

# Hear Here

Every restaurant has a sound and a vibe. We made it measurable.



I. How it all started

# Our shared passion

Seoyun and I love a great dining experience. But for us, it's never just been about the food. The space matters just as much.

Can you actually hear the person across from you? Can you have a real conversation? That's what makes a meal worth going back for.



**INSUN HEO**

Master of Design  
@UC Berkeley



**SEOYUN CHOI**

Master of Experience Design  
@Écal

I. How it all started

# It started with my own hearing loss.

I was diagnosed with moderate hearing loss at the age of 6. No one in my family had it before me, so no one really understood what it meant. I learned to navigate the world as though I could hear like everyone else.



I. How it all started

# Restaurants were always the hardest.

It took years to understand what I was missing, and longer still to understand that the spaces I was in could be dramatically improved. Restaurants were always the hardest with its loud music and overlapping conversations. That's what drives this work.



I. How it all started

# Hearing aids don't fix noisy restaurants.

In a quiet room, hearing aids work well to amplify speech. But in a noisy restaurant, they amplify everything equally: clinking glasses, the table next to you, the music, the air conditioning.

Hearing aids can't separate the voice you're trying to hear from everything else, and this is the #1 pain point for people with hearing loss.



## I. How it all started

# Noise is the #1 complaint among diners.


A restaurant can look perfect and taste incredible. But if you can't hear the person across from you, the experience falls apart.

 Elizabeth John  
Local Guide · 19 reviews · 4 photos

★★★★☆ 2 years ago

... My only complaint was that the music in this restaurant was intolerably loud. I could hardly hear my companion, who was sitting directly across from me. Several of the wall booths have speakers directly above them, which makes it worse for ... [More](#)



 Like  Share

 JT  
Local Guide · 172 reviews · 231 photos

★★★★☆ 2 weeks ago NEW

Was disappointed, super expensive, too saucy, loud atmosphere. Expected more.

Food: 2...  
[More](#)

 Like  Share

 Michelle's Gypsy Life  
Local Guide · 124 reviews · 346 photos

★★★★☆ a year ago

... The staff were good and friendly. The restaurant itself was very loud. I could have let that go if the food was great, but sadly, it wasn't. 😞 ... [More](#)



 Maha Aljallaf  
Local Guide · 48 reviews · 22 photos

★★★★☆ a year ago

... , and provided us with excellent service. However, if you're looking to celebrate a special occasion, this restaurant might not be suitable due to the extreme crowding, noise, and loud sounds. The food quality in terms of taste was ... [More](#)

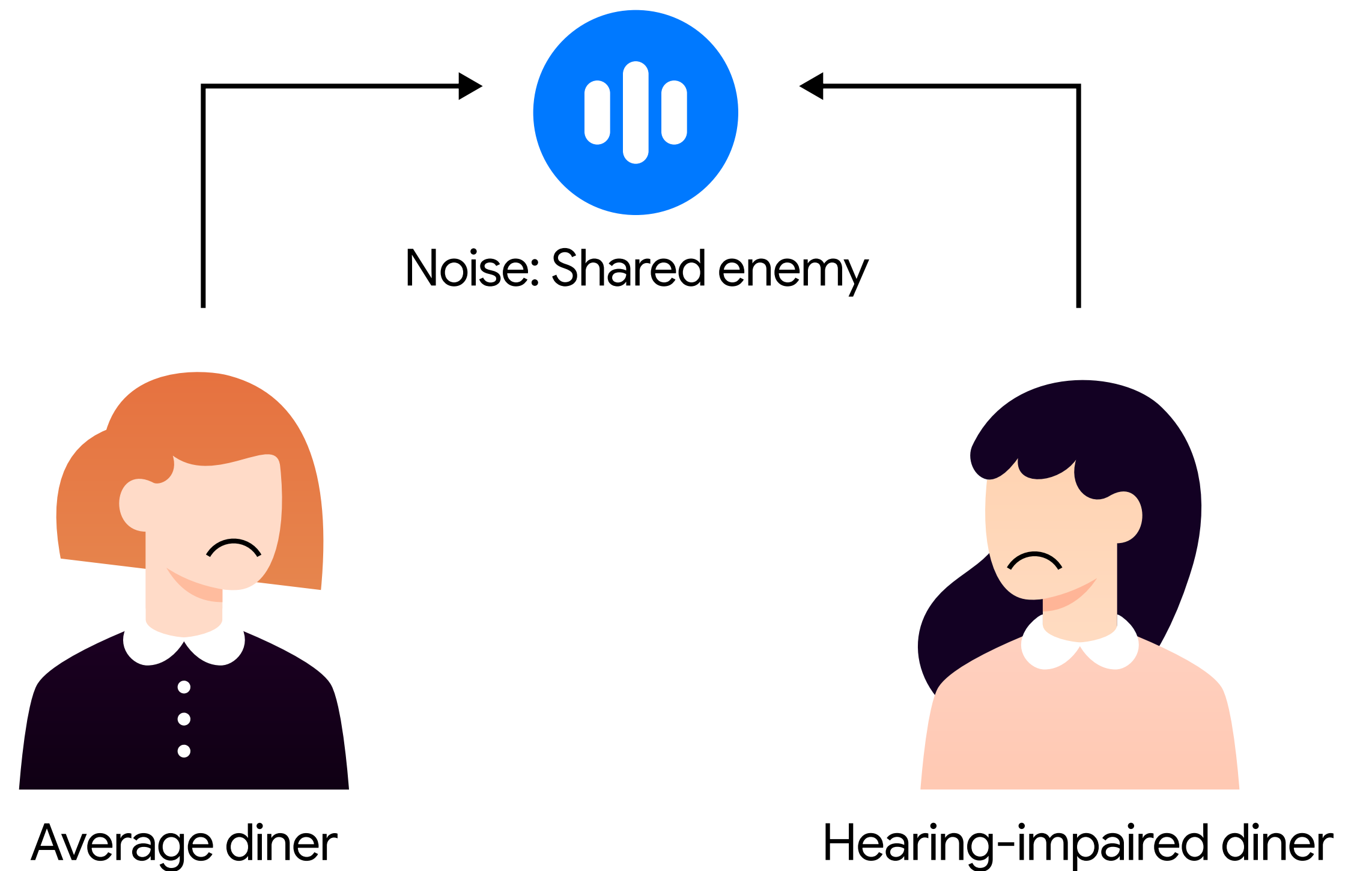
I. How it all started

# The real cost of a loud room.

Shared meals are one of the most important parts of how we connect.

But overwhelming noise takes that away.

For most diners, it's frustrating. For those with hearing loss, it's isolating.



I. How it all started

# Everyone deserves a good conversation.

For diners, Hear Here finds spaces with the right vibe for real conversation.

For people with hearing loss, it's the accessibility tool that's never existed.

For restaurants, it turns good acoustics and vibe into a competitive advantage.

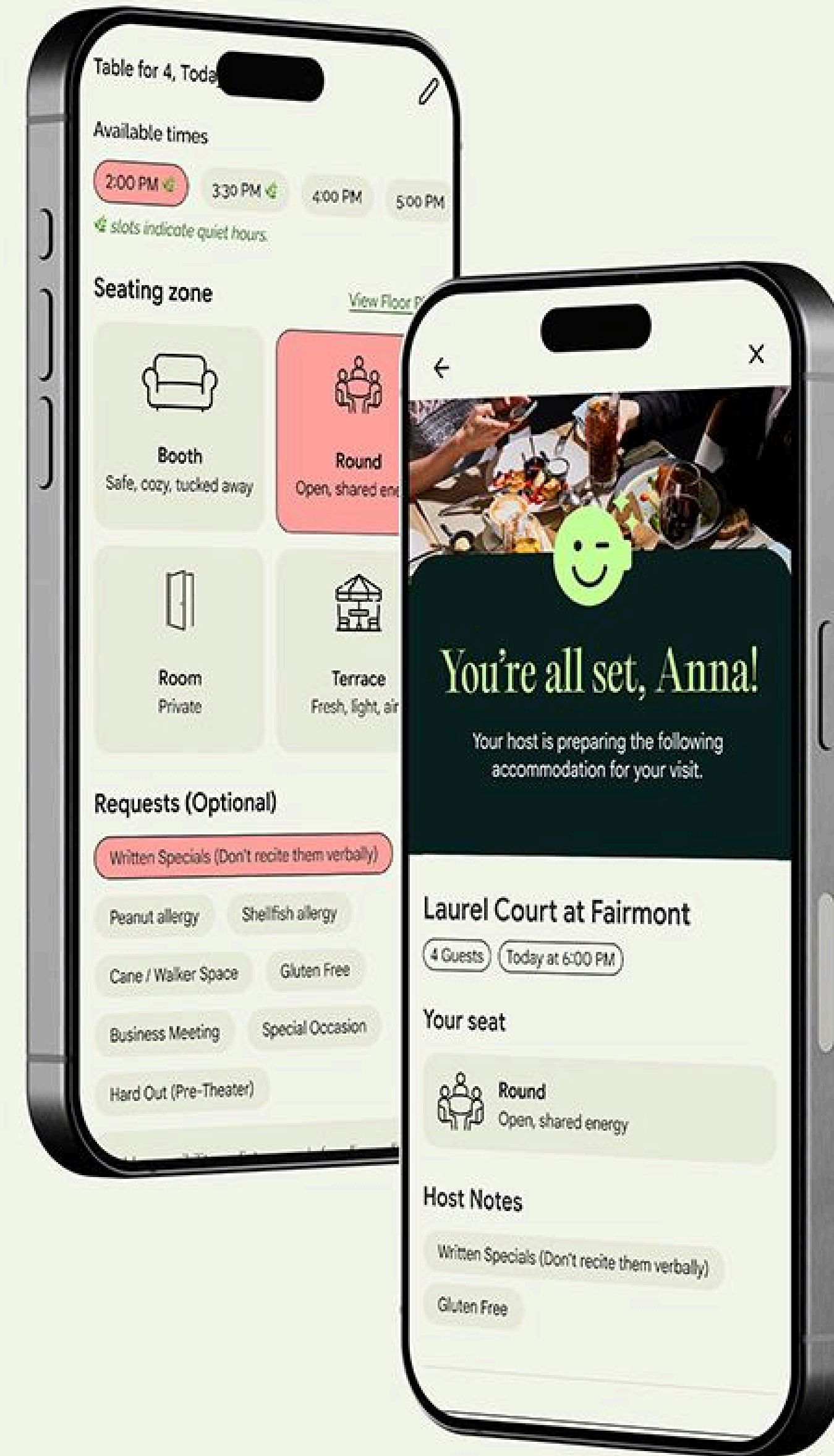


I. How it all started

# Built for everyone. Essential for some.

Hear Here matches diners to spaces with the right vibe for real conversation.

For the 1.5 billion people worldwide with hearing loss, it goes further. It treats acoustic accessibility as something you can search for, compare, and choose.



II. The Room Is the Problem

# The Room Is the Problem

People with hearing loss already  
feel what the science confirms



# Materials matter more than you'd think.

Standard acoustic treatment absorbs low-frequency rumble but misses high-frequency sounds above 4 kHz where speech consonants live. A treated room can feel quieter without becoming easier to understand.



Material

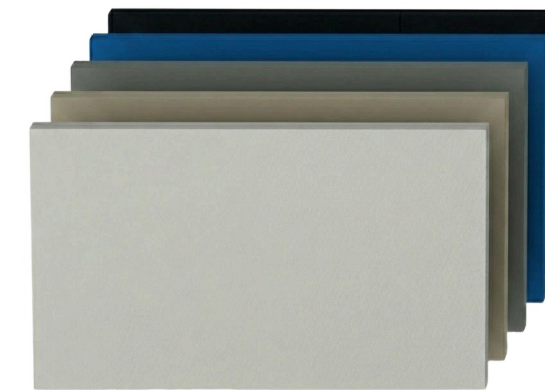
Sound-absorbing surfaces



## II. The Room Is the Problem

# Hard, flat surfaces are the enemy.

Concrete, glass, polished floors, metal ceilings reflect consonant sounds around the room, creating overlapping copies your brain can't sort out. The materials that define trendy restaurants are the same ones that destroy speech clarity.



Reverb

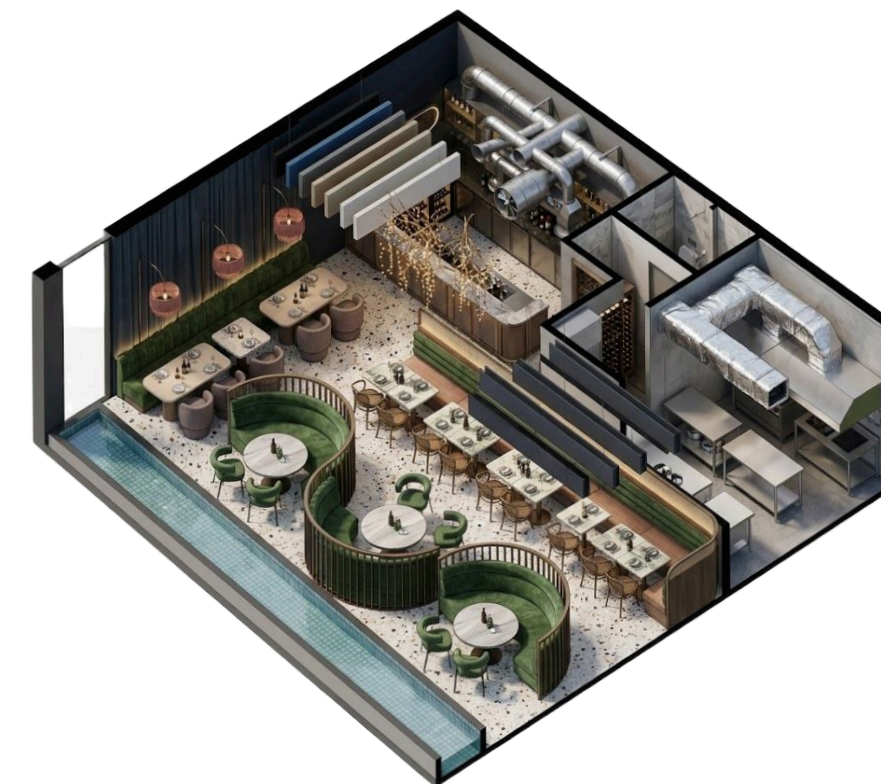
Acoustic baffles?



## II. The Room Is the Problem

# Room geometry affects speech clarity.

Low-frequency sounds bend around furniture and fill rooms evenly. High-frequency sounds travel in straight lines. Parallel walls create flutter echo. Angled walls and irregular surfaces scatter sound and prevent it from piling up.



