ScopeFace

Don't Miss a Beat

Project Update
Amrita Moturi, Shayan Boghani, Siya Rajpal, Shelby Myrman
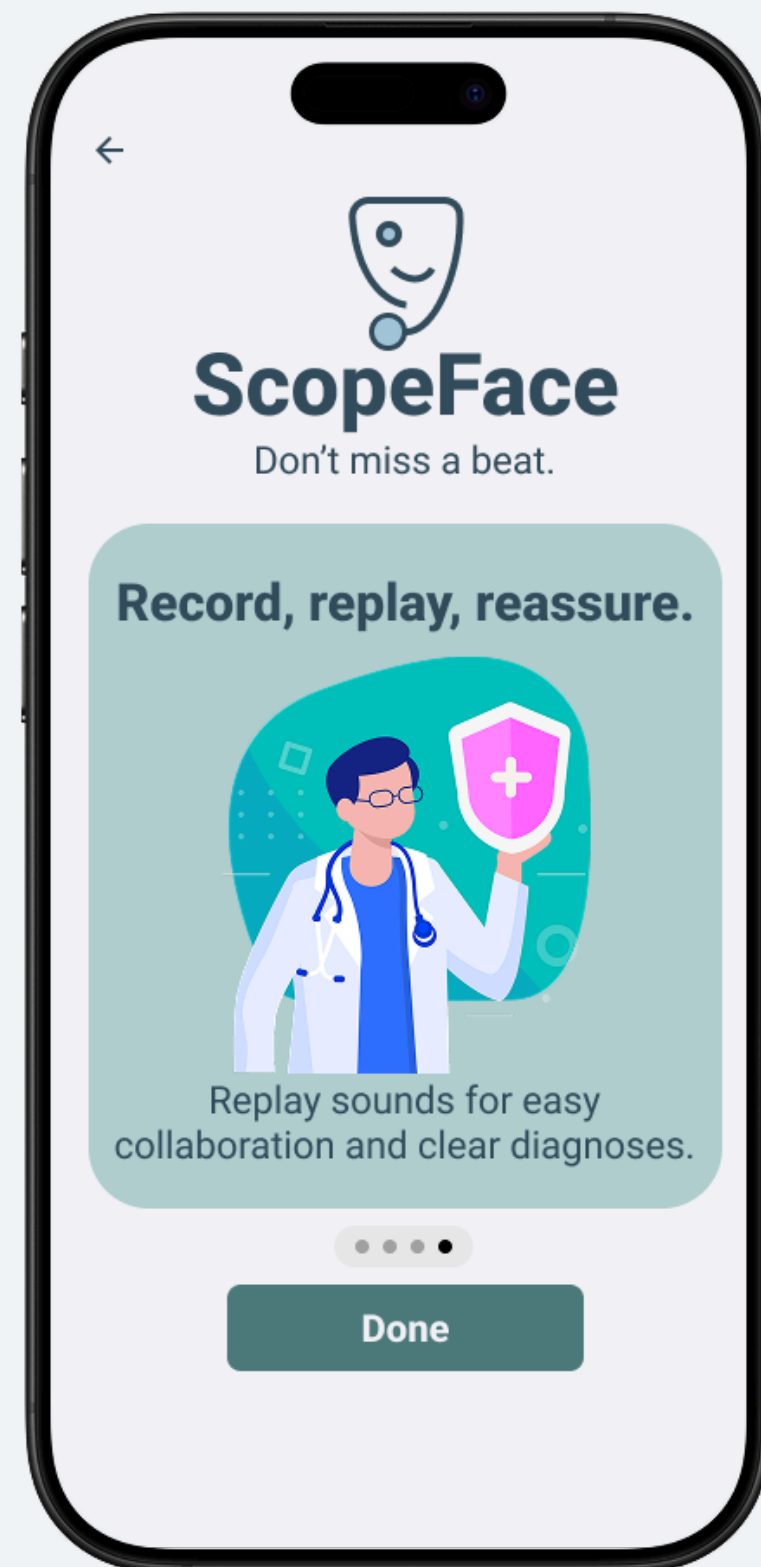
Motivation

