Project name:

"Up & Down" Mood Tracker & Sensor

Team members:

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Elevator pitch:

"Up & Down" is a mood-tracking app where users can track their mood by selecting emojis & words to describe how they are feeling. The app integrates physiological data from custom sensors and is aimed at users with cognitive and intellectual disabilities.

Target user group:

We aim to target individuals with cognitive and intellectual disabilities who may have trouble verbally communicating their emotions to others. We will reach out to this community through personal connections (Emily's family works at a day program for adults with disabilities).

We will also target middle-school and high-school aged teenagers who may also struggle with keeping track of their moods/communicating their feelings. We will reach out to this community by reaching out to local schools and through FB pages.

Versions (if working with a partner):

1. Mobile App Version

The first prototype would be a graphical interface app where users can select a few emojis, pictures, or words to describe how they are feeling. Their data will be recorded and saved in a calendar format so they can see how their mood has evolved over days, weeks, months, and so on. They will also be able to view their physiological data over different time periods. The physiological data are recorded from sensors such as Galvanic Skin Response and Electrodermal activity, which are closely related to emotions. The app also learns from this data and tailors its experience for each user by providing relevant feedback.

Hey, how are you feeling today?

HAPPY   SAD
EXCITED

wearable
recording
physiological
data
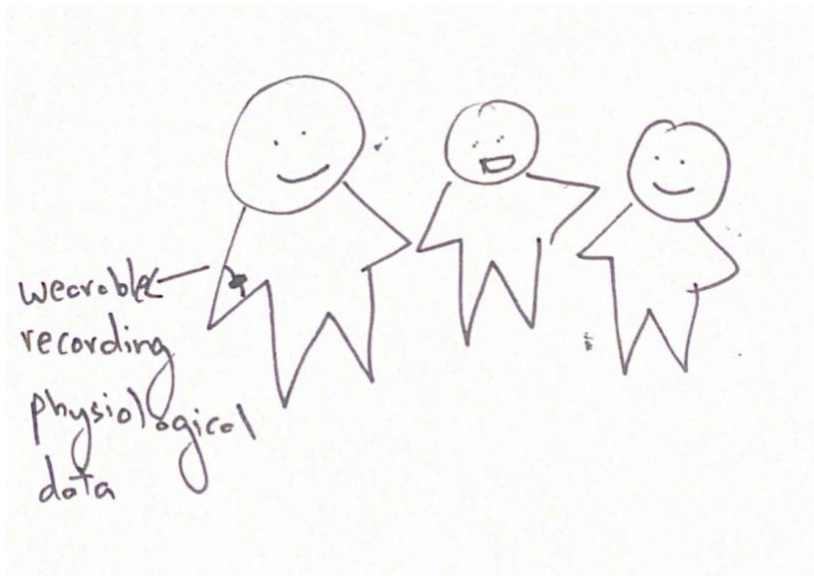
2. Home-based Voice Assistant

The second prototype will be a built-in app for a conversational voice assistant interface. The voice assistant will ask the user how they are feeling through certain prompts. The user would then be able to select different words to describe how they are feeling. While this method is not as telling as the app is (the app has more ways to describe emotions), the voice assistant is an easy and encouraging way for the user to consistently track their mood. Users will also be able to set a schedule where their voice assistant will ask them how they are feeling (i.e., when they first wake up, when they arrive home, after dinner, etc.). The assistant will also have access to the physiological data and can frame questions for the user while keeping the data in context.

How this project meets the theme:

"Up & Down" records personal mood and physiological data from its users. The app will then show trends between heartrate and moods recorded. By learning from the recorded data, the app can make smarter decisions, provide relevant feedback, and tailor the experience for each user.

3 interaction design challenges:

1. How to display correlation between heartrate/exercise/respiration and mood data
2. How to make this accessible to people with disabilities/challenges
   a. For example, my sister has autism and is nonverbal. She uses an iPad as a communication device. How can I make the interface simple enough for her to understand and use to track how she is feeling?
3. How can we provide useful feedback for the user and keep them motivated enough for them to use the app daily?
4. How can we make the user feel comfortable about sharing and trusting the app/assistant with their most personal data?