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### 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
  - Al-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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