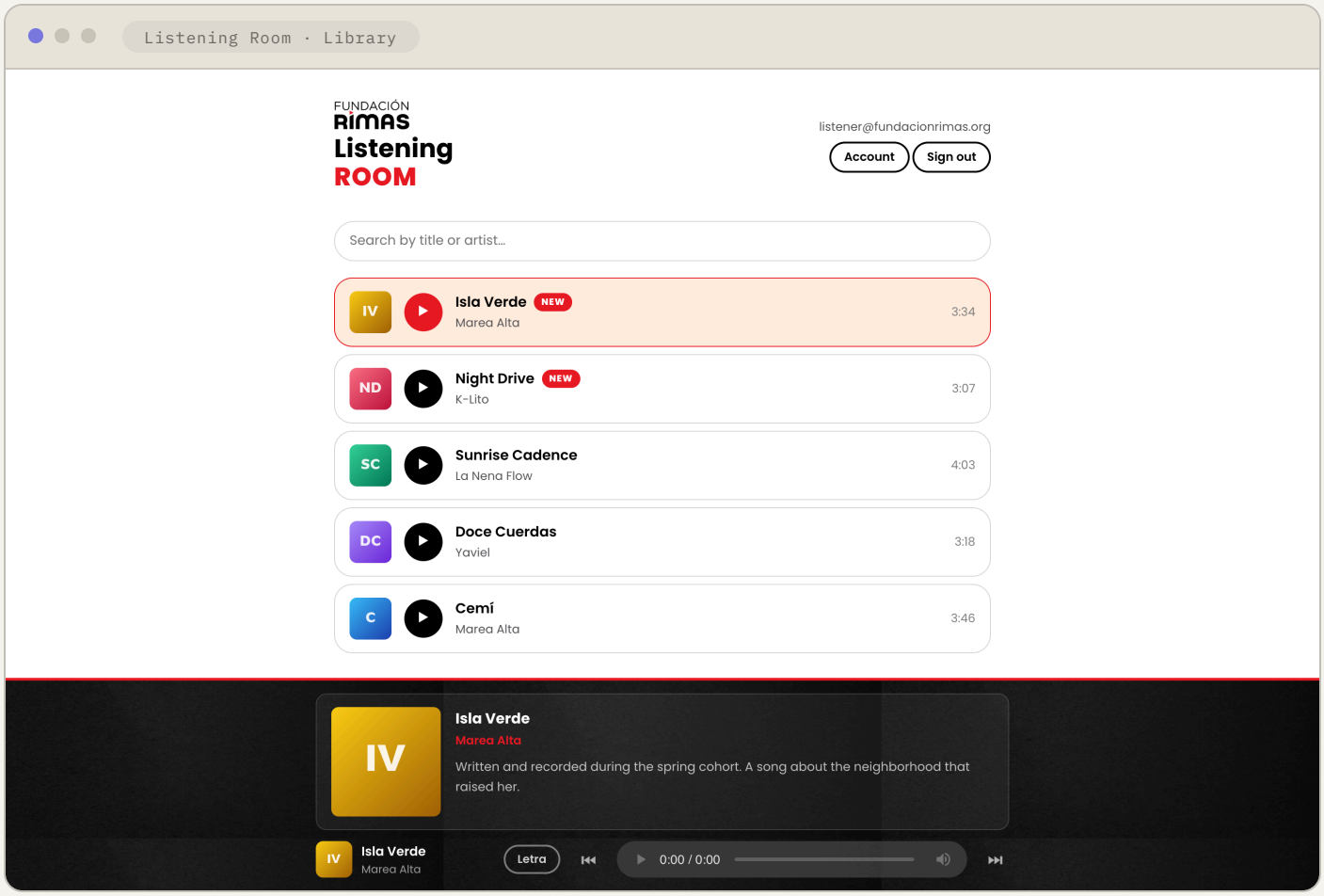
FUNDACION RIMAS

Listening Room

A private, invitation-only streaming room where Fundacion Rimas shares music by its youth participants with funders and allies, without ever handing anyone a file.



6 sec
TO CUT OFF A REVOKED LISTENER, MID-STREAM

0
AUDIO FILES EVER DELIVERED TO A BROWSER

100%
OF PLAYS LOGGED WITH IP AND DEVICE

PRODUCTS | SECURE STREAMING | YOUTH MEDIA

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The context

Fundacion Rimas runs La Academia, a music, arts and sports program for Puerto Rico's most vulnerable youth; Mutiny Labs already built its participation and impact platform. The program's students write and record real songs, and the foundation needs funders, partners and families to hear them. But sending audio files of a minor's creative work means losing control of it forever.

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The challenge

Every mainstream option was wrong. Public platforms expose children's identities and invite reuse. Email attachments are unrecoverable the moment they leave the outbox. The foundation needed listeners to feel like guests at a listening session, not recipients of files, with access granted per person, per song, and withdrawn just as easily.

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How we worked

We treated the player like a vault with a beautiful lobby. Audio is transcoded and encrypted in the administrator's browser, so the original recording never leaves their computer unprotected. Every playlist, decryption key and six-second audio segment is served through an authenticated API that re-checks identity and per-song permission on every request. The interface itself implements the foundation's 2026 brand system, from typography to the red play triangle.

