

FleetSync Pro - Product Requirements Document (PRD)

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Part 1: Project Overview

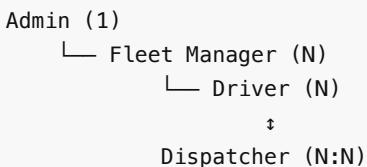
1. Product Summary

Item	Description
Product Name	FleetSync Pro
Product Type	Web + Mobile App + Admin Dashboard
Target Users	Logistics companies, delivery services, fleet operators
Core Value	AI-powered fleet management and delivery optimization platform

2. User Types & Roles

User Type	Primary Role	Key Permissions
Driver	Execute deliveries	View assignments, update status, submit POD, report issues
Fleet Manager	Manage vehicles & drivers	Monitor fleet, assign vehicles, view analytics, manage maintenance
Dispatcher	Coordinate deliveries	Create/assign tasks, optimize routes, track drivers real-time
Admin	System administration	Full access, user management, billing, configuration

3. User Relationships



- Driver ↔ Fleet Manager:** N:1 - Many drivers report to one fleet manager
- Driver ↔ Dispatcher:** N:N - Dispatchers assign to multiple drivers, drivers receive from multiple dispatchers
- Fleet Manager ↔ Admin:** N:1 - Multiple fleet managers per admin

4. Design Guidelines

Aspect	Specification

Primary Color	#1E3A5F (Navy Blue)
Font Family	Inter
Design Reference	Uber Freight (driver UI), Samsara (dashboard), Onfleet (route planning)

5. Key Differentiators

1. AI-powered route optimization considering traffic, weather, and time windows
 2. Unified platform for last-mile and long-haul fleet management
 3. Real-time vehicle health monitoring with predictive maintenance
 4. Seamless dispatcher shift handoff
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Part 2: Mobile App PRD

1. Driver App

1.1 Navigation Menu (Bottom Tab)

1. **Home** - Today's schedule and active delivery
2. **Deliveries** - Full delivery list and history
3. **Messages** - Chat with dispatcher/fleet manager
4. **Profile** - Settings, earnings, vehicle info

1.2 Page Architecture & Feature Specification

1. Home Tab

Main Page (Today's Dashboard)

1. Active Delivery Card

- o Current delivery address and customer name
- o ETA display
- o Navigation button → Opens Google Maps
- o Status buttons: Arrived / Complete / Issue

2. Today's Summary

- o Total deliveries: [X] assigned, [Y] completed
- o Hours worked today
- o Break time remaining

3. Quick Actions

- o Start Route button
- o Report Issue button
- o Take Break button

Delivery Detail Page

- Full address with map preview
- Customer contact info (tap to call)
- Delivery notes/instructions

- Package details (size, quantity)
- Time window display
- Status update buttons
- Proof of Delivery section

2. Deliveries Tab

Main Page (Delivery List)

1. Filter Tabs

- Assigned | In Progress | Completed | Failed

2. Delivery List Items

- Address (truncated)
- Time window
- Status indicator (color-coded)
- Priority flag (if applicable)
- Tap → Delivery Detail

3. Search

- Search by address or customer name

History Page

- Past deliveries with POD thumbnails
- Filter by date range
- Earnings per delivery

3. Messages Tab

Main Page (Conversation List)

1. Conversation Items

- Contact name and role
- Last message preview
- Unread indicator
- Timestamp

Chat Page

- Message bubbles (sent/received)
- Text input with send button
- Photo attachment option
- Real-time delivery status shared

4. Profile Tab

Main Page

1. Profile Section

- Profile photo
- Name and driver ID
- Contact info
- Edit Profile button

2. Earnings Section

- o Today's earnings
- o This week's earnings
- o View Details → Earnings History

3. Vehicle Section

- o Assigned vehicle info
- o License plate
- o Last inspection date
- o Report Issue button

4. Settings

- o Notification preferences
- o Language selection
- o Help & Support
- o Log Out

1.3 Key Flows

Proof of Delivery Flow

1. Driver taps "Arrived" on Active Delivery
 - └ System logs GPS + timestamp
2. Driver taps "Complete Delivery"
 - └ Camera opens automatically
3. Driver takes photo of package
 - └ Photo preview with retake option
4. Signature capture screen (if required)
 - └ Customer signs on screen
5. Optional notes input
 - └ Text field for delivery notes
6. Submit confirmation
 - └ Success animation
 - └ Next delivery auto-loads

Vehicle Issue Report Flow

1. Driver taps "Report Issue"
 - └ Issue category selection (Engine, Tire, Brakes, Other)
2. Photo capture
 - └ Take photo of issue
3. Severity selection
 - └ Low / Medium / High / Critical

4. Description input
 - └ Text field for details
5. Submit
 - └ Fleet Manager notified immediately
 - └ If Critical: Dispatcher prompted to reassign

