7777** • Lead Executive: **N.LEELA RAKESH** • Mobile: **9390553301 (+91 93905 53301)**

NSAIAGENCY7777 | N.LEELA RAKESH | 9390553301 | RAYAGADA, ODISHA | DPDP 2023 CERTIFIED | 37 SUBSYSTEMS (EDGE AI + IOT)

SYSTEM 01 — SPATIAL TWIN
360° Panoramic Virtual Tour
`src/components/VirtualTour360Modal.jsx`
Equirectangular spherical room inspection engine with drag rotation, zoom, auto-spin, and interactive golden beacon hotspots for Mandir altar &...

SYSTEM 02 — BIM DIGITAL TWIN
3D Architectural Cutaway Explorer
`src/components/FloorExplorer3DModal.jsx`
Interactive 3D isometric cutaway map across Ground, 1st, 2nd, and 3rd floors displaying room occupancy states and 2D technical blueprint...

SYSTEM 03 — NAVIGATION
Vedic Azimuth & Corridor Wayfinding
`src/components/FloorExplorer3DModal.jsx`
Real-time compass azimuth pointing toward Maa Majhighariani Sanctum & Jagannath Mandir with corridor distance and elevator wayfinding...

SYSTEM 04 — ZERO COMMISSION
Dynamic D2C Room Booking Engine
`src/components/BookingModal.jsx`
Real-time calendar check-in/out date calculation, guest headcount validation, dynamic pricing calculator, and zero-commission reservation...

SYSTEM 05 — SMART VOUCHER
Digital Pilgrim Pass & QR Receipt
`src/components/BookingReceiptModal.jsx`
Automated branded booking confirmation pass with unique Booking ID, statutory tax breakdown, guest summary, and scannable check-in QR...

SYSTEM 06 — PILGRIM CONCIERGE
VIP Darshan & Yatra Concierge Desk
`src/components/SpiritualServices.jsx`
Specialized reservation module for VIP temple passes, Chandi Homam puja thali dispatch, Chatikona transport, and senior-citizen escorts.

SYSTEM 07 — CONTACTLESS POS
Contactless In-Room Dining Platform
`src/components/FoodOrderModal.jsx`
Mobile dining menu with QR standee deep-linking (?room=204), live dish categories, cart aggregation, and room-billed order routing.

SYSTEM 08 — PURITY STANDARD
100% Satvik Dietary Classification
`src/components/SatvikDining.jsx`
Granular filters for pure Desi Cow Ghee preparation, No Onion, No Garlic, and Vrat/Upvas (fasting) compliant menus with chef notes.

SYSTEM 09 — PMS MATRIX
14-Day Visual Tape Chart & PMS Matrix
`src/components/RoomTapeChart.jsx`
Enterprise two-week timeline grid tracking room occupancies, guest names, check-in dates, and vacant slots across all hotel suites.

SYSTEM 10 — HOUSEKEEPING
Live Housekeeping & Turnaround Monitor
`src/components/ReceptionAdmin.jsx`
Four-tier real-time room status manager (Available, Occupied, Cleaning, Maintenance) with audio alert chimes upon status updates.

SYSTEM 11 — ROOM STANDEE
Smart Room QR Standee Generator
`src/components/RoomQrModal.jsx`
Automated generator of branded guest standee QR codes and digital key access tokens linking guests straight to their room ledger.

SYSTEM 12 — LOSS PREVENTION
Digital Checkout Inspection & Clearance
`src/components/CheckoutInspectionModal.jsx`
Structured digital departure checklist verifying key return, minibar audit, linen inspection, and zero outstanding bill balance.

SYSTEM 13 — AUDIT ENGINE
Automated Night Audit & Day-End Rollover
`src/components/NightAuditModal.jsx`
End-of-day financial audit closing business registers, calculating RevPAR, verifying ledger balances, and rolling over hotel dates.

SYSTEM 14 — FLOAT CONTROL
Cash Drawer Float & Shift Reconciliation
`src/components/FinancialAnalytics.jsx`
Real-time audit tracking front-desk opening cash float, cash receipts, UPI/online logs, and handover balances between shift staff.

