

TEAM 4

Domain: Busy, self-conscious gym-goers who want to improve form without drawing attention or breaking flow.



GR2 REPORT

MEET THE TEAM



Kenisha Vaswani



Animesh Sachan



Jenil Prajapati

KEY INSIGHTS (GR1)

- Gym-goers rely on *feel* rather than feedback. People judge success by soreness, fatigue, or “vibes” in their body, not by clear indicators of form.
- Uncertainty is constant, even for frequent gym users. All participants went 3–5 times a week, yet still questioned if they were “doing it right.”
- Learning is private and self-directed
- Most avoid asking others for help and prefer figuring things out alone or through trusted people.
- Social pressure shapes behavior. Fear of judgment leads people to:
 - ◆ Avoid new or unfamiliar movements
 - ◆ Choose machines over free weights
 - ◆ Leave early when something feels off
- Feedback is fragmented and unreliable
Mirrors, memory, soreness, and online videos are used, but none offer clarity in the moment.

OUR PLAN FOR GR2

Gap identified: People are actively trying to learn, but lack clear, low-pressure, in-the-moment feedback that fits into a real workout.

From GR1, we learned that “learning in the gym” was too broad. What stood out instead was how often people feel unsure while actively working out

For GR2, we are focusing on: How recreational gym-goers learn new movements in the moment without breaking flow or feeling judged.

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01

ADDITIONAL NEEDFINDING

Finding more interviewees

★ Target Demographics:

- Recreational gym-goers learning new movements
- Beginners and returners who feel unsure mid-workout
- A non-user or dropout who quit due to confusion or anxiety
- One extreme user with high confidence and deep technique knowledge

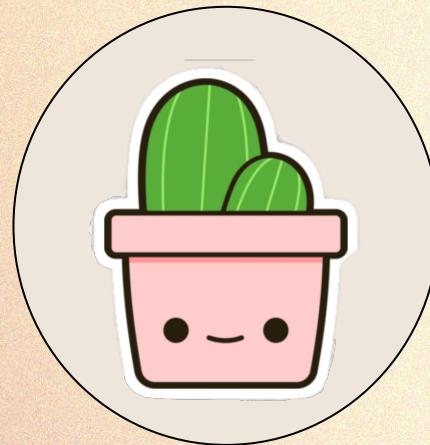
★ Where we found them:

- Outside local gyms before or after workouts
- By asking interviewees to refer others

Previous Participants



Jose



Rosaline



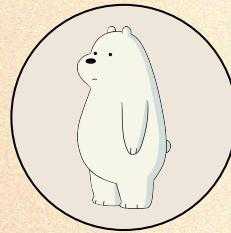
Adam

New Participants



Aaron, 25

Entry-level business analyst
Average User



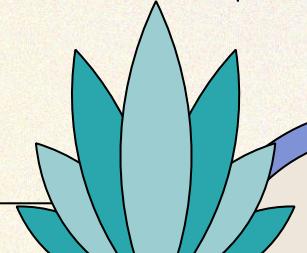
Elena, 23

Retail Associate and
Freelance Photographer
Non User

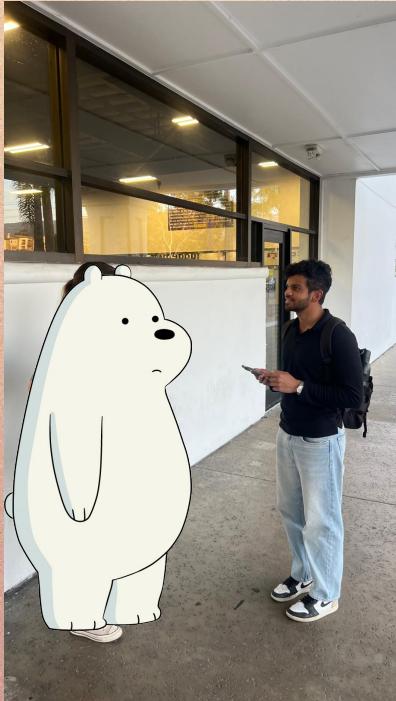


Marcus, 31

Management Consultant
Extreme User



Pictures from the interview



Interview 1

Aaron, 25

- Entry level business analyst with a long 9-5 commute.
- Goes to the gym ~3x/week
- Wants to improve form but avoids asking for help
- Occasionally checks videos mid work-out, breaking flow



Average User

Interviewer - Jenil Prajapati,
Scribe - Kenisha Vaswani

SAY

"I hate being on my phone at the gym."

I come a lot, but I still don't know if I'm doing it right
"I don't want people watching me mess up."

"I wish someone could just tell me if I'm off."

"Sometimes I leave early if I feel awkward."

"I just hope soreness means it worked."

"I just stick to machines I already know."

"I don't want to slow anyone down."

"I often ask ChatGPT what I'm doing wrong"

"I feel dumb asking for help."

"I should already have this figured out."

"Everyone else knows what they're doing."

"I don't belong in this area of the gym."

"If I look wrong, people will judge me."

"Stopping to check my phone kills momentum"

"I need reassurance, not perfection."

"I do not want attention."

"I just want to feel confident."

