

Take a deep breath

Stress, everyone deals with it.



Some stress statistics...

Top Causes

- ▶ Job Pressure
- ▶ Relationships

48%

People in the US who say stress has a negative impact on their personal and professional life

48%

People in the US who feel their stress has increased over the past 5 years

\$300

BILLION

Annual costs to employers in stress related health care and missed work

How can we avoid it?

Introducing...

 *reath*e

ADAM GRAY

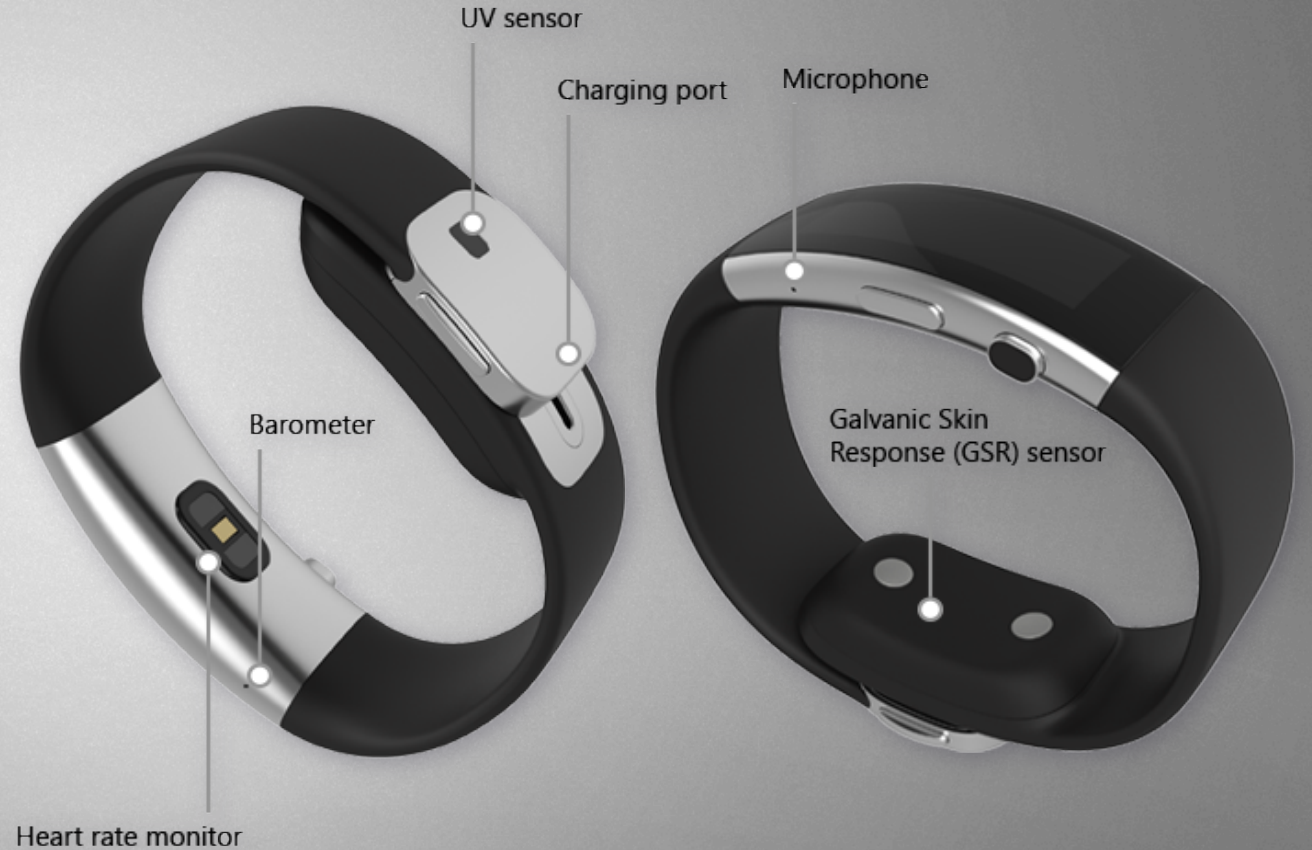
Breathe is...

