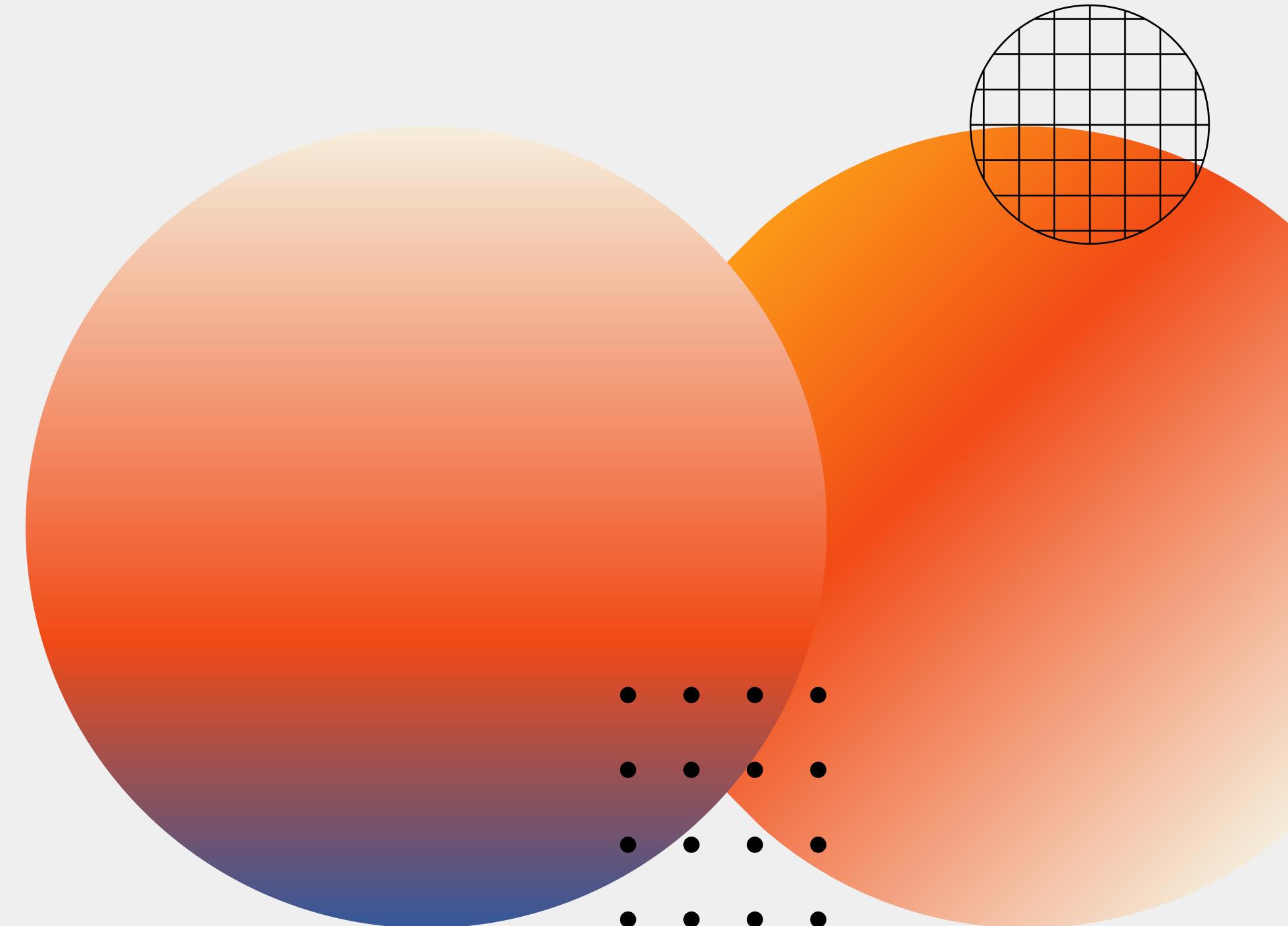


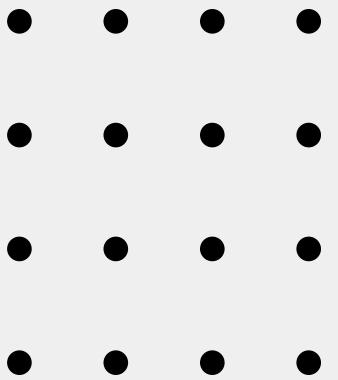