Layout

Distance between tables



## II. The Room Is the Problem

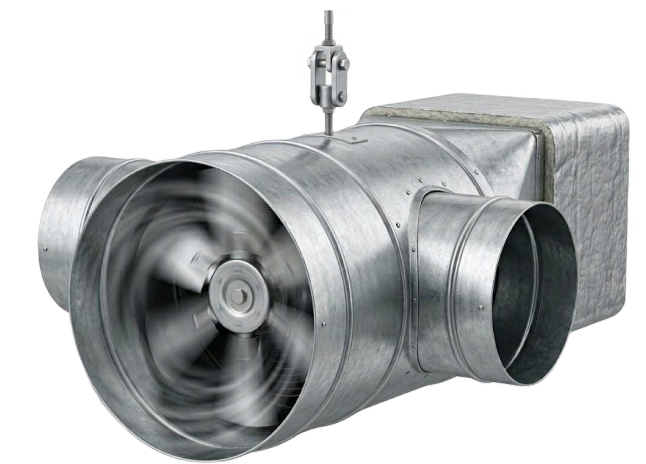
# HVAC is louder than you think.

Air conditioning produces a constant hiss across all frequencies. Most brains filter it out. For people with hearing loss, it sits directly on top of the speech sounds they're already struggling to hear.



HVAC

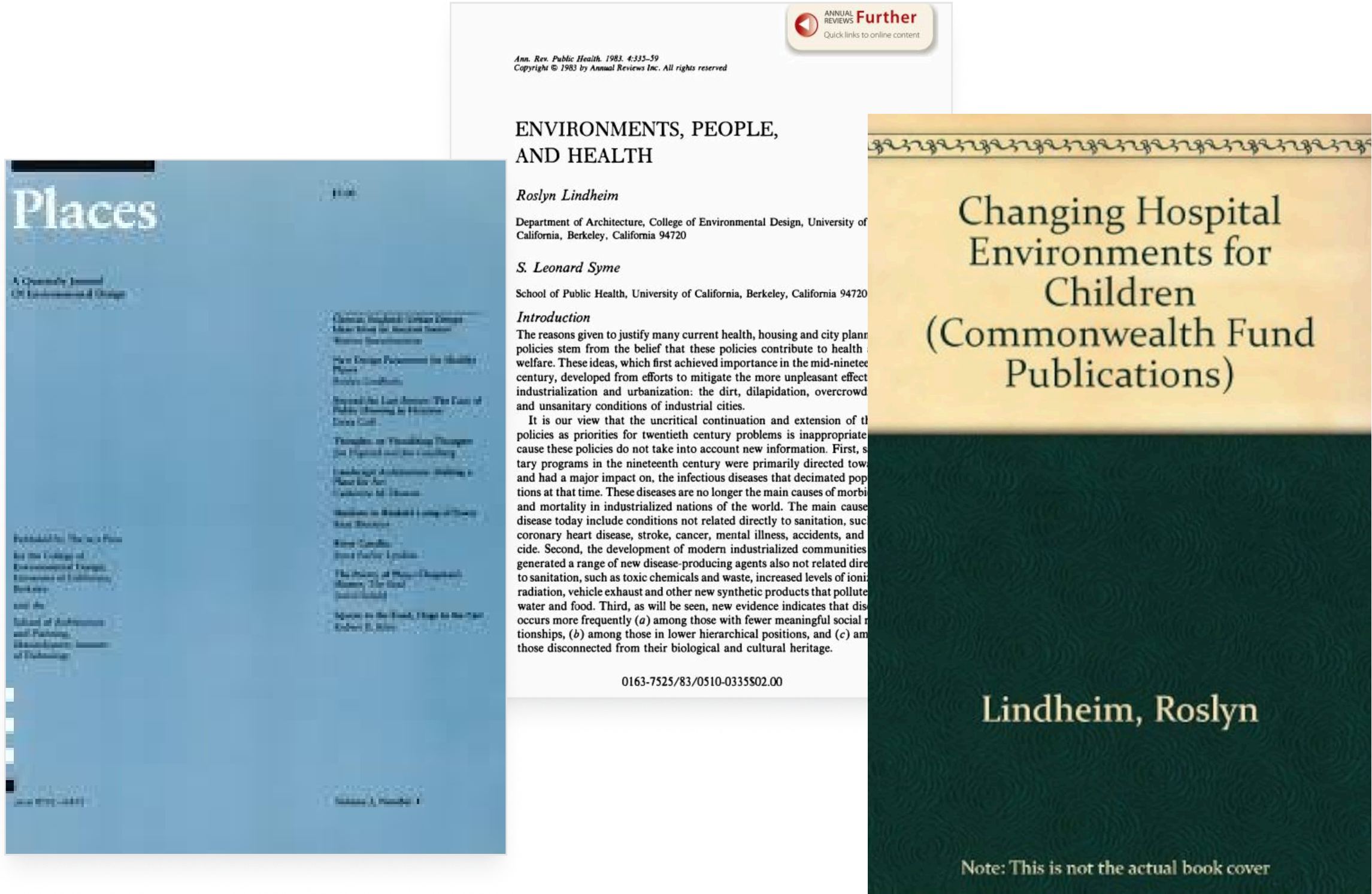
Concealed, quiet venting?



II. The Room Is the Problem

# Grounding Vibe in Environmental Psychology

Vibe can feel subjective. So we grounded our framework in academic research. We draw heavily on Professor Roselyn Lindheim from UC Berkeley, who spent decades studying how built environments shape human health, behavior, and social connection.



# Bad acoustics cause physical stress.

Lindheim classifies environmental stressors, including noise, as triggers for physiological stress. For people with hearing loss, poor restaurant acoustics goes beyond frustration and are a direct threat to physical and mental well-being.

Connection to Lindheim's Work

## "New Design Parameters for Healthy Places" (1985)



### 01 Design as an "Assault"

Lindheim classifies environmental stressors—including noise—as "assaults" that trigger physiological stress and cause the "resistance of the host to break down". This provides a scientific basis for Hear Here that [poor acoustics are a physical assault on the well-being of the hard-of-hearing](#).

### 02 Macro and Micro Personal Control

She proposes that places must be designed so that people can exercise "greater personal control at all levels of the environment, macro and micro". This supports Hear Here Standard's goal of creating [adjustable, user-centered acoustic environments](#).

### 03 Spatial Identity and Functioning

Lindheim states that "spatial identity is fundamental to human functioning". By addressing acoustic inaccessibility, hear here [prevents the "disconnection" from place and community](#) that she identifies as a primary cause of illness.

# Design choices leave a permanent impact.

Once design decisions are built into a physical space, they stay. They will permanently enhance or permanently impede human connection long after the original architects are gone.

Connection to Lindheim's Work

## "Environments, People, and Health" (1983)



### 01 **The Inadequacy of the Medical Model:**

This article argues that relying on 19th-century medical and sanitary priorities for modern health problems is "inappropriate". It posits that we must raise issues of importance for ["architectural policy"](#) because health is determined by "social and spatial conditions".

### 02 **Active Participation and Agency**

A "healthy environment" is defined not as a static space, but as one that provides "a range of opportunities for its inhabitants to shape the conditions that affect their lives". [Hear Here](#) directly operationalizes this [by giving the hard-of-hearing the agency to "shape" their acoustic experience.](#)

### 03 **Social Connectedness as a Biological Requirement**

Lindheim notes that disease occurs more frequently among those with "fewer meaningful social relationships". Since poor acoustics act as a physical barrier to these relationships, [hear here](#) frames acoustic accessibility as [a biological necessity for maintaining "host resistance"](#).

## II. The Room Is the Problem

# Accessibility is an architectural responsibility.

Hear Here reframes hearing loss from a purely medical issue to an environmental one. Instead of relying solely on interventions like hearing aids, we push for spaces that are structurally built to support everyone.

Connection to Lindheim's Work

## "Birthing Centers and Hospices" (1981)



### 01 The Power of "Bricks and Mortar"

Lindheim warns that once design decisions are "translated into bricks and mortar," they exert a lasting power to "enhance or impede" human activities long after the original designers are gone.

### 02 Reclaiming Competence and Power

Hear Here's focus on "acoustic agency" aligns with her call to "reclaim some involvement in and individual control" over one's sensory and social environment rather than relying solely on medical interventions like hearing aids.

### 03 Support Over Cure

Lindheim advocates for a shift from technical "cures" for pathological functions toward a system of "watchfulness, and care, support with intervention aimed not at cure but at support". This supports Hear Here's shift from viewing hearing as a medical fix to an architectural responsibility.

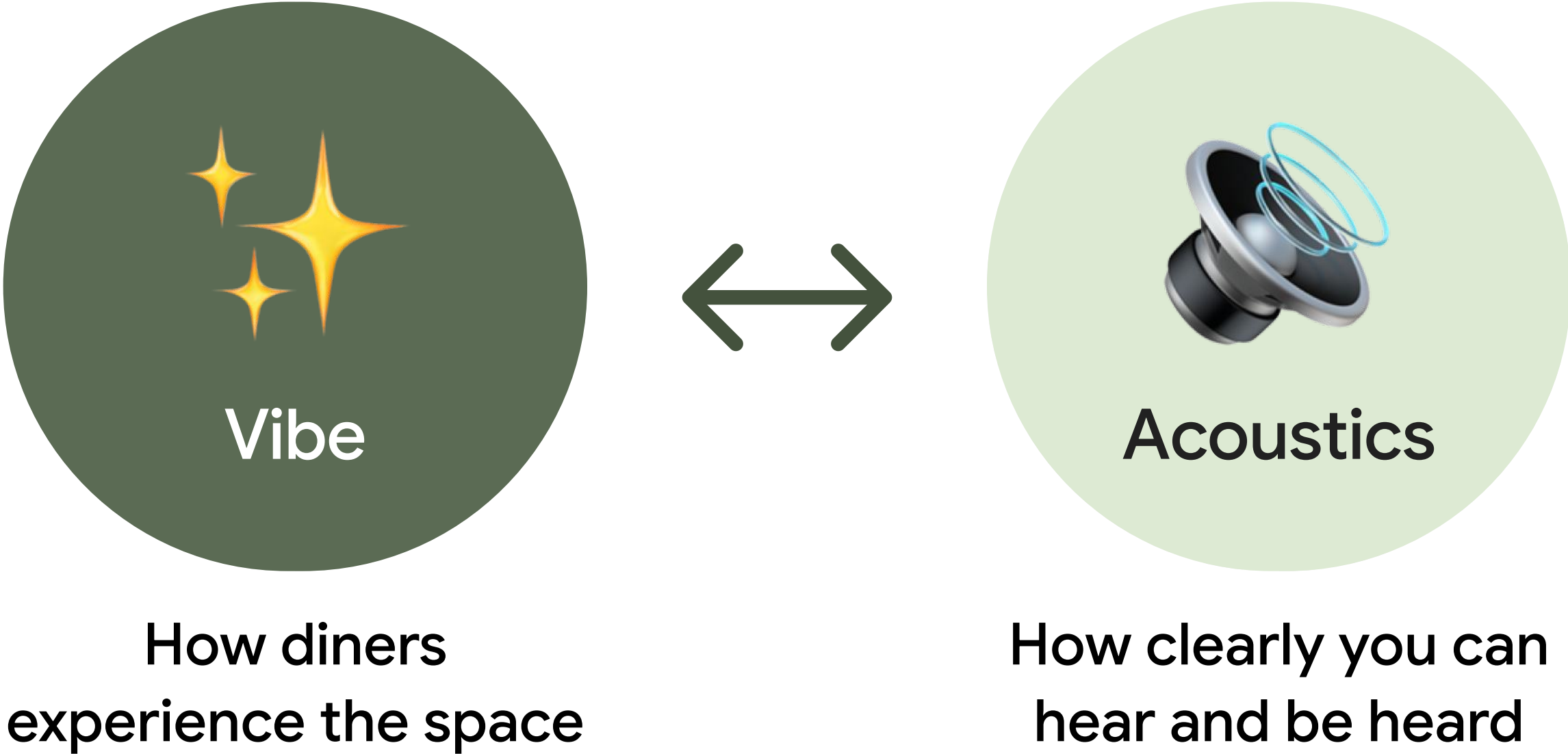
# The Science Behind Vibe

What actually shapes how a space feels, and why it matters for conversation.



# We call it vibe. And it's measurable.

Every restaurant has an atmosphere. You feel it the moment you walk in. But you can't search for it. Hear Here changes that.

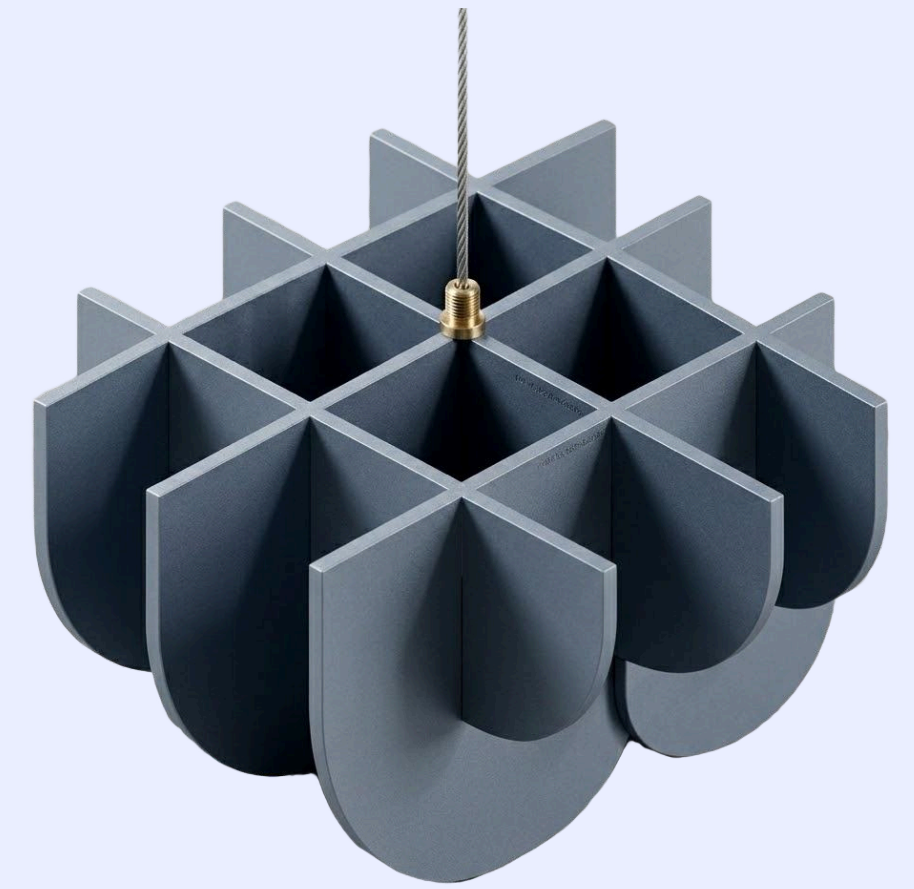


### III. The Science Behind Vibe



Layout

Distance between tables



Reverb

Acoustic baffles



HVAC

Concealed, quiet venting



Material

Sound-absorbing surfaces



# Built with the best in acoustics

We built our acoustic research with 3 of the most respected institutions in sound, space, and environmental science at UC Berkeley. The accessibility framework is grounded in firsthand conversations with people living with hearing loss.