- Fast-paced setting

- Loud environments

- Faint sounds
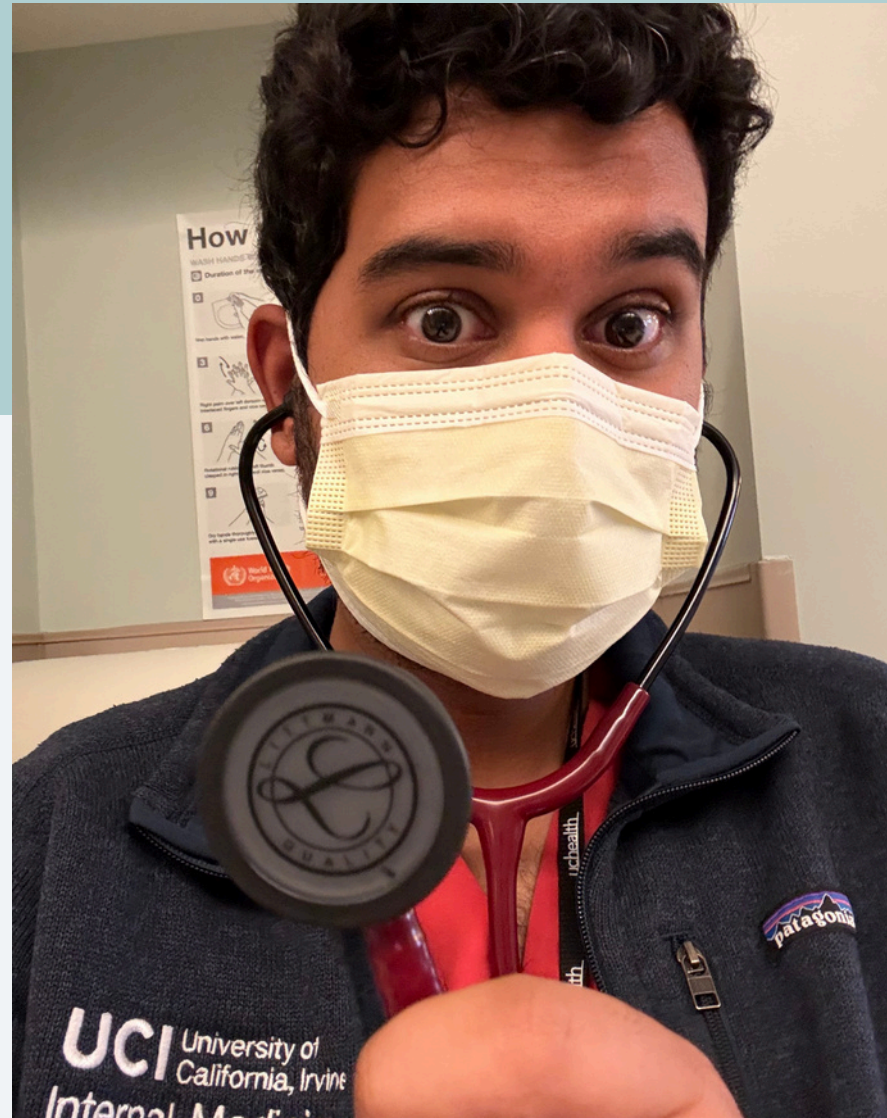
- Stethoscopes easily lost

Core Product

Our MVP includes

- Acoustic signal acquisition and amplification
- A portable and durable hardware design
- Visualization of heart and lung waveforms via companion app
- In-app recording playback functionality