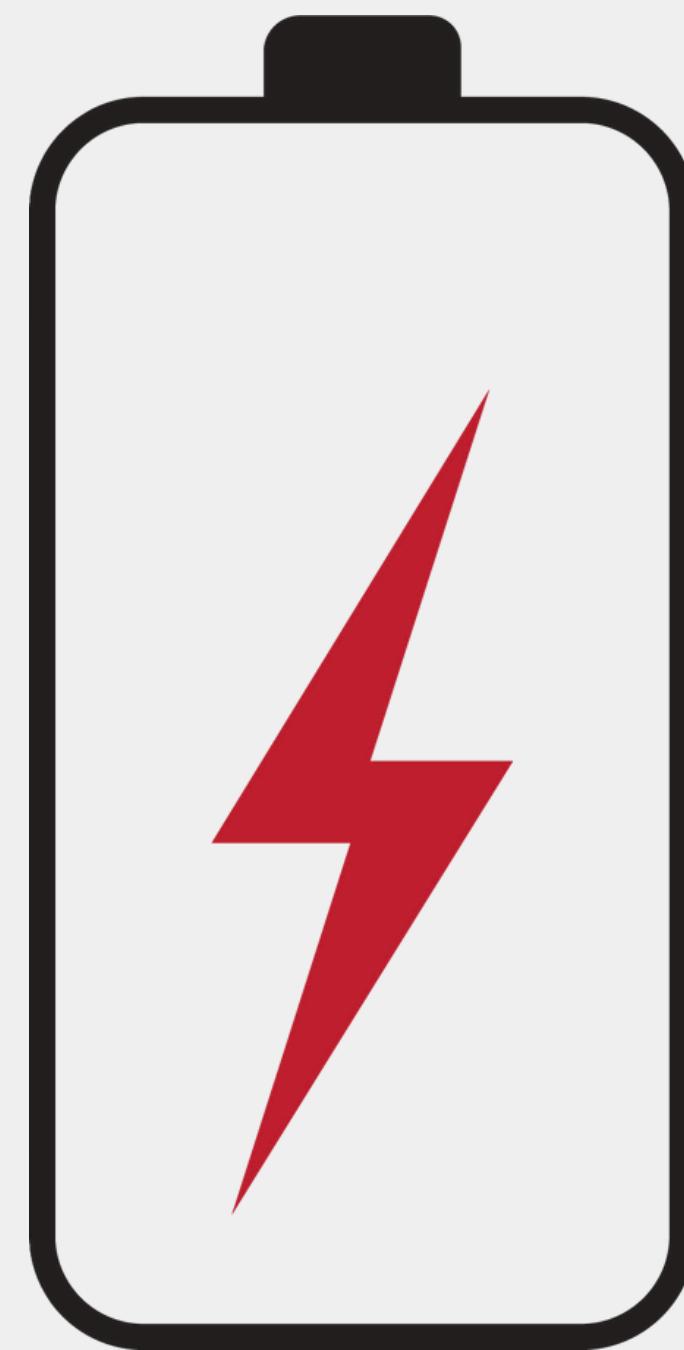
Smart Watch Design

