MASTER CHECKLIST

PHASE 2a — "Credible Data Backbone"

| Step | Task | Description |
| --- | --- | --- |
| 2a.1 | Environment Setup | Set up virtualenv, FastAPI, SQLAlchemy, PostgreSQL, .env, pip packages |
| 2a.2 | Define Data Schema & Models | Create Team and Player SQLAlchemy models with Base, session, Alembic |
| 2a.3 | Ingest CSV into Database | Load FootballPlayers.csv, normalize it, insert into DB via ingestion script |
| 2a.4 | ERD + /docs Endpoint | Auto-generate schema visualization or serve table structure as JSON via FastAPI |
| 2a.5 | Player Availability + Biometric Readiness | Create tables status\_intervals and fact\_biometric\_minute with mock data (injuries, HRV, GPS) |
| 2a.6 | Insight Cards (Placeholders) | Stub 5 cards: Tactical Misfit, Trending Up, Underused Asset, Role Drift, Risk Alert — include schema and dummy logic |
| 2a.7 | Feedback & Logging | Add audit\_log and feedback\_log tables for user actions (filters, thumbs up/down) |
| 2a.8 | Metrics Endpoint | Add /metrics route in FastAPI — return ingestion health, error counts, freshness |
| 2a.9 | ERD + Docs Endpoint | Add /docs/schema route (text or visual) showing table structure |
| 2a.10 | Calendar Table (dim\_time) | Add static table dim\_time to track weekdays, matchdays, breaks, etc. (helps with modeling) |

Exit Criteria for Phase 2a:

* All tables created via Alembic
* 10+ players and teams ingested
* Insight cards render (with placeholder JSON)
* /docs and /metrics routes working
* Biometric and feedback tables exist (with mock data)

PHASE 2b — “Demo Intelligence System”

| Step | Task | Description |
| --- | --- | --- |
| 2b.1 | Conversational Assistant | Chat search interface using OpenAI + pgvector (e.g., “Find young left-footed CBs”) |
| 2b.2 | Unit Synergy Metrics | Create Synergy tab → calculate chemistry using pass chains, xG linkups |
| 2b.3 | Coach Style Profiles | Analyze formations, press height, and create coach fingerprint tags |
| 2b.4 | Auto PDF Reports | Export multilingual player PDFs: includes profile, insights, contract, synergy |
| 2b.5 | Injury/Load Risk Alerts | Parse mock HRV/GPS → show Risk Alert card + link to player profile |
| 2b.6 | Contract Projection Widget | Add smart salary + fee estimator with clustering-based comps and negotiation cues |
| 2b.7 | UI Polish + Deployment | Tailwind styling, responsive layout, 1-click deploy (e.g., Vercel + Render) |

Exit Criteria for Phase 2b:

* Chat search returns players from DB based on natural language
* Insight cards are rendered from API (not static)
* PDF reports show insight data in multiple languages
* Risk alert, synergy, contract data visible for 5 test players
* Frontend styled, demo-deployable