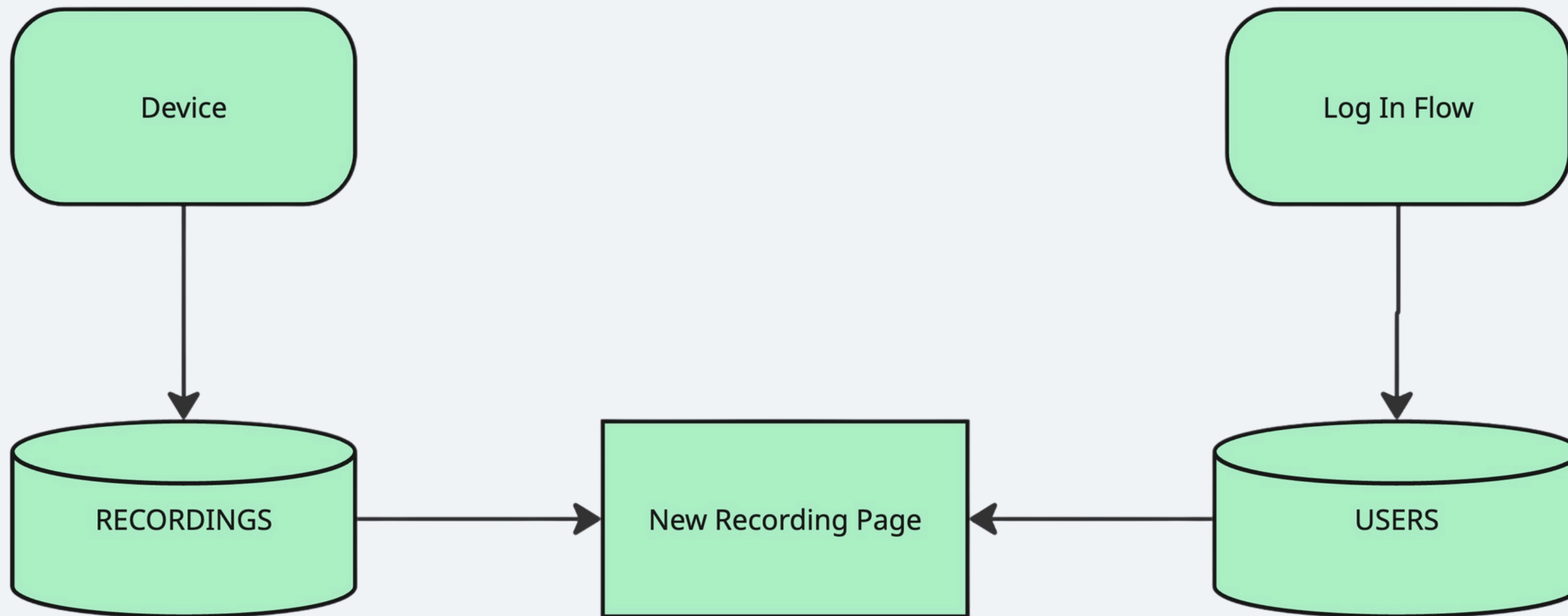# User Research

New RN Graduate

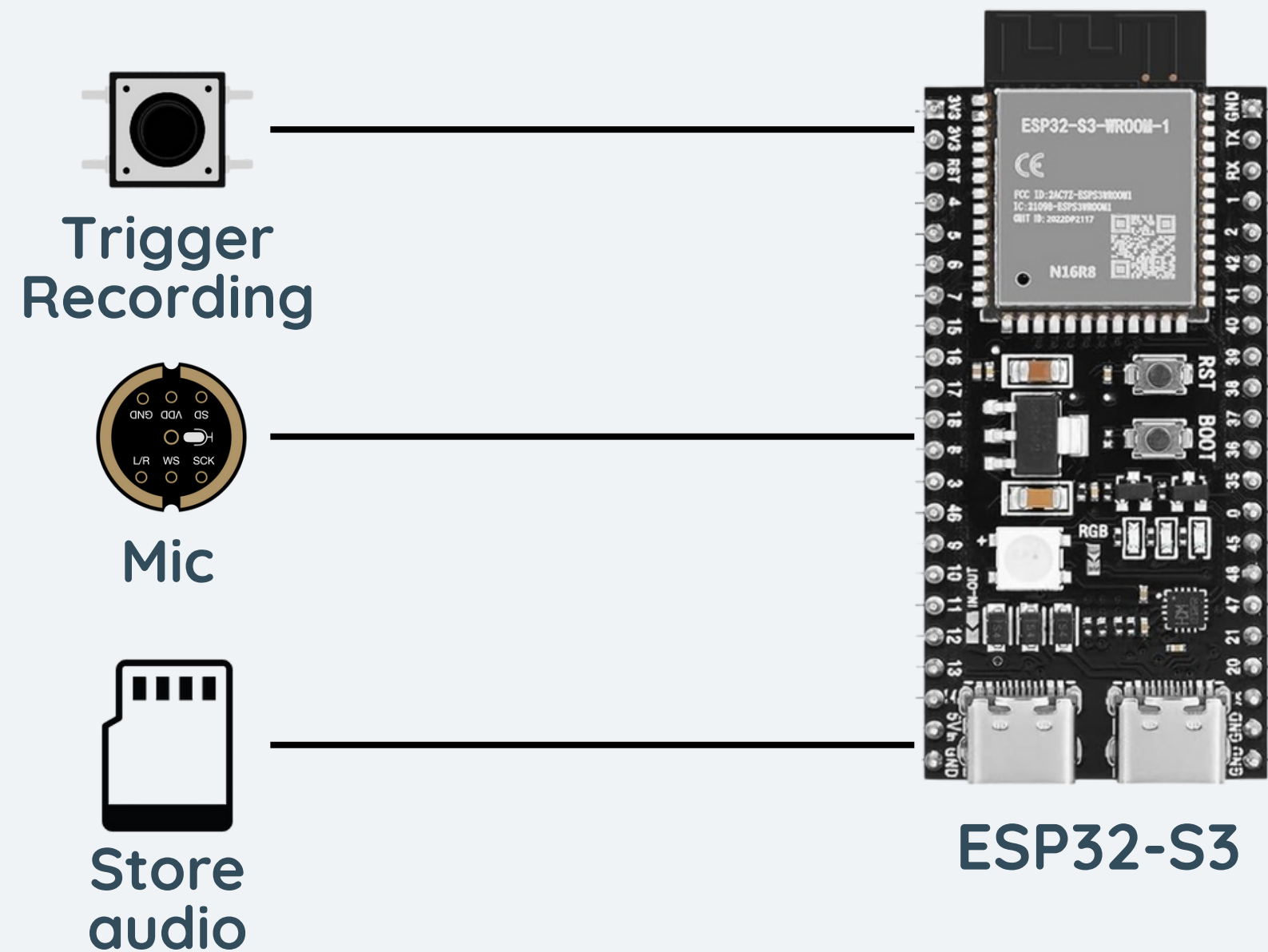First Year Resident

Early Career PA

Full Software System Design

MVP Software System Design

Device

Log In Flow

RECORDINGS → New Recording Page ← USERS

UI Prototypes & Authentication

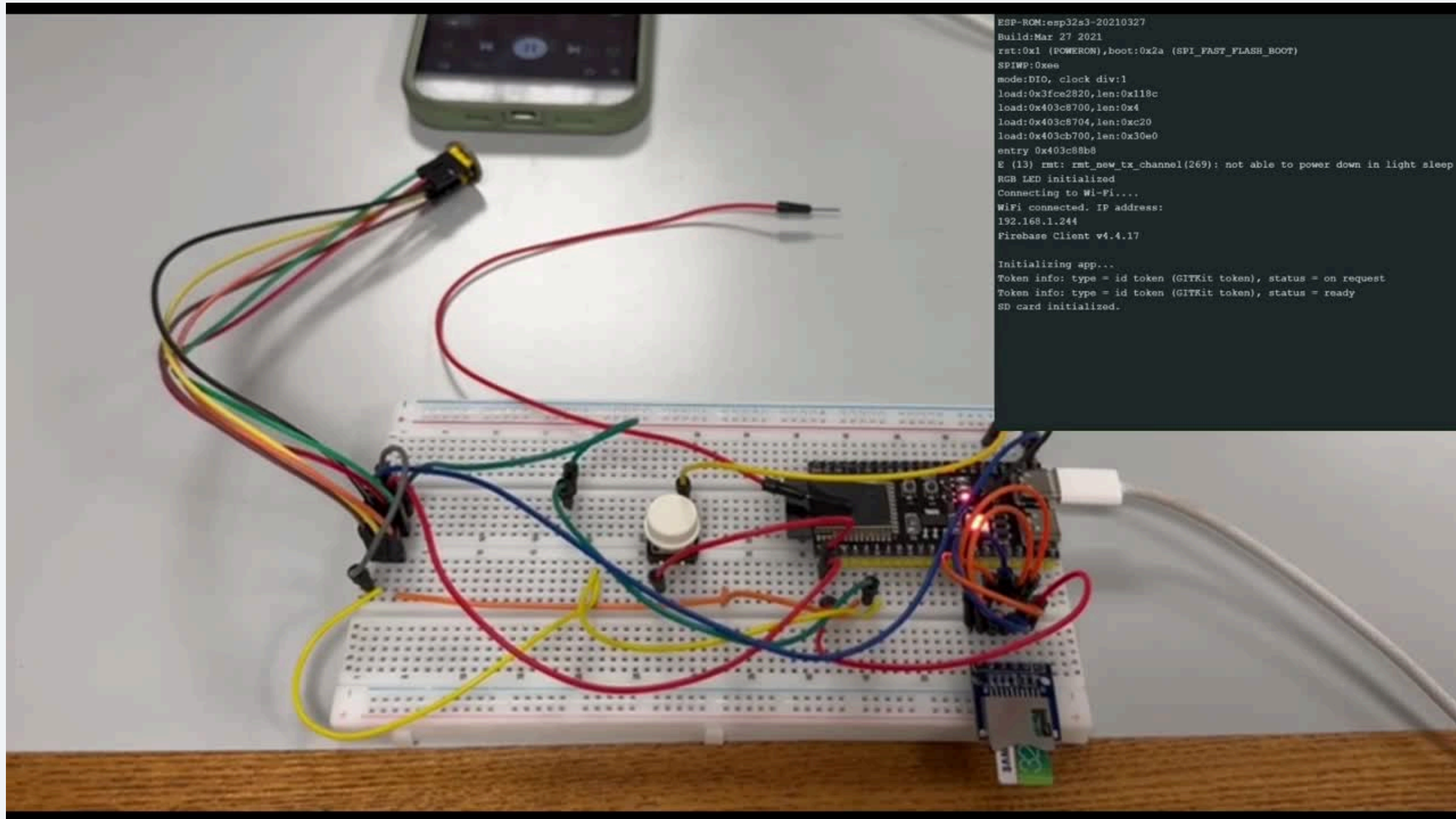# Hardware System Design

