iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** V **Month of publication:** May 2022

DOI: https://doi.org/10.22214/ijraset.2022.42163

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue V May 2022- Available at www.ijraset.com

COMRADE: A Productivity and Selfcare Website

Snehal Urankar[1], Madhura Nawghare[2], Mahima Raina[3]
[1, 2, 3]*Department of Computer Science and Technology, Usha Mittal Institute of Technology, S N D T Women's University, Mumbai-400049, Maharashtra, India*

Abstract: With the growing world and increasing opportunities, mental health issues have become a major challenge, affecting the productivity. Hence, in this world where technology has become our shadow, we give our attempt here to help beat this by building an application 'Comrade' .This is basically an application that will focus on bringing the various patterns of mood swings to the user's attention and will provide an assistance to combat procrastination. Comrade will not only help to track the mood changes and analyse it, but also assist the productivity and focus.

I. INTRODUCTION

Human mind is considered to be the greatest enigma, whichhas been a driving force behind many scientific endeavours, leading to the various theories associated with its working. With the growing world, increasing opportunities and reachingvarious heights the humans have been able to achieve - we tendto lose our touch upon the cognitive, behavioral and emotional well being, which is generally referred to as Mental health.

This particular topic is being highlighted more than everin recent times because of the drastic changes the humanbeing has been adapting to since a couple of years with the entire developmental surge across the globe, not forgetting the"pandemic". The past 2 years have been extremely crucial to the entire mankind and handling everything has been a real task.

With the issues of health (primarily) and employment, men-tal well being has come across to be a luxury in these tough times. It can affect daily living, relationships and physical health as well. Apart from that, one of the most common concerns has been 'productivity'.

It is not easy to keep going during such adverse conditions. No motivation, procrastination, etc has affected the productive capabilities in some or the otherway, and hence in this world where technology has become our shadow, we give our attempt here to help beat this by building an application 'Comrade'.

II. RESEARCH METHODOLOGY

The first step is to identify issues and/or opportunities for collecting data and to research the interest of the users. This research include gathering primary data that refers to the first hand data which includes talking to people and gathering secondary data which includes articles, research papers, socialmedia monitoring and other resources.

The goal of the project is to track and remedy any mental health problem before it gets too serious and also to increase the focus of the user. The users could set goals, thereby takingsmall steps to achieve major differences in their daily lifestyles leading to better productivity.

III. LITERATURE SURVEY

The application and it's impact we intend to make nec- essarily requires two approaches to go ahead with the work- Findings and Outcomes and Comparison. The former primarily talks about the learning we picked from the various research papers and articles we went through, and the later isa study we conducted to compare the existing products falling under similar field of interest.

A. Findings and Outcomes

The primary interest of Comrade is to impart the sense/feeling of well-being. This is closely linked with the mental health, moods, habits, behaviours, etc. Through the papers we referred to, we tried to cover the entire umbrellaof topics underlying.

1) *Top ways to increase productivity; Maintaining a healthy balance in life helps efficiency, Are produc- tivity apps more hype than help? (2015, October 19). BBC News.*

Here, what we picked was that the human mind and brain are not made for heavy-duty multitasking. It is suggested to keep track of how much time you devoteto certain tasks everyday and perform the physical task of jotting things down. Hence, we implemented a feature which would help the user have a clear idea of how much time is required, leftand utilized while completing tasks for the day.

©IJRASET: All Rights are Reserved

2) *Match Your Productivity Approach to the Way YouWork, M, K., NC, R., Isaac, O., Harish, K. S.,Iqbal, M. I., Srivvastava, K. (2021). STUDY ONEFFECT OF MEDITATION ON INDIVIDUAL'SPERFORMANCE AT WORKPLACE. International Journal of Management (IJM), 12(1), 379–389.*

What we essentially picked here is that people havedifferent productivity styles. Some people prefer timing how long tasks take and others prefer flexibility and variety in their schedule.

This brings you to our motive behind not sticking to a particular strict method for the user to follow. Focusing on one type of productivity style will limit the audience the Comrade app attracts.

