

# **Sprint 01 — Field Execution & Monitoring MVP**

## **Sprint 1 Goal**

In Sprint 1, we aim to deliver a fully working, demo-ready MVP where I can demonstrate a complete field sales workflow from start of day to end of day upload, and allow the Business Unit to monitor all collected data through the web dashboard.

## **Core Features Covered**

- Core Feature 02 — Collecting Data (Main Execution Logic)
- Core Feature 03 — Monitoring (Basic Visibility for BU)
- Core Feature 01 (Route Optimization) intentionally deferred to Sprint 2.

## **Technology Stack & Justification**

- Flutter (Mobile) with Hive for offline-first capability.
- ASP.NET Core Web API as centralized backend service.
- PostgreSQL as single source of truth database.
- React + Tailwind for admin monitoring dashboard.
- Google Maps Platform for basic location capture (optimization in Sprint 2).

## **System Architecture**

Flutter (offline Hive) → Sync via HTTP → ASP.NET Core API → PostgreSQL ← React Admin Web.  
In our architecture, mobile and web never directly connect to the database. Only the API communicates with PostgreSQL.

## Mobile App Features (Core Feature 02)

- Login with JWT authentication.
- View due shop list based on configurable 14-day visit frequency.
- Start Day: select vehicle and enter opening lorry stock.
- Shelf & Stock Checks (OSA) with reason codes and backroom quantity.
- Smart Order Suggestion with case-pack rounding and warnings.
- Delivery Handling (Full / Partial) with automatic backorder generation.
- Promotion checklist and basic competitor feedback capture.
- End-of-day stock reconciliation and returns entry.
- Bulk upload of all daily data via POST /sync/day.

## Web Dashboard Features (Core Feature 03)

- Role-based login (BU role in Sprint 1).
- Master setup: configure visit frequency days.
- Monitoring dashboard filtered by Rep, Territory, and Date.
- View visits list with OSA issues.
- View order summaries and delivery status.
- View returns summary.
- Read-only monitoring (approval in Sprint 2).

## Key API Endpoints (Sprint 1)

- POST /auth/login
- GET /shops/due
- POST /day/start
- POST /sync/day
- GET /monitoring/summary
- GET /monitoring/visits
- GET /monitoring/orders
- GET /monitoring/deliveries
- GET /monitoring/returns
- GET & PUT /settings/visit-frequency

# Agile Roles & Responsibilities

## Product Owner

- Define and prioritize Product Backlog.
- Write user stories and acceptance criteria.
- Approve completed Sprint deliverables.
- Clarify requirements with lecturer.

## Scrum Master

- Organize Sprint Planning, Daily Standups, Review, and Retrospective.
- Maintain Jira/Trello board.
- Track progress and remove blockers.
- Document daily summary points.

## Business Analyst

- Prepare UML diagrams (Use Case, Activity, Sequence).
- Ensure requirement traceability.
- Refine workflows and align with proposal.

## Developers

- Implement Flutter mobile features.
- Develop ASP.NET Core API.
- Build React admin dashboard.
- Follow clean architecture and Git workflow.

## QA/Test Engineer

- Create test cases for each user story.
- Perform manual testing.
- Collect evidence screenshots.
- Track and report bugs.