<div align="center">**Helping struggling addicts (more creative name coming soon)**</div>

Recitation section: 103
TA: Vinitha Gadiraju

Part One: Group plan

Team Members:
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Revised Project Description:
Addiction is a very real problem in today's society, and there are many agents causing addiction, including alcohol, nicotine (or smoking in general), and other drugs. There are some solutions to addiction already implemented today, the main one being therapy (as far as I'm aware). Therapy can certainly be effective, but there are two drawbacks. First, therapy sessions are usually held only once or twice a week. These sessions are useful, but for someone struggling with addiction, they may need more guidance than that. Second, therapy sessions are only useful if the addict voluntarily attends. I intend to solve these two issues using smart, wearable technology. This wearable tech could be created two different ways. One option is to just make it like some of the other smart watches out there now. However, wearing this device might be a sign to others that the user is struggling with addiction, so maybe users of this device will want to hide it. If this is the case, then perhaps we could make the device more similar to a nicotine patch, something that could be easily hidden underneath clothing. Either way, this device should have some kind of sensor to recognize whenever a bad substance enters the user's body. This sensor can be on the addict at all times, holding them accountable. We would create an app to go along with this sensor as well. Within this app we could offer incentives and punishments for whenever the harmful substance is detected. We could offer the users points for each day they remain clean. Then, we could have companies sponsor the app, and offer coupons from those companies to the user in

exchange for points that they earned. This app could also alert a sponsor or therapist of the user whenever harmful substances are found in the user. This way the therapist knows the whole story, not just what the addict is telling them.

In addition to the wearable technology, we could also extend this to a smart home approach. So not only would the wearable be able to track the addicts use of the substance, but we could create smart home technology to help track it. For example, we could have smoke detectors of some kind in the house or a camera in the fridge to discover any alcohol. Through a combination of a wearable technology, smart home technology, and an interactive app that offers incentives and punishment, I hope to help people beat their addictions. This technology will help keep the addicts accountable at all times and offer incentives for staying clean.

Meeting Schedule:

We plan to meet every Thursday any time after 2:30 pm.

Group chat and documentation:

Communication methods: Texting and Slack channel.
Documentation: Google Docs folder.

Part Two: Research Plan

First data collection type: 1:1 interview
One on one interviews will definitely be tough given that our project is focused on addiction.
While I do not know anyone addicted to any serious drugs or alcohol, I do have an uncle who has been smoking for most of his life, and several of my friends use a Juul or something similar (what college kids don't at this point). I feel that interviewing a few friends about their Juul use and then my uncle about his smoking habits will provide some great data for the project. While the topic may be somewhat uncomfortable for the interviewee, actually completing the interview should not be difficult. My uncle is always available on the phone, and one of my roommates uses a Juul, so conducting the actual interviews will not be a problem.
Interview questions:

- What made you start smoking?
- How often do you smoke?
- Do you enjoy smoking/are you glad that you smoke?
- Are you aware of the negative health effects that go along with smoking?
- If you had someone/something to hold you accountable, do you think it would deter you from smoking?
    - How would you want to be held accountable?
- Is there something that you wish you had to help you with your addiction/smoking?
- Have you ever tried quitting? What brought you back?

Second data collection type: Survey

For our second method of gathering information, we will be conducting a survey for people struggling with an addiction to complete. This method may be easier to gather data as we can make the survey anonymous. With it being anonymous, the people answering the survey can feel more comfortable in answering truthfully, which will be quite beneficial to us. The only thing making this method more challenging than interviews is that we will have to find people who have an addiction, and have them take the survey. The survey will also be able to gather information not obtained in the interviews. It will also give us a wider perspective on addiction than the interviews will. Conducting the survey will have less bias than the interview will, as we will interview people we know. The survey can be done with completely random people, as the answers will be anonymous. The survey will have similar questions to the interview but will allow the person to go more in depth and help us come up with a better prepared addiction plan/tool.

Survey questions:
- What type of addiction do you have?
- Are you concerned with your addiction?
- Are you trying to beat your addiction?
- Would you use a device to hold you accountable?
    - In what way would you want to be held accountable?
- Do you have a good support system?
- Does addiction run in the family?
- Does your addiction affect your ability to work?
- At what age did your addiction start?