3) *Evaluating online stress management intervention for college students, Frazier, P., Meredith, L., Greer, C., Paulsen, J. A., Howard, K., Dietz, L. R., Qin, K. (2015). Randomized controlled trial evaluating the effectiveness of a web-based stress management pro- gram among community college students. Anxiety, Stress, Coping, 28(5), 576–586.*

This article talks about a correlation between lower levels of depression, stress and anxiety with the elementof control.

Through Comrade the users will be made aware of the various steps/measures/ways which are helping them getover the low phase thus helping them to monitor and track their mood over the time.

4) *Understanding People's Use of and Perspectives on Mood-Tracking Apps: Interview Study, Corpus ID: 236997578, S. Schueller, Martha Neary, +1 author Daniel A. Epstein Published 3 April 2021 Medicine JMIR Mental Health*

Mood is not a behavior, rather it is a bodily and cognitive experience encompassing both physiological reactions and thoughts. Accordingly, people may not have direct control over their mood and might be interested in under-standing why certain mood states occur. This might holdsome similarity to other bodily or cognitive experiences people track including chronic health conditions.

Here, Comrade will assist the user in tracking their moods as well as the measures they took to fix it.

5) *The Pomodoro Technique for Sustainable Pace in Extreme Programming Teams, DOI:10.1007/978-3- 540-68255-4 18, Federico Gobbo, Matteo Vaccari, June 2008*

The Pomodoro Technique is a time management methoddeveloped by Francesco Cirillo in the late 1980s. It usesa timer to break work into intervals, typically 25 minutesin length, separated by short breaks. The pomodoro technique increases focus immensely when prescribedto correctly. In turn, this leads to an increase in work turnover and a boost in quality. Yep, that is right, more work, better quality, all with the same amount of hours in a day. Realising its impact and importance,one of the most,important features of Comrade is Pomodoro.

6) *Sentimental Analysis using Logistic Regression , DOI:10.9790/9622-1107023640, Subhani Shaik Pub- lished July 2021 International Journal of EngineeringResearch and Applications*

Logistic Regression is a classification that serves to solvethe binary classification problem.Estimation is made by applying binary classification with Logistic Regression on the data allocated to training and test data in a data set.Sensitivity Analysis is a method used to judge some- one's feelings or make sense of their feelings according to a certain thing. It is basically a text processing processand aims to determine the class that the given text wantsto express emotionally.Sentiment analysis can be usedto analyze web material from social media platforms, online products, companies, events, and personnel. The idea here in Comrade is to divide the training set into positives and negatives.

B. Comparison

The next step for us was to conduct a study to understand the existing market existing on the similar lines. For the same we compared 6 applications with Comrade and drew a few difference lines

1) *Todoist:* Its a to do list application which keeps a track of other apps in use too, creates to-do lists for individuals and group them into sub-tasks. It charges the user on a 3 dollar/month basis and doesn't provide any timer feature.
2) *TickTick:* It shows a Achievement score by the task completed in the allotted time. It own the databases and all rights to the application. View your tasks in smart lists or create your own custom smart lists. There are 2 versions - free and premium(costs 27.99 dollars/year). This makes use of pomo technique.
3) *Sober Time:* It's a mental health app that tracks sobriety down and updates in real-time and tracks your relapses. Each goal is tracked and you'll get a notification when you've reached one. Free to download and use, but has too many advertisements included. Its a free applciation to use andhas no pomo timer. technique.

4) *Serene:* It comes with a built-in website and app blocker.It keep a track of all the other apps in use.Serene will only block the sites and apps during your scheduled sessions.There are 2 versions - free and premium(costs 49 dollars/year).It blocks access to other apps- which may lead to missing urgent calls, etc. Doesn't make use of pomo technique.
5) *COMRADE:* When compared to other applications, the biggest USP of this website is that under one platform the user can make use of the mood tracker and utilise the productivitytools to enhance the efficiency. Comrade won't keep a track of your other apps and online activity .Comrade limits the amount of time you spend on a task by setting a time goal. It costs nothing to find out. The user can set work time and interval break time via pomodoro timer.