- ▶ A mobile application that learns about you and the things you do
- ▶ A stress detection, reduction, and avoidance system

Detecting stress

- ▶ Breathe uses the Band's heart rate monitor to detect and track your stress level in real time

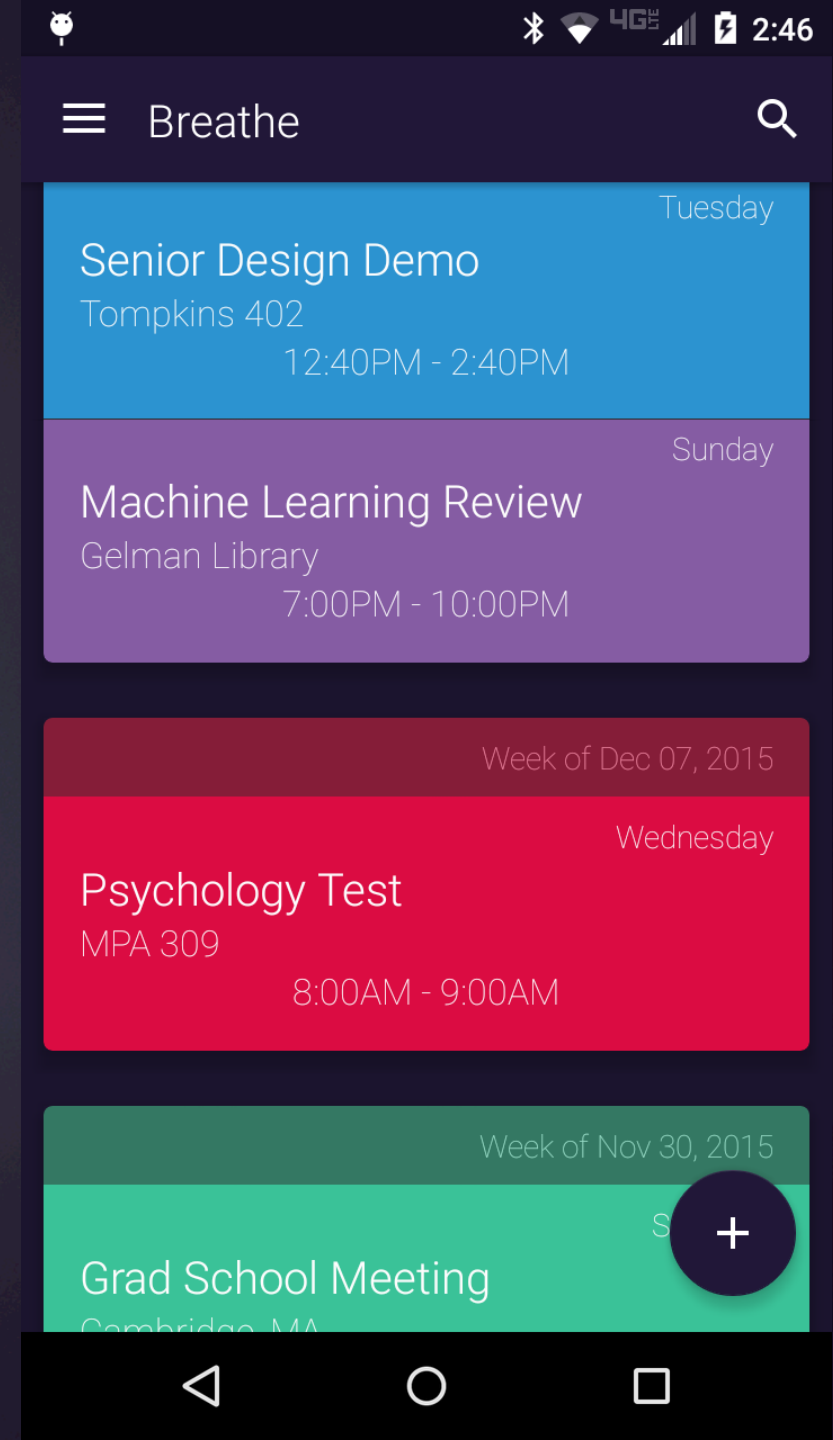
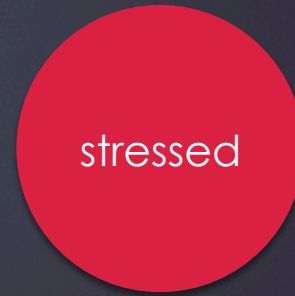
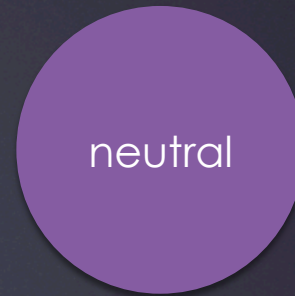
Microsoft Band



