Universitat Politècnica de Catalunya

HUMAN-COMPUTER INTERACTION

Insight

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1 Introduction

It is no secret that mental health is a hot topic in recent years, especially since the Covid pandemic lockdown. The prevalence of mental health problems over the age of 15 is one in ten in Spain. Additionally, statistics from 2018 show that 30% of older adults are feeling lonely and suffering from its effects. This can result from the modern world bringing stress and anxiety to our everyday life. Our cellphones are also discussed a lot as an opponent of good mental health. Our goal, however, is to turn it into a place where mental health issues can be soothed and a safe place for those who suffer.

2 Project description

Our vision is to create an online platform called Insight. It will contain functionalities a neurodivergent person would need in order to cope with issues related to mental health. This platform would be aimed at people between 16 and 40 years old, as our first target, since they are more comfortable using technology. Following that, we will use English as our primary language to develop the prototype, although in the future the idea is not to be limited to a single language.

In order to create a safe space for our users, we are planning to select users. This will ensure that there will be no hate speech, no bullying, and no trolling. Because we need professionals to deal with serious and significant issues such as mental health, we will have psychologists and counselors involved in the process: they will interact with users.

The added value in our application compared with what exists already in the market, is that we are trying to focus on different modules to understand our target's needs better. The application will be divided in different units and will introduce novel concepts such as online support groups, online and peer-to-peer interaction as well as a self-care unit that will focus on different modules such as a mood tracker, journaling, etc.

Finally, through Insight we want to share positive values such as empathy and positive reinforcement. Our goal is to make the application as accessible as possible, yet as secure as possible, so that users won't have to worry about their privacy. The application will encourage people to self-reflect and work together as a community on their issues related to mental health and overall wellness, so that people can improve together for the better.

2.1 First Unit: Online Support Groups

The first unit will focus on introducing an innovative concept aiming to connect users in a better way. The idea is to be able to have a virtual space where people can talk about their issues and problems openly. Let's imagine a typical support group composed of a few people who suffer from an issue such as anxiety, child abuse, or grief among others. These groups are not always available, and sometimes due to limited resources, they do not even exist in specific regions, which is why we want to create them online.

Volunteer psychologists will select individuals beforehand for each support group, and will organize and coordinate meetings within the groups. The topics of different groups will be organized and indexed so as to be consistent in answering everyone needs.

Different modules will be implemented to facilitate online support groups such as:

- Drop-in calls to join live audio conversations in between weekly meetings.
- Private video meetings to have the group session.
- Group chat where users can chat with the respective groups anytime.

2.2 Second Unit: Self-Care

Due to the fact that some people are hesitant to talk about their mental issues, a second module was developed with that in mind. The slogan we use is "a safe space for everyone", so we don't want to exclude them as part of our target audience. We want to make a "self-care" unit. The "self-care" unit will include several modules that will allow our users to express themselves and track their progress. The modules we are planning to implement are:

— Mood Tracker — Journaling — Sketching — Task of the Day — ChatBot —

First of all, the ChatBot will give a safe space for an introverted user to be involved in a conversation without the fear of judgment. DialogFlow seems to be an easy and available alternative to create such a tool but before talking about a definitive decision, we will discuss which development environment is best suited for all the components of our projects. The mood tracker will ask how the user feels everyday and ask them to express it with an emoji. We will name some of the emojis to give a better interface to the user, as well as the application will store these emojis (thus the moods of the user on different days) in a data structure (e.g., a stack) and give a weekly summary to the user for them to see how things can change in even a short period and do not stay exactly the same the whole time. If they don't change, there will be a related quote that could make the user feel slightly better. The journaling and sketching modules will go side-byside; here the user will have the possibility to use them as a sheet of paper and express their thoughts in whatever way they wish to express. It will allow texting, doodling and handwriting. Lastly, the task of the day will be for those who feel very overwhelmed to accomplish anything to maintain their daily lives. These will be very easy tasks such as "brush teeth", "make the bed", "put your trash in the bin", and so on, and their aim is to give a sense of accomplishment to the user, hoping that one, day by day, they will be able to define a sort of routine which will help them to get a hold of their lives.