CLIENT

Fundacion Rimas

SECTOR

Youth development / music

YEAR

2026

BUILT WITH

Server-rendered React and TypeScript, AES-128 encrypted HLS streaming, in-browser WebAssembly audio encryption, managed Postgres and private object storage, generative AI for lyric transcription and cover art, serverless API layer on a global edge network

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What we built

01 Encrypted streaming vault

Audio lives as AES-128 encrypted six-second segments in private storage. The browser only ever receives a rewritten playlist, a session-checked key and non-cacheable encrypted segments. No audio file ever reaches a listener's device.

02 Per-song guest lists

Admins invite listeners by email and choose exactly which songs each one can hear. Revoking access takes effect on the next segment request, cutting off a stream in about six seconds, even mid-song.

03 A complete audit trail

Every login, visit and play is recorded with IP address and device, alongside per-listener listening minutes. The foundation can always answer who heard what, when, and for how long.

04 Lyrics that follow the music

Generative AI transcribes each track into time-synced lyrics that highlight karaoke-style during playback, so listeners can follow every word the young artists wrote.

05 Cover art born from the lyrics

When a track has no artwork, generative AI reads its lyrics and paints an abstract album cover in the brand's spirit. Prompts exclude faces, text and any depiction of children by design.

UNDER THE HOOD — Server-rendered React and TypeScript, AES-128 encrypted HLS streaming, in-browser WebAssembly audio encryption, managed Postgres and private object storage, generative AI for lyric transcription and cover art, serverless API layer on a global edge network

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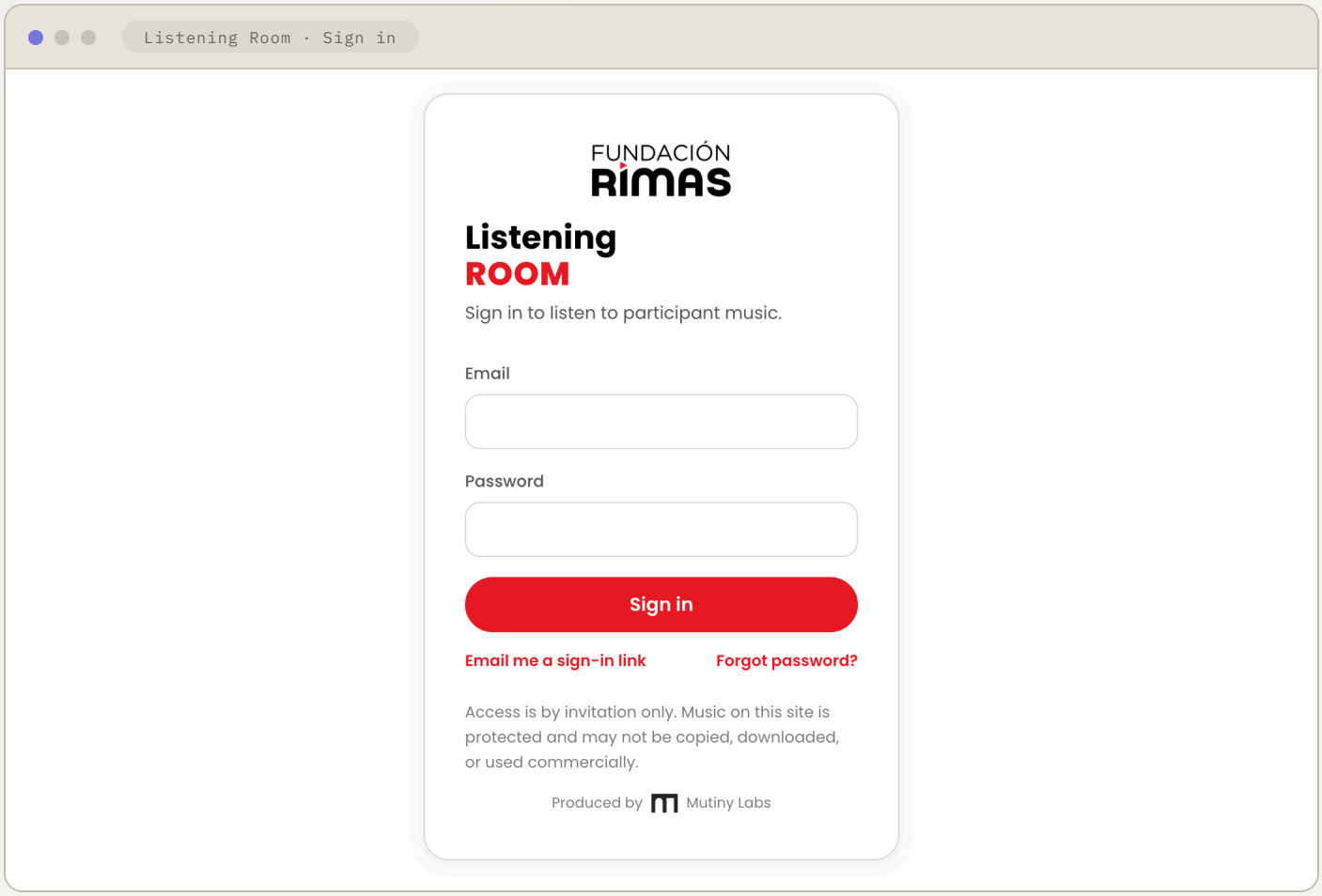
In the product



Invitation-only entry: there is no public signup, and every account is provisioned by the foundation. Shown with sample data.

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What this demonstrates

- Media protection without heavyweight DRM licensing
- Safeguarding minors' creative work by architecture
- Full brand-system implementation, tokens to typography

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