THINK

DO

Chooses familiar machines over free weights

Avoids mirrors when trying new movements

Copies what others nearby are doing

Leaves if a machine feels confusing

Adjusts based on "educated guess"

Very conscious while doing reps

Keeps rest periods short to avoid attention

Does not record himself

Sticks to the same routine

FEEL

Self conscious

Anxious

Relieved when something feels right

Motivated

Overwhelmed

Hopeful

Frustrated

Embarrassed

Determined

Lonely



SAY

I come a lot,
but I still
don't know if
I'm doing it
right

"I don't want
people
watching me
mess up."

I don't want
people watching
me mess up."

anyone
down."

I just hope
ignorance
means it
worked."

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i feel
dumb
asking for
help."

"Everyone
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what they're
doing."

Everyone else
knows what
they're doing.

THINK

FEEL

DO

Chooses
familiar
machines
over free
weights

Avoids mirrors
and sticks to
familiar
machines.

leaves if a
machine
feels
confusing

does not
cond herself

Adjusts
based on
"feel" alone

Replays
instructions
in her head

Sticks to
the
same
routine

Self
conscious

Anxious

Relieved
when
something
feels right

Anxious but
determined to
improve.

Hopeful

Lonely

Determined

"If I look

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"I do
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"I do not
want
attention."

"I just want
to feel
confident."

"I need
reassurance
, not
perfection."

INSIGHTS

- Feels watched even when no one is looking
- Avoids mirrors, filming, and unfamiliar machines
- Relies on “guess” instead of feedback
- Leaves early when confusion turns into anxiety
- Sticks to the same routine to stay safe
- Wants to improve form but fears embarrassment
- Interprets soreness as the only feedback
- Feels behind compared to others
- Avoids asking for help
- Wants quiet reassurance without attention

Aaron is motivated to learn, but fear of being judged keeps him from seeking feedback in the moment.

Interview 2

Marcus, 31

- Management consultant with time-constrained days
- Goes to the gym 6-7x/week
- Actively refines form and wants to help out others



Extreme User

Interviewer - Jenil Prajapati,
Scribe - Animesh Sachan

SAY

"You learn by feeling tiny differences."

"I always adjust between sets."

"Rest matters equally"

"Form matters more than weight."

"I can tell when something is off."

"Mirrors Are not enough."

"You need someone to watch sometimes."

"Beginners just need reassurance"

"Everyone starts unsure."

"Slow reps are better"

"Learning is constant."

"People are scared to ask."

"Feedback speeds everything up."

"Small changes matter."

"Everyone needs guidance."

"Beginners just need safety."

"No one should feel alone here."

"Support makes learning stick."

THINK



FEEL

DO

Reflects after every set

Makes micro adjustments

Watches others lift

Demonstrates movements

Pauses to reset posture

Avoids ego lifting

Spots people during lifts

Uses internal body cues

Encourages others

Confident

Supportive

Responsible

Calm

Curious

Encouraging

Patient

Empowered

Attentive

Proud when others improve



"You learn by feeling tiny differences."

SAY

"I always adjust between sets."

"Rest matters equally"

"You need someone to watch sometimes."

"I need someone to watch sometimes."

"Beginners just need reassurance"

"Everyone starts unsure."

"Slow reps are better"

"Learning is constant."

"Small"

"Feedback speeds everything up!"

"Everyone needs guidance."

"No one should feel alone here."

"Learning is mostly internal."

"Support makes learning stick."

THINK



DO

Reflects after every set

Makes micro adjustments

Watches others lift

Gives quiet tips and adjusts between every set.

Pauses to reset posture

Reds ego fitting

Coaches through tone and gesture

Spots people during lifts

Uses internal body cues

Encourages others

FEEL

Confident

Supportive

Confident and supportive.

Proud w/others improve

Curious

Encouraging

Empowered

Attentive

"Beginners just need safety."

INSIGHTS

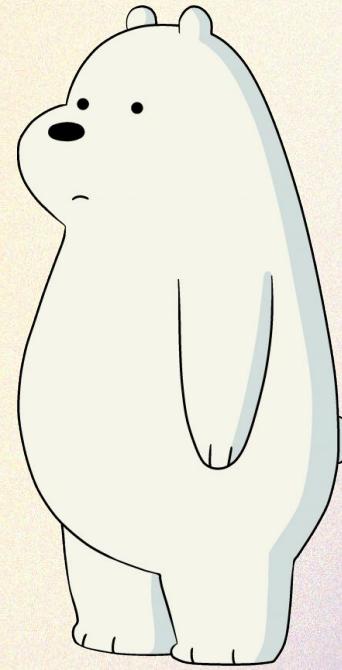
- Constantly self-corrects
- Uses internal body cues
- Notices tiny form changes
- Helps others without judgment
- Believes feedback speeds learning
- Thinks beginners need reassurance
- Adjusts between every set
- Watches others lift
- Sees mistakes as normal
- Finds joy in improvement

Marcus learns through constant micro-feedback and reflection, but beginners lack access to this kind of guidance.

Interview 3

Elena, 25

- Retail associate and freelance photographer
- Irregular schedule doesn't allow her to go to the gym
- Wants to go but doesn't find the time and is self conscious about starting



Non User

Interviewer - Animesh Sachan,
Scribe - Kenisha Vaswani

SAY

"I actually want to start going to the gym."

"I wasted a lot of time standing around."

Plans to go, then delays

Left early on many visits

"I just don't know what I'm supposed to do there."

"My schedule is all over the place."

"Videos didn't help once I got there."