Learning about you

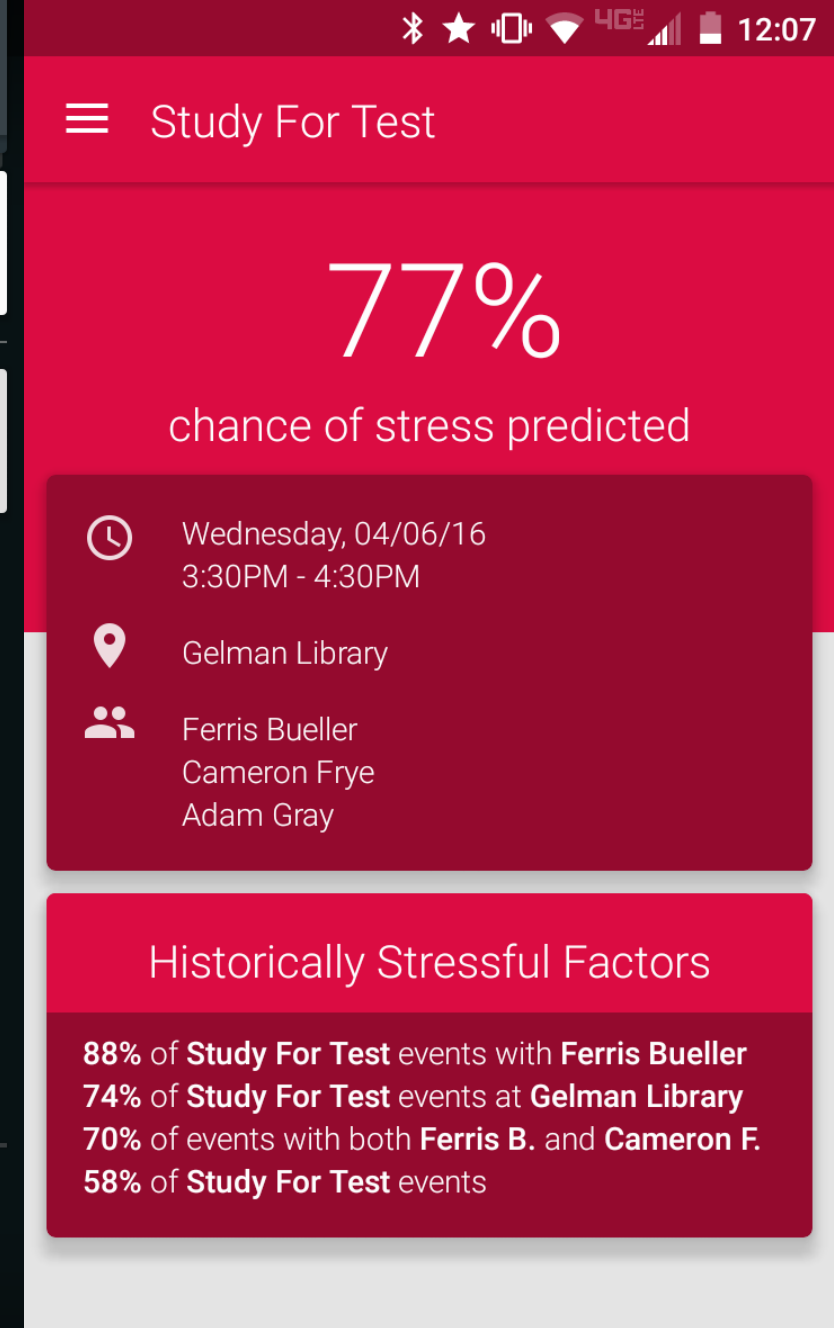