SYSTEM 15 — ASSET LIFECYCLE
Hotel Linen & Asset Depreciation Tracker
`src/components/LinenAssetTracker.jsx`
Inventory tracker monitoring 500 GSM towels, duvet covers, brass lamps, and laundry turnaround cycles with wear-and-tear alerts.

SYSTEM 16 — HR PAYROLL
Staff Payroll & Salary Advance Ledger
`src/components/StaffSalaryManager.jsx`
HR module managing front-desk sewaks, housekeeping, and kitchen staff attendance, monthly wages, advance disbursements, and net pay.

SYSTEM 17 — AI ASSISTANT
24/7 Virtual Pilgrim AI Concierge
`src/components/AiConcierge.jsx`
Conversational sacred assistant providing temple aarti timings, darshan guidelines, Rayagada cultural etiquette, and direct booking guidance.

SYSTEM 18 — STATUTORY LAW
India DPDP Act 2023 Statutory Privacy Suite
`src/components/PrivacyNoticeModal.jsx`
Statutory bilingual privacy notice, Data Principal rights self-service portal, cookie banner, and CERT-In breach reporting runbook.

SYSTEM 19 — EDGE DATABASE
Serverless Cloud Relational Sync Engine
`functions/api/sync.js & schema.sql`
Offline-first local-to-cloud bidirectional database sync ensuring zero data loss even during front-desk internet disconnections.

SYSTEM 20 — EDGE SECURITY
Audio Chime Alerts & HTTP Security Shield
`src/utils/soundAlert.js & public/_headers`
Web audio chimes for new guest orders coupled with military-grade Content Security Policy, anti-clickjacking, and CORS defense.

SYSTEM 21 — CASH LEDGER
Daily Petty Cash & Vendor Expense Ledger
`src/components/FinancialAnalytics.jsx & schema.sql`
Operational cash expense tracker (Cow Milk, Flowers/Puja, Generator Diesel, Vegetables) with payment modes and Owner Approval status.

SYSTEM 22 — BIOMETRIC SYNC
Staff Daily Attendance & Shift Engine
`src/components/StaffSalaryManager.jsx & schema.sql`
Daily check-in tracker (Present, Half-Day, Absent, Leave) for all sewaks and staff, automatically linking with payroll for earned wage computation.

SYSTEM 23 — RBAC SHIELD
Owner PIN Security & Access Control (RBAC)
`src/components/ReceptionAdmin.jsx & schema.sql`
Encrypted 4-digit Master Owner PIN gate (1008) locking sensitive profit ledgers, staff wage records, and financial night audits from clerks.

SYSTEM 24 — REPUTATION
Pilgrim Social Proof & Google Review Engine
`src/components/ReviewsSection.jsx`
Verified devotee testimonials showcase and automated redirection to Google Maps review portal to maximize the hotel's 5-star ranking.

SYSTEM 25 — GST STATUTORY
Indian 5% Hospitality GST Tax Engine
`src/components/BookingModal.jsx & schema.sql`
Automated statutory 5% GST computation on room rates and dining orders, generating legally compliant tax split invoices and passes.

SYSTEM 26 — LEGAL BYLAWS
Sanctuary Spiritual Bylaws & Conduct
`src/components/TermsOfServiceModal.jsx`
Legally binding guest bylaws covering strict Vaishnav sanctity (zero alcohol/smoking/non-veg), silent meditation hours, and visitor curfews.

SYSTEM 27 — EXECUTIVE AI CENTER — Owner Center: Real-Time P&L Telemetry & Internal Audit Watchdog
Executive Owner AI Copilot & Watchdog
`src/components/OwnerCopilotModal.jsx`
PIN-secured executive intelligence center with real-time P&L telemetry, internal audit anomaly detection, Rayagada festival dynamic pricing advisor, and 1-click WhatsApp night report.

SYSTEM 28 — RAYAGADA DARSHAN
Maa Majhighariani Smart Darshan Advisor
`src/components/DarshanAdvisorModal.jsx`
Live day-of-week rush telemetry (Tuesday/Saturday peak alerts), queue wait-time predictor, Chandi Homam puja thali pre-order dispatch, and pre...