Battery Buddy

Anna Hwang, Subin Choi, Ken Pao



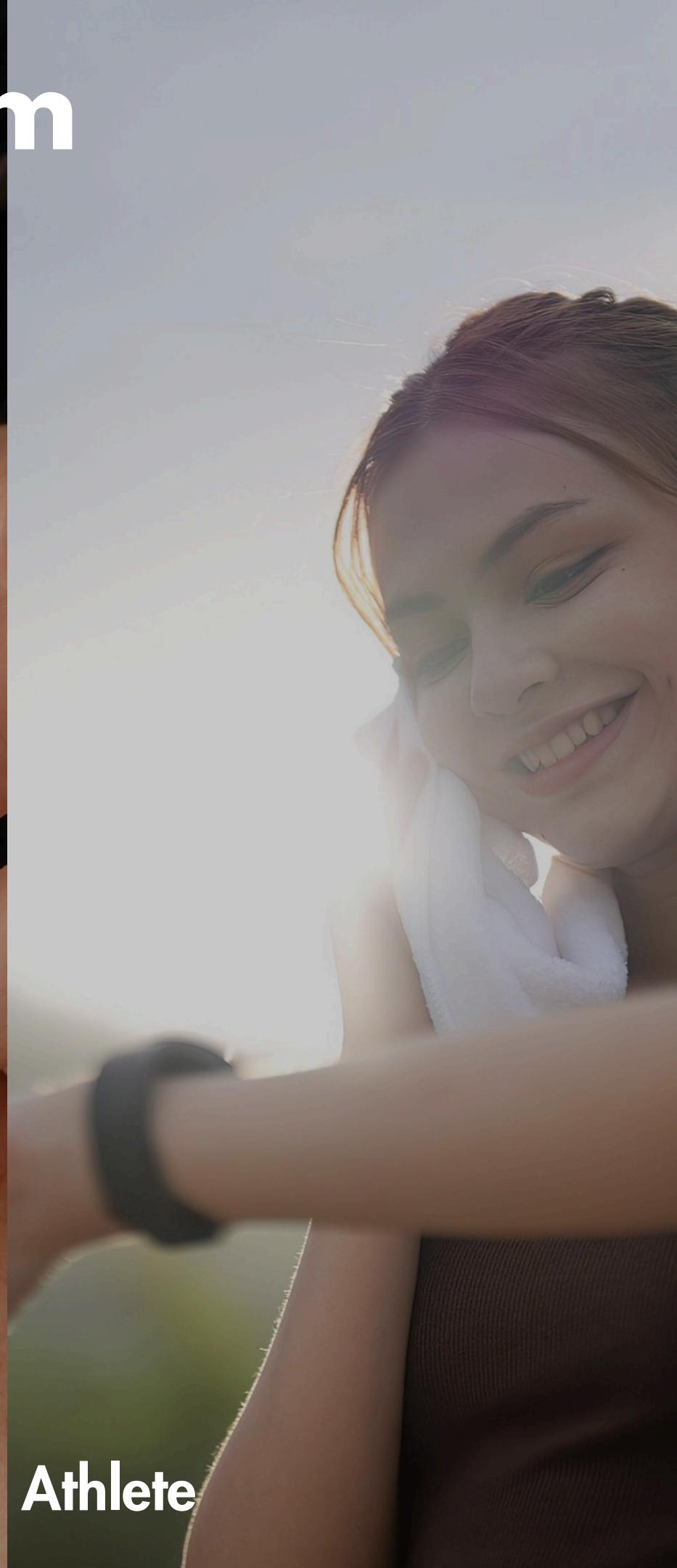
Intro duction



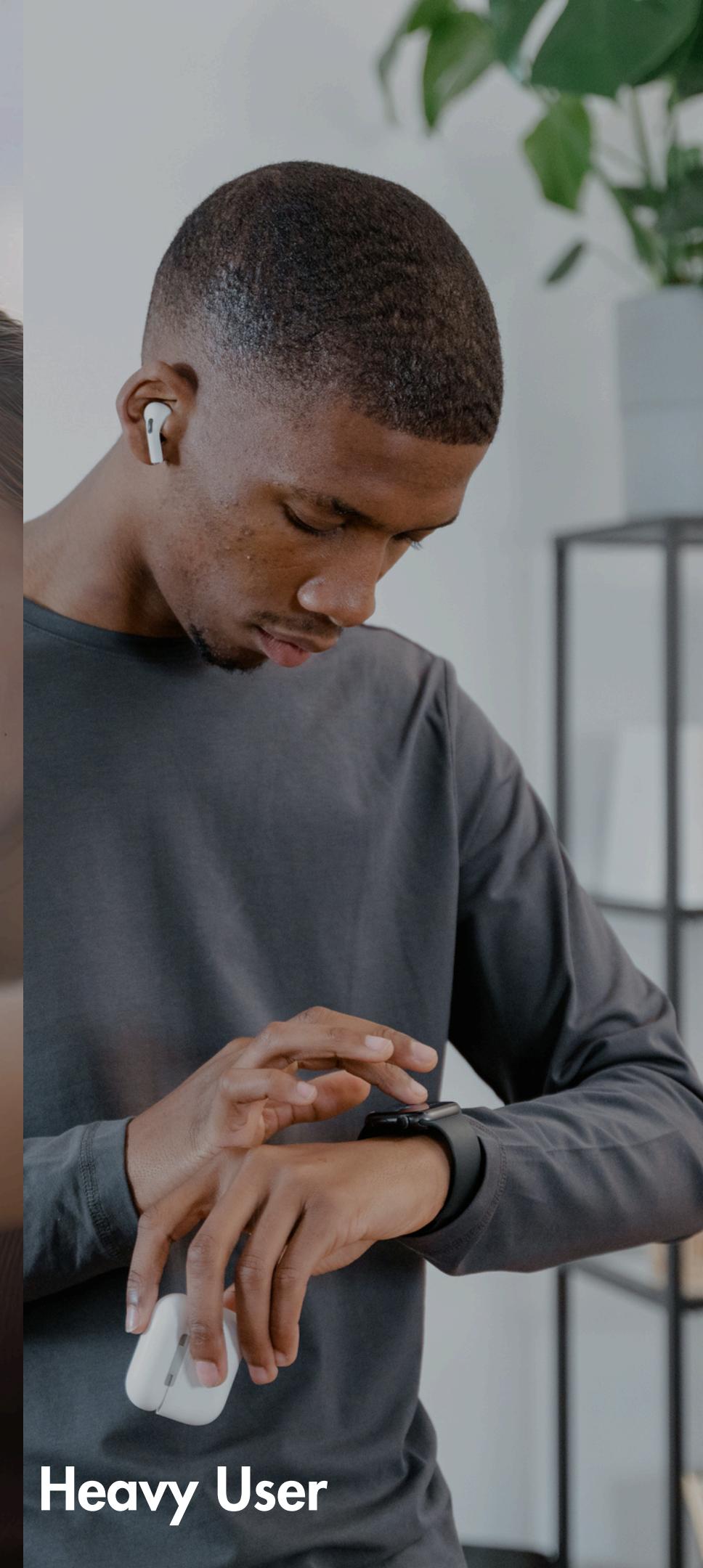
The Problem



Professional



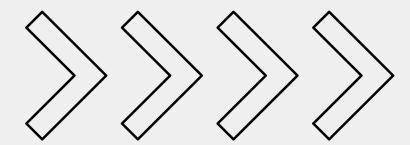
Athlete