Trigger
Recording

Mic

Store
audio

ESP32-S3

MVP Progress
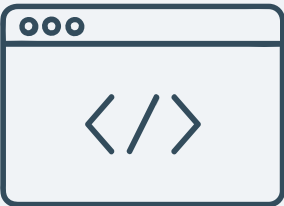
- Mic data acquisition
- Mic data storage
- Data transmission over WiFi
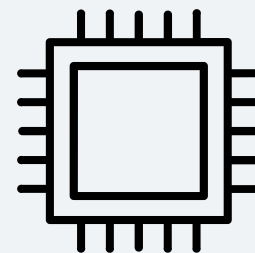
Hardware Prototypes

Next Steps: Software

Priority	Key
P0	Critical
P1	Important
P2	Stretch goal

Deliverable	Person	Priority
MVP UI Complete	Shelby	P0
Audio Tagging & Integration	Siya	P0
Nice to have features	Shelby	P1
Deploy app to TestFlight	Siya	P2

Week 8

Week 10

Next Steps: Hardware

Priority	Key
P0	Critical
P1	Important
P2	Stretch goal

Deliverable	Person	Priority
Swap Mic	Shayan	P0
Heartbeat/Lung sound filtering	Amrita	P1
Design and Build Casing	Shayan	P0
ML classification	Amrita	P2

Week 7-8

Week 9-10