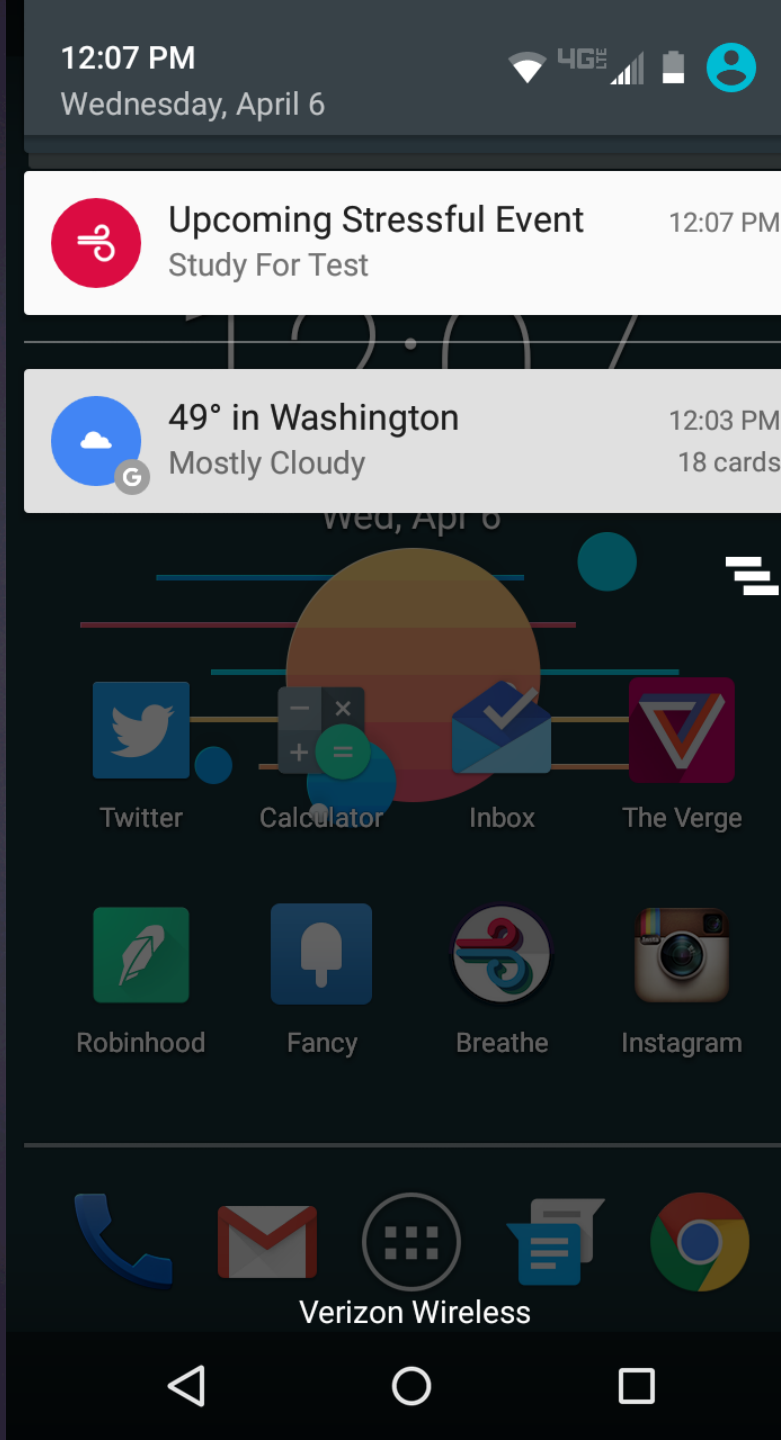
Band Sensors + Breathe App Answers:

