Motivation

- Chronic anxiety affects 31% of adults in the US at some point in their lives
- No current application exists that can both detect anxiety by monitoring physiological symptoms, and provide solutions to alleviate stress

Solution

- Robust detection of spiking anxiety levels utilizing changes in heart rate and heart rate variability
- Effective stress management techniques in the palm of your hand

Innovation

- Real-time analysis of stress levels
- Reliable alert system to gently notify user of spiking stress
- Three stress mitigating features:
  - Researched effective breathing exercises
  - Journal with NLP analysis on emotions and stress
  - AI-driven chatbot to provide immediate aid

In-Depth Analytics

- Advanced data visualization of stress levels gauges upward progress from integrating Tranquil into daily life

Architecture

Gather biometric data using HealthKit

Send heart rate value in 5 second intervals

CloudKit + Core Data

Dispatch watch notification upon anxiety detection

NLP processing of journal entries using CoreML

Visualize anxiety metrics and analysis with SwiftUI Charts

ChatGPT-driven stress support

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