# CNMAT, UC Berkeley

Center for New Music and Audio Technologies

CNMAT has been a leading center for spatial audio research at UC Berkeley since 1989, spanning music, engineering, architecture, and cognitive science. They have a deep research interest in hearing and acoustic accessibility.



III. The Science Behind Vibe

# Salter Inc.

Founded by the Bay Area's leading  
acoustics consultant

Professor Charles Salter has taught architectural acoustics at UC Berkeley since 1973 and founded one of the largest acoustic consulting firms in the country. His firm has shaped the acoustics of Skywalker Ranch, SFMOMA, and 900+ projects annually.



# Salter

### III. The Science Behind Vibe

*Advised by CNMAT and Salter Inc., our vibe data is built on decades of acoustic science and the real needs of people living with hearing loss.*

IV. Our Idea

# Enter, Hear Here

Restaurant discovery built on  
acoustic data and lived experience.



## Laurel Court at Fairmont

\$\$ | Modern American

Terrace

Bar

Round Tables

### Atmosphere Report



Acoustics

Level 1: Social



Lighting

Level 2: Ambient



Spacing

Level 3: Buffered

[See what these levels mean](#)

# IV. Our Idea


**Hear Here** Search places...

**Analysis** Settings

ZONE 01 • ACTIVE SELECTION

### Laurel Court at Fairmont

\$\$ Modern American Round Tables

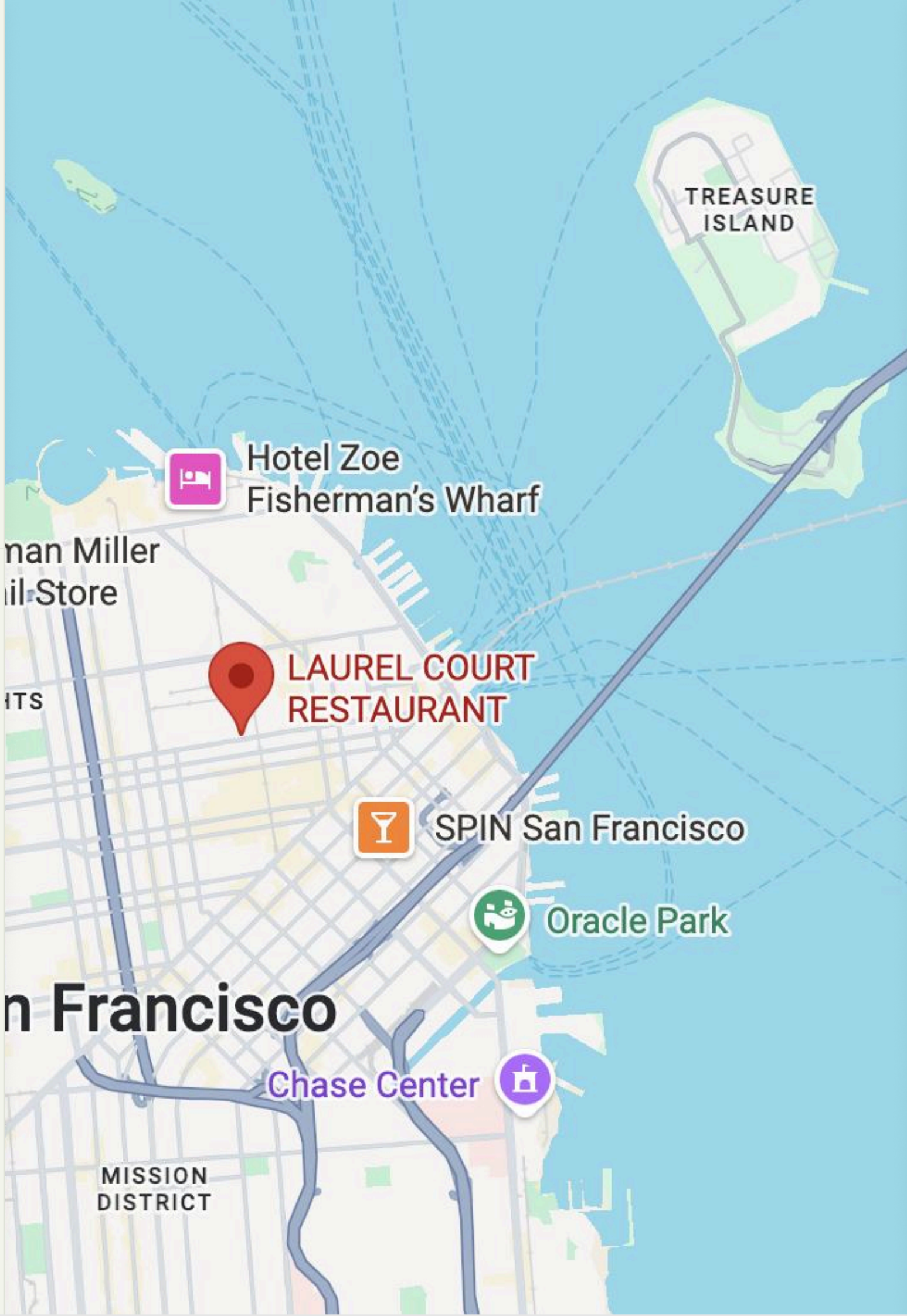


**Make a reservation**  
Table for 4, Today at 6:00 PM

**Available times**  
2:00 PM 3:30 PM  
4:00 PM 5:00 PM  
*slots indicate quiet hours.*

**Seating zone** [View Floor Plan](#)

- Booth**  
Safe, cozy, tucked away
- Round**  
Open, shared energy



San Francisco

LAUREL COURT RESTAURANT

Hotel Zoe Fisherman's Wharf

SPIN San Francisco

Oracle Park

Chase Center

MISSION DISTRICT

TREASURE ISLAND

### Overall Assessment

View History →

**88**  
Vibe Score

**Excellent Acoustic Comfort**

This venue achieves a rare balance of liveliness and intimacy. Perfect for date nights and small business dinners where conversation is key.

### Vibe Breakdown

- Layout Density: **Spacious** (OPTIMAL)
- Room Echo: **Minimal** (CLEAR AUDIO)
- Background Noise: **Quiet** (LOW NOISE)
- Material Absorption: **High** (SOFT)

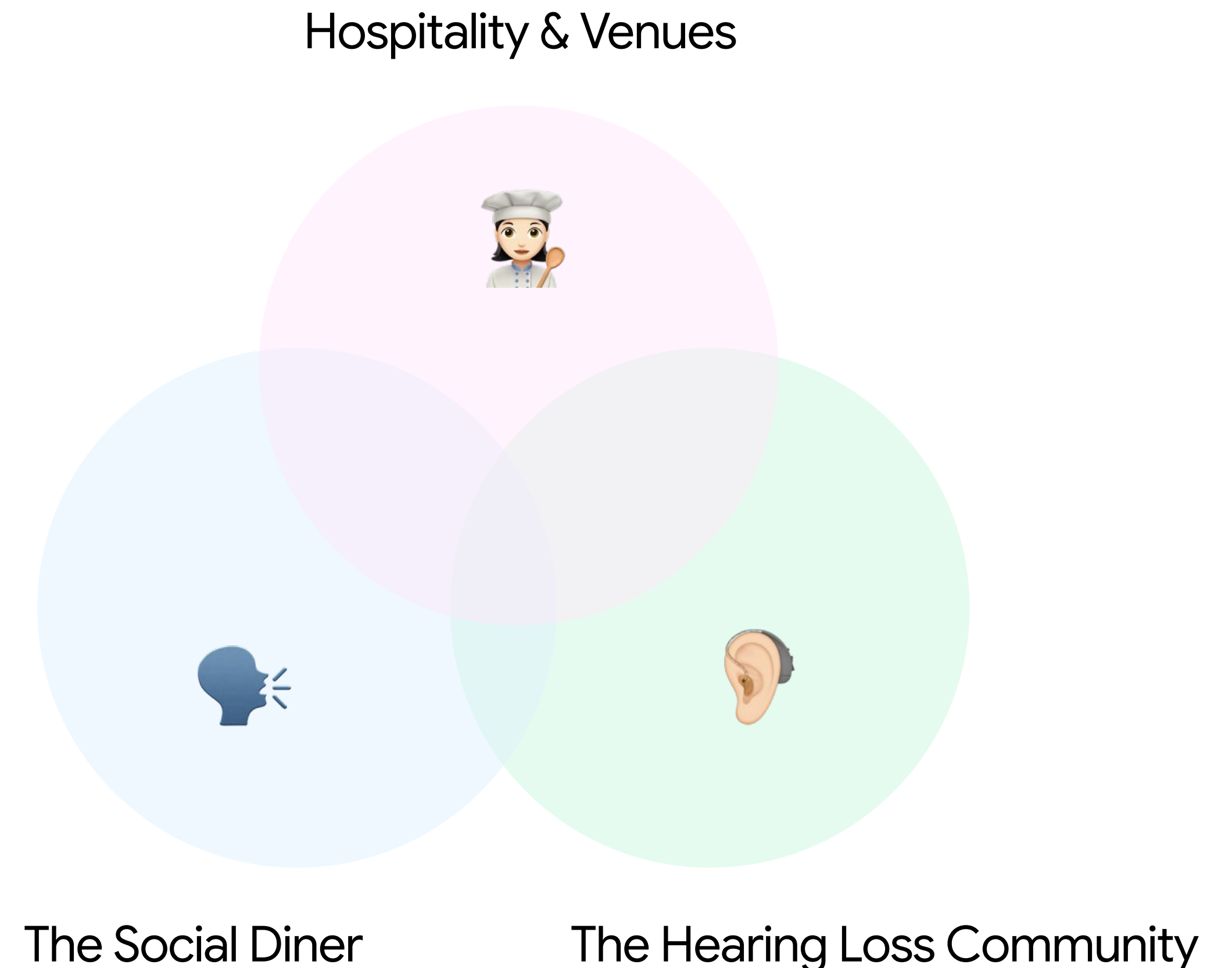
[See what these levels mean](#)

### Acoustic Highlights

- Conversational Clarity: High
- Kitchen Bleed: Low
- BGM Uniformity: Good

# Who are we designing for?

- **The Social Diner:** Find a space that matches the moment. A first date, a birthday, a work dinner.
- **Hospitality & Venues:** Know how your space actually sounds. Attract the right customers, get better reviews.
- **The Hearing Loss Community:** Accessible spaces they can trust. Finally know which spaces will work before you walk in.



# What Hear Here does

Search by vibe. Book the right space.

Hear Here reimagines restaurant discovery around how spaces actually sound and feel. For diners, it matches you to spaces with the right vibe for your occasion. For people with hearing loss, it makes acoustic accessibility searchable for the first time. For restaurants, it turns atmosphere into a measurable, marketable asset.