Heavy User

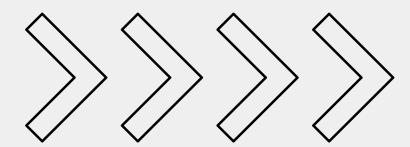


Careless



● The Problem

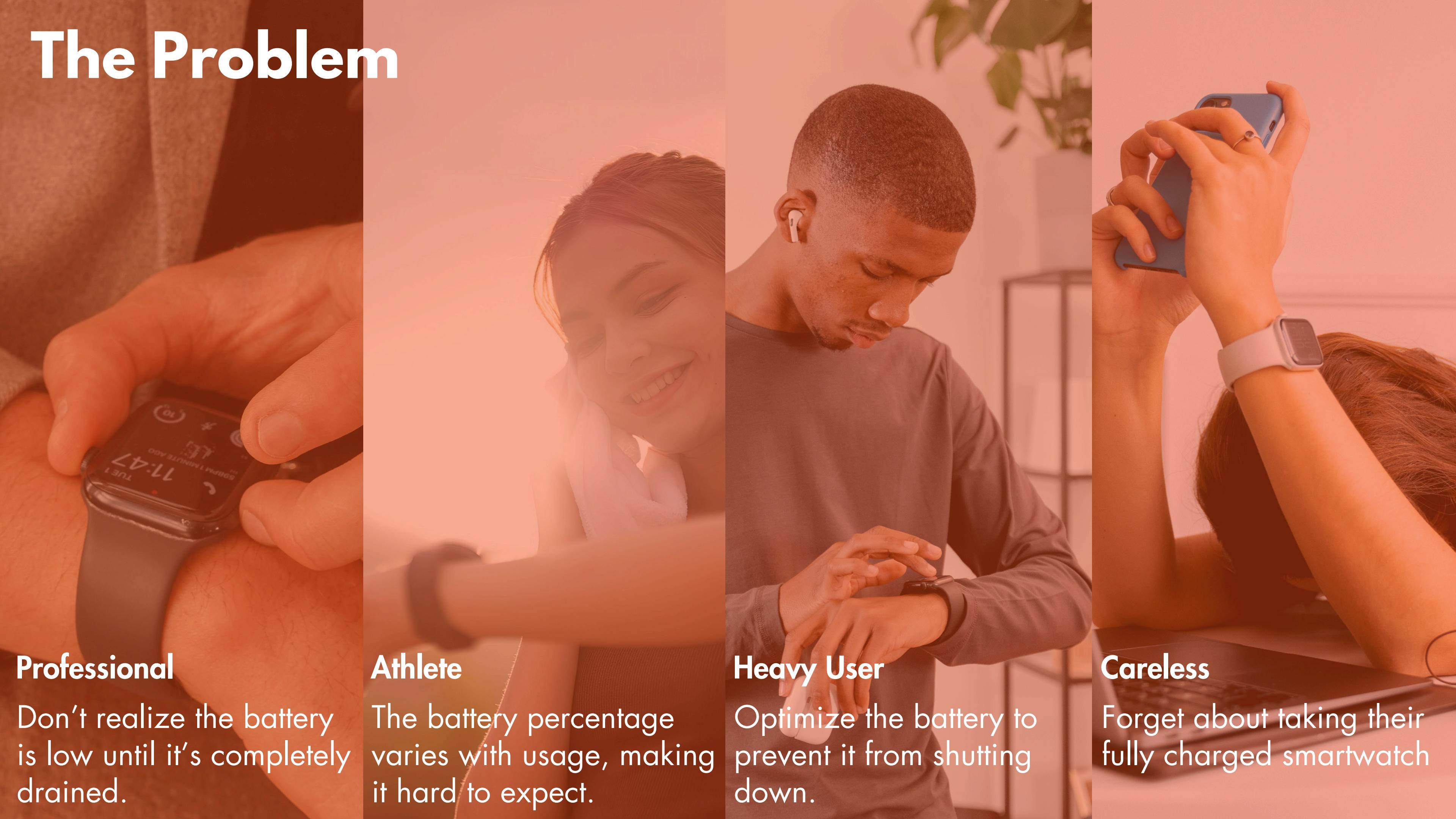




● The Problem



The Problem



Professional

Don't realize the battery is low until it's completely drained.