Avoids free weight areas

Avoided busy hours

"I feel dumb asking basic questions"

"I don't have time to figure things out while I'm there"

Replayed YouTube tutorials

Tries to copy others

"I wish there was an easy way to start"

"If I had a plan, I'd probably go more"

"I wish I had someone with me."

Hesitated before every set

Eventually stopped going

Skipped unfamiliar exercises

THINK

I should already know how this works

FEEL

What if I use something wrong?

I don't have time to experiment

Anxious

Isolated

Frustrated

Nervous

Confused

Embarrassed

Defeated

I don't know where to begin

"I am wasting time."

I can't commit to a strict routine

Discouraged

Unwelcome

Defeated

"I wish someone would guide me."

"This place isn't for me."

"It would be easier with a buddy."

SAY

DO

"I actually want to start going to the gym."

"I just know what I'm supposed to do there."

"I waste a lot of time standing around..."

"I never knew if I was doing things right."

"I feel dumb asking basic questions"

"I don't have time to figure things out while I'm there"

"I wish there was an easy way to start"

"If I had a plan, I'd probably go more"

"I wish I had someone with me."

I should already know how this works

What if I use something wrong?

I don't have time to experiment

I don't

"This place isn't for me."

"I wish someone would guide me."

"This place isn't for me."

"It would be easier with a buddy."

THINK

FEEL

Anx

Intimidated

Isol

arrassed

Discouraged

Unwelcome

Defeated

Nervous

Left early and eventually stopped going.

Plans to go, then delays

Left early on many visits

others

Skipped unfamiliar exercises

Eventually stopped going

Hesitated before every set

INSIGHTS

- Felt lost and out of place
- Could not tell if exercises were correct
- Didn't have enough time to keep guessing
- Watched others instead of acting
- Avoided busy hours
- Hesitated before every set
- Felt "small" in the space
- Did not ask for help
- Left early many times
- Eventually stopped going

Elena did not fail because of lack of motivation. She left because confusion and isolation coupled with less time which made the gym feel unwelcoming.

Key Insights from all interviews

What we see:

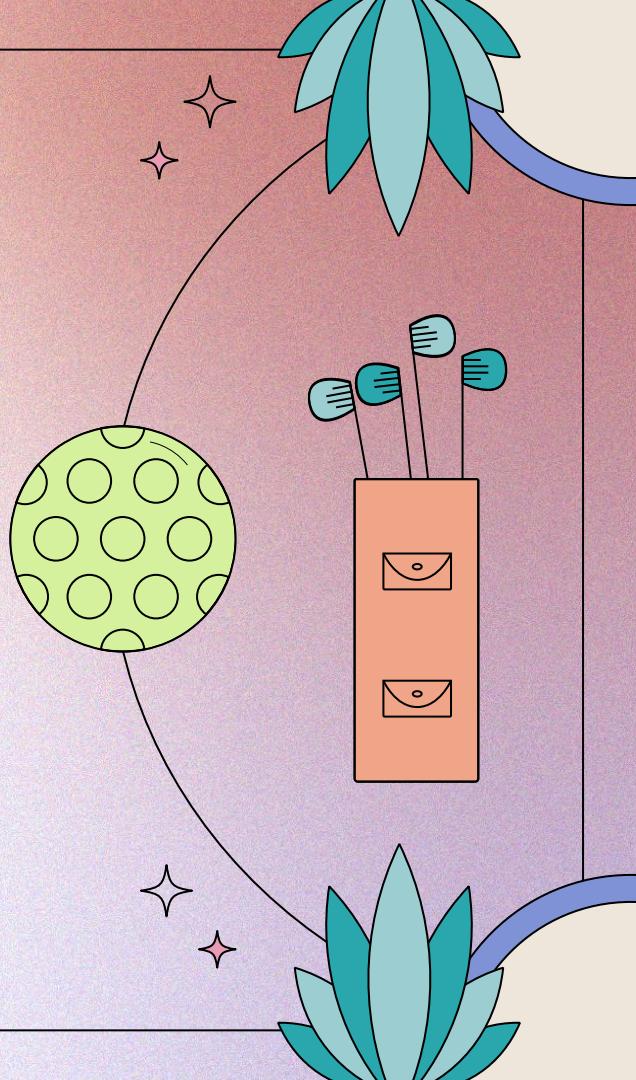
- Regular gym-goers still feel unsure mid-workout
- Beginners and dropouts avoid asking for help
- People rely on “feel” instead of real feedback
- Phones and mirrors feel awkward to use
- Learning happens between sets, not during reps
- Social pressure changes behavior
- Fear of judgment limits experimentation

What this means:

- Uncertainty is not a beginner problem
- Lack of feedback drives people away
- Learning in the gym is emotional, not just physical
- Tools must fit into real workout flow
- Feedback must feel private and safe
- Support matters more than instructions
- A trusted “buddy” reduces anxiety and speeds learning

02

POV Developmental





POV 1 - Average User

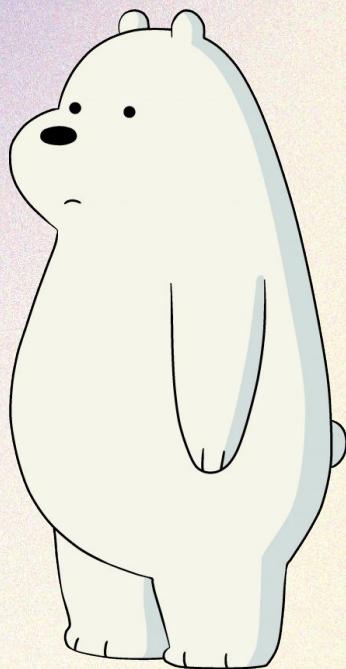
- ★ **We met** Aaron, a 25-year-old working man who goes to the gym roughly 3 times a week to stay healthy and feel strong.
- ★ **We were surprised to notice** that even though he is consistent, he avoids trying new movements because he feels exposed and worries he is doing things wrong in front of others.
- ★ **We wonder if this means** that confidence in the gym is less about experience level and more about feeling safe to make mistakes in public.
- ★ **It would be game changing to** help people like Aaron learn new movements in a way that feels private, supportive, and judgment-free while still being in the gym.