## Certified nooks

Acoustically verified for easy conversation



## Outdoor terraces

Open air where sound won't bounce back



## Private rooms

Fully enclosed, no competing noise



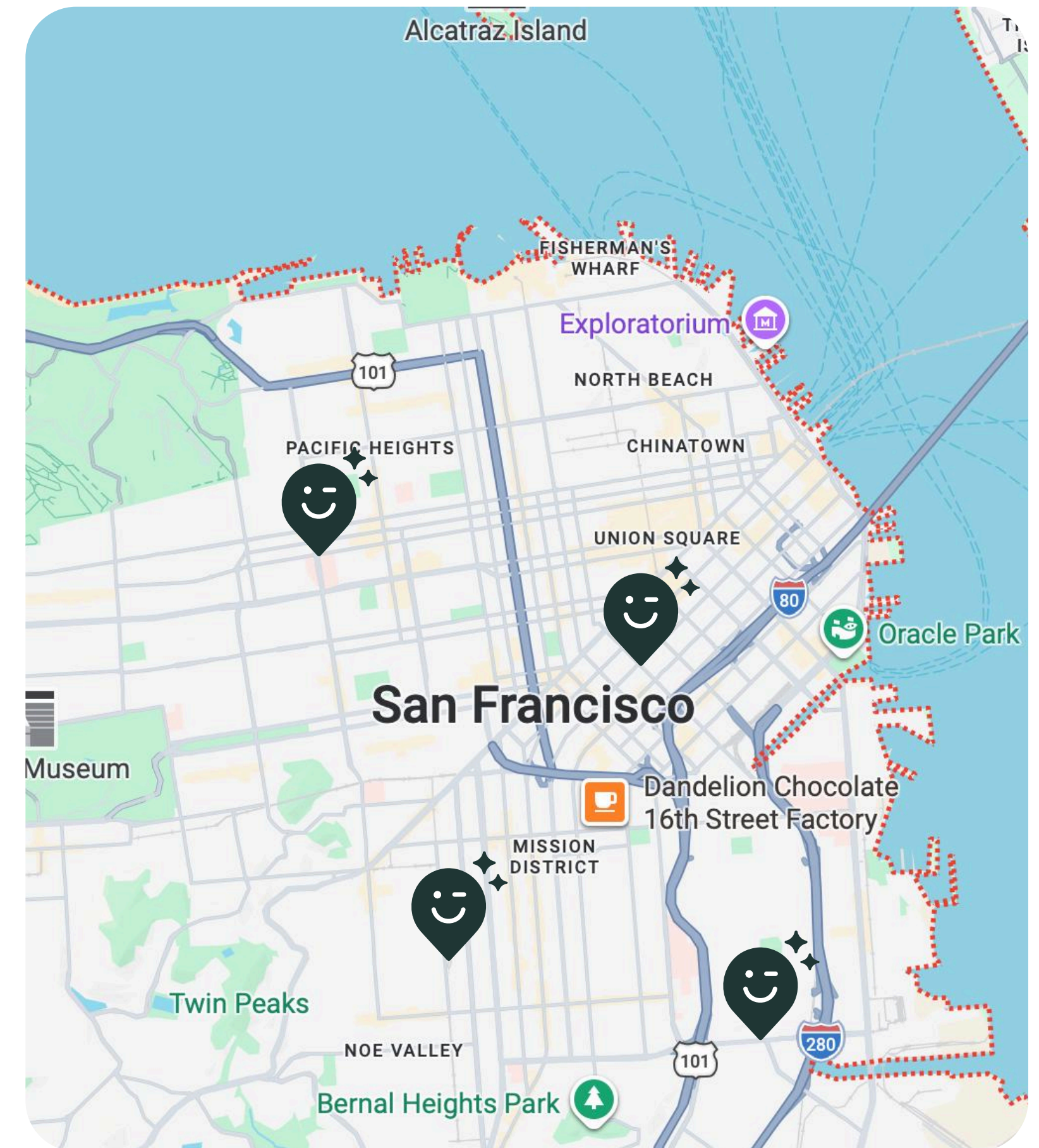
## Off-peak hours

Fewer crowds, clearer conversations

## IV. Our Idea

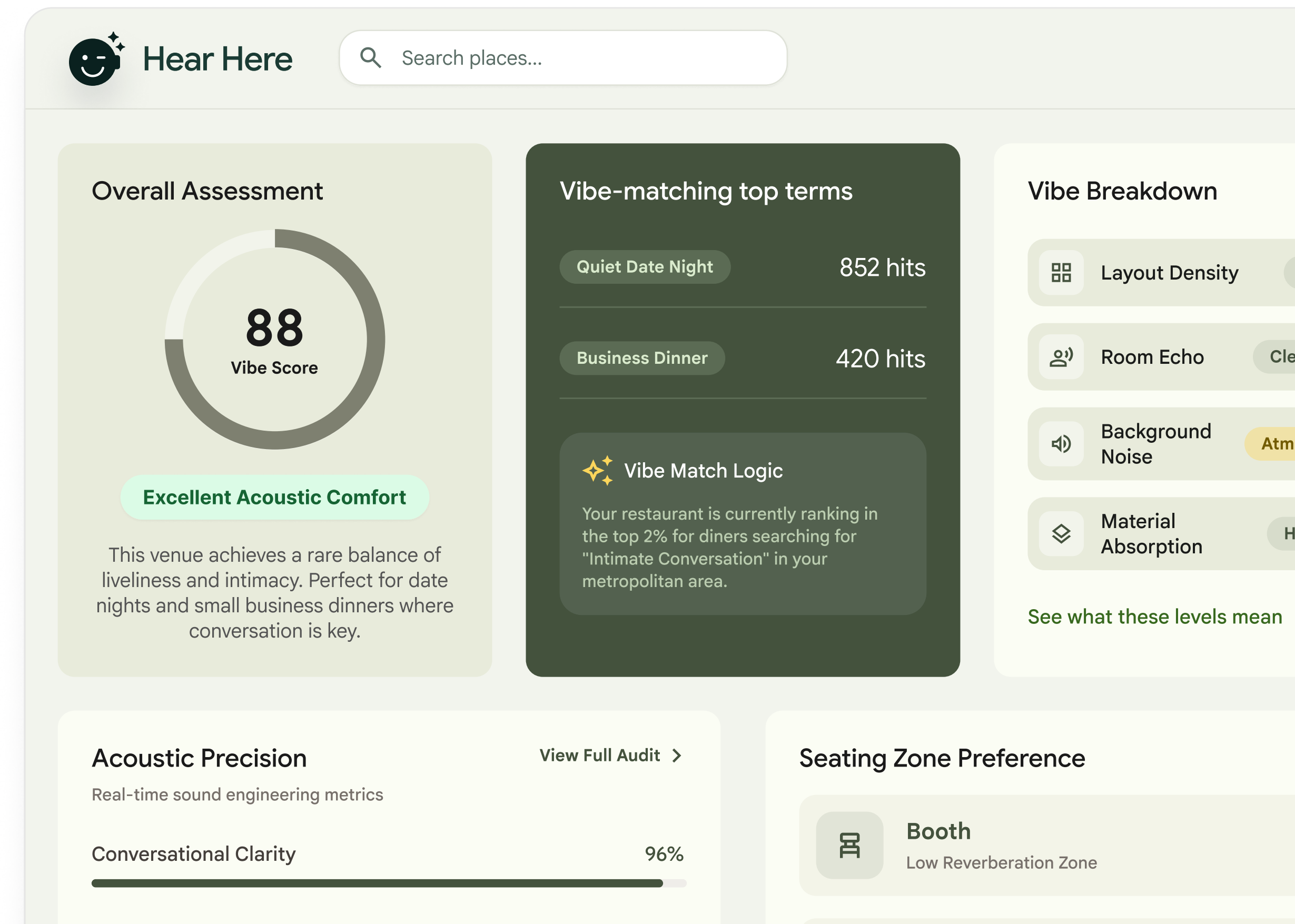
# We intend to build a living map of acoustic accessibility.

A public, growing map of audited restaurants will allow diners to see at a glance which restaurants nearby have been audited, what their vibe profile is, and which seating zones work best for conversation. As more restaurants get certified, the map will become the go-to resource for acoustic accessibility.



# The Business Behind the Vibe

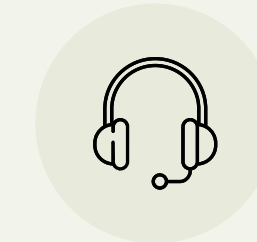
Why restaurants will pay for vibe data



# Restaurants spend thousands on how a space feels. There's no way to search for it.

Restaurants invest in materials, layout, lighting, and sound. But none of that shows up when a diner is deciding where to eat. There's no filter for 'good for conversation.' No tag for 'not too loud.' All that effort stays invisible until you walk through the door. We make it searchable.

## Atmosphere Report



**Acoustics**  
Level 1: Social



**Lighting**  
Level 2: Ambient

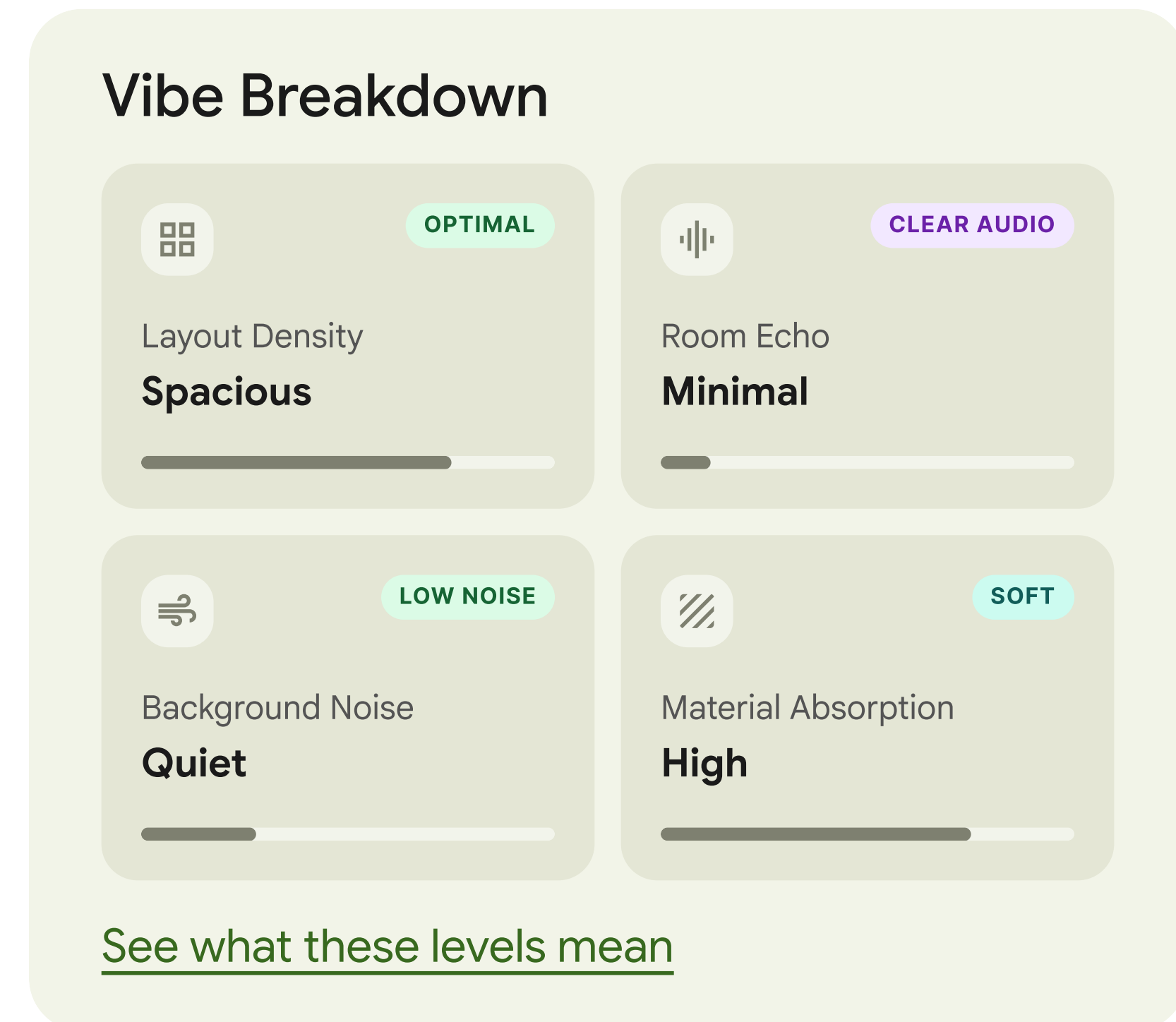


**Spacing**  
Level 3: Buffered

[See what these levels mean](#)

# A vibe profile is a marketing asset.

Restaurants can share their vibe profile on social media, their website, and reservation platforms. Diners searching for 'quiet date night' or 'lively group dinner' find the right match. The restaurant fills seats with people who actually want to be there.



V. The Business Behind the Vibe

# Comal proved it's possible.

Comal in Berkeley is one of the only restaurants in the world with an active acoustic system. Meyer Sound's Constellation technology lets the space adjust its acoustics in real time, proving acoustic treatment can transform a dining experience.



# How We Validated This

40+ interviews across 6 user groups  
(Diners, Experts, and Restaurant Staff)

1. Please let me know a little bit more about your hearing condition

Examples:

- mild hard of hearing
- moderate hard of hearing
- profound hard of hearing
- deaf

Ex. I have mild to moderate hearing loss and wear hearing aids.

2. What types of places do you go to meet up with people outside

[Where do you go to meet up with people?](#)

3. How many times a week do you meet up with other people in re

Here are some timeframes as guidance!

- Rarely
- 1-2 times
- 2-3 times
- 4-5 times
- 6-7 times

[Shorten it - how many times a week do you meet/or go in restaura](#)

4. How often are you the one choosing the place to meet VS how  
choosing the place?

[Think about the last time - did you choose? → Put it under 7-1](#)

5. What do you consider when you are the one choosing the resta  
general factors or specific considerations in regards to your hearing

6. [\\*Where\\* do you look for information on the place when you are](#)  
[Reconsider the context of the question → where to place it within t](#)

7. In social settings, what are some of the frustrations/challenges y  
hearing situation?

# We talked to 40 people.

3

Deaf

3

Hard of hearing

2

Audiologists

1

Accessibility experts

2

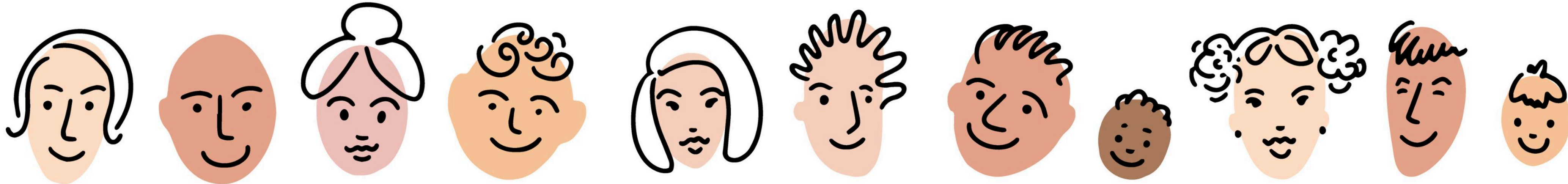
User researchers

3

Restaurant managers

21

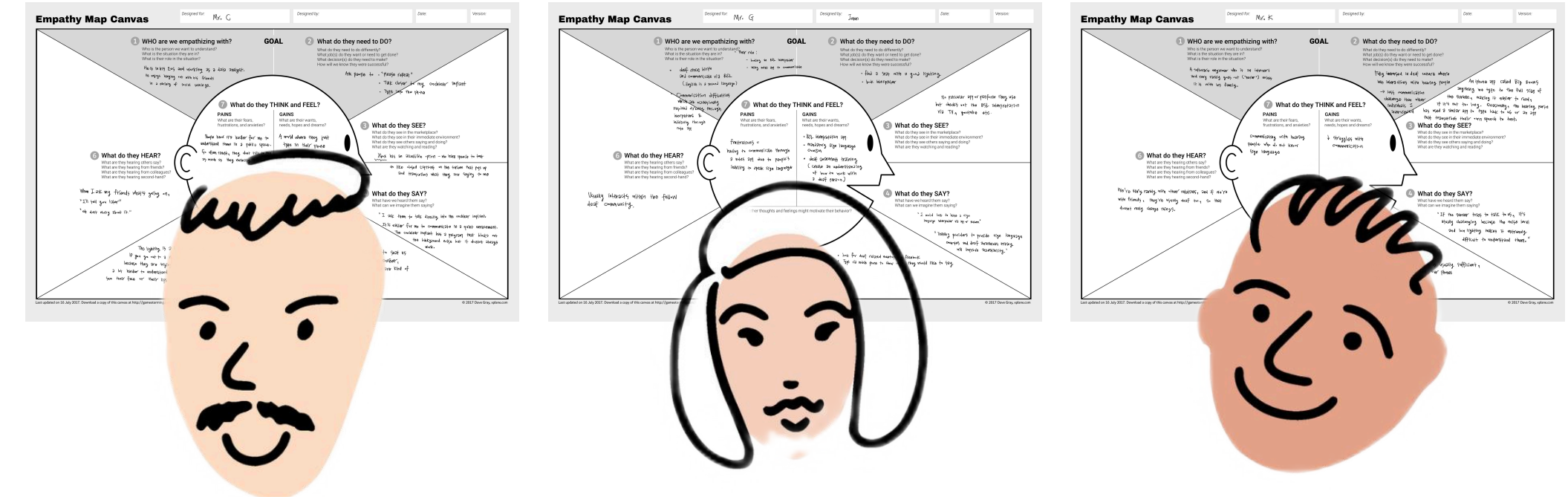
People who want quiet restaurants





# Deaf: "Round tables make it easier to see sign language and lips."

- Lighting is Essential: Bright spaces are required for lip-reading and sign language.
- Strategic Seating: Diners actively seek quieter areas like corner seats.
- Communication Barriers: Diners rely on screen-zooming apps (like 'Big' or Notes) to talk to staff.
- Sightlines Matter: Round tables allow groups to easily see each other's lips and hands.



"I depend a lot on lip reading and sign language so I always look for brightly lit places to see better."

## VI. 40+ User interviews

"Round tables make it easier to see sign language and lips when there are more than two people."