IV. SCOPE OF THE PROJECT

1) We wish to make the user experience better as far asvisuals are concerned.
2) Display of the corresponding journal entry - as the date and rating.
3) In future, given the time and skill-set, we may try connecting the users with their health professionals(if any) and make a provision to share the updates regardingtheir daily monitoring.

V. TECH-STACK USED

A. *Figma*

It is a web-based graphic editing and user interface de-signing software. We used figma to design the interface of our project. It was later easier for us to implement these designed interfaces for our website.

B. *Visual studio code*

Visual Studio Code is a source-code editor which is made by Microsoft for Windows, Linux and macOS. Its features include support for debugging, syntax highlighting, intelligentcode completion, snippets, code refactoring, and embedded Git.

C. *Angular CLI*

We have used angular as the frontend of our project. Angular framework includes JavaScript, HTML and CSS which help to develop the frontend of the project.

D. *Firebase*

Firebase is a nosql database software. It enables us to store and sync data at global scale. The data is stored as JSON and synchronized in realtime to every connected client.

E. *Github*

We used github to commit i.e, to record the changes in the repository of our project. We were also able to push and pull the project from github.

The workflow of our project is given below:

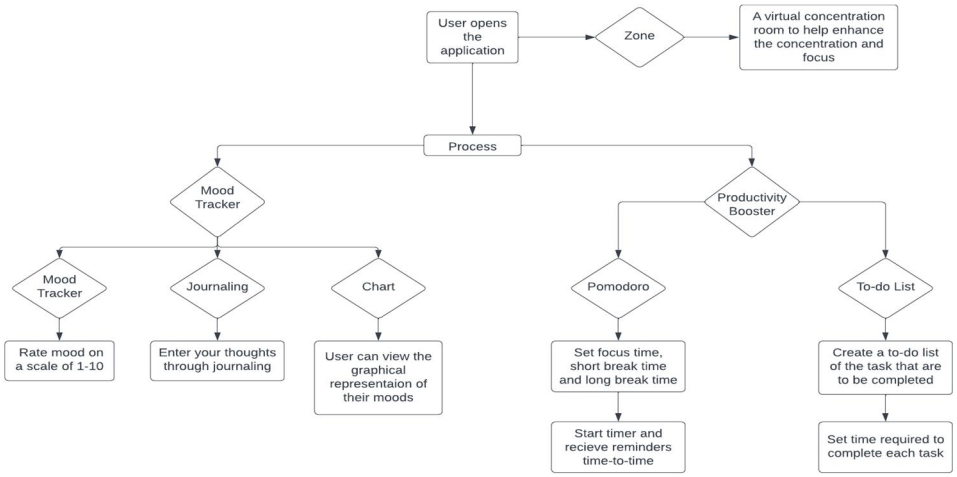


Fig. 1. Flow Chart

Following are the screenshots of our project:

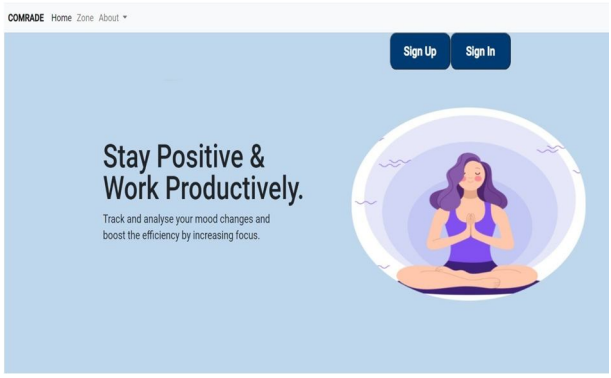


Fig. 2. Home Page

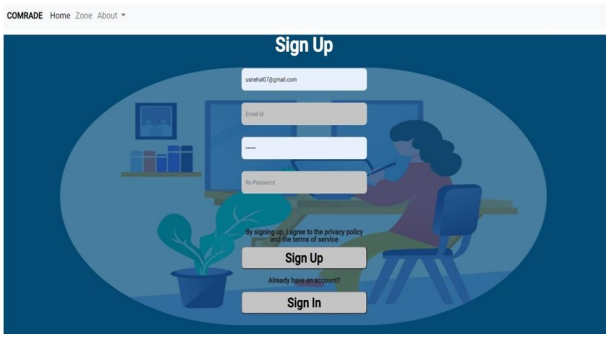


Fig. 3. Sign Up

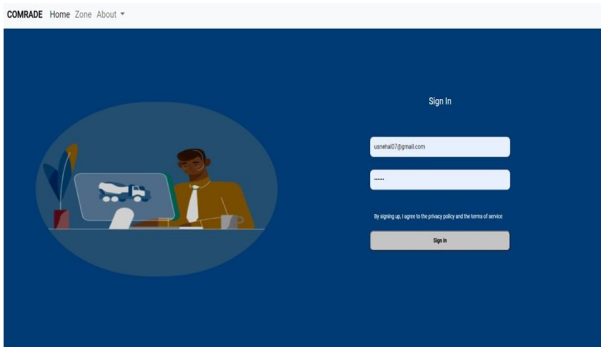


Fig. 4. Sign In

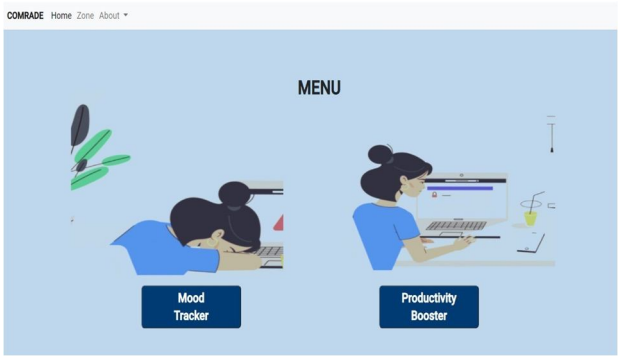


Fig. 5. Menu

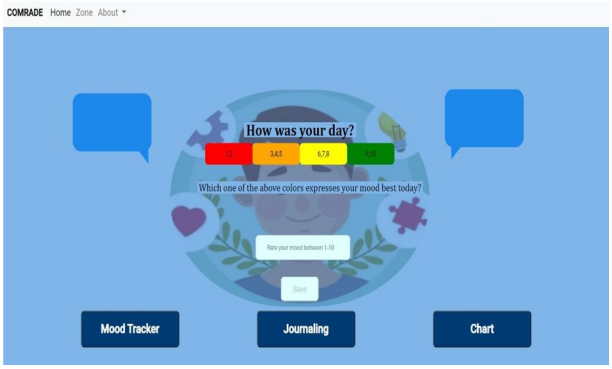


Fig. 6. Mood Tracker

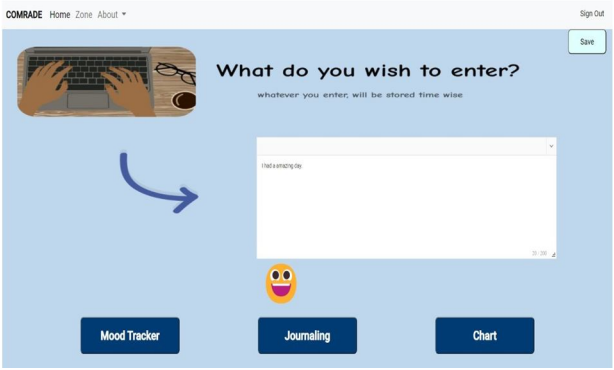


Fig. 7. Journaling

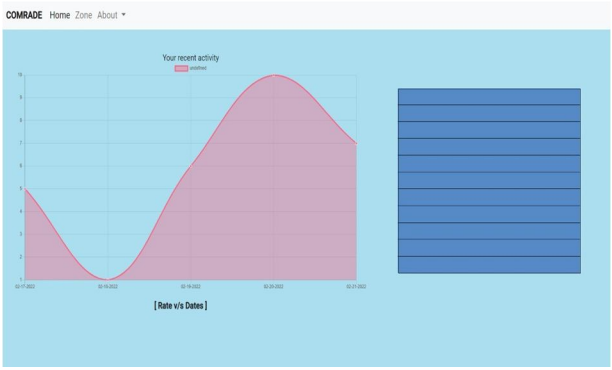


Fig. 8. Chart

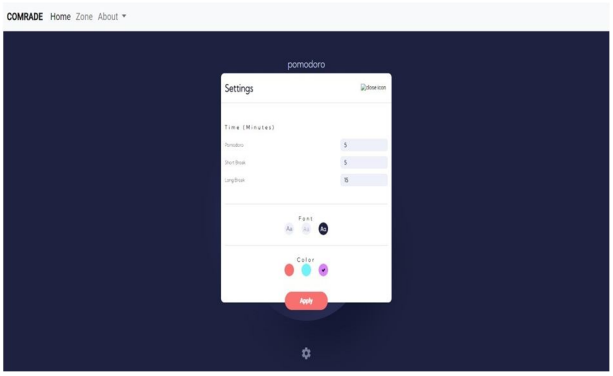


Fig. 9. Pomodoro