2. Fleet Manager App (Web Responsive)

2.1 Navigation Menu (Side Menu)

1. Dashboard - Overview and alerts
2. Fleet Map - Real-time vehicle locations
3. Vehicles - Vehicle management
4. Drivers - Driver management
5. Maintenance - Schedule and history
6. Reports - Analytics and exports

2.2 Page Architecture & Feature Specification

1. Dashboard

Main Page

1. Fleet Status Cards

- Active vehicles count
- Idle vehicles count
- In maintenance count
- Total deliveries today

2. Alerts Panel

- Vehicle issues reported
- Maintenance due alerts
- Driver requests pending
- Geofence violations

3. Performance Chart

- Deliveries completed (7-day trend)
- On-time delivery rate

2. Fleet Map

Main Page

1. Interactive Map

- Vehicle markers with status colors
- Click marker → Vehicle popup card
- Cluster view for many vehicles

2. Filter Panel

- By status (Active, Idle, Issue)

- By vehicle type
- By assigned driver

3. Vehicle List Sidebar

- Scrollable list synced with map
- Quick status indicators

3. Vehicles Page

Main Page (Vehicle List)

1. Top Actions

- Add Vehicle button
- Filter dropdown
- Search by plate/ID

2. Vehicle Table

- Vehicle ID
- License plate
- Type (Van/Truck/Motorcycle)
- Assigned driver
- Status
- Last location
- Actions (Edit, View, Assign)

Vehicle Detail Page

- Full vehicle information
- Maintenance history
- Fuel consumption chart
- Assigned driver history
- Current location on map

4. Drivers Page

Main Page (Driver List)

1. Driver Table

- Name and photo
- Contact info
- Assigned vehicle
- Status (Active/On Break/Offline)
- Today's deliveries
- Performance score
- Actions

Driver Detail Page

- Profile information
- Performance metrics
- Delivery history
- Hours worked (weekly view)
- Approve/Deny requests

5. Maintenance Page

Main Page

1. Calendar View

- Scheduled maintenance events
- Overdue items highlighted

2. Pending Issues List

- Driver-reported issues
- Severity indicator
- Create Ticket button

Maintenance Ticket Page

- Issue details
- Assigned mechanic/vendor
- Status updates
- Cost tracking
- Resolution notes

6. Reports Page

Main Page

1. Report Types

- Fleet Utilization
- Fuel Consumption
- Driver Performance
- Maintenance Costs

2. Export Options

- Date range picker
 - Format selection (PDF, Excel, CSV)
 - Download button
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Part 3: Dispatcher Web Dashboard PRD

Navigation Menu (Top + Side)

Top Bar:

- Organization logo
- Search (deliveries, drivers)
- Notifications bell
- Profile dropdown

Side Menu:

1. **Dispatch Board** - Main delivery management
2. **Live Map** - Real-time tracking

3. **Deliveries** - All deliveries list
4. **Route Planner** - Optimization tool
5. **Customers** - Customer communication
6. **Handoff** - Shift handoff notes

Page Architecture & Feature Specification

1. Dispatch Board

Main Page (Kanban-style Board)

1. Column Headers

- o Unassigned | Driver 1 | Driver 2 | Driver N...
- o Add Driver column button

2. Delivery Cards

- o Address snippet
- o Time window
- o Priority indicator
- o Package count
- o Drag handle

3. Card Actions

- o Click → Delivery detail modal
- o Drag → Assign to driver
- o Right-click → Priority menu

4. Top Actions

- o Import CSV button
- o Auto-assign button
- o Optimize All Routes button

5. AI Suggestion Panel

- o Suggested assignments
- o Accept / Dismiss buttons
- o Reasoning tooltip

2. Live Map

Main Page

1. Map View

- o Driver markers (real-time)
- o Active delivery routes
- o Traffic overlay toggle

2. Driver Panel (Right)

- o List of active drivers
- o Current delivery info
- o ETA to next stop

- o Message button

3. Delivery Panel (Left)

- o Unassigned deliveries count
- o Urgent deliveries highlight
- o Quick assign dropdown

3. Deliveries Page

Main Page

1. Filter Bar

- o Status filter
- o Date range
- o Driver filter
- o Priority filter

2. Delivery Table

- o ID
- o Customer
- o Address
- o Driver
- o Status
- o Time window
- o Actions

3. Bulk Actions

- o Select multiple
- o Bulk assign
- o Bulk cancel
- o Export selected

Delivery Detail Modal

- Full delivery info
- Status history timeline
- POD viewer (if completed)
- Customer communication log
- Edit / Cancel buttons

4. Route Planner

Main Page

1. Driver Selection

- o Dropdown to select driver
- o Or "New Route" option

2. Delivery Selector

- o Available deliveries list
- o Multi-select with checkboxes

- Add to route button

3. Route Preview

- Map with numbered stops
- Ordered stop list (drag to reorder)
- Total distance and time
- Time window violations highlighted

4. Optimization Panel

- Optimize button
- Options: Fastest / Shortest / Balanced
- Before/After comparison
- Savings display