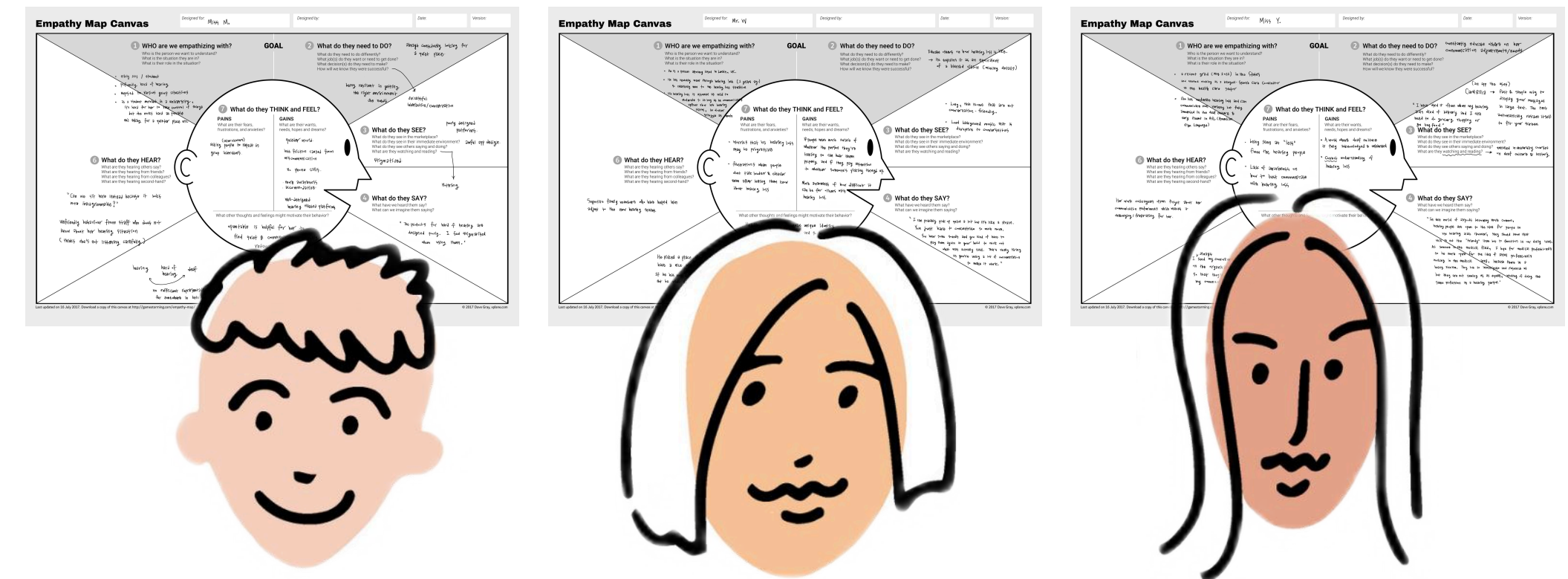


"I use the iphone notes app or an iphone app 'Big' that zooms anything we type to the full size of the screen to ask the staff to ask about the menu such as dietary information etc."



# Hard of hearing: *"It's about acoustics, not just quietness."*

- Acoustics > Quiet: A slightly noisy room is still functional if the acoustics are designed well.
- Proximity is Key: Distance distorts sound. Round tables and side-by-side seating work best.
- Communication Fatigue: There is a widespread lack of understanding about hearing loss, meaning diners frequently have to remind others of their needs. They resort to typing on note apps in loud environments.



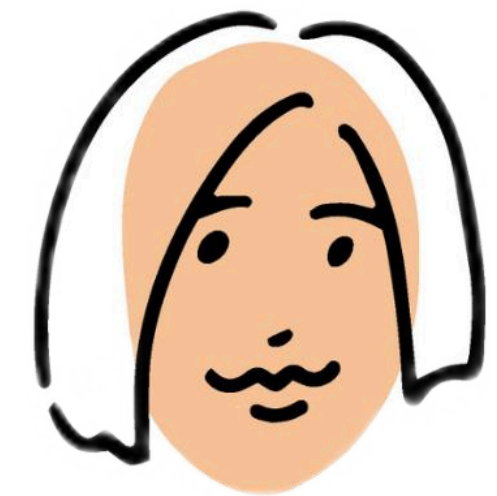
"Some places can be slightly noisy and yet it's still decent enough to hear speech clearly." (Acoustics > Quiet)

## VI. 40+ User interviews



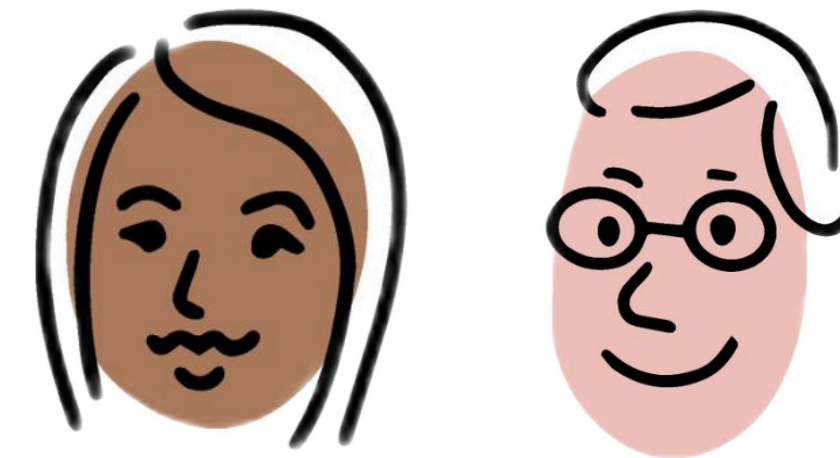
"I constantly need to remind people around me about my hearing loss but sometimes they can't accommodate as they truly struggle to speak louder."

"The longer the distance, the more the sound tends to get distorted. Usually the closer I get to sit to the person, the easier it is to hear them accurately."



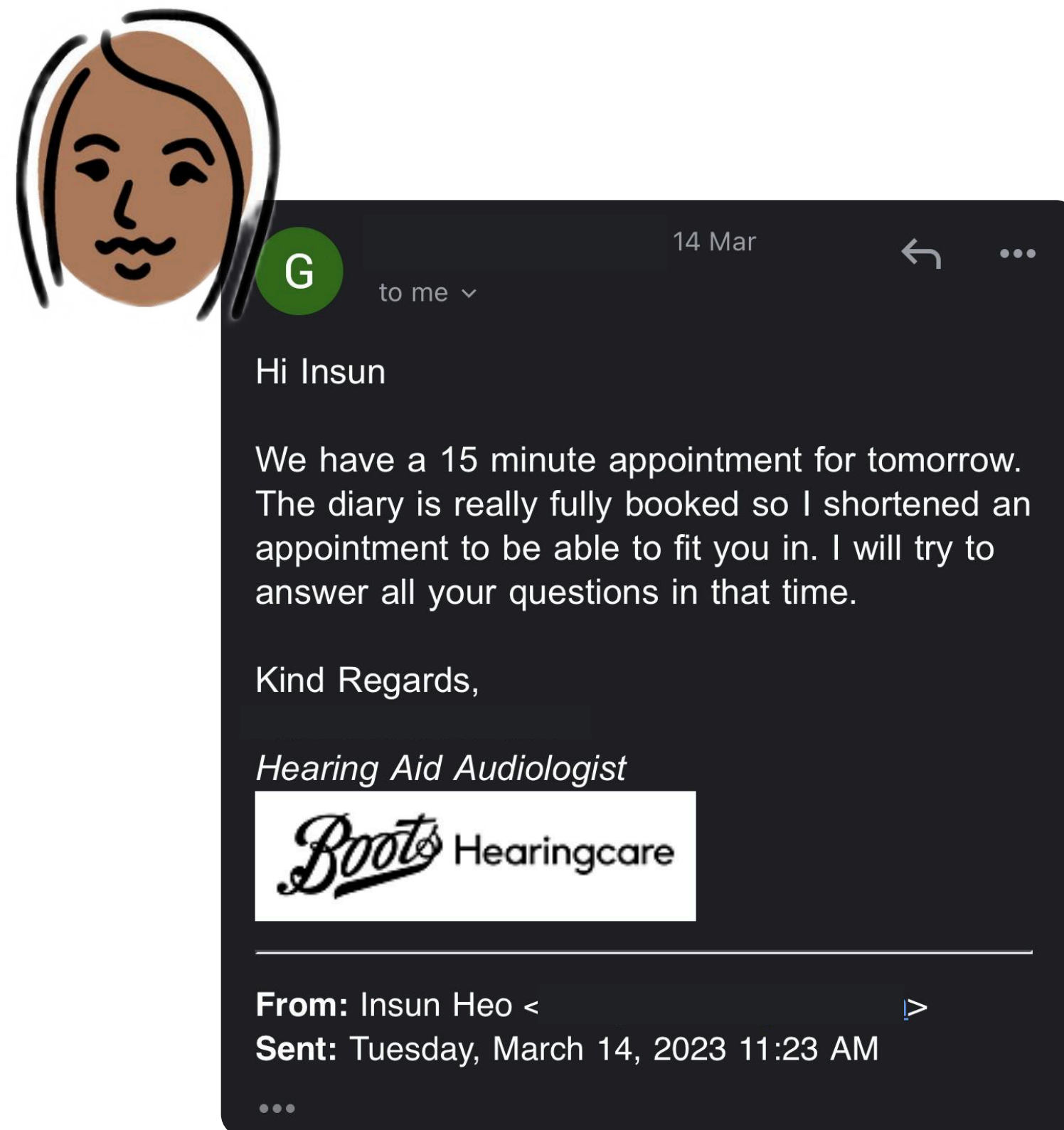
# Audiologists: *“Physical placement in a space heavily impacts hearing.”*

- Walls are amplifiers: Sitting in a corner with a wall behind you bounces sound forward and cuts background noise.
- Avoid high-traffic zones: Seating away from busy areas like doors prevents sensory overload.



"Sit in the corner with the wall behind you so that the sound will bounce off from the wall and cut off unnecessary background noise." — Audiologist 1

## VI. 40+ User interviews



# Restaurant managers: *"We could allocate specific time slots for those quieter tables."*

- Access to Decision-Makers is Critical: While frontline staff gave immediate "no" responses over the phone, speaking to a manager in person led to actual problem-solving and potential workarounds.
- Balance Seat Inventory: Managers fear specific bookings will create an imbalance between "popular and less popular seats," complicating floor management.



Kerridge's Bar & Grill



Ham Yard Restaurant



Dishoom

# Vibe advocates: *"If we can't hear each other, we just eat fast and leave."*

- The Research Burden:: Diners already research atmosphere heavily. They want an objective guide to the "vibe" to remove the guesswork.
- Moving to the Safe Bet: If it's too loud to connect, diners leave ASAP. They don't stick around for dessert or extra drinks, and migrate to a guaranteed quieter spot they already know.
- Noise Ruins the Meal: Vibe matters as much as the menu. Overwhelming noise creates sensory overload and makes the food less enjoyable.



This group does not have hearing loss, and yet cares deeply about the vibe.

## VI. 40+ User interviews



"I spend so much time digging through reviews just to figure out the atmosphere. I really wish there was an objective guide to the vibe before I actually book a table."

"Honestly, the atmosphere matters just as much as the menu. If a place is deafening, it's so overwhelming that I don't even enjoy the taste of my food."