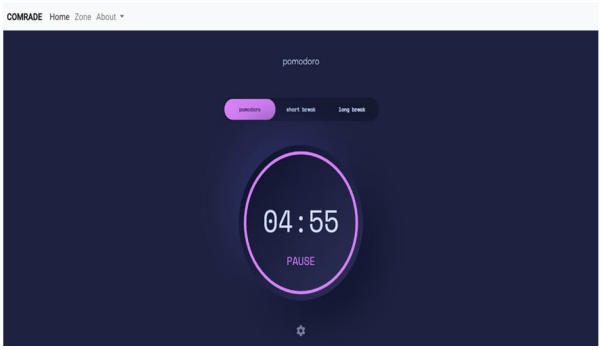


Fig. 10. Pomodoro



Fig. 11. To-Do list

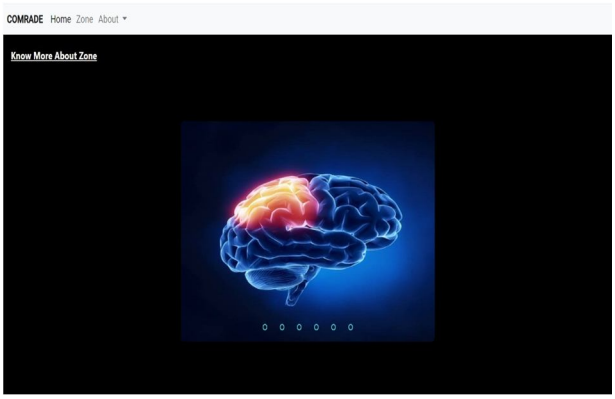


Fig. 12. Zone

VI. CONCLUSION

1) We have implemented a platform which takes input fromthe user, analyses it using ML, displays a chart for the user to get an overview for their past 30 days activity.

2) We have also incorporated productivity enhancing tech- niques which have been picked from research papers we referred during the research process.

