Product Requirement Document (PRD)

Project Name: Product Delivery System
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Date: [DD/MM/YYYY]
Version: 1.0

1. Introduction
Purpose: To design and develop a system that manages product orders, tracks deliveries, and ensures timely delivery to customers.
Scope: The system will allow customers to place orders, delivery agents to pick and deliver, and admins to monitor the entire process.

2. Objectives
1. Enable customers to browse, order, and pay for products.
2. Track orders in real-time.
3. Allow delivery agents to update status.
4. Provide admin panel for monitoring and reporting.

3. Stakeholders
- Customer: Places order, tracks delivery.
- Delivery Agent: Picks up and delivers products, updates status.
- Admin: Manages products, orders, delivery agents, and reports.

4. Functional Requirements
Customer Features
- Register/Login
- Browse products
- Add to cart & checkout
- Payment (COD / online)
- Order tracking (real-time)
- Notifications

Delivery Agent Features
- Login
- View assigned orders
- Update status
- Route assistance

Admin Features
- Manage users
- Manage inventory
- Assign orders
- Dashboard with reports

5. Non-Functional Requirements
- Scalability
- Security
- Performance
- Reliability

6. System Workflow
1. Customer places order → system confirms order.
2. Admin assigns delivery agent.
3. Delivery agent picks product.

4. Agent updates status → customer notified.
5. Agent delivers product → system marks complete.

7. Technology Stack
- Frontend: React / Flutter
- Backend: Node.js / Django
- Database: MySQL / MongoDB
- Payments: Razorpay / Stripe
- Notifications: Firebase / Twilio

8. Success Metrics
- 95% orders delivered on time.
- <2% failed deliveries.
- Customer satisfaction rating ≥ 4/5.

9. Future Enhancements
- AI-based route optimization.
- Customer feedback system.
- Loyalty rewards and discounts.