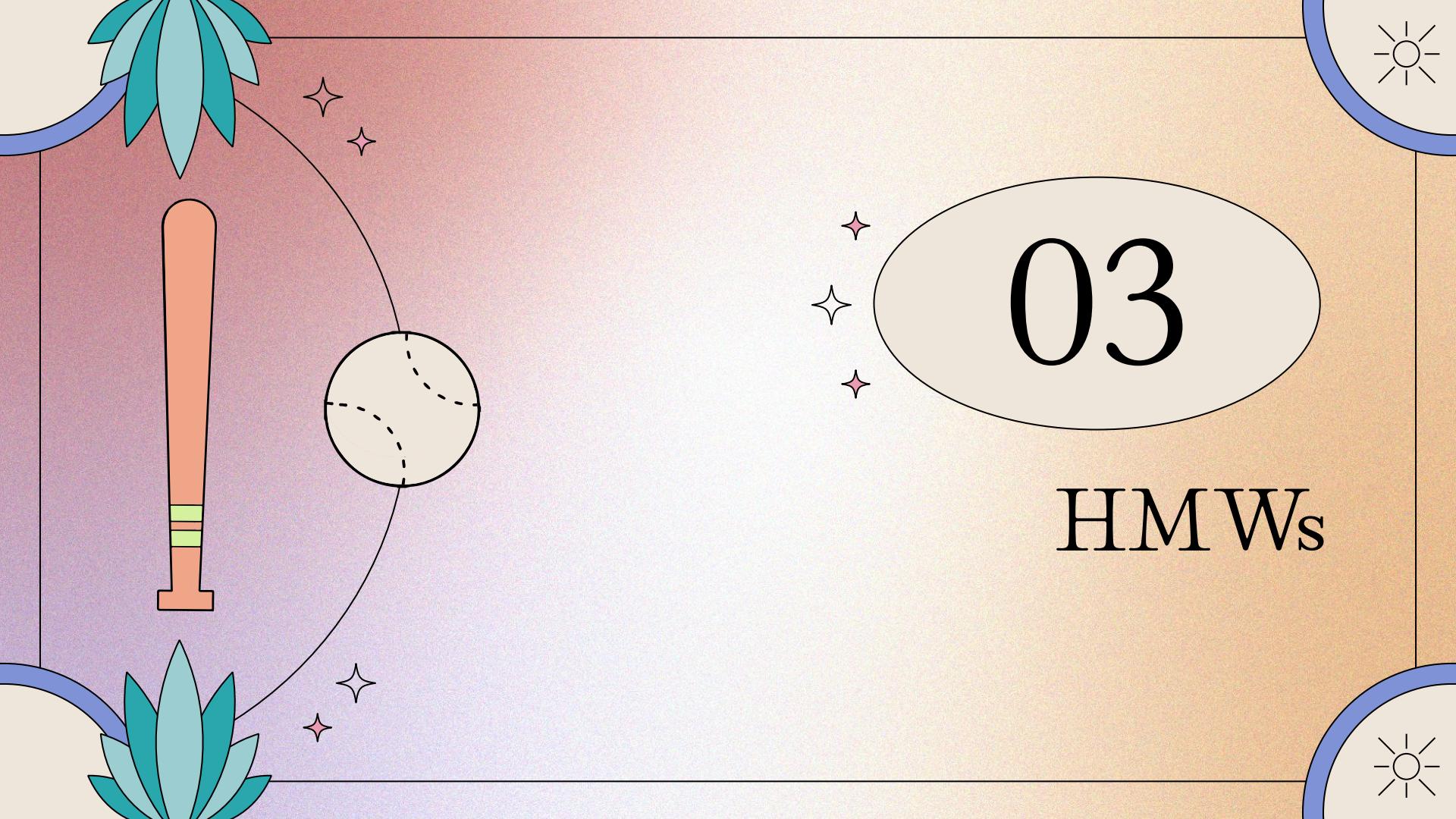
POV 2 - Extreme User

- ★ **We met** Marcus, a working professional and experienced lifter who trains almost daily and relies on internal cues to self-correct his form.
- ★ **We were surprised to learn** that much of what guides his movement is difficult for him to explain.
- ★ **We wonder if** this means that what beginners struggle with is not motivation but the lack of access to the feedback.
- ★ **It would be game changing** to translate the kind of expert guidance into something beginners can access while learning.

POV 3 - Non User



- ★ **We met** Elena, a freelancer who used to go to the gym but can't due to irregular schedule
- ★ **We were surprised to notice** that she still wants to be active but associates gyms with uncertainty and embarrassment rather than growth.
- ★ **We wonder if this means** that people do not quit because they dislike fitness, but because learning in public feels overwhelming.
- ★ **It would be game changing to** create a way for people like Elena to re-enter gym spaces without fear of judgment or doing things “wrong.”



