

■ AI-Assisted Barbershop Booking Platform

Project Proposal & Cost Plan (Base + VPS Add-On)

Prepared by: Moenuddeen Shaik

Role: Software Engineer (6 years exp — Amazon & Loyalty Platform domains)

■ 1. Project Overview

A smart booking platform enabling users to discover barbers, schedule appointments, and manage bookings through AI-assisted workflows. Phase 1 focuses on core booking, authentication, and admin visibility of all appointments. The system is built to scale into analytics, payment automation, and AI-driven recommendations in later phases.

■ 2. Scope of Work — Phase 1 (MVP)

Module	Description	Deliverable
Authentication	User & admin login/sign-up using email/phone.	JWT-based secure login system
User Portal	Book appointments, view/edit/cancel upcoming bookings.	Responsive React web UI
Admin Portal	View all bookings, users, statuses; manage barber slots.	Role-based admin dashboard
Database Setup	Store users, barbers, slots, and bookings.	Supabase / PostgreSQL schema
Backend APIs	CRUD for users / bookings / admin operations.	Flask / FastAPI REST endpoints
Deployment (Base)	Cloud deployment and CI/CD.	Live environment + docs
Documentation	Developer + handover docs.	README + ER diagram

■ 3. Future Phases (Planned)

Phase	Focus	Est. Timeline
Phase 2	AI Booking Chat + Payment Integration (Stripe)	2 weeks
Phase 3	Analytics Dashboard + AI Insights	3 weeks
Phase 4	Mobile App (React Native / Flutter)	4 weeks

■ 4. Cost Breakdown — Base Build (Phase 1 Web Platform)

Component	Est. Dev Time	Base Rate (\$60/hr)	Cost
Auth + User Mgmt	10 hrs	\$600	\$600
Booking System + Calendar Mgmt	14 hrs	\$840	\$840
Admin Portal (React Dashboard)	12 hrs	\$720	\$720
Backend APIs + DB Design	10 hrs	\$600	\$600
Deployment & Testing	8 hrs	\$480	\$480
Documentation & Handoff	6 hrs	\$360	\$360
Subtotal (Before Discount)	60 hrs		\$3,600

First-Timer Discount			-\$100
Base Project Total			\$3,500

■■ 5. Production Hosting Add-On (VPS & Docker)

This optional add-on hardens the deployment: containerized services, reproducible builds, secure SSL-enabled VPS hosting.

Item	Notes	Cost
Containerization & Orchestration	Dockerizing frontend + backend, Docker Compose, environment config, secrets.	\$360 (one-time)
VPS Hosting Setup	Provisioning VPS (e.g. DigitalOcean / EC2), firewall rules, SSL certs.	Included in above
Managed Hosting Window	2 months VPS (2GB RAM tier) + domain SSL.	\$60
Add-On Total		\$420

■ 6. Total Investment

Package	Cost
Base Project (Phase 1 Web Platform)	\$3,500
Production Hosting Add-On (VPS + Docker + 2 months hosting)	\$420
Grand Total	\$3,920 USD

■■ 7. Timeline

Week	Deliverable
Week 1	Auth + User Portal UI
Week 2	Booking Flow + Admin Dashboard
Week 3	Integration, Testing & Launch
(Optional Week 4)	Docker/VPS production hardening + live handoff

■ 8. Technical Stack

Layer	Tech
Frontend	React + Tailwind + Vite
Backend	Flask / FastAPI
DB & Auth	Supabase (PostgreSQL + Auth)
Hosting (Base)	Vercel (frontend) / Render or similar (backend)
Hosting (Add-On)	Dockerized VPS (DigitalOcean / AWS EC2) with SSL
CI/CD	GitHub Actions + containerized deploy pipeline
Future AI	OpenAI API / LangChain (chatbot booking assistant, analytics summaries)

■ 9. Summary

Item	Value
Base Cost	\$3,500 USD (discounted first-time build rate)
Add-On Cost	\$420 USD (containerized VPS, 2 months hosting)
Grand Total	\$3,920 USD
Deliverables	Auth, Booking, Admin Portal, Deployment + Optional VPS hardening
Next Add-Ons	AI Chat Assistant, Payments, Analytics Dashboard