Athlete

The battery percentage varies with usage, making it hard to expect.

Heavy User

Optimize the battery to prevent it from shutting down.

Careless

Forget about taking their fully charged smartwatch

Alex Kim(28)



Goals & Needs



Updated messages



Track activity



Manage battery

Motivations



Convenience



Productivity



Health tracking

Pain Points



Frequent battery drain



Irregular schedule



Forgetting to charge

John Miller(42)



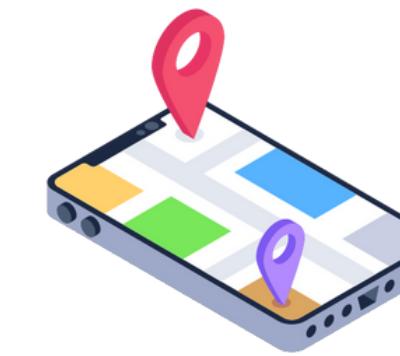
Goals & Needs



Hands-free calls



Reliable battery



Navigation

Pain Points



Frequent battery drain

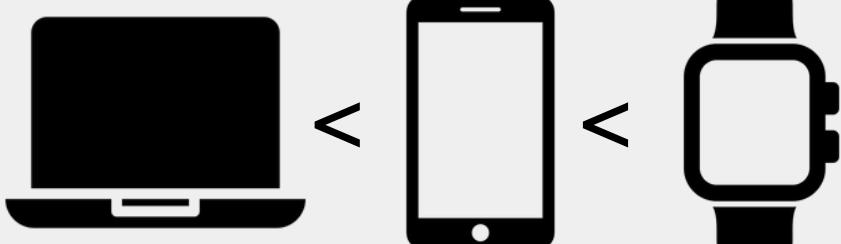


Disrupted communication



Inaccurate Estimation

Motivations



Safety



Efficiency



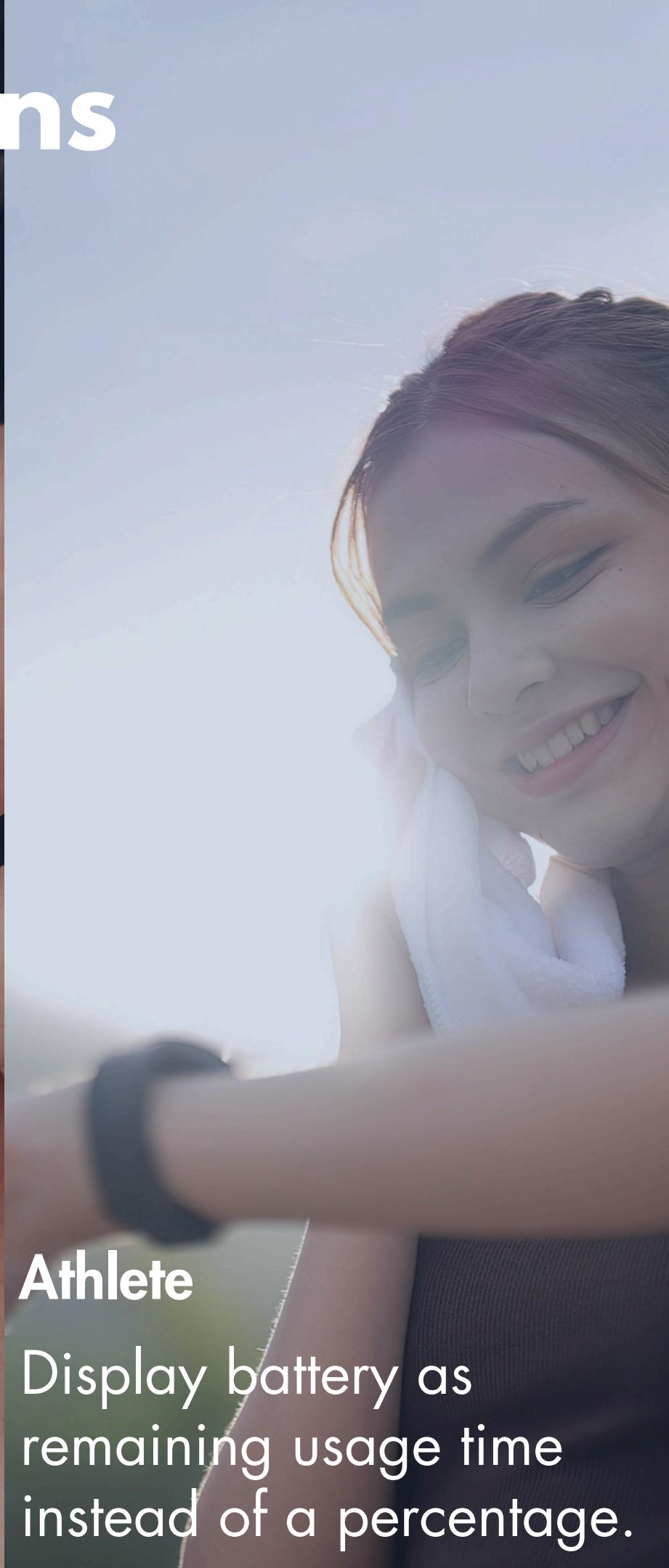
Smooth connectivity

The Solutions



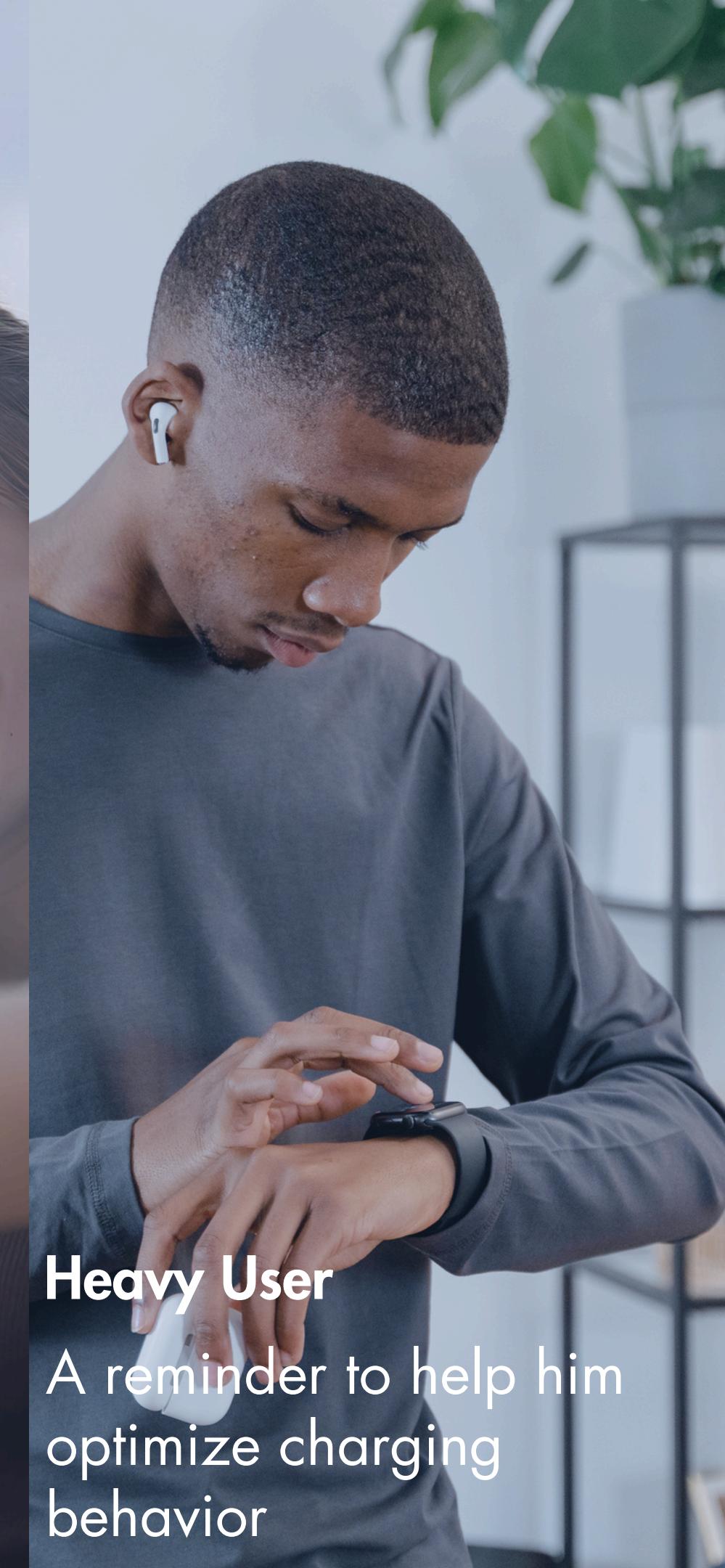
Professional

Informed about battery status without feeling annoyed.



Athlete

Display battery as remaining usage time instead of a percentage.



Heavy User

A reminder to help him optimize charging behavior



Careless

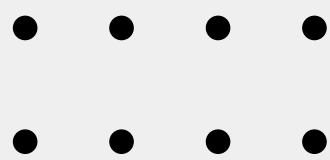
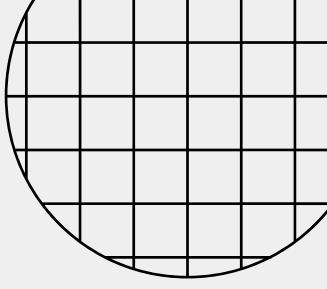
A notification to remind them when the battery is fully charged.