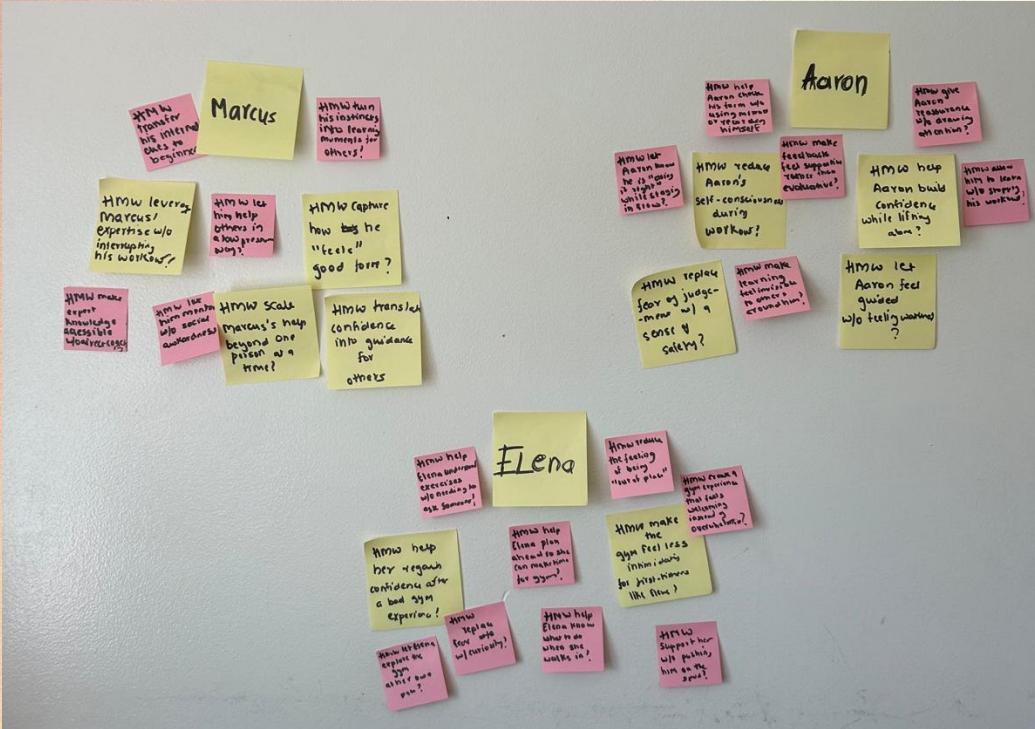
03

HMWs

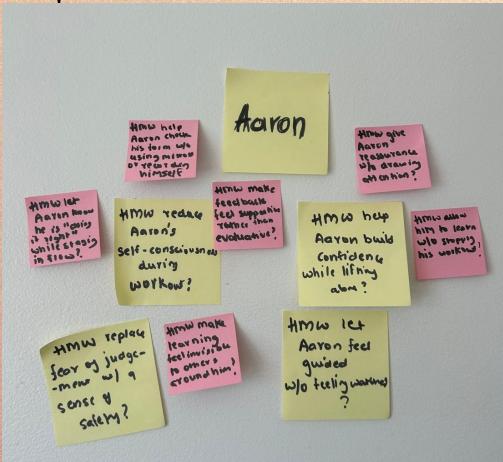
The Plan

- ★ For each POV, we gave ourselves a 7 minute timer
- ★ Everyone worked individually and silently
- ★ Each idea became one sticky note
- ★ We wrote fast without editing or judging
- ★ We pushed for at least 10 HMWs per POV
- ★ After time ended, we shared and clustered notes together
- ★ Only after seeing the full space did we begin narrowing

HMW BRAINSTORM

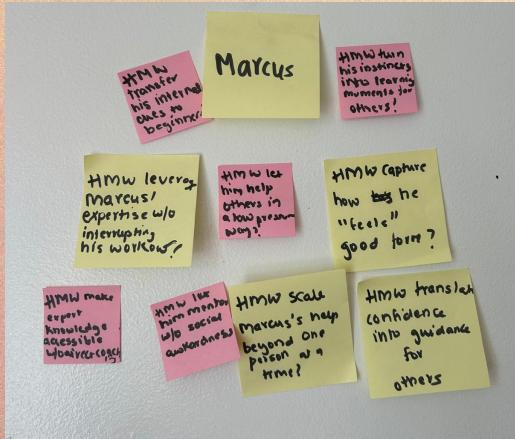


Aaron Brainstorm



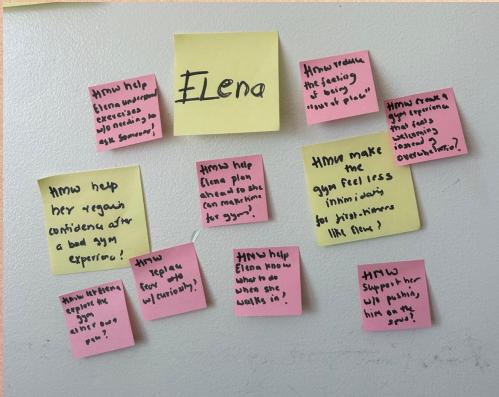
- HMW help Aaron check his form without using mirrors or recording himself?
- HMW give Aaron reassurance in the moment without drawing attention?
- HMW let Aaron know he is “doing it right” while staying in flow?
- HMW reduce Aaron’s self-consciousness during workouts?
- HMW make feedback feel supportive instead of evaluative?
- HMW help Aaron build confidence while lifting alone?
- HMW allow Aaron to learn without stopping his workout?
- HMW replace fear of judgment with a sense of safety?
- HMW make learning feel invisible to others around him?
- HMW let Aaron feel guided without feeling watched?