5. Actions

- Save Route
- Push to Driver
- Clear Route

5. Customers Page

Main Page

1. Communication Log

- Customer inquiries list
- Status (Open / Resolved)
- Assigned dispatcher

Customer Detail

- Customer info
- Delivery history
- Communication thread
- Reply input

6. Handoff Page

Main Page

1. Current Shift Summary

- Deliveries completed
- Pending issues
- Driver notes

2. Handoff Notes Editor

- Rich text editor
- Tag drivers/deliveries
- Priority items highlight

3. Previous Handoffs

- History list

- o Read status
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Part 4: Admin Dashboard PRD

Navigation Menu

1. **Overview** - System-wide dashboard
2. **Users** - User management
3. **Organizations** - Multi-tenant management
4. **Billing** - Subscription and invoices
5. **Integrations** - API keys and connections
6. **Settings** - System configuration
7. **Audit Logs** - Activity history

Page Architecture & Feature Specification

Dashboard (Overview)

Card Components

- Total users by role
- Active deliveries (real-time)
- System health status
- Revenue this month

Charts

- User growth trend
- Delivery volume by organization
- API usage metrics

User Management

Main Page

1. Top Area

- o Create User button
- o Role filter dropdown
- o Organization filter
- o Search by name/email

2. User Table

- o Name
- o Email
- o Role
- o Organization
- o Status (Active/Suspended)
- o Last login
- o Actions

3. Bulk Actions

- Bulk suspend
- Bulk activate
- Export users

User Detail/Edit Modal

- Edit user info
- Change role
- Reset password
- Suspend/Activate
- Activity log

Billing Page

Main Page

1. Revenue Summary

- MRR display
- Active subscriptions count
- Overdue invoices alert

2. Subscription Table

- Organization
- Plan
- Status
- Next billing date
- Actions

Invoice Detail

- Line items
- Payment history
- Resend invoice
- Mark as paid

Integrations Page

Main Page

1. Active Integrations

- Google Maps: Connected ✓
- Stripe: Connected ✓
- Twilio: Connected ✓
- Firebase: Connected ✓

2. API Keys

- Key list (masked)
- Create new key
- Revoke key
- Usage stats

Settings Page

Sections

- Organization defaults
- Notification templates
- Role permissions matrix
- White-label settings (logo, colors)
- Compliance settings

Audit Logs

Main Page

1. Filter Bar

- User filter
- Action type
- Date range

2. Log Table

- Timestamp
- User
- Action
- Resource
- IP Address
- Details link

Additional Questions (Client Confirmation Required)

Required Clarifications

#	Question	Context
1	What is the maximum number of stops per route?	Needed for route optimization limits
2	Should POD photos be required for all deliveries or configurable?	Some deliveries may not need photo proof
3	What are the specific HOS (Hours of Service) regulations to enforce?	Varies by region/country
4	Should customers receive real-time tracking links?	Common feature but not specified

Recommended Clarifications

#	Question	Context
1	What offline data sync strategy is preferred?	For driver app in low connectivity
2	Should there be driver-to-driver messaging?	Currently only driver ↔ dispatcher specified
3	What vehicle types need specific handling?	Weight limits, route restrictions for trucks

4	Is there a maximum photo size/quality setting?	Affects storage costs and upload time
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Terminology

Term	Definition
Last-mile delivery	Final leg of delivery from distribution center to customer
Proof of Delivery (POD)	Documentation confirming successful delivery (photo, signature)
Deadhead	Driving without cargo, typically returning from delivery
ETA	Estimated Time of Arrival
Geofence	Virtual perimeter around a geographic location
Hours of Service (HOS)	Regulations limiting driver working hours
Route optimization	Algorithm to find most efficient delivery sequence
Telematics	Technology for monitoring vehicle location and diagnostics
Dispatch	Process of assigning drivers to deliveries
Fleet utilization	Percentage of fleet actively being used
Time window	Specific period when delivery must occur
Stop	Individual delivery location on a route
Manifest	List of all deliveries assigned to a driver

Technical Requirements

Authentication

- Email/Password for all users
- Phone + OTP option for drivers
- SSO (SAML/OAuth) for enterprise clients
- 2FA required for Admin and Fleet Manager roles

Integrations

Service	Purpose
Google Maps Platform	Navigation, geocoding, traffic data
Stripe	Payment processing for billing
Twilio	SMS notifications, phone verification
Firebase	Push notifications, real-time database

AWS S3	Photo storage (POD, vehicle issues)
Samsara API	Fleet telematics (optional)
QuickBooks API	Accounting sync (enterprise)

Non-Functional Requirements

- Offline mode support for driver app
- Multi-language: English, Spanish, Korean
- iOS and Android mobile apps
- Battery optimization for GPS tracking
- Real-time updates via WebSocket

Feature Change Log

Version 1.0 (2026-01-15)

Change Type	Description	Source
Initial Release	Complete PRD from client requirements	FleetSync_260115_162345.md

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