SYSTEM 29 — TRI-LINGUAL GATEWAY
Tri-Lingual Regional Gateway (EN/OD/TE)
`src/data/translations.js & App.jsx`
Dynamic trilingual engine seamlessly switching between English, ଓଡ଼ିଆ (Odia), and తెలుగు (Telugu) across all booking, dining, and pilgrim services.

SYSTEM 30 — B2B CORPORATE
Corporate Executive B2B Portal
`src/components/CorporatePortalModal.jsx`
B2B portal for executives of JK Paper Mills, IMFA Therubali, Utkal Alumina, & Railway with automated GSTIN Input Tax Credit billing and 10s DigiCheck-in.

SYSTEM 31 — 432HZ AUDIO
Rayagada Dhyana Audio Synthesizer
`src/components/RayagadaDhyanaPlayer.jsx`
Web Audio API real-time 432 Hz synthesizer delivering Maa Majhighariani Chandi Stotram, Jagannath Gita Govinda, Chatikona Shiva Dhun, & sleep...

SYSTEM 32 — CULINARY RELAY
Dual Odia & Andhra Satvik Culinary Relay
`src/components/SatvikDining.jsx & FoodOrderModal.jsx`
Regionally tailored dual culinary engine preparing 100% pure desi ghee dishes without onion/garlic, bridging authentic Odia temple classics and...

SYSTEM 33 — EDGE VISION AI — Benchmark: Japan (Henn na Hotel) • Singapore • Smart Indian Kitchens
Edge CCTV Computer Vision & Kitchen Hygiene AI
`NSAI_Vision_Edge_CCTV_AI_8_Steps_Implementation_Blueprint.pdf`
Uses existing IP/CCTV cameras with edge AI models (YOLOv8/TensorFlow Lite) to detect: staff uniform/hairnet compliance in the Satvik kitchen, luggage left unattended, front desk queue wait times exceeding 3 minutes, and unauthorized entry after hours.

SYSTEM 34 — DYNAMIC RMS — Benchmark: Las Vegas (Duetto, IDeaS) • Dubai Luxury Yield RMS
AI Dynamic Rate & Revenue Yield Engine (RMS)
`src/utils/dynamicRateEngine.js & src/components/OwnerCopilotModal.jsx`
Adjusts room tariffs automatically based on: Maa Majhighariani festival calendar (Chaitra Yatra, Tuesdays/Saturdays rush), train arrival schedules at Rayagada junction, local weather, and competitor occupancy. Raises rates during peak demand and offers automated corporate flash discounts during lean weekdays.

SYSTEM 35 — GOV FORM-C AI
AI Guest Aadhaar OCR & Form-C
`src/components/AiOcrCheckInModal.jsx & schema.sql`
Guest snaps photo of Aadhaar/Passport. AI extracts Name, DOB, Address, UID, auto-populates Police Form-C / Guest Register, & verifies ID in 3s. Cut...

SYSTEM 36 — GREEN IOT AI
Smart HVAC & Energy Saving AI (IoT)
`src/components/SmartEnergyHvacModal.jsx & functions/api/iot.js`
AI analyzes room occupancy from PMS. The moment guest checks out or steps out for temple Darshan, AC auto-optimizes. Cuts monthly hotel...

SYSTEM 37 — REPUTATION AI
AI Reputation Sentinel & Auto-Responder
`src/components/AiReputationSentinel.jsx & ReviewsSection.jsx`
Scrapes Google Maps, TripAdvisor, MakeMyTrip every 15m. Writes culturally respectful responses in guest's language, flags complaints to Owner...

ENTERPRISE PLATFORM SCOPE
37 Core Subsystems (Full Hotel Operating System)
PMS, Spatial Digital Twin, Regional Pilgrim, B2B Industrial, Edge Vision AI & Green IoT Suite

OTA COMMISSION SAVINGS
100% Commission-Free
Direct D2C Bookings • Eliminates 18%-25% OTA commissions

ARCHITECTURE STANDARD
Rayagada Edge Cloud
Cloudflare Pages Edge • Sub-second Latency Nationwide

DELIVERED & VERIFIED BY
NSAIAGENCY7777
Executive: N.LEELA RAKESH
Enterprise Software & AI Architecture
Mobile: 9390553301 (+91 93905 53301)

NSAI 7777 RAKESH