Marcus Brainstorm



- HMW leverage Marcus's expertise without interrupting his workout?
- HMW let Marcus help others in a low-pressure way?
- HMW transfer Marcus's internal cues to beginners?**
- HMW capture how Marcus "feels" good form?
- HMW turn Marcus's instincts into learning moments for others?
- HMW make expert knowledge accessible without direct coaching?
- HMW let Marcus mentor without social awkwardness?
- HMW scale Marcus's help beyond one person at a time?
- HMW bridge the gap between expert and beginner?
- HMW translate confidence into guidance for others?

Elena Brainstorm



- HMW help Elena understand exercises without needing to ask someone?
- HMW reduce the feeling of being “out of place”?
- HMW help Elena plan ahead so she can make time for gym?
- HMW help Elena regain confidence after a bad gym experience?
- HMW make the gym feel less intimidating for first-timers like Elena?**
- HMW let Elena explore the gym at her own pace?
- HMW replace fear with curiosity?
- HMW help Elena know what to do when she walks in?
- HMW create a gym experience that feels welcoming instead of overwhelming?
- HMW support Elena without putting him on the spot?

The HMWs we picked

HMW help Aaron check his form without using mirrors or recording himself?

HMW make the gym feel less intimidating for first-timers like Elena?

HMW transfer Marcus's internal cues to beginners?



04

Solutions

Brainstorm Solutions

- ❖ We took each of our 3 HMWs and treated them as separate prompts
- ❖ For each HMW, we set a 5–10 minute timer
- ❖ Everyone brainstormed individually to maximize idea diversity
- ❖ Each idea became one sticky note
- ❖ We pushed for quantity over quality
- ❖ No judging or refining during this phase
- ❖ After each round, we shared and clustered ideas
- ❖ We compared directions across HMWs
- ❖ We voted as a team to select the most promising concepts

Solutions for HMW 1

HMW help Aaron check his form without using mirrors or recording himself?

- A wearable band with additional joint trackers that tracks when posture drifts
- A pressure-sensing floor mat that provides feedback based on stance and balance
- Bone-conduction audio cues that whisper short corrections only the user can hear.
- A clip-on weight collar that signals improper bar path through light haptic taps.
- A “ghost outline” projected beside you
- A personal warm-up station that teaches correct movement patterns
- A belt that tightens slightly when core disengages
- Smart floor tiles that respond to stance
- A small badge that glows when form is consistent
- A rest-screen that shows only one micro-cue
- A resistance band add-on that slightly changes tension to cue joint alignment in real time
- A mirror that only shows joints, not your face

Solution for HMW 2

HMW make the gym feel less intimidating for first-timers like Elena?

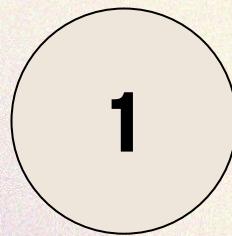
- A “first time path” through the gym
- Quiet hours for beginners only
- A guided entry experience at the door
- Color-coded zones by skill level
- Anonymous “help” buttons on machines
- A low-pressure orientation walk
- A welcome buddy for one session
- “You belong here” signals in the space
- A warm-up ritual everyone does
- A system showing where beginners start
- Stickers marking “safe” starter equipment
- A starter badge that unlocks help

Solutions for HMWs 3

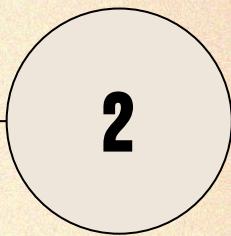
HMW transfer Marcus's internal cues to beginners?

- A system that converts expert lifters' self-talk into simple cues beginners can follow
- A library of expert body sensations
- A mentor relay system
- A "coach in a box" voice guidance
- A cue-sharing wall
- A wearable that mimics expert timing
- A machine that demonstrates micro-movements
- A buddy prompt system
- An expert shadow mode
- A form feedback journal
- A tactile coaching tool
- Shared form templates created by experienced lifters

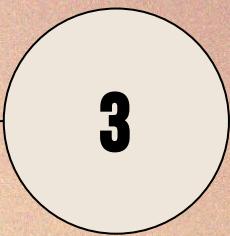
Top 3 Solution by sticky note voting



Form Band +
Joint Trackers



Beginner
Entry Path



Expert Cue
Guidance

Solution 1 - Form Band + Joint Trackers

What it is - A system of lightweight bands and small joint trackers that provide gentle vibration cues when movement or posture drifts from a safe, personalized baseline.

Who it serves - Busy, self-conscious gym-goers who want real-time, subtle form feedback.

Why it works -

- No screen, no sound, no attention
- Feedback stays private
- Supports learning during the workout, not after
- Keeps users in flow

Why it's different - It replaces visual or social correction with subtle, embodied cues that feel personal, supportive, and invisible to others.

