ReliServe

PRODUCT REQUIREMENTS DOCUMENT (PRD)

Product Name (Working)

ReliServe
Tagline: Reliability-first local services. Built for urgency.

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1. Product Overview

1.1 Problem Statement

Existing local service platforms (cleaning, plumbing, handyman services, etc.) exhibit several critical shortcomings:

- High job cancellation rates
- Low accountability, with penalties applied primarily to workers
- Inflated, subjective, and outdated star rating systems
- Inadequate handling of urgent and emergency service requests
- Pricing uncertainty and negotiation friction
- Frequent disputes caused by unclear job scope

These issues result in:

- Wasted time for both customers and workers
- Reduced trust in platforms
- User churn
- Degradation of overall marketplace quality

1.2 Product Vision

ReliServe aims to build a trust-first, AI-powered local services marketplace that:

- Prioritizes reliability over popularity
- Handles emergency service requests intelligently
- Enforces mutual accountability between customers and workers
- Uses AI to prevent failures before they occur rather than reacting afterward

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1.3 Target Users

Primary Users

- Homeowners and renters seeking local services
- Students and local individuals offering services
- Freelance cleaners, plumbers, electricians, and handymen

Secondary Users

- Property managers
- Small service businesses
- Emergency responders (future expansion)

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2. Goals and Success Metrics

2.1 Business Goals

- Reduce cancellation rates by at least 40 percent
- Increase successful job completion rates
- Retain high-quality and reliable workers

- Build a sustainable, trust-driven local service ecosystem

2.2 Product Success Metrics

Metric	Target
Job completion rate	Greater than 90 percent
Emergency response acceptance time	Less than 10 minutes
Repeat user rate	Greater than 50 percent
Cancellation rate	Less than 15 percent
Dispute rate	Less than 5 percent

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3. Core User Flows

3.1 Normal Job Flow

1. User posts a service request
2. AI assistant clarifies job scope
3. System suggests a fair price range
4. Worker is matched based on reliability and availability
5. Job is executed
6. Payment is released
7. Mutual reviews and reliability scores are updated

3.2 Emergency Job Flow

1. User selects the Emergency tab

2. Location is automatically detected
3. AI prioritizes workers by ETA and reliability score
4. Workers receive emergency alerts
5. First worker to accept locks the job
6. Live job tracking begins
7. Payment and mandatory emergency review are completed

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4. Emergency Tab (Key Differentiator)

4.1 Emergency Tab Features

- One-tap emergency job creation
- Mandatory location access
- High-priority job designation
- Map-based interface showing:
    - Customer location
    - Nearby reliable and available workers
- Worker opt-in for emergency availability

4.2 AI Role in Emergencies

- Prioritizes workers based on:
    - Distance and ETA
    - Reliability score
    - Emergency job performance history
- Automatically filters unreliable matches

- Enforces minimum job clarity requirements

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5. AI-Powered Job Clarity

5.1 Problem

Vague job descriptions often lead to misunderstanding, scope creep, and cancellations.

5.2 Solution

An AI assistant that:

- Asks structured follow-up questions
- Accepts photos and videos
- Classifies job type automatically
- Estimates:
    - Required time
    - Necessary tools
    - Job complexity
- Locks job scope before worker acceptance

5.3 Output

- Structured job summary
- Locked scope agreement
- Shared visibility for both customer and worker

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6. Fair Pricing Intelligence

6.1 Features

- AI-suggested price ranges
- Acceptance probability indicators
- Market comparison insights (e.g., percentage of similar jobs accepted at a given price range)

6.2 Pricing Logic

Pricing recommendations are generated using regression models based on:

- Job type
- Location
- Estimated duration
- Urgency level
- Time of day

The system flags unrealistic pricing to both parties.

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7. Reliability Score (Core Innovation)

7.1 Why Reliability Over Ratings

Traditional star ratings are subjective, inflated, and easily manipulated. Reliability scores reflect actual behavior.

7.2 Reliability Score Inputs

Signal	Weight
On-time rate	High

Signal	Weight
Cancellation rate	Very high
Completion consistency	High
Scope adherence	Medium
Emergency performance	Medium

7.3 AI-Predicted Metrics

- Cancellation probability
- Reliability decay based on recent behavior

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8. Mutual Accountability System

8.1 Buyer Accountability

- Buyers receive reliability scores
- Late cancellations reduce job visibility
- Repeated abuse limits emergency access

8.2 Worker Accountability

- Emergency performance tracked separately
- No-shows incur severe penalties
- Scope violations are flagged and recorded

8.3 Impact

- High-quality workers remain on the platform
- Low-quality actors are naturally filtered out
- Marketplace quality improves over time

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9. Map and Urgency Awareness

9.1 Map View Features

- Live job markers
- Visual distinction between emergency and normal jobs
- Worker availability overlays
- ETA visualization

9.2 Matching Intelligence

AI matches jobs using:

- Proximity
- Availability
- Reliability score
- Job suitability

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10. Payments and Deal Flow

10.1 Payment Model

- Escrow-based payments
- Support for partial releases
- Optional emergency surge pricing

10.2 Dispute Handling

AI-assisted dispute resolution includes:

- Chat and scope summarization
- Agreement extraction
- Suggested fair outcomes

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11. Reviews and Ratings (Two-Way)

11.1 Review Types

- Star rating (secondary)
- Reliability impact score (primary)
- Written feedback

11.2 Review Rules

- Reviews unlock only after payment completion
- Emergency jobs require mandatory reviews
- NLP-based abuse and manipulation detection

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12. Trust and Safety

12.1 Fraud Detection

- Detection of off-platform payment attempts
- Scam pattern recognition
- Repeated cancellation abuse detection

12.2 Safety Features

- Identity verification
- Emergency job monitoring
- SOS and reporting mechanisms

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13. Technical Architecture (High Level)

Frontend

- Web and mobile applications (React or Flutter)
- Maps integration using Google Maps or Mapbox

Backend

- Node.js or FastAPI
- PostgreSQL with PostGIS
- Redis for real-time availability and state management

AI and ML

- Large language models for job clarity and dispute resolution
- Machine learning models for:
    - Pricing estimation
    - Cancellation prediction
    - Trust and reliability scoring

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14. MVP Scope

MVP Features

- Job posting
- Emergency tab
- Reliability score system
- AI-driven job clarification
- Map-based matching
- Secure payments
- Mutual reviews

Post-MVP Features

- Vision-based job analysis
- Advanced dispute automation
- Subscription plans
- Business and enterprise accounts

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15. Risks and Mitigation Strategies

Risk	Mitigation
Cold start trust	Default trust values with verification
Emergency abuse	Rate limiting and behavioral penalties
AI errors	Human override and appeal mechanisms
Legal liability	Clear disclaimers and terms of service

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16. Future Expansion

- Insurance integration
- Smart contract-based payments
- City and municipal partnerships
- AI-verified professionals
- Emergency responder APIs

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17. Final Positioning Statement

ReliServe is a trust-first, AI-powered local service marketplace designed for reliability, accountability, and emergency readiness rather than popularity.