- ▶ What?
- ▶ How ?
- ▶ Who?
- ▶ Where?
- ▶ Surrounding environment?



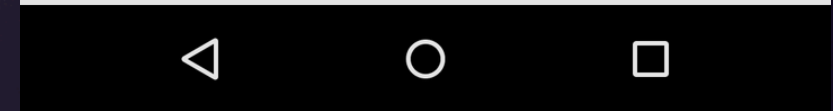
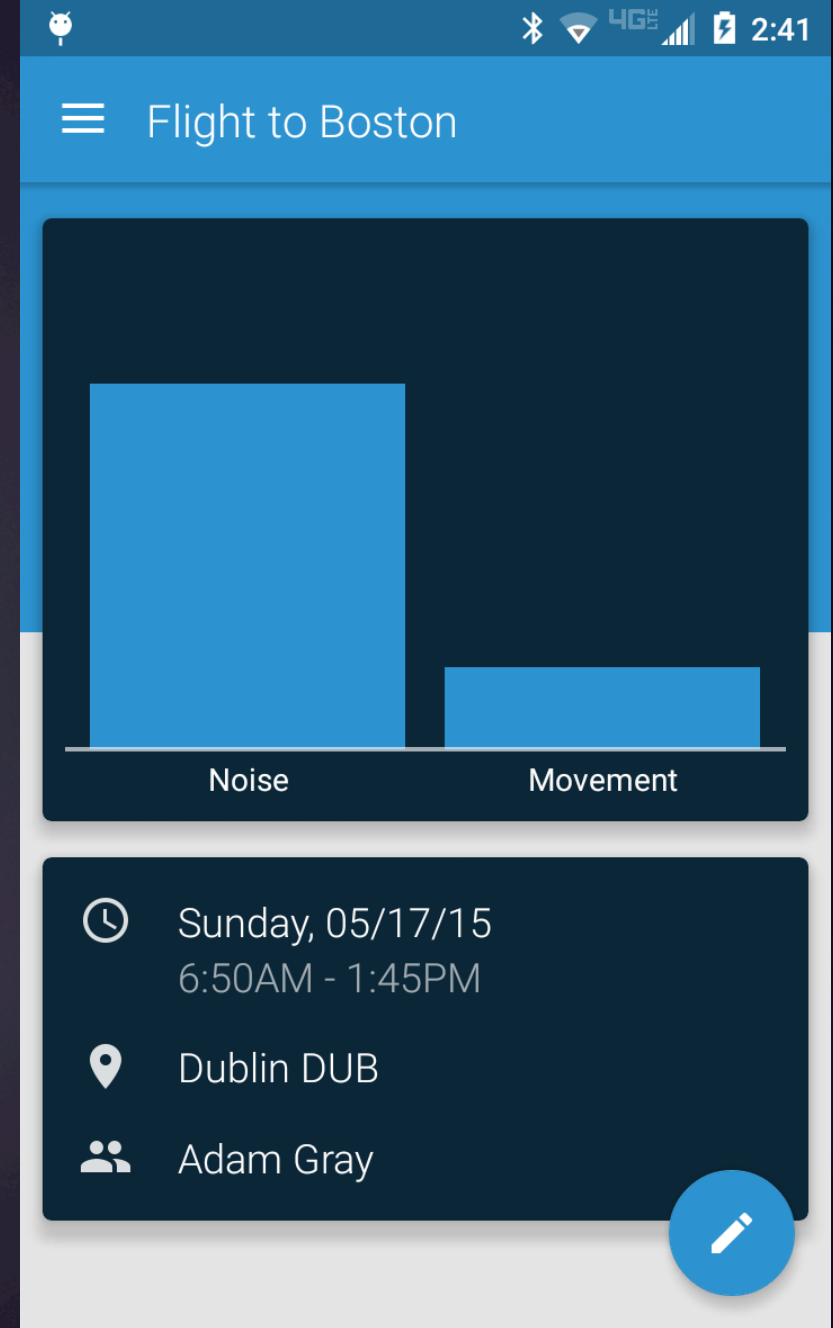
Breathe can...

- ▶ Find stressful and relaxing factors
- ▶ Predict stressful events
- ▶ Improve over time