The Solution

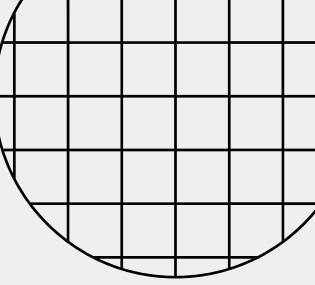
Introducing **Battery Buddy**



Friendly charging reminder: Battery Buddy



Key Screens



Strategy 1

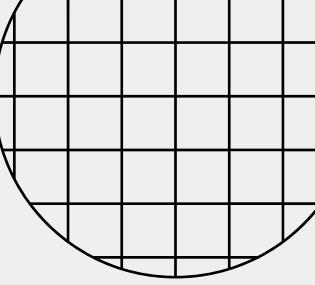
Friendly character, UI



Strategy 2

Smart Charging
Alerts

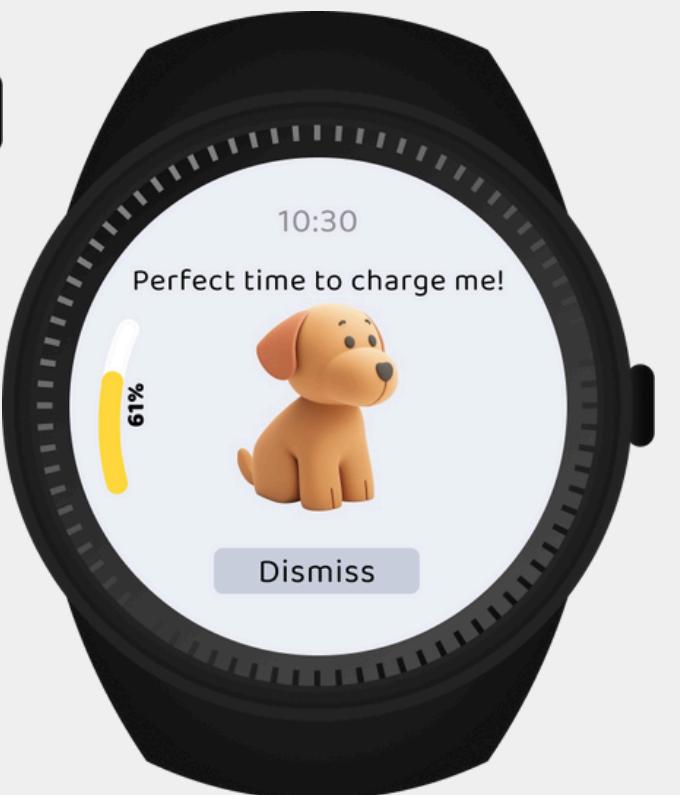
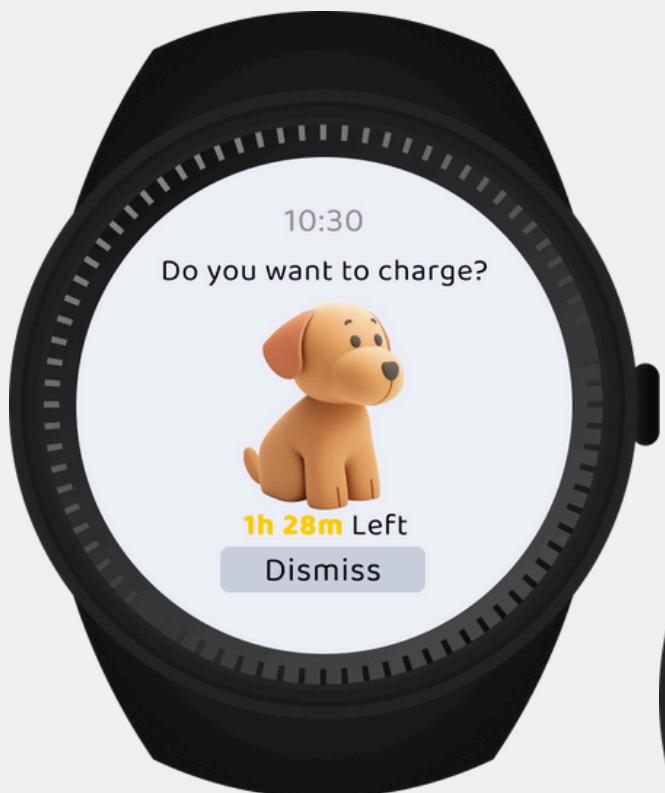




