# Project Proposal Document

## 1. Project Title & Short Description

**Title:** Service-Booking-System

**Description:** A simple web-based platform where customers can book on-demand home services such as cleaning, plumbing, and tutoring. Customers can search services, book a timeslot, pay online, and provide feedback. Service providers receive assignments and update job status. An admin dashboard supports monitoring of bookings, payments, and providers with basic analytics.

## 2. Application Type

This project will be developed as a Web Application only.

- **Customer:** Responsive web interface accessible via browsers on desktops.
- **Provider:** Same responsive web interface, with role-based dashboards for service providers.
- **Admin:** Web dashboard with monitoring, management, and analytics.

## 3. Motivation / Problem Statement

People often struggle to find reliable service providers for household and tutoring needs. Current solutions are either fragmented or lack transparency in pricing, scheduling, and provider ratings. Our platform aims to centralize these services in one place, ensuring:

- Easy booking process for customers.
- Job visibility and assignment flow for providers.
- Secure transactions and feedback mechanisms.
- Administrative oversight for service quality and payments.

## 4. Target Users & Use Cases

**Users:**

- **Customers:** Search, book, pay, and rate services.
- **Service Providers:** Accept assignments, update job status, manage availability.
- **Admins:** Monitor operations, manage providers, track bookings & revenue.

**Use Cases:**

- Customer books a plumbing service for next day.
- Provider accepts the booking and marks progress updates.
- Customer pays via in-app sandbox payment after completion.
- Admin views daily bookings & revenue through dashboard charts.

## 5. Project Scope & High-Level Features

### Scope:

- Focus on core booking & payment functionality in a simple monolithic system.
- Web-based, responsive design (no native apps initially).

### High-Level Features:

- Authentication & Role-based Access (customer, provider, admin).
- Service catalog browsing.
- Booking workflow (with provider assignment).
- Provider dashboard with status updates.
- Secure payment integration.
- Feedback and ratings system.
- Admin dashboard with search, filters, and KPIs.

## 6. Technology Stack

- **Frontend:** React.js
- **Backend:** Spring Boot REST API.
- **Database:** PostgreSQL.
- **Authentication:** JWT with bcrypt-hashed passwords.
- **Payments:** Razorpay.
- **Deployment:** Vercel/Render.
- **Version Control:** GitHub repository.

## 7. Roles & Responsibilities

| Roles | Person |
|---|---|
| Frontend | Bhavya , Pratyush , Shashank , Akshay |
| Backend | Hitiksha , Bhavika , Anjali |
| Q/A Tester | Shashank , Anjali |
| ML Implementation (Backend) | Malhar , Jayesh |

## 8. Timeline with Milestones

| Week / Date | Milestone / Deliverable | Description |
|---|---|---|
| 26-Aug-2025 | Project Proposal Document | Title, scope, motivation, tech stack, roles, timeline. |
| 07-Sep-2025 | Requirements Specification Document (BRD) | Functional & non-functional requirements, user stories, wireframes (initial). |
| 14-Sep-2025 | System Design Document | Architecture diagram, DB schema, class diagrams, mockups (majorly final). |
| 14-Sep-2025 | Project Plan / Gantt Chart | Task timeline, milestones, team assignments (Trello/Jira). |

| | | |
|---|---|---|
| 15-Sep to 25-Nov 2025 | Weekly Progress Reports | 1-page reports on tasks completed, blockers, upcoming work. |
| 14-Oct-2025 | Mid-Semester Demonstration | Partial working demo + code walkthrough + slides. |
| 04-Nov-2025 | Test Plan & Test Cases | Unit/integration tests, bug log, DB population, UI testing. |
| 15-Nov-2025 | Final Application | Fully functional app with frontend + backend + DB integration. |
| 15-Nov-2025 | Deployment & Hosting | Hosted on Heroku/Vercel/Firebase, live URL, deployment notes. |
| 18-Nov-2025 | Final Project Report | 15–25 page detailed report with system overview, challenges, solutions. |
| 18-Nov-2025 | Final Presentation & Demo | 10–15 slides, poster, live demo, lessons learned. |
| 19-Nov-2025 | Peer Review & Contribution Report | Individual reviews and self-assessment. |