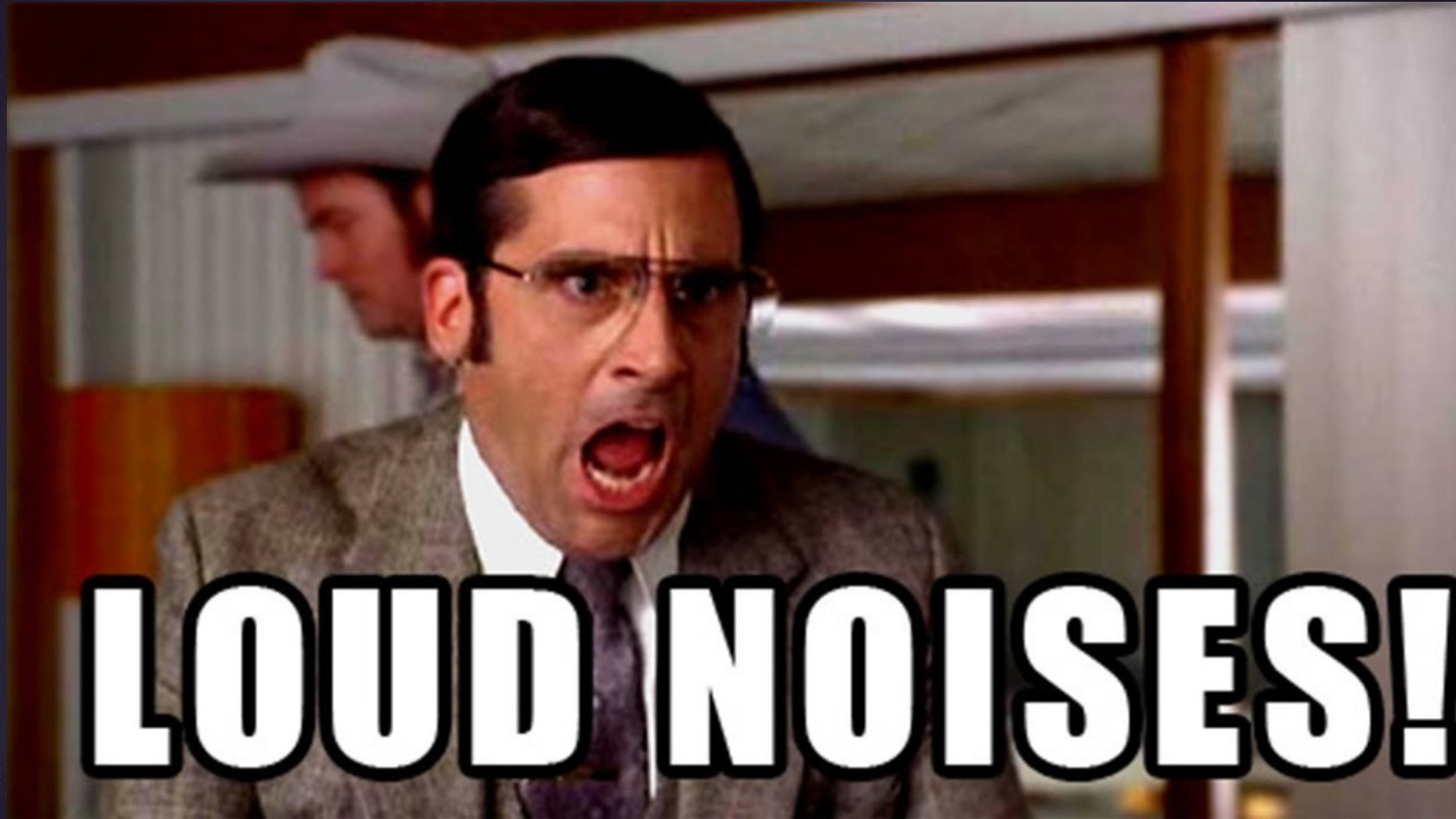


Technical challenges

- ▶ Noise Level
- ▶ Stress level
