

## Codename: Chill Out



Codename: Chill Out is a mobile application that works to make your life easier. It learns about you and the things you do in order to help reduce and eventually eliminate factors that lead to stressful situations in your day-to-day life. The application used biofeedback from a wearable device to detect your stress level in real time. Using our team's customized machine learning algorithms, it finds correlations between an elevated stress level, certain attributes of the events in your calendar, the noise level of the surrounding environment, your physical activity to determine which aspects of a given event stress you out. Once it's able to pinpoint the stress inducers that make your life harder, the application makes suggestions to avoid similar situations in the future.

Paired with a Microsoft Band™, the application can monitor your heart rate and other physiological signs of stress



## How About an Example

Paul works very hard at his job because he wants to be promoted. Paul's boss, Laura, with whom Paul has a good working relationship, offers Paul a chance to prove himself by assigning him to a challenging team project. Laura likes to meet with the team members once a week, either individually or as a group, to discuss the project's status. Because the project is difficult, the team is often behind schedule. Paul, thinking it's a reflection of his job performance, gets stressed when Laura isn't pleased by the project's status - making it more difficult to concentrate on his work. During the weekly updates where Laura meets with all the team members as a group, she often yells at them due to their lack of progress, which really stresses Paul out. However, when Laura meets with Paul one-on-one to discuss the same subject, she's much calmer and able to have a more civilized conversation.

After a few weekly meetings with Laura, the application detects a correlation between Paul's high stress level, an elevated noise level, and a calendar event titled *Weekly Project Meeting with Laura* with a list of attendees including Paul's team members. The application is able to isolate the differences between this type of meeting and a similar one that doesn't include Paul's team members. The day before the next group meeting with Laura, Paul gets a notification on his phone, "You appear to be stressed during *Weekly Project Meeting with Laura*. Perhaps don't include [list of team members] in the event tomorrow." The next morning, Paul asks Laura if their weekly meetings can be one-on-one. Laura agrees, and Paul, no longer as stressed out, is able to focus on his work more easily and do a better job.

## Social Impact

As you can see from the example discussed, Codename: Chill Out benefits more than just the people who use the application directly; after Paul helps his team finish their project, Laura is pleased enough to promote him, which raises Paul's salary - enabling him to provide a better life for his family. The response is not unlike a domino-effect of stress relief. Additionally, people who suffer from chronic stress are more frequently frustrated, easily irritated, often depressed, and are at much higher risk for serious physical illnesses such as diabetes and heart disease. Eliminating the factors that lead to such vital physical and mental afflictions would be a significant positive contribution to society.

Codename: Chill Out can also help people other than adults in high-pressure jobs. Imagine a teenager who is bullied by kids at school and then sits in isolation at home while receiving abusive text and Facebook messages, an unfortunate but not uncommon scenario. The application can recognize this person is more relaxed when hanging out with a few close friends and suggest to do so more frequently. Realistically, the possibilities for positive impact are endless.

For future versions of our application, we will integrate social features - allowing users to let the application notify select friends or family members that they are having a hard time in a current situation and even ask for help. This type of feature is particularly useful for people who are perhaps not comfortable sharing their feelings or telling others that they need help. Back to the example of teenagers who aren't always interested in telling their parents exactly how they feel or what's wrong, but want them to know they could use some support.

Our primary concern is that people mistake this service as a replacement for seeking help from a medical professional when faced with severe stress. Our intention is to make it as clear as we possibly can that our service is not remotely equivalent to the same level of treatment a medical professional can offer. We will also discuss our stress detection system can only be so accurate and may provide some inaccurate readings.

## Raking It In

Since our application will require regular algorithmic improvements, constant server-side computations, general maintenance, and customer support, we believe a monthly subscription model for our service is the best strategy. You see, stress-related ailments cost over \$300 billion per year in medical bills and lost productivity across the United States.<sup>1</sup> This means stressed employees cost more with both higher health insurance rates and decreased work efficiency, extremely significant annual expenses for every corporation. We intend to offer different monthly pricing plans that corporations can subscribe to in addition to individual and family plans.

Since lower medical bills also substantially benefit insurance companies, we intend to work with said companies to bundle our service into some of their current health care packages as a way to reach an already established audience - one that may include a number of people who are not caught up on the latest and greatest mobile applications. Because we do think our service offers value to everyone, and we want as many people using it as possible, we may choose to offer a free version with a limited feature set.

With nearly 45% of adults in the US alone experiencing more stress than they did five years ago,<sup>2</sup> we believe the national and global market potential is huge. This is the kind of service we know nearly everyone can benefit from, and we truly improve all of their with your help.

## Don't stress out. Chill out.

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## Sources

- 1) "Stress Is Killing You | The American Institute of Stress." The American Institute of Stress.  
Accessed December 8, 2015. <http://www.stress.org/stress-is-killing-you>.
- 2) "Stress Is Killing You | The American Institute of Stress."