Key Screens

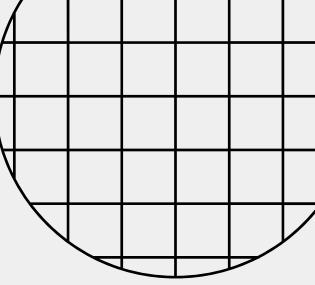
Strategy 3

Showing the remaining time or battery



• **Strategy 4**
Reminder setting

Key Screens

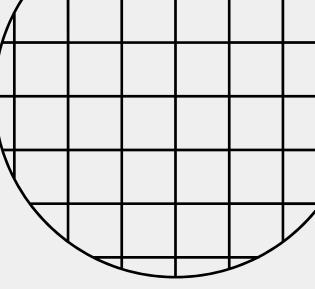


Strategy 5

Fully Charged
Sync Notification



Key Screens



Strategy 6

Customizable
battery Settings



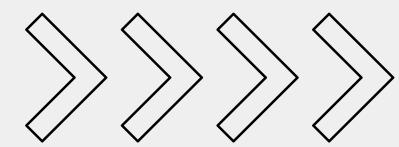
•Strategy 7

Personalized Battery
Management System

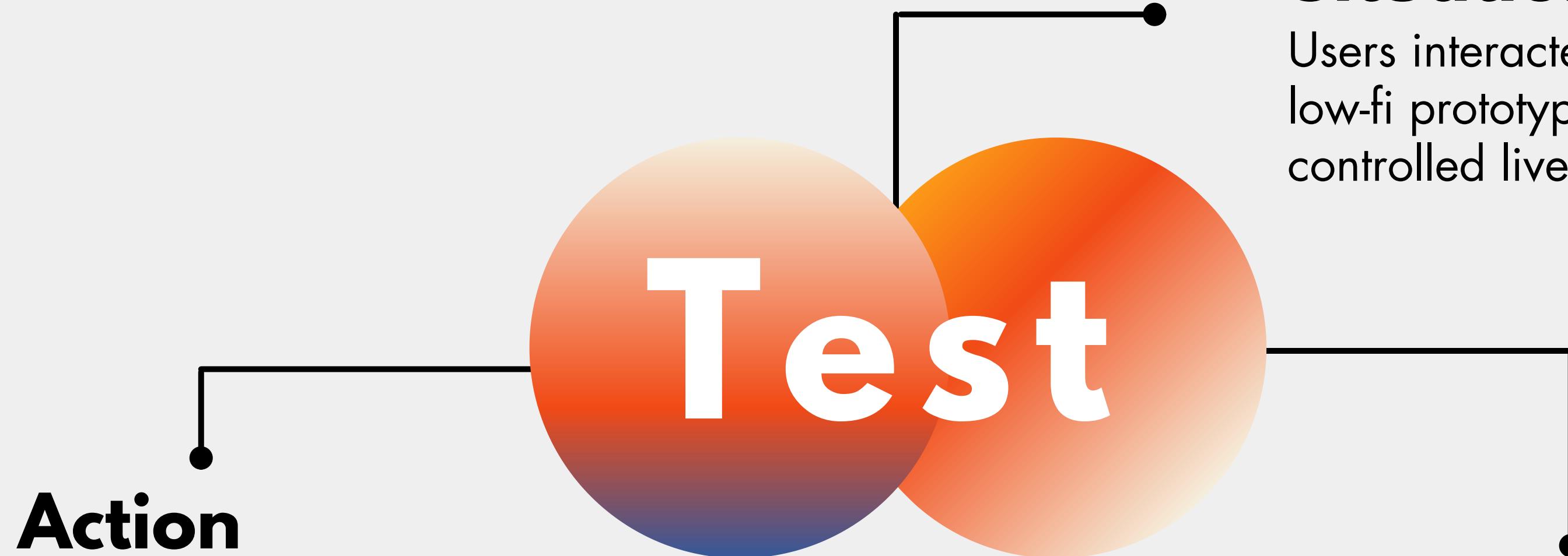


Try the prototype here





Validation



Action

- Explained feature functionality
- Observed user interactions
- Collected feedback via interviews and observations

Situation

Users interacted with our low-fi prototype in a controlled live scenario.

Task

Validate clarity and usefulness of UI elements and alerts.

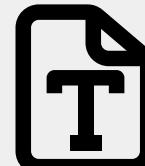
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User Feedback



Icon Interaction

Speech bubble icon received more attention than the traditional button.



Text Clarity

Change "25m" to "0h 25mins" for better clarity.



UI Readability

Buttons need clearer design and stronger visual contrast.



Alert Preferences

Users value periodic battery status updates and request control over repetitive alerts.

Conclusion

Solution recap

Battery Buddy provides friendly charging reminders to enable users like Alex to stay informed and always have a charged smartwatch ready for her workouts.

Future Refinements

We plan to create an algorithm to capture user activity schedules and add a friendly reminder at the right time to enhance the notification functionality.



<https://bit.ly/batterybuddy>

End

Thank you

Do you have any questions?

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kpa03@horizon.csueastbay.edu