- ▶ Stress prediction

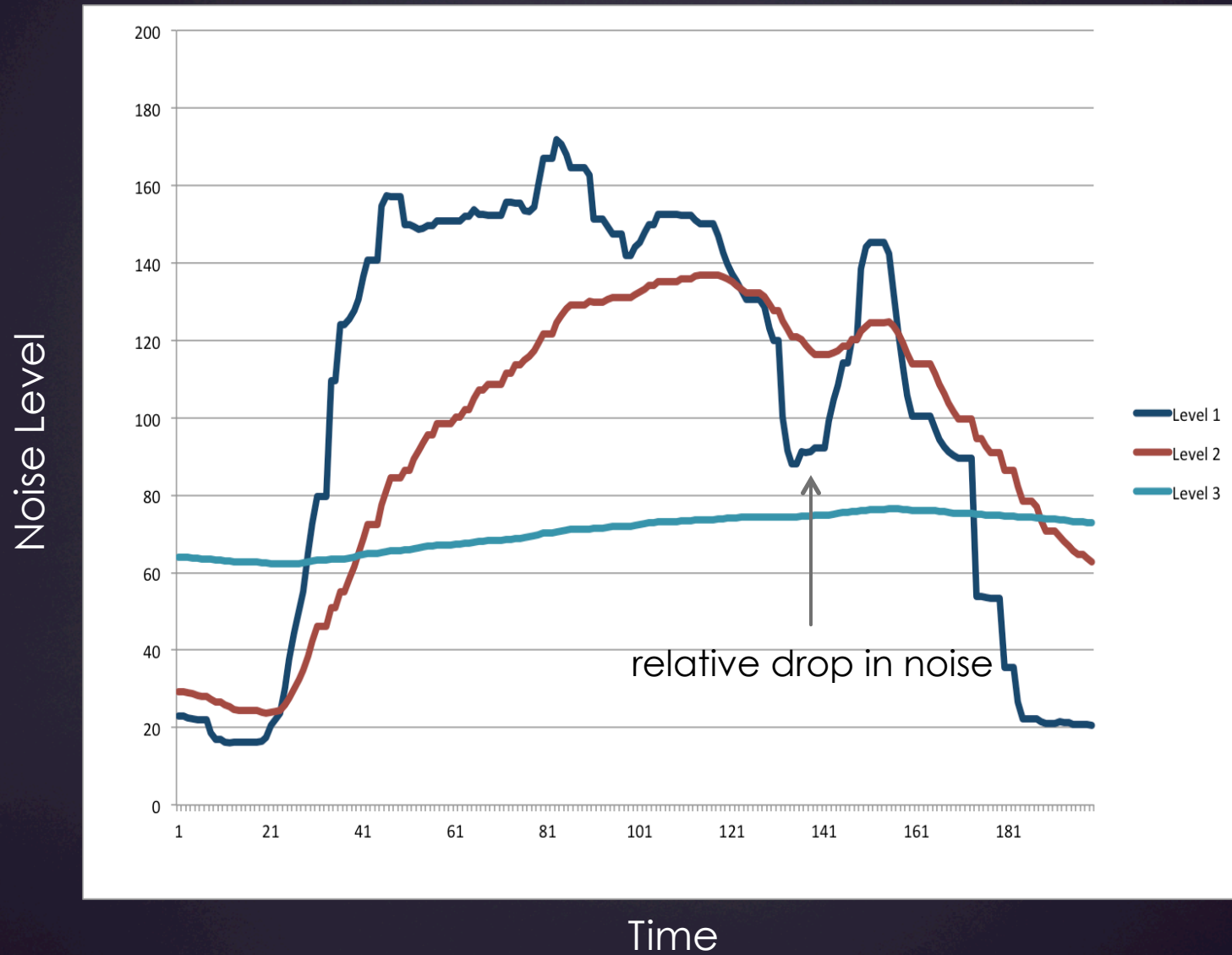


Challenge 1: Noise Level



[Anchorman]

