

# Mental Health Tracker

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**Abstract** - The project focuses on building a mental health tracker. Also focuses on how the mood of the user will get stabilize. You will try to get an idea of the mental state of your user find out if they are suffering and then suggest measures they can take to get out of their present condition. A user answers some questions also he/she can perform some activities and maintain a record of their mental state by the help of graph which will be displaying on graph page. Mental disorders are widespread in countries all over the world. Leaving people with mental disorders untreated may increase suicide attempts and mortality. To address this matter of limited resources, conversational agents have gained momentum in the last years. In this work, we introduce a mobile application with integration of some activities like breathing activity also some wallpaper including some motivational quotes, jokes activity and many more to support mentally ill people in regulating emotions and dealing with thoughts and feelings.

Also an integration of mindfulness exercise is suggested by an application. Our paper aims to propose a system design, which is based on the android app "Mood Stabilizer". But our main aim is to stabilize the mood of the user. So we are not judging the user like you have this disease or you are suffering from this our only aim is that to stabilize the mood of the user.

**Key Words:** Depression, Android Application, Prediction, Mental Health, Mood Stabilizer.

## 1. INTRODUCTION

In our daily life, mental health is need of life. Mental health means a state of mind in which the person understands his/her own abilities and disabilities. Example of mental health issues like anxiety disorder, emotional disorder, bipolar affective disorder, depression, Eating disorder, etc. During pandemics because of strict lockdown we had to stay in home. We people keep thinking about various stuff and because of over thinking, frustration, less confidence we get annoyed. Isolation, jobless, loss of money and many more thoughts revolves in our mind and that impacts our mental health. Many peoples became drug and alcoholic addicted. Peoples can't speak about their mental health openly. They have fear that anyone will judge them and tease them.

Therefor we applied the simple activities in our project's model.

The self-assessment method in determining the user's sentiment. Self-assessment, as the name suggests, uses reviews to assess the user's sentiments and emotions. It focuses mostly on text data sentiment analysis. According to "Mental Health Tracker" the Following key points in application: 1) Self-Assessment 2) Sound activity (User have to listen some music we have included which will definitely help the user) 3) Breathing Exercise 4) Joke activity (User have to read the jokes for mood stabilization) 5) To-Do List (Self checker). This activities we have been included in our model. As we have mentioned earlier our main aim is only to stabilize the mood of the user. Also study aims to track the early period of mental disorders among young people. We also have given some of the experts number on which he/she can consult about their problem.

### 1.1 MOTIVATION

Mobile technologies for mental health playing an important role considering our current reality of surrounding. More than 90% people are using a mobile phone nowadays. So making an application to track users daily activities get more easier. Mental health is mainly including emotional, psychological as well as social well-being. It is very difficult to find out one's mental health. The mental health conditions are rapidly increasing.

This project is an observational study proposed to patients suffering from mental disorders like anxiety disorder, depression, eating disorders. This mental health tracker application is developed to monitor and stabilize the mood of the user and help them to get rid out from the current situation. The application can help people to know their thoughts, feelings etc. To reduce mental problems like anxiety, depression the activities like deep breath, to-do list, self-assessment will help the user. The application is basically a personal guide to health and happiness.

### 1.2 OBJECTIVES

The objective was to gain an understanding of how individuals deals with mental illness using their mobile application.

Mental Health Tracker' study aims to better understand the mental disorders and their impacts over time by tracking.

This app helps to track your mood in simple, quick and easy manner and help you to get from the situation. Mental Health test is application in which it identifies your mental condition by giving different tests like depression test, eating disorder test, etc. Then according to your test it shows the result in the form of graph. It also suggests a therapist.

Mental health tracker application is basically a mood tracker which allows keeping tracks of mood dynamically and motivational quotes which help user to keep themselves motivated and positive which help them to come out from Overthinking.

### 1.3 NEED OF SYSTEM

Mobile Mental Health apps are very effective alternative to assist with a broad range of psychological disorders like anxiety, depression.

Mood tracking system is a positive technique for improving users mental health where a person records their mood and usually at set time intervals, in order to help identify patterns in how their mood varies. It has been suggested as a self-care method for people suffering from mood disorders such as anxiety, depression and many more.

Mental health apps not only allow patients to track their moods but also reminds to complete assessment timely. So that it help users to seek help at all hours, or in an emergency situation as well.

## 2. PROBLEM STATEMENT

Nowadays, mental health is a significant issue. The mental health issue has gotten worse day by day.

As a result, it is critical to identify any issues and address them before they have a major impact.

Typically, a person visits a doctor to monitor his or her mental health. They must schedule a doctor's appointment, travel to the hospital, and then pay the medical professionals. It is very time consuming and hectic for the suffering patient.

Also In pandemic, people were suffering from many problems like no job, anxiety, depression, etc.

Keeping in mind users mental illness due to covid crises, we are trying to build a user friendly app

## 3. LITERATURE REVIEW

### 1. Prof. D. D. Sharma, Priyanka Jadhav(2022)

A MENTAL HEALTH TRACKER BUIT USING FLUTTER AND FIREBASE

In this technosavy period, people are more relaied on technology. They start their day by checking messages on cell phone and also end a day by sending or receiving a message which has lead to mental stress.

Basically this paper will give you an idea of the mental state of user, it finds out if they are suffering and then suggest measure they can take. Here the user answers some questions and a graph is been created according to the answers they provide, after which they are assigned a task or fun activities and maintain a record of their mental state on dashboard.

