

Team B - Phased Development Plan

App Summary

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The Combine Stats Tracker is a tool designed for youth sports combine events, where organizers can register approximately 250 players, collect real-time performance data across five drills, and automatically group players by age for fair ranking. Staff will take player photos at check-in, record scores for each fixed drill, and use a customizable algorithm to rank players within their age group. The app must support offline data entry with sync, and export detailed reports for coaches to use during draft selection. Leaderboards and all data views are staff-only. This version is for a single-event use case, not long-term tracking.

Phase 1: Project Setup & Architecture

- Set up frontend (React/React Native) and backend (Express or FastAPI) repos.
- Initialize database (PostgreSQL or Firebase).
- Configure CI/CD pipeline and environment variables.
- Prepare basic routing, page layout, and role-based auth scaffolding.

Phase 2: Player Management

- Create UI and backend for player check-in form.
- Integrate device camera API for photo capture.
- Store player data and image to database + cloud storage.
- Display player list with search and age-group filtering.

Phase 3: Drill Input System

- Build input forms for all 5 fixed drills.
- Validate and save scores (raw and normalized).
- Allow editing if needed.

- Link results to player records.

Phase 4: Age Grouping & Event Configuration

- Automatically assign players to default age groups.
- Build admin interface to adjust age brackets.
- Add admin setting panel for custom drill weight inputs.
- Save weights per event instance.

Phase 5: Ranking & Leaderboards

- Normalize all drill scores (0-100 scale).
- Apply weighted scoring and compute total scores.
- Generate and sort rankings within each age group.
- Display rankings in staff-only view.

Phase 6: Offline Support & Syncing

- Enable local caching of data inputs using IndexedDB or localStorage.
- Queue offline entries for sync.
- Build auto/manual sync triggers and status indicators.

Phase 7: Reports & Exports

- Build PDF and CSV generator for player stats and draft reports.
- Allow export by age group or full event.
- Include player photo, all scores, and final rank in reports.

Phase 8: QA, Testing & Polish

- Test user flows end-to-end (offline, admin, judge).
- Conduct field simulation test (check-in + full event flow).
- Add UI polish, responsive styles, and error handling.
- Final bug fixes and deployment.