Detecting change in noise level



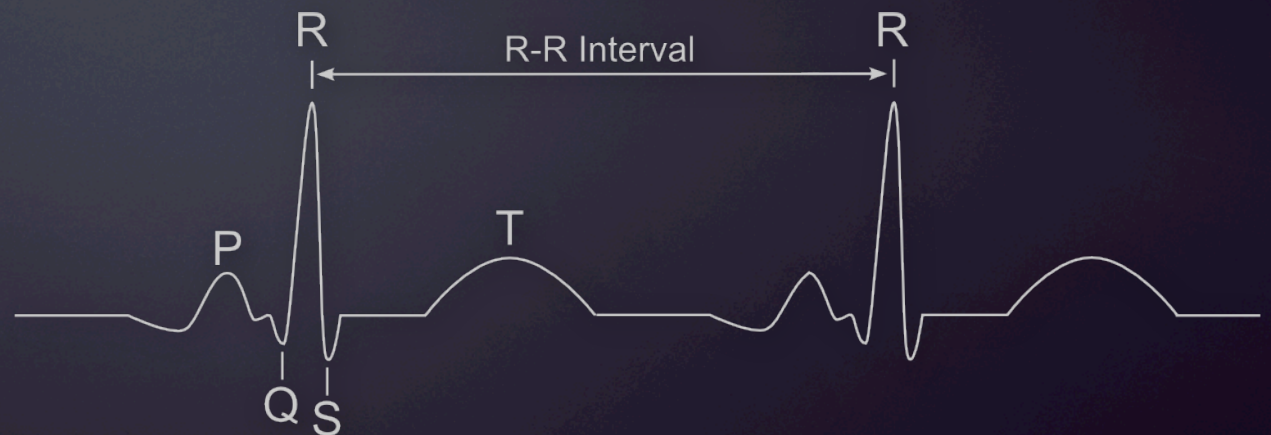
Challenge 2: Stress



- ▶ Never been done before
- ▶ I figured it out.*

Detecting stress level

- ▶ Relaxed = Detectable Heart Pattern
- ▶ Stressed = Undetectable Heart Pattern



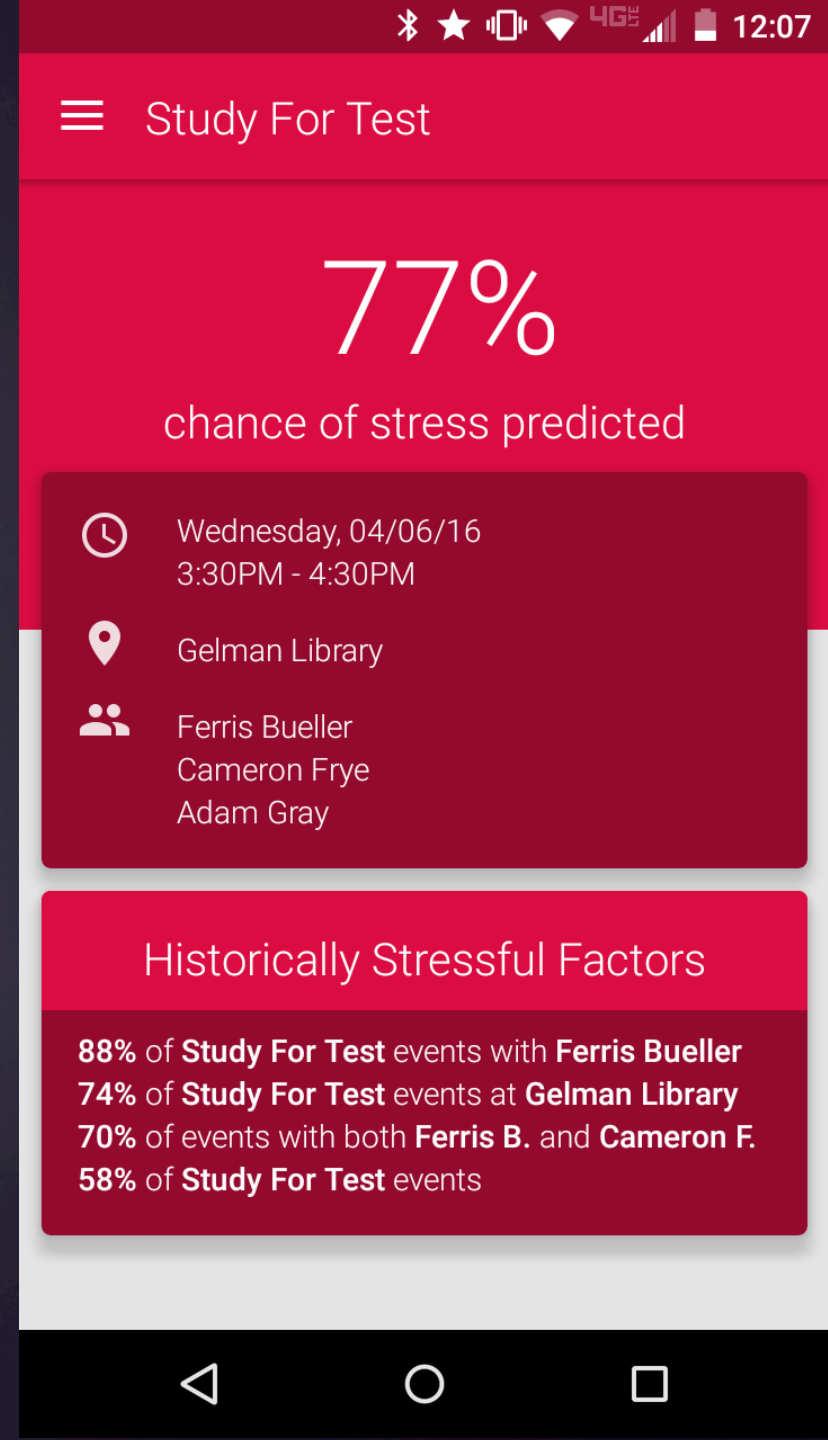
Challenge 3: Prediction

- ▶ Predictions must work on unseen events
- ▶ Some factors are unknowable



Predicting a stressful event

- ▶ Finds stressful/relaxing factors
- ▶ Makes prediction on upcoming event



Breathe...

- ▶ Is completely unlike any other mobile application
- ▶ Learns what stresses you out and shares that information with you
- ▶ Helps you better understand yourself and different aspects of your life
- ▶ Makes your life easier

It really helps to Breathe



Thank you