Conversational agents helps people to open up and chat more which have gain momentum in last few years. They have introduce a mobile based application with integrated Chatbot which implements methods of (CBT) Cognitive behaviour theory that supports people which are facing mental illness. It also detects emotions of a user or a client by using NLP and Lexicon-based approach. Based on emotions detected through NLP mindfulness activity is suggested by applications

Their goal was to make a user friendly system, track the mental health of user. They have over come the drawback of existing system and providing a smart system.

### 2. Vaishnavi N. Jadhav, Vidya S. Kubde(2022)

In this they have also build an android based app "Mental Heath Tracker". This can be traced by chatbot, physical devices and mobile applications. Their system uses NLP(textblob), ML(random forest algorithm) and MySQL for sentiment analysis. Here they generate a graph based on the answers provided by users. A user can see their improvement weekly.

Here they are aiming for mental fitness of userby accessing the inputs from user. They are also relaied on WHO research which shows depression is a major cause of mental disease throughout the world. Basically people are more conscious about their physical health but not about mental disease as a result this kind of application are useful for ones who are introvert or those who are shy talking about their mental illness. Online predicators can be used by those who are afraid to contact humans.

### 3. Cathrin Rohleder, Elizabeth M Scott(2022)

This study aims to track the early period of mental disorders among young people. The study is part of a clinical trials framework.

### 4. PROPOSED SOLUTION

This app focuses on to care, rather than diagnosis the mental state.

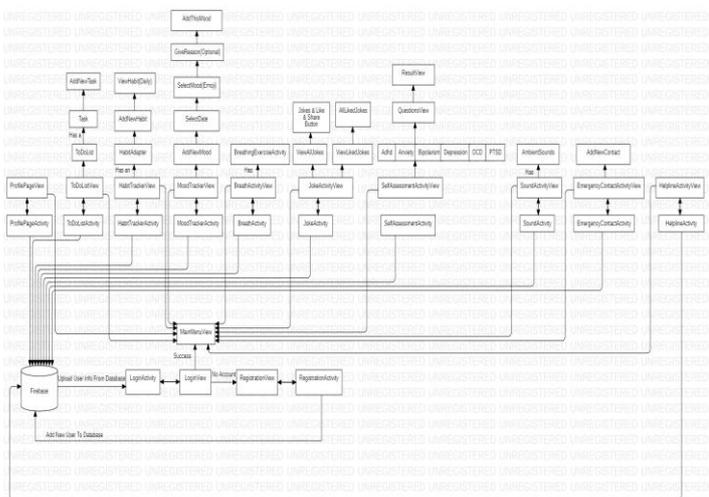
We have build an app which will help our users to get over their issues which they are dealing in their day-to-day life.

We are providing activities as well as self-assessment to build up their self-esteem and also self-confidence.

Also we will be providing many activities for example the joke activity in which user only have to read that joke and simple tell us whether he/she likes that joke or dislike that joke by pressing the like and share button.

And then the graph will be displayed from which we can track the users mood.

### SYSTEM ARCHITECTURE



In this app first login page will be there. If the user don't have login then user have to sign up. Then after that home page will be there. Then there are some activities which user can do. Activities like To-do list activity in which has two sections namely my completed task and pending task. In this user have to add their own works like in my completed task he/she can add their completed work in a day and in pending section they can add their pending tasks of the day. Then next is habit tracker activity. Habit tracker has habit adapter in which user have to add their habit and have to track that habit daily. Then Mood tracker activity is there. In this user simply have to select date and have to select emoji of which they are feeling and add that mood. This will help to

track their mood with the help of graph. Then breathing exercise is there. In this user simply have to select seconds for that activity like inhale and exhale and have to do that activity. Then joke activity is there. This is one of the simple activity in which user have to simply read the jokes. And if user like the joke then he/she will have to simply like that joke and at the same time user can see the liked joke in the like jokes section. Then user can also share that joke from WhatsApp, Email, etc. This will definitely help the user to stabilize their mood also to boost their mood. And jokes are the part that everyone likes. Then our model contain self assessment. This section is for that if the user is using our activity and still not getting well then he/she can go with the self-assessment part. In this questions are there for six sections are there like adhd, anxiety, bipolarism, depression, OCD, PTSD. In this section various questions will ask to the user which user have to answer. Then after that result will be displayed according to the answers of the user. Then the sound activity is there in which the various ambient sounds are included. This sounds will definitely help the user to get stabilize the mood and get out of the situation. And according to our survey this ambient sounds is one of the way to heal the person. Also our application contain the various wallpapers which contain motivational quotes which will help the user to be always positive and not to give up. Also we have provided some experts number and some websites of the mental health page.

### 5. FUTURE WORK

Now we have our flexible UI but we are focusing more on how we can build our UI more feasible. So right now we are in touch with several doctors who can help us to build our application more sophisticated.

Now a days there are many security issues specially regarding this kind of software.

Therefore for the security issues we are going to add the google authentication system which will be more secured. By the google authentication system user will also have surety of their security.

Besides, We will be including more fun activities for the user to help them to get stabilize their mood.

Our application is very user friendly.

As our application's only aim is to get stabilize the mood of the user. So we are only focusing on the users mood and their mental state.

So building the easy User Interface and Security and the Fun Activities will be the key points of our future work.

## 6. CONCLUSION

In conclusion, making mind clam when we are dealing with mental illness or when we feel low, frustrated, etc. can be challenging to deal with. However, its not impossible to overcome.

From last 2 years due to lockdown their has been increase in mental illness as many people have lost their job many have become jobless which leads to depression, anxiety problem and many more. So just to overcome all the issue faced by employee, students and many more youths we have build an app MOOD STABILIZER improving the sense of well being and self confidence.

This program also helps user to develop a positive attitude towards mental health. We are better able to cope with difficult times in our personal and professional lives.

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