

Key Improvements for Trainr's AI-Generated Workouts

1. Eliminate Repetition & Boost Variety

- **Problem:** Users receive the same exercises repeatedly.
- **Solution:**
 - The AI will **rotate exercises** to ensure no exercise repeats within a week.
 - Daily workouts will target *different sub-body parts* (e.g., biceps one day, triceps the next).
 - Use the new subBodyPart and workoutPhase fields in the video database to diversify movements (e.g., squats → goblet squats → split squats).

2. Progressive Overload for Continuous Growth

- **Problem:** Workouts lack clear progression (e.g., heavier weights, more reps).
- **Solution:**
 - The AI will **analyze 2-3 weeks of historical data** (sets, reps, weights, feedback) to incrementally increase intensity.
 - Example: If a user completes 3x8 squats at 100 lbs, the next session might suggest 3x10 reps or 105 lbs.

3. Dynamic User Feedback Integration

- **Problem:** Workouts don't adapt to user-reported difficulty.
- **Solution:**
 - If a user rates a workout "too easy," the AI increases load/reps or selects a harder exercise variant.
 - If rated "too hard," it reduces intensity or substitutes with a simpler exercise.

4. Structured Full-Body Workouts

- **Problem:** Inconsistent workout formats.
- **Solution:**
 - **Daily focus:** Full-body sessions targeting arms, legs, chest, back, shoulders, and abs.
 - **Weekly schedule:**
 - Mon, Tue, Thu, Fri, Sat: Workouts (with rest days on Wed/Sun or substituted if skipped).
 - Rest days include light walks and stretches.

5. Duration & Expertise-Based Customization

- **Problem:** Workouts don't align with user time constraints or skill levels.
- **Solution:**
 - **Duration:**
 - 30/45/60+ minute workouts with tailored warmups, sets, and stretches.
 - **Expertise:**
 - Exercises selected based on user level (beginner/intermediate/advanced) from the video database.

6. Equipment & Safety Compliance

- **Problem:** Workouts suggest unavailable equipment.
- **Solution:**
 - The AI will **strictly use equipment listed during onboarding** (e.g., bands, barbells).
 - Bodyweight exercises are prioritized if no equipment is available.

Success Metrics to Track

1. **Zero repeated exercises** in weekly workouts.
2. **User feedback directly impacts** the next session's design.
3. **Clear progression** in weights, reps, or difficulty over 2-3 weeks.

Client Benefits

- **Higher engagement:** Varied, personalized workouts keep users motivated.
- **Better results:** Progressive overload ensures continuous fitness improvements.
- **User trust:** Feedback-driven adjustments show the app "listens" to their needs.