# What we designed and why

Built on firsthand experience and acoustic research



# We designed around critical user journeys.

## Critical User Journey 1

User

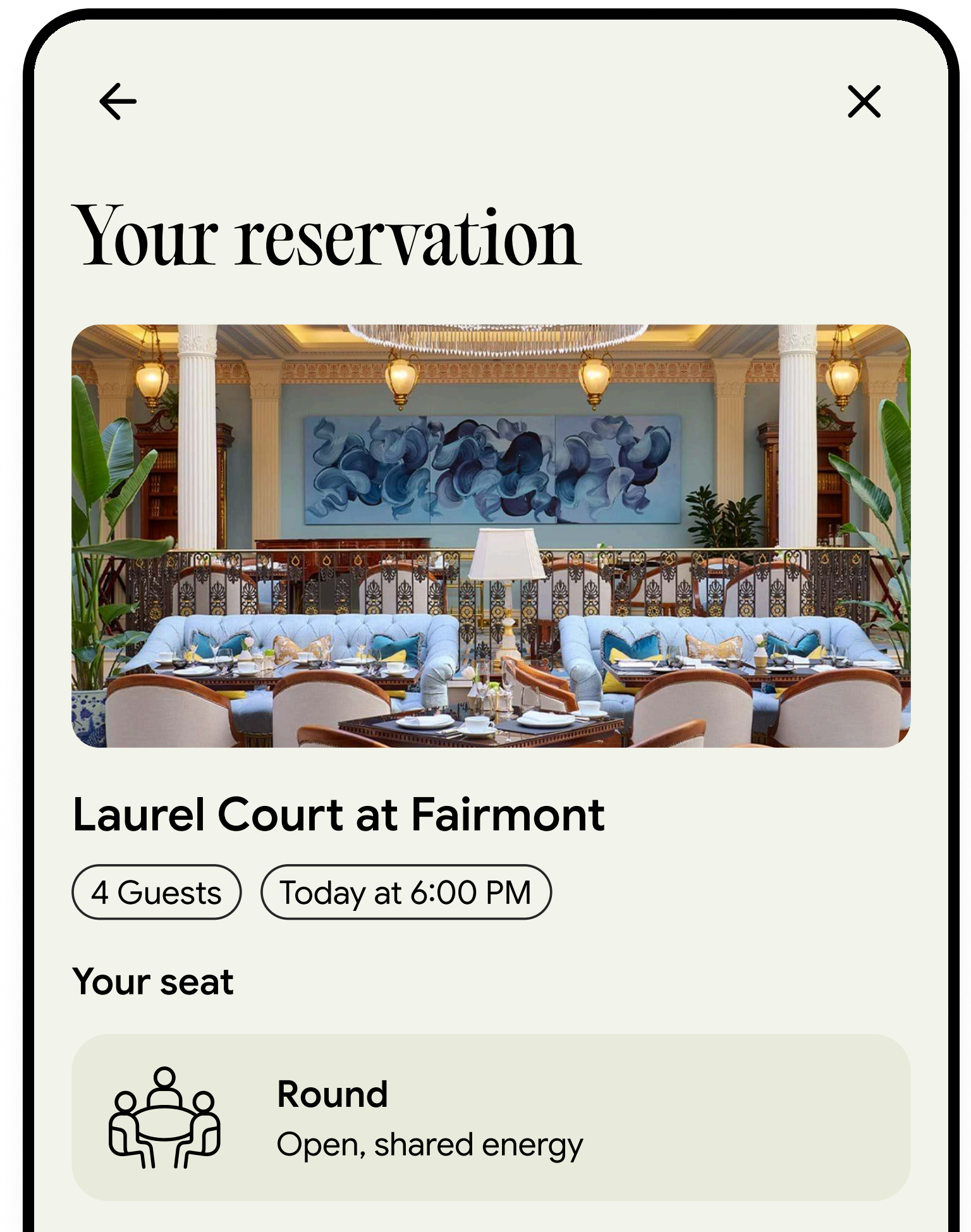
**As a person with hearing loss,**

Goal

**I want to find a restaurant where I can really connect with my friends,**

Task

**so I search by conversation ease and pick a booth with low background noise.**



# We designed around critical user journeys.

## Critical User Journey 2

User

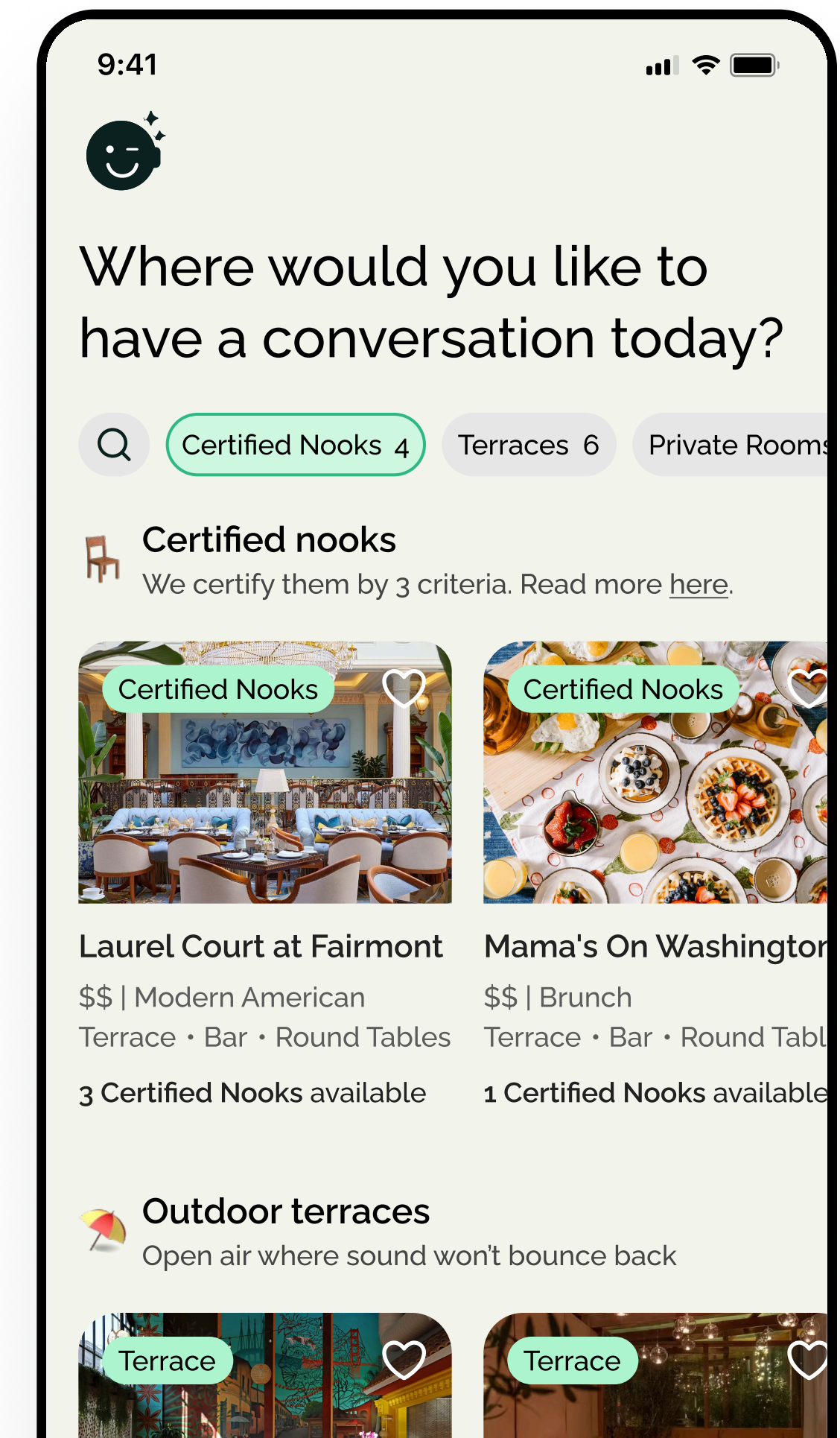
**As a general diner,**

Goal

I want to find the right restaurant and the right seat for tonight,

Task

so I filter by vibe and check the seating zones before I book.







# We designed around critical user journeys.

## Critical User Journey 3

- User **As a restaurant owner,**
- Goal I want to attract diners who appreciate the space I've built,
- Task so I check my vibe profile and see how people find me.


Vibe Breakdown

	Layout Density	Optimal
	Room Echo	Clear Audio
	Background Noise	Atmospheric
	Material Absorption	High Tech

[See what these levels mean](#)

Vibe-matching top terms

Quiet Date Night	8
Business Dinner	4

 Vibe Match Logic

Your restaurant is currently ranking in the top 10 for diners searching for "Intimate Conversation" in your metropolitan area.

# Mobile-responsive web-app vs. Native mobile app?

- Data showed 73% of diners book on mobile devices.
- We assumed "mobile" meant a native app and began designing one, before realizing a crucial detail.
- "Mobile" usually just means **mobile web browsers**, not dedicated apps.



73%

diners book via  
mobile devices

# We talked to engineers to decide

What we found out:

- Slow updates - App Store review processes can delay simple fixes by a full day.
- High maintenance - App Store requires continuous reviews and relies on users downloading updates.



# Our strategy decision

## Phase 1

### Mobile-Responsive Web App

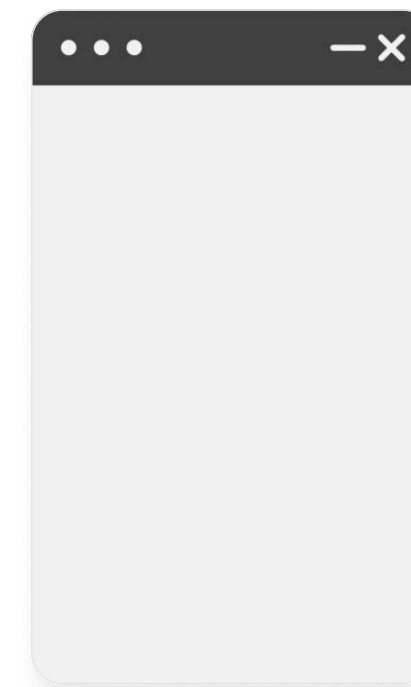
We chose a mobile-first web strategy to maximize our reach and instantly push updates, without waiting for app store approvals.



## Phase 2

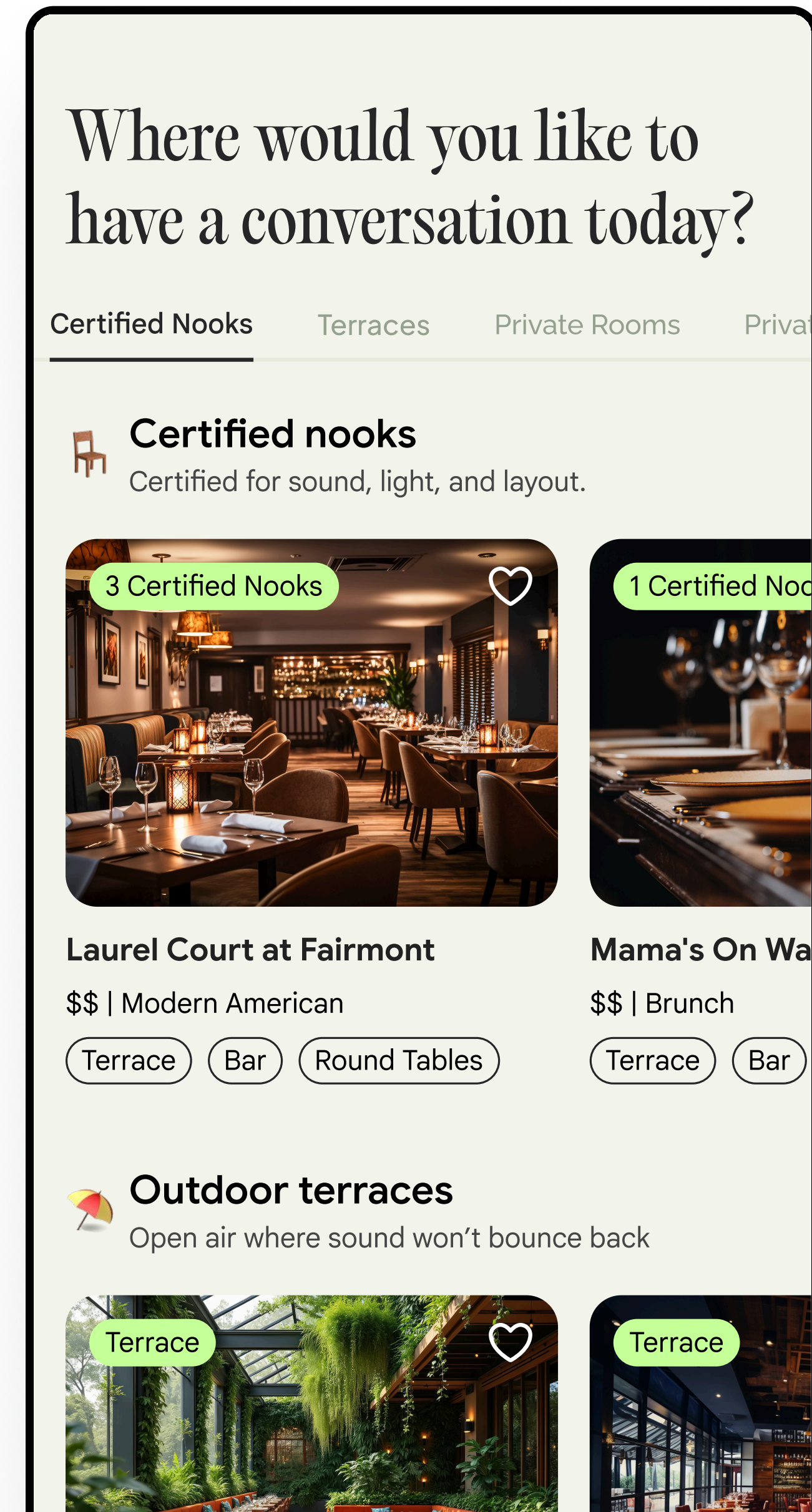
### Native Mobile App (Post-Traction)

Once our user base is proven, we'll launch a native mobile app to provide a faster, smoother, and more intuitive user experience.



# Search by how a space sounds, not just what it serves.


Instead of filtering by cuisine or price, we organize restaurants by how they sound. Certified Nooks for quiet, intimate conversation. Outdoor terraces where sound won't bounce back. Private rooms for group dinners. Diners browse by the experience they want, not just the food.



# Every restaurant gets a vibe profile.

Every vibe profile is backed by four measurable dimensions: Layout Density, Room Echo, Background Noise, and Material Absorption. These come directly from our acoustic audit. Diners see the summary. The data is underneath for anyone who wants it.

Overall Assessment [View History →](#)







**88**  
Vibe Score

**Excellent Acoustic Comfort**

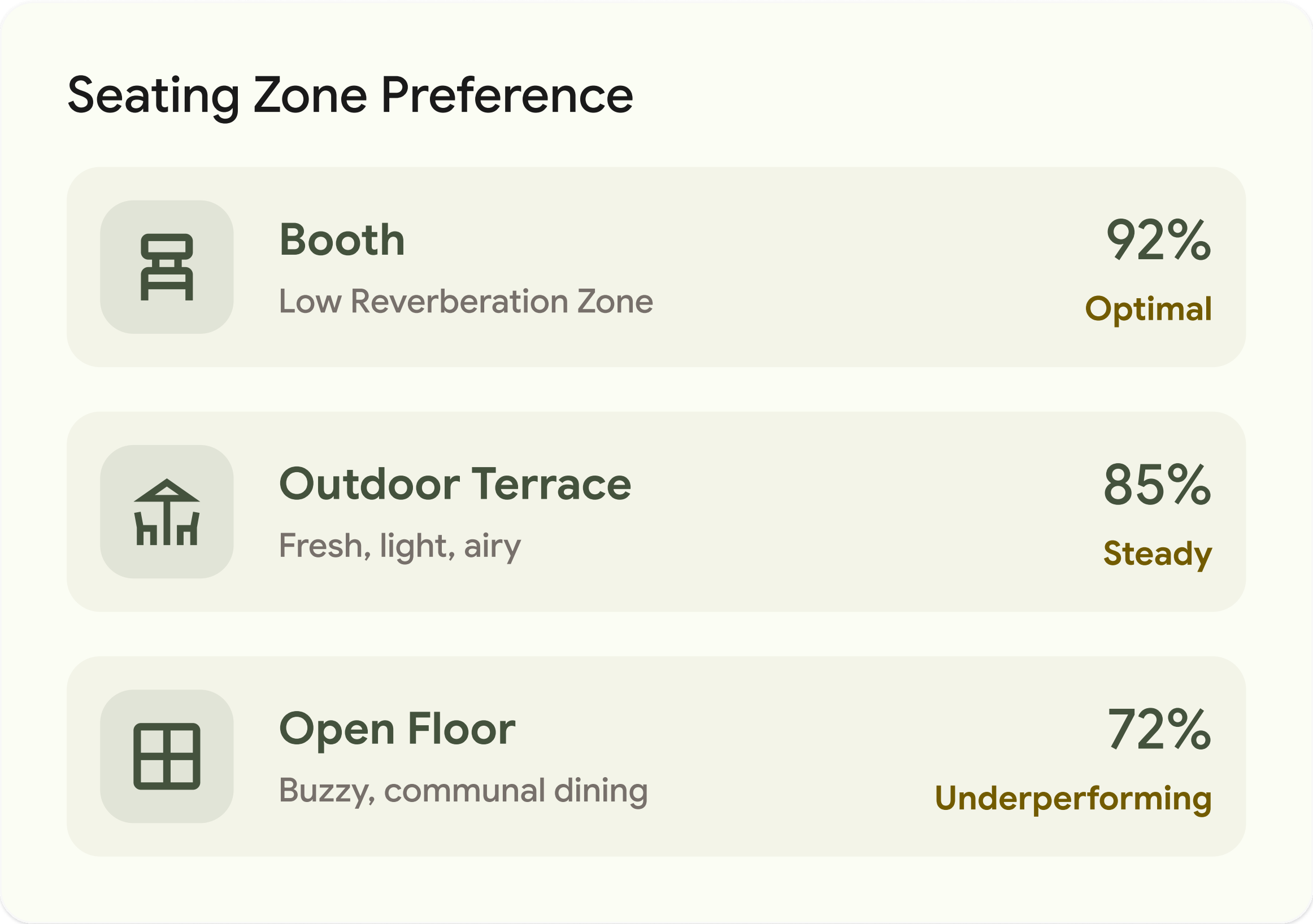
This venue achieves a rare balance of liveliness and intimacy. Perfect for date nights and small business dinners where conversation is key.