Solution 2 - Beginner Entry Path

What it is - A guided, low-pressure entry path in the gym that gradually introduces first-timers to spaces, equipment, and basic movements instead of exposing everything at once.

Who it serves - First-time and infrequent gym-goers who feel intimidated by crowded, unfamiliar gym environments.

Why it works -

- Removes guesswork at the door
- Makes learning feel guided, not exposed
- Turns entry into a structured experience
- Normalizes being new

Why it's different - It reframes the gym experience as a gradual onboarding journey rather than an all-at-once exposure.

Solution 3 - Expert Cue Cards

What it is - A system that translates experienced lifters' internal self-talk and decision cues into simple, beginner-friendly prompts that can be followed during a lift.

Who it serves - Beginner and intermediate gym-goers who struggle to know what to notice or adjust while learning new movements.

Why it works

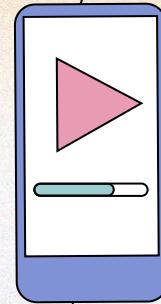
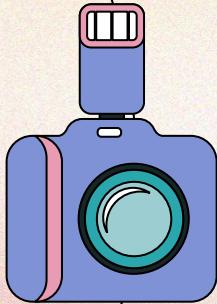
- Makes expert intuition explicit and usable
- Reduces cognitive overload during learning
- Mimics how experts think
- Focuses attention on one cue at a time

Why it's different - Instead of teaching form through explanations or demonstrations, it shares how experts think during a lift, and what it should feel like.



05

Prototypes



Prototype 1 - Form Band + Joint Trackers

Considered assumptions

- Users can notice and interpret subtle vibration cues mid-lift
- Haptic feedback will not feel distracting or embarrassing
- Real-time feedback is more useful than post-workout correction
- Personalized baselines can be established quickly

Critical assumption - Users can respond to vibration-based feedback during a lift **without breaking flow or feeling self-conscious**

Why this assumption

- Preserving flow and privacy is the core value of this solution
- If users stop, hesitate, or feel exposed, the solution fails its purpose
- Other assumptions can be refined later without invalidating the concept

Prototype setup

- **Scene:** Participant performs a squat or hinge movement
- **Props:** Phone or resistance band strapped to arm/leg to simulate wearable
- **Roles:** Participant = gym-goer, Facilitator = system providing feedback

How it was run

- Participant performs movement continuously
- Facilitator triggers phone vibration when posture visibly drifts
- No verbal instruction or explanation is given

What we observed

- Participant associated vibration with “adjust posture” quickly
- Feedback did not cause stopping or visible discomfort
- Participant stayed focused on movement rather than device

★ **Key learning** - Subtle haptic cues can support in-the-moment learning but needs to be isolated to area of improvement



Prototype 2 - Beginner Entry Path

Considered assumptions

- Reducing initial exposure lowers intimidation for first-timers
- Clear starting points reduce anxiety and indecision
- Social comparison drives early gym avoidance
- Onboarding experience affects willingness to return

Critical assumption - Gradual spatial onboarding reduces anxiety before any workout begins

Why this assumption

- If users feel intimidated at entry, learning never happens
- This assumption is foundational and cheapest to test physically
- Other assumptions depend on first-time comfort

Prototype setup

- **Scene:** Simulated gym walkthrough
- **Props:** Color coded signs on machines signaling “zones”
- **Roles:** Participant = first-time gym-goer, Facilitator = neutral guide (no coaching)

How it was run

- Participant used machines of one zone at a time
- Each zone introduced minimal context
- Participant verbalized comfort level at each stage

What we observed

- Participant reported reduced overwhelm
- Clear starting point lowered hesitation
- Gradual exposure felt more approachable than open layout

Key learning - Entry experience does shapes perceived accessibility of the gym but isn't as helpful in new user retention

Prototype 3 - Expert Cue Guidance

Considered assumptions

- Beginners benefit from expert intuition without explanations
- Simple cues are easier to act on than detailed instruction
- Too many cues increase cognitive load
- Expert self-talk can be generalized across users

Critical assumption (tested)

- Minimal expert-derived cues can be generalized and guide beginner behavior effectively

Why this assumption

- If cues are unclear or unhelpful, knowledge transfer fails
- This assumption defines whether expert intuition is usable at all
- Other assumptions can be refined through iteration

Prototype setup

- **Scene:** Participant performs a basic movement
- **Props:** Brief cue through airpods (e.g., “Brace,” “Slow,” “Reset”)
- **Roles:** Participant = beginner, Facilitator = expert mindset translator

How it was run

- Participant performed movement
- Facilitator presented one cue at a time if needed
- No technical explanations were provided

What we observed

- Participant preferred short cues over explanations
- Cues helped focus attention during movement
- Some cues needed personalization to be effective

Key learning - Expert intuition can be transferred when reduced to simple, contextual cues but generalization isn't easy.

