

2-Hour Daily Implementation Checklist

This list breaks down the project into "Deep Work" sessions of 2 hours each.

Phase 1: Backend & DB (Weeks 1-3)

- [] **Day 1:** Initialize Node.js/TS project. Setup Express & Folder Structure.
- [] **Day 2:** Configure Database (PostgreSQL/Prisma or MongoDB). Define User & Restaurant models.
- [] **Day 3:** Create Menu, Category, and Item schemas.
- [] **Day 4:** Build API for Menu Management (CRUD).
- [] **Day 5:** Implement Authentication (JWT) for Restaurant Owners.
- [] **Day 6:** Define Order schema (Table #, Items, Status, Customer Phone).
- [] **Day 7:** Basic Error Handling & Logging middleware.

Phase 2: QR Menu & Ordering (Weeks 4-7)

- [] **Day 8:** Initialize React + Tailwind. Setup Basic Routing.
- [] **Day 9:** Design Mobile-Responsive Menu Layout (Item Cards).
- [] **Day 10:** Implement Category Filtering & Search.
- [] **Day 11:** Build "Add to Cart" logic (Local State).
- [] **Day 12:** Checkout Page: Phone Number input & Order Review.
- [] **Day 13:** API: Submit Order from QR Menu to Backend.
- [] **Day 14:** QR Code Generator utility (Map Table ID to URL).

Phase 3: Dashboard & Waiter Input (Weeks 8-11)

- [] **Day 15:** Build Admin Dashboard Layout (Sidebar/Top Nav).
- [] **Day 16:** Setup Socket.io on Backend for real-time notifications.
- [] **Day 17:** React: Connect Socket.io client to receive new orders.
- [] **Day 18:** Order Management Table (Filter by New, Preparing, etc.).
- [] **Day 19:** Waiter Interface: Manual Item Selection form.
- [] **Day 20:** Action Buttons: "Confirm", "Ready for Pickup", "Cancel".
- [] **Day 21:** Order History view with date filters.

Phase 4: AI Chatbot (Weeks 12-16)

- [] **Day 22:** Setup Telegram Bot via BotFather. Connect Node.js listener (telegraf).
- [] **Day 23:** Setup Google Gemini API Access & LangChain basic prompt.
- [] **Day 24:** Prompt Engineering: Parsing "2 pizzas and a coke to 123 Street" into JSON.
- [] **Day 25:** Validation Logic: Handle missing address or phone number in chat.
- [] **Day 26:** Confirmation Loop: Bot asks "Should I place this order? (Yes/No)".
- [] **Day 27:** Connect Bot to Order API.
- [] **Day 28:** Edge Cases: Handling "Off-menu" items or gibberish.

Phase 5: Driver App - React Native (Weeks 17-21)

- ☐ **Day 29:** Initialize React Native (Expo) project.
- ☐ **Day 30:** Driver Login Screen & Auth integration.
- ☐ **Day 31:** "Available Orders" list view.
- ☐ **Day 32:** Order Detail view with Customer Address & Navigation link.
- ☐ **Day 33:** Update Status buttons (Picked Up / Delivered).
- ☐ **Day 34:** Background Location tracking (Basic implementation).
- ☐ **Day 35:** Admin Map View: Show driver locations on Dashboard.

Phase 6 & 7: Final Integration & Polish

- ☐ **Day 36:** Phone Order entry form on Dashboard.
- ☐ **Day 37:** Export to Excel/CSV functionality.
- ☐ **Day 38:** UI Polish: Add loading states & better toast notifications.
- ☐ **Day 39:** Performance check: Optimize Database queries.
- ☐ **Day 40:** Deployment setup (VPS/Docker).