FlowTrack – End Goal Definition (Updated)

Working Name: FlowTrack
Owner: Single user (the creator)
Type: Personal web app / Flow Operating System

1. Core Outcome

The end goal of FlowTrack is to create a **personal Flow Operating System** that uses the user's own data (sessions + physiology) to:

1. **Make entering flow a predictable, repeatable skill instead of a random event.**
2. **Increase resilience in flow** – the ability to stay in flow longer and recover from distractions.
3. **Generate and continually refine a personalized "Flow Recipe"** that describes the exact conditions, routines, and parameters that best trigger flow for this specific user.

By the time the system is mature, the user should be able to say:

> "I know when, how, and under what conditions I can reliably enter deep flow, how long it usually takes, how resilient it is, and what to adjust if it isn't working."

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2. What the System Actually Does

FlowTrack is a **self-experimentation and performance lab**, not a general productivity app.

It will:

1. **Collect high-quality, structured data** about:
   - Deep-work / flow training sessions (mental performance side).
   - Daily physiological status (HRV, sleep duration, sleep score, etc. from a Garmin device, logged manually once per day).
2. **Analyze patterns over time** to discover:
   - When flow is easiest to access (time of day, day of week).
   - Which internal states (sleep, HRV, mood, energy) support or hinder flow.
   - Which environmental conditions (location, noise, music) correlate with stronger flow.
   - How challenge level and task type affect flow intensity and duration.
   - How long it typically takes to "drop into" flow and how often the user successfully recovers after distractions.

3. **Produce a living, versioned “Flow Recipe”**, including:
    - Best time(s) of day for deep work.
    - Ideal session length (e.g., 60–90 minutes).
    - Recommended environment (location, sound, lighting).
    - Pre-session ritual (breathing, planning, warm-up).
    - Optimal challenge range (e.g., subjective difficulty 6–7/10).
    - Most effective flow triggers (novelty, complexity, risk, pattern recognition, purpose, etc.).
    - Common flow killers (notifications, multi-tasking, tiredness patterns, etc.).
    - Recovery strategies that work when flow is broken.
4. **Show clear metrics and trends**, so the user can see:
    - Average flow intensity over time.
    - Total deep work minutes per week.
    - Changes in drop-in time (how fast they enter flow).
    - Relationship between HRV/sleep and flow quality.
    - Whether their resilience and performance are improving.

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3. Data Model – Conceptual

FlowTrack’s end state assumes these key data layers:

1. **Session-Level Data (`sessions`)**
   For each focused/flow attempt:
    - Date, start time, end time, duration.
    - Activity / task type.
    - Internal pre-state: sleep quality (subjective), mood, energy, stress.
    - Environment: location, noise level, music or silence, etc.
    - Challenge rating and other task-related parameters.
    - Flow metrics: intensity, time distortion, enjoyment, inner critic quietness, sense of control.
    - Performance metrics: output quality and quantity (self-rated).
    - Resilience metrics: drop-in time (how long until they felt “in the zone”), number of distractions, whether they recovered.
    - Reflections: what helped, what hurt, tweak for next time.
2. **Daily Physiological Data (`daily_physio`)**
   Logged manually once per day from the Garmin app:

    - Date.

- HRV value (e.g., morning readiness / average HRV in ms).
- Sleep duration (minutes or hours).
- Sleep score.
- Resting heart rate (optional).
- Stress score (optional).
- Notes (e.g., sick, travel, heavy training).

Sessions for a given date can be **joined** with that day's physio record by `user_id + date`.

3. **Flow Recipe Data (`flow_recipes`)**
   Versioned protocol the user updates periodically:
   - Version number and date.
   - Best time windows for flow.
   - Ideal session length.
   - Preferred environment and sound.
   - Pre-ritual steps.
   - Optimal challenge range.
   - Most reliable triggers.
   - Flow killers.
   - Recovery strategies.
   - Notes/lessons for future self.

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4. Target Technical Implementation (High-Level)

The system is intended to be implemented as a **web app** with:

- **Frontend:** Next.js + Tailwind CSS (vibe-coded, likely using Windsurf AI assistance).
- **Backend / Database / Auth:** Supabase (Postgres, auto-generated APIs, Row-Level Security).
- **Hosting:** Vercel for the frontend, Supabase for DB and auth.
- **Charts / Analytics:** A React chart library (e.g., Recharts or Chart.js).

The user logs:

- **Daily physiology** via a `/physio/new` page (once per day).
- **Focus/flow sessions** via a `/sessions/new` page (multiple times per day).

A `/dashboard` page aggregates and visualizes data, and a `/flow-recipe` page stores and edits the current personal protocol.

5. Final End Goal Statement (for an LLM)

> **FlowTrack is a personal Flow Operating System web app that collects detailed data about the user's deep-focus sessions and daily physiological state (including Garmin-based HRV and sleep metrics), analyzes patterns across time, and produces an evolving, personalized "Flow Recipe" that specifies the exact conditions, routines, and challenge levels under which the user can most reliably enter, sustain, and recover flow. The ultimate outcome is to turn peak performance from a lucky, occasional state into a predictable, trainable, and resilient skill, supported by clear metrics, dashboards, and versioned protocols, implemented with Next.js, Tailwind, Supabase, and Vercel.**