

## CereBI Junior Intern Assignment – LogiDog MVP

Business Problem: LogiDog faces customer complaints due to shipment delays. They need a system to flag shipments at risk early.

Solution Overview: A React-based dashboard that ingests shipment data, applies risk detection rules, and highlights at-risk shipments with clear reasons. It includes sample data, API design, and risk logic.

Risk Detection Rules: - ETA beyond planned delivery - Delivery within 3 days but not in final stages - In transit with last scan > 12h ago - Customs hold within 5 days of delivery - Hub delay  $\geq$  180 minutes - Severe weather alert

Data & API: - Fictitious dataset of 18 shipments (JSON). - OpenAPI spec for /shipments, /shipments/at-risk, /shipments/{id}. - Optional Express stub server provided.

UI/UX Dashboard: - At-risk list with badges and reasons - Filters: search, status, mode, carrier, risk-only - KPIs: at-risk %, in transit, delivered counts - Auto-refresh (15s polling)

Business Value: The dashboard converts raw tracking data into early-warning alerts. It allows operations teams to act before delivery failures, reducing penalties and improving customer satisfaction.

Next Steps: - Extend with detailed shipment timelines - Collect ground-truth outcomes for ML training - Replace polling with SSE/WebSockets