Comparing Solutions

Form Band

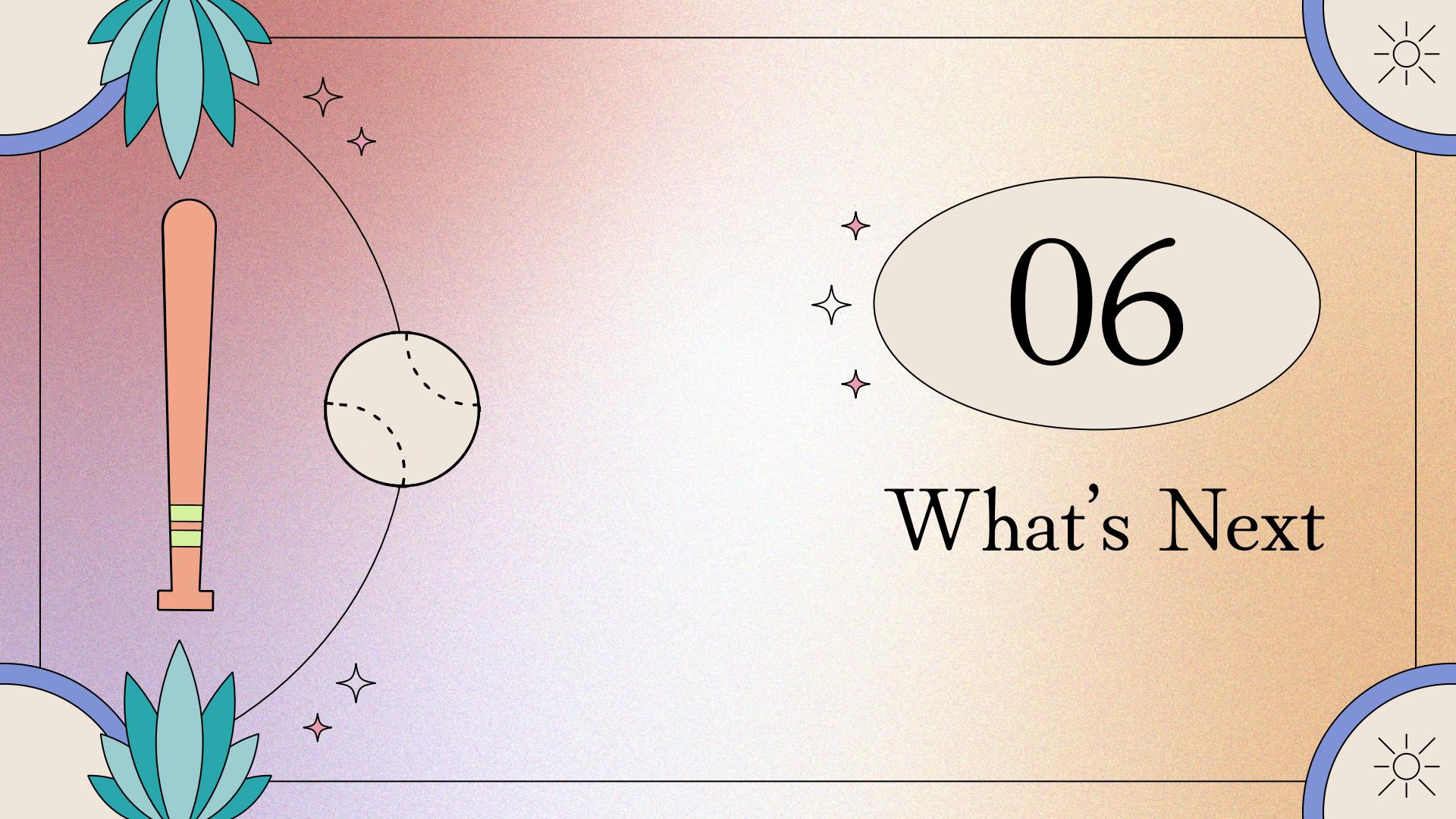
- Impact: High (in-the-moment correction)
- Reach: Medium (users already lifting)
- Novelty: High (embodied, private feedback)

Beginner Entry Path

- Impact: Medium
- Reach: High (first-timers)
- Novelty: Medium

Expert Cue Guidance

- Impact: Medium–High
- Reach: Medium
- Novelty: Medium–High



06

What's Next

Chosen Solution - Form Band + Joint Trackers

Why this solution

- Experience prototyping showed that **subtle haptic cues can guide movement without breaking focus or drawing attention**
- The system can be extended to **directional, multi-point haptics**, allowing joints to be guided in the correct direction rather than simply flagged
- Distributed feedback enables **whole-body guidance** across exercises while preserving privacy and workout flow

Chosen Solution - Form Band + Joint Trackers

Ethical Considerations:

- **Privacy:** Movement and posture data must stay local and user-controlled
- **Over-reliance risk:** Users should not substitute bodily awareness entirely with feedback
- **Accessibility:** Wearables may exclude users with sensory sensitivities or cost barriers
- **Consent & comfort:** Feedback must remain subtle to avoid social pressure in shared gym spaces

Community it serves

- Busy, self-conscious gym-goers learning new movements or looking to get feedback on form
- Beginners and regular gym users who avoid mirrors, filming, or public correction
- People who want in-the-moment feedback without disrupting their workout

Chosen Solution - Form Band + Joint Trackers

Community it leaves out

- **First-time or avoidant users like Elena:** Our interviews showed that Elena's biggest barrier is entering the gym and feeling confident enough to start. Because this solution assumes users are already performing movements, it may not address intimidation that happens before a workout begins.
- **Users who prefer explicit instruction over bodily cues:** Some gym-goers may rely on clear verbal explanations or visual demonstrations to feel confident while learning. Because this solution emphasizes subtle, embodied feedback, it may be less effective for users who need more explicit guidance to understand why a correction is needed.

THANK
YOU