Case Study: Building the Cortisol Rhythm Tracker App in One Day at Guild Studio

Overview

In a one-day prototyping sprint at Guild Studio, the team reviewed the concept and design with one round of feedback and prototyped a wellness app that helps users track their daily cortisol rhythm through voice samples. The goal was to create a simple, intuitive experience that encourages consistent data collection and to provide demo data on insights into energy, sleep, and mood optimization for an investor showcase and user testing.

Objective

The challenge was to create a fully functional an MVP (Minimum Viable Product) that allows users to:

- Create fully functional authentication system with a simple onboarding questions flow stored in the database
- Record voice samples at four specific times of the day
- Set reminders for the user to remember the next test (integration with SMS or email was out of scope)
- Analyze voice data to infer cortisol rhythm patterns based on dummy data from the database
- Provide an actionable insights dashboard and an interactive graph for improving daily well-being
- Offering 1-on-1 consultation service with calendar integration
- Set the admin role to access custom-built admin dashboard to play recorded voice samples and see user data

The focus was on speed, clarity, and usability—delivering a functional prototype within 24 hours.

Process

1. Wireframing

The wireframes (as shown above) were created by the client to visualize the user flow quickly. The main screen, **“Collect,”** became the core of the experience. It guides users through four daily checkpoints:

- **Wake-up (before 9am)**
- **Noon (11am–12pm)**
- **Afternoon (4pm–5pm)**
- **Bedtime (after 8pm)**

Each time slot prompts the user to record a short voice sample. The interface emphasizes simplicity —just one tap to collect data.

We provided feedback on user journey steps like timezone collection, reminder functionality, error handling, onboarding questions, user profile, and an admin dashboard all of which was not provided in the wireframes.

2. Frontend Prototyping

We translated the clean and calm design, reflecting the app's wellness focus in a frontend on Lovable. The **"Collect voice sample"** button anchors the experience, while the navigation bar provides access to:

- **Collect** – main tracking interface
- **Interpret** – insights and analysis
- **Support** – help and guidance
- **Admin** – backend or clinician tools

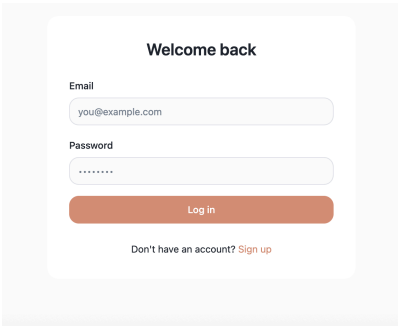
3. Development Sprint with integrated Backend

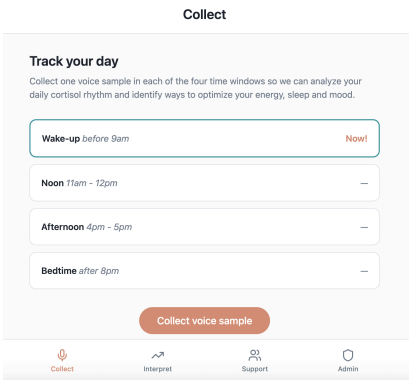
Using rapid prototyping tools, the team built an interactive version of the app that created the voice collection process and connected all frontend data fields to Supabase with the appropriate edge functions and APIs for later integration with the data science Python black box where the voice samples would get analyzed. The fully functional prototype demonstrated:

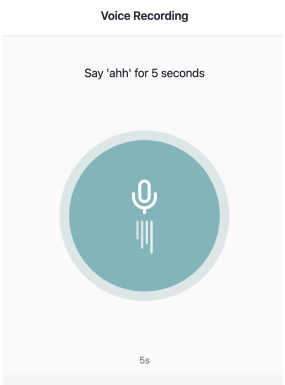
- Time-based state changes (e.g., "Now!" indicator for active time slots based on user's time zone)
- Seamless transitions between collection and interpretation screens incl. randomization of dummy data based on baseline metrics
- Placeholder analytics for cortisol rhythm visualization
- Fully functioning progress tracking and motivational notifications
- Showcase of products and completion tracking of subsequent tasks
- Consultation booking with calendar and time slots and reminder functionality
- Admin Playback after a user recorded their session
- Admin view of consultations and addition to Googe and iCal calendar

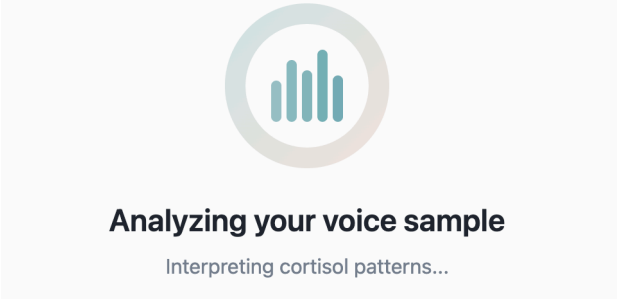
5. Outcome

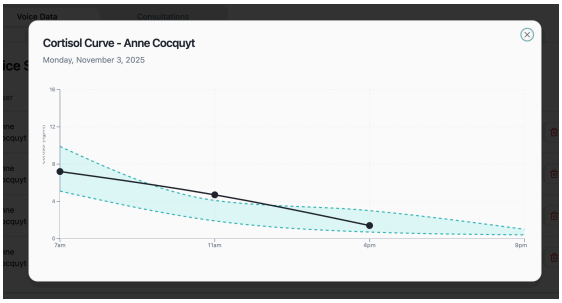
By the end of the day, the team had a fully functional web app prototype ready for user testing. The backend and frontend were working perfectly in tandem. New users were able to sign up and record their voice, and the admin was able to listen to their recordings. The app successfully demonstrated how voice-based biomarkers could be captured and ultimately integrated into a daily wellness routine.











Conclusion

This one-day build at Guild Studio showcased the power of rapid prototyping and focused design. By aligning wellness science with intuitive UX, the team created a foundation for a tool that could meaningfully improve users' understanding of their daily energy and mood patterns.