### Vibe Breakdown

 <b>OPTIMAL</b>	 <b>CLEAR AUDIO</b>
Layout Density <b>Spacious</b>	Room Echo <b>Minimal</b>
 <b>LOW NOISE</b>	 <b>SOFT</b>

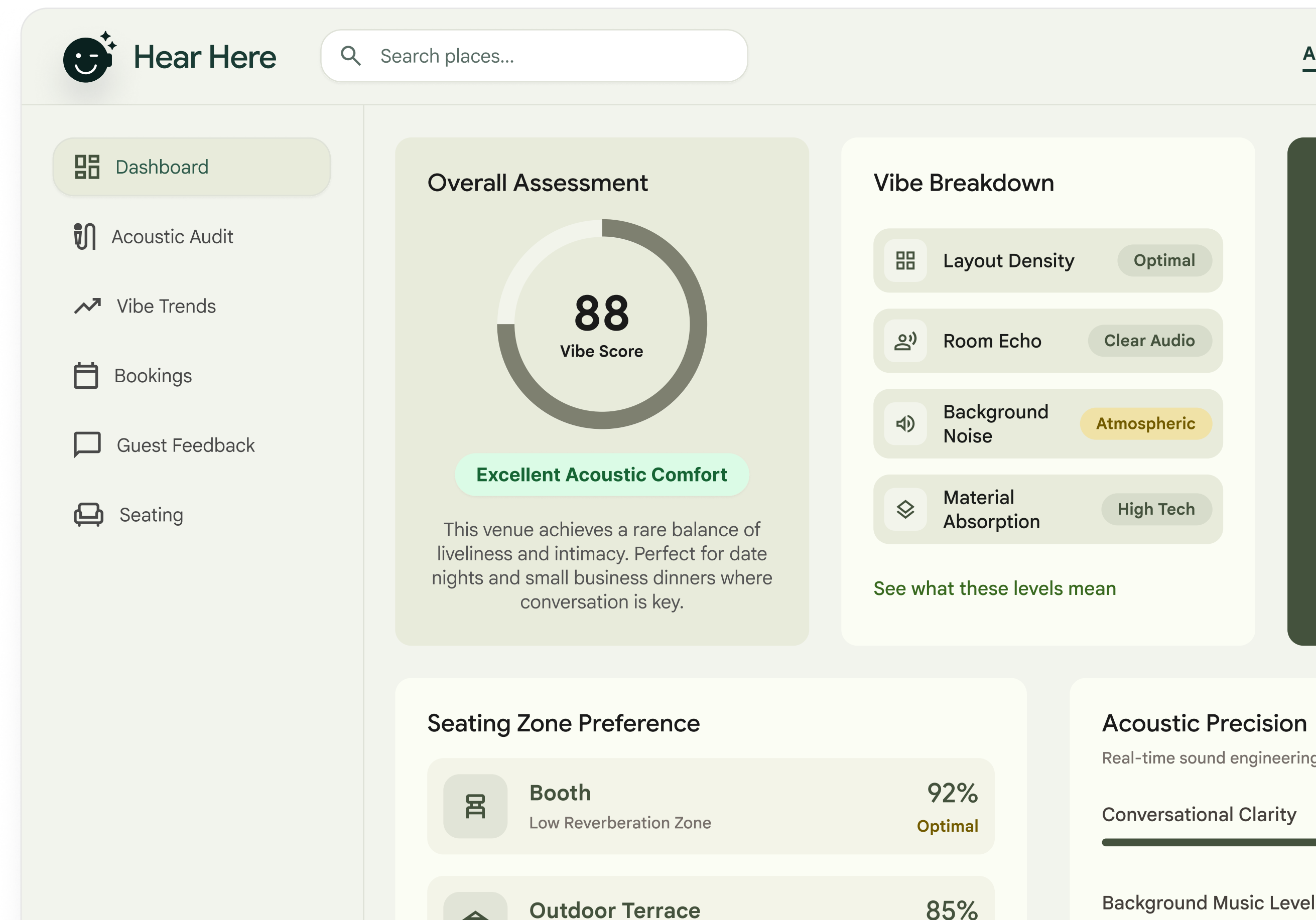
# Not every seat in a restaurant sounds the same.

A booth in the corner sounds different from a round table in the middle. A private room is different from the terrace. Hear Here breaks down each seating zone so diners can pick the spot that matches what they need, not just what's available.



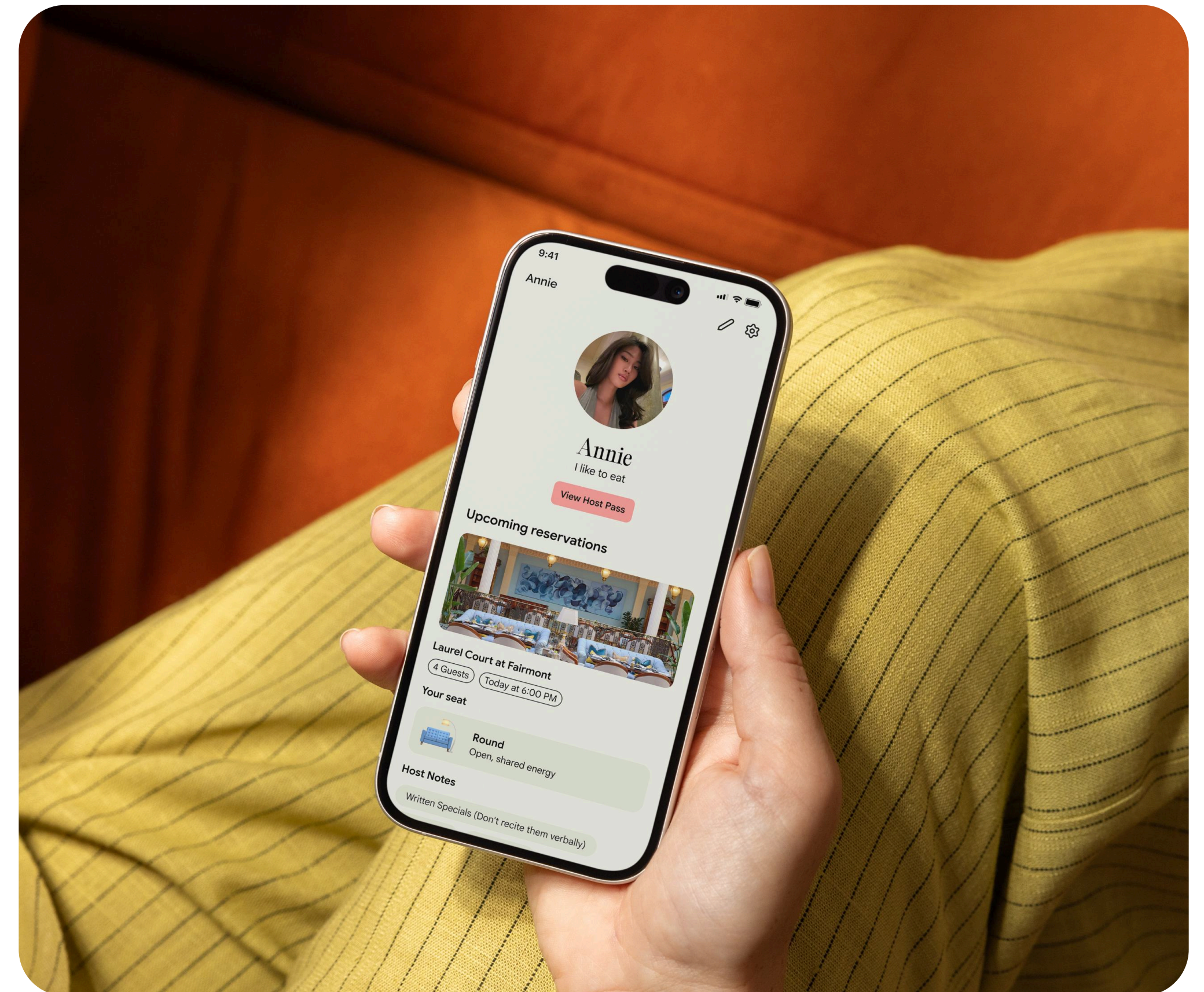
# Restaurants see what diners experience.

The restaurant dashboard shows how their space scores across vibe dimensions, how diners are finding them, and what search terms match their profile. For the first time, a restaurant can see whether their design investment is actually reaching the right audience.



# Building the Visual Language

How we made acoustic data feel warm, clear, and searchable



# Two typefaces. Warmth and clarity.

PP Editorial Old for character. Google Sans for readability.

Primary Typeface

PP Editorial Old

Headline 1

Aa

Headline 2

Aa

Secondary Typeface

Google San

Subheading

Aa

Body text

Aa

# Colors that feel like a good room.

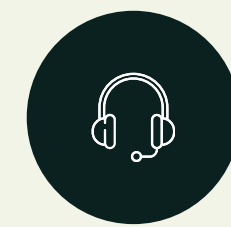
Grounded in green. Softened with warmth.

## Color Palette



# Custom icons for every acoustic dimension

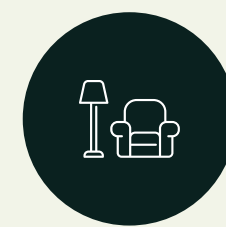
## Icon System



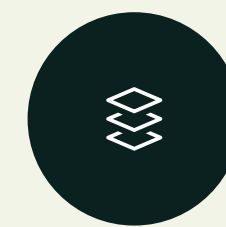
Acoustics



Lighting



Spacing



Material



Round Table



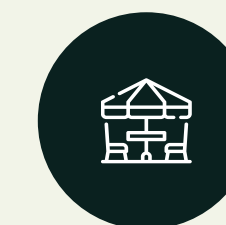
Round Table



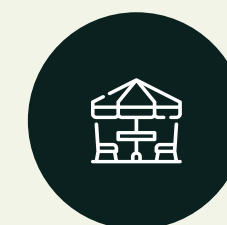
Booth



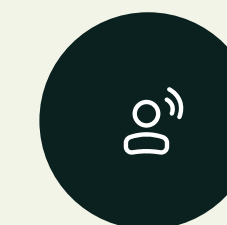
Room



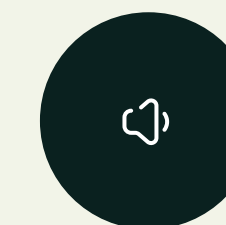
Terrace



Terrace



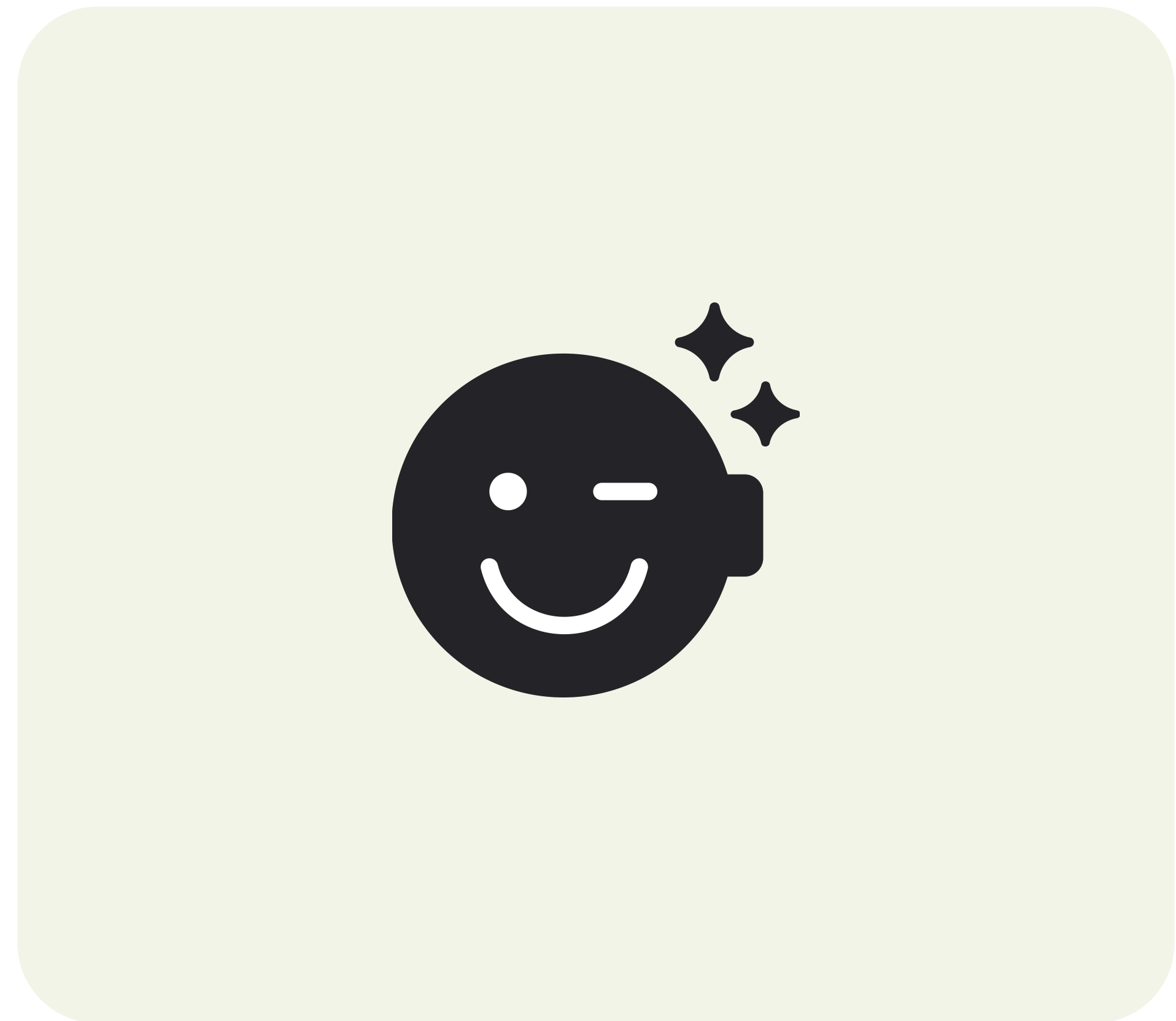
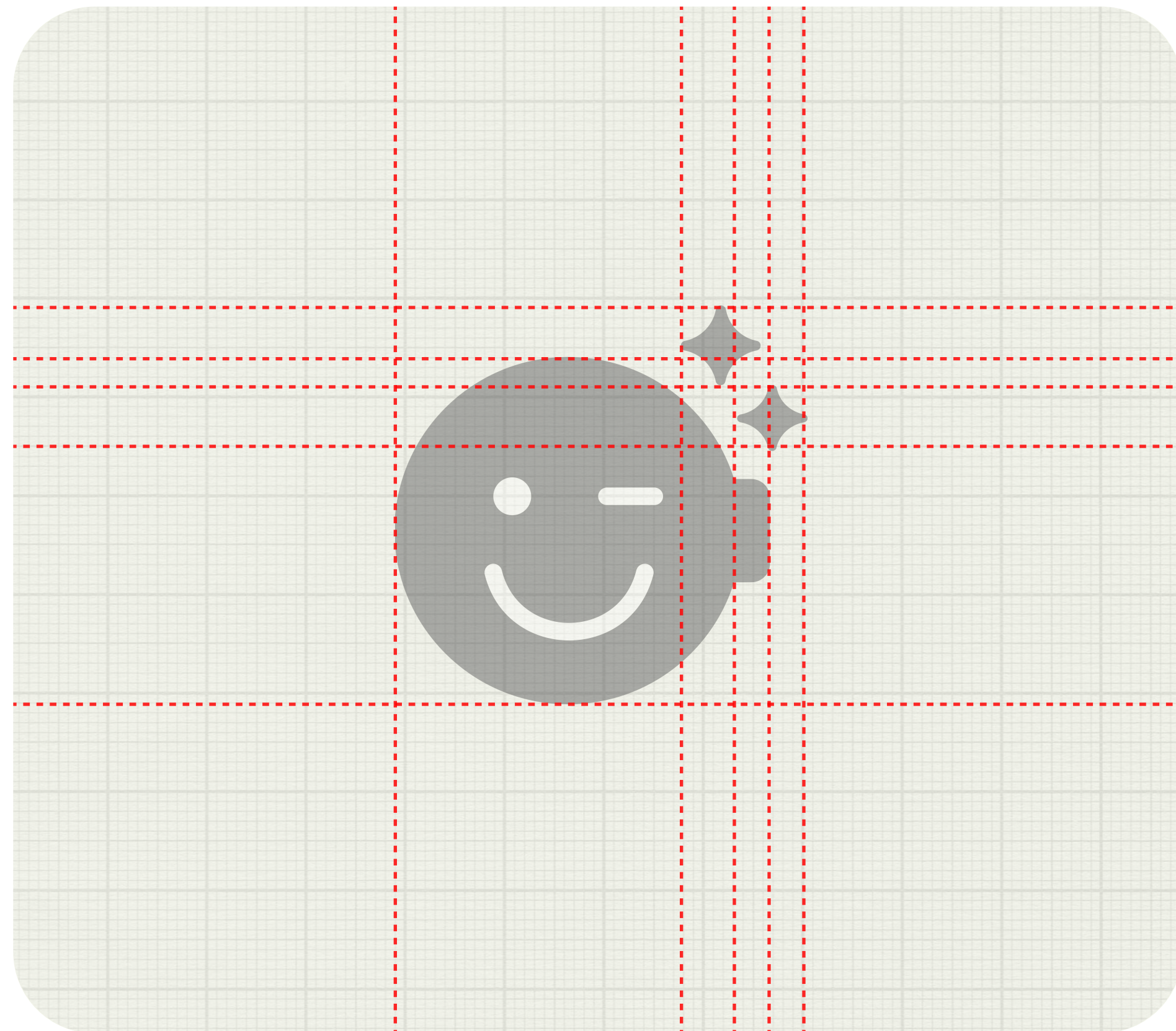
Room Echo



Noise

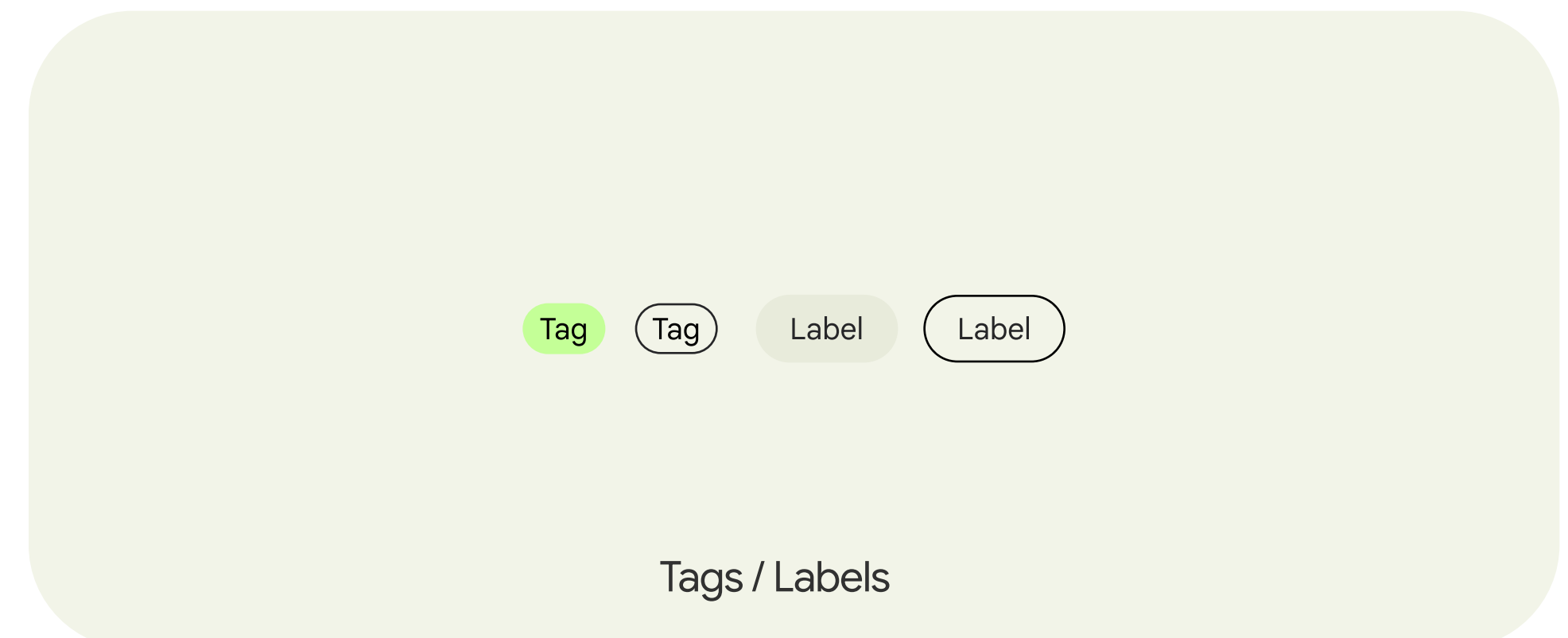
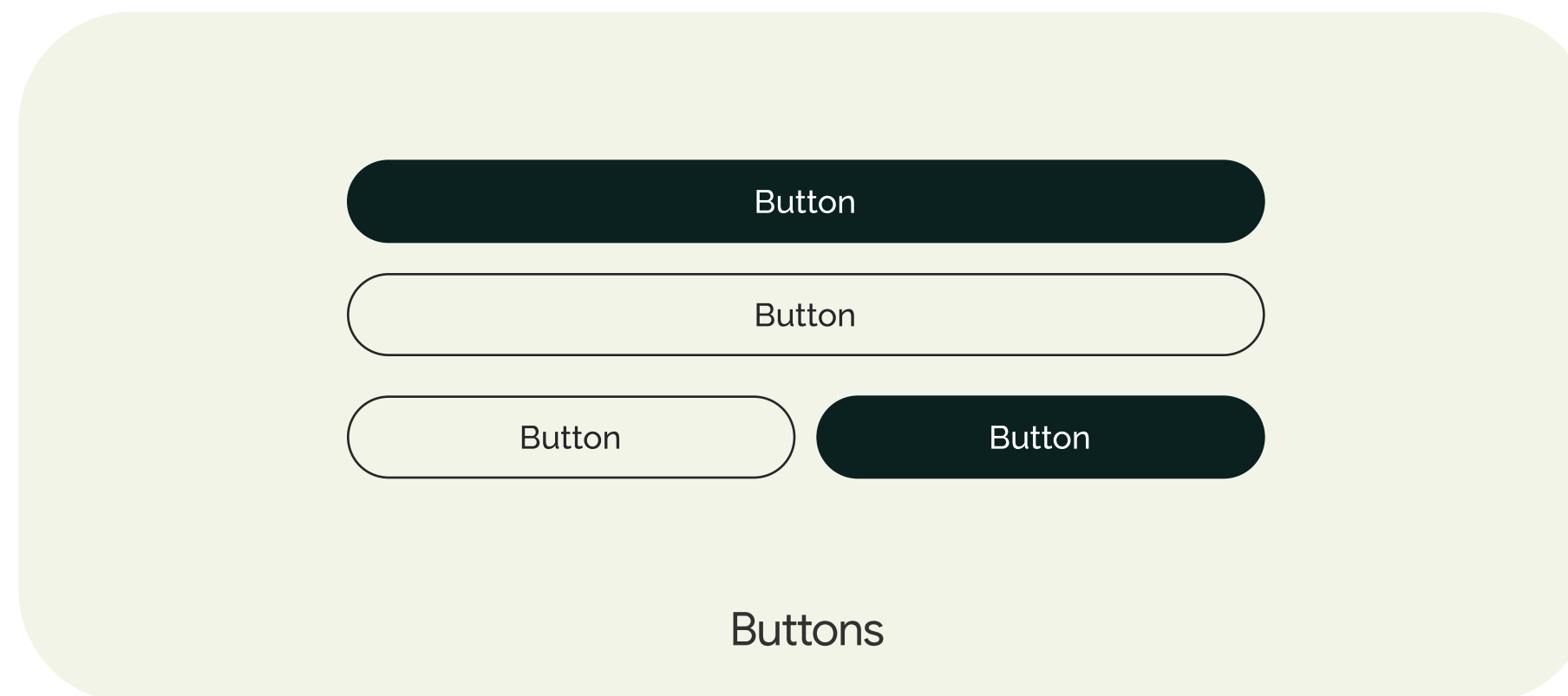
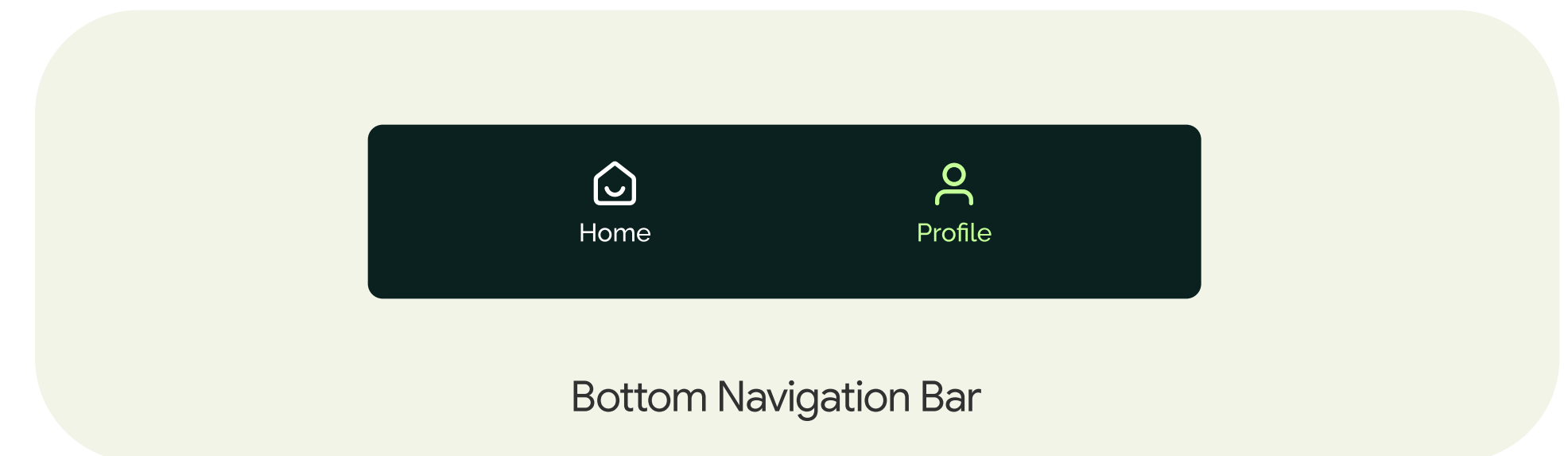
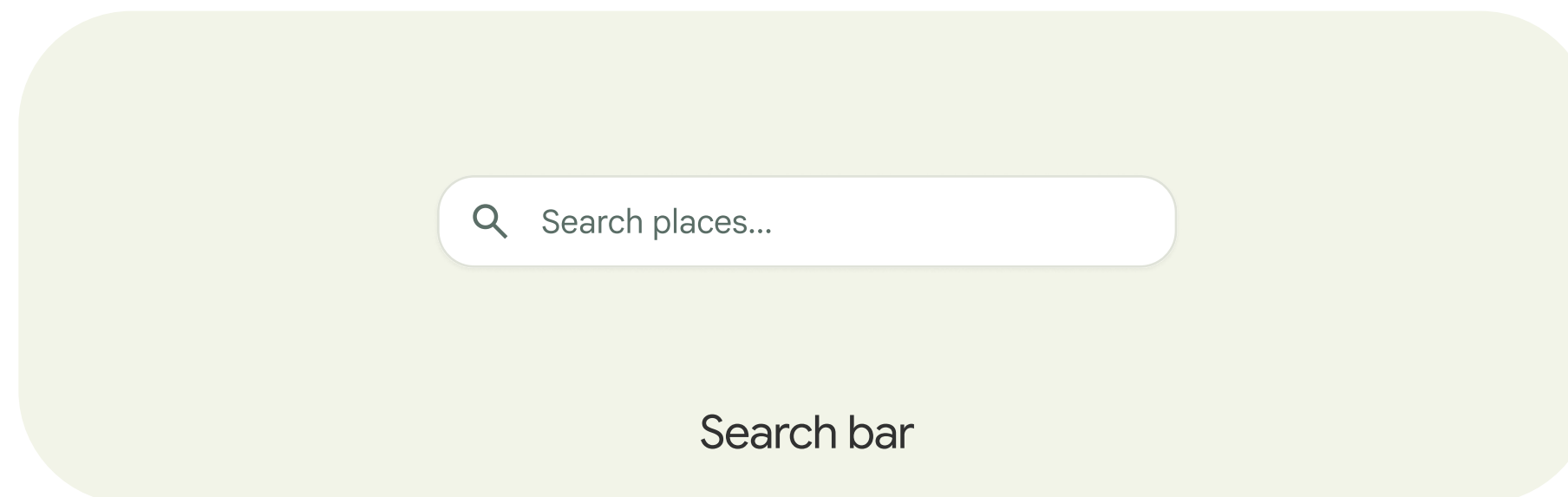
# Logo construction, designed to feel human.

Logo



# Core UI components

## UI Elements



# The Impact

What happens when acoustic accessibility is designed in



# Accessibility doesn't have to feel like accessibility.

Accessibility usually means a separate experience. Hear Here works differently. A person with hearing loss searching for a quiet dinner gets the same results as a couple looking for a place to talk. There's no "accessible" toggle. There doesn't need to be.



# Restaurants get credit for the spaces they build.

For the first time, a restaurant's acoustic investment becomes visible before a diner walks in. Better matched customers, fewer noise complaints, and a reason to keep investing in how their space sounds.



# Vibe becomes a standard part of how we choose where to eat

Right now, there's no acoustic data for restaurants. Diners find out how a space sounds after they arrive. When expectations don't match reality, the reviews reflect it. Hear Here closes that gap before the reservation.

## Vibe-matching top terms

Quiet Date Night

852 hits

Business Dinner

420 hits

### Vibe Match Logic

Your restaurant is currently ranking in the top 2% for diners searching for "Intimate Conversation" in your metropolitan area.

# Where we are now

We've built relationships with four leading research institutions: CNMAT, Salter Inc., the Center for the Built Environment, and Meyer Sound. We're currently applying for research grants to fund Phase 1: acoustic audits across 5 Berkeley venues. With funding, we begin acoustic audits this summer and deploy our first vibe profiles by fall.