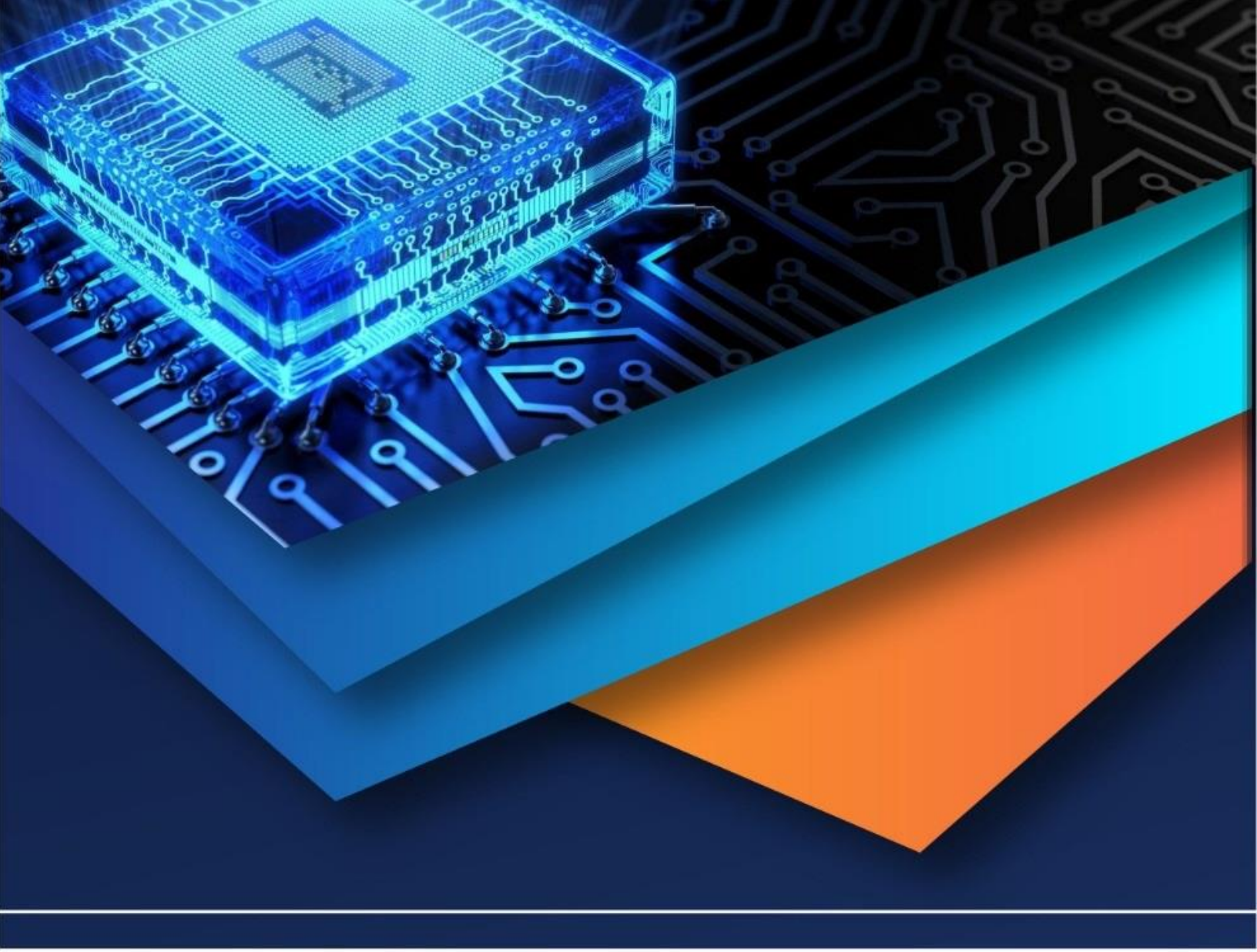
3) In future, with appropriate duration of time and skillset incorporation of a dashboard for connect with the individual therapist can take place.

VII. ACKNOWLEDGEMENT

It gives me immense pleasure to express my deep gratitude and sincere thanks to our guide Mr.N.Gawai, our external guide Mr.Sumedh Pundkar, our H.O.D Mrs.Kumud Wasnik and all the faculty members from Department of Computer Science and Technology, UMIT for their valuable and useful support . I would not forget to mention that their approachkept our working environment alive and their encouragement promoted us to do our task rigorously.

REFERENCES

[1] Daniel A. Epstein S. Schueller, Martha Neary. Understanding People's Use of and Perspectives on Mood-Tracking Apps: Interview Study. 3 April 2021.
[2] Mehul Shah. A Usability Study on Self-Improvement and Productivity Apps. 29th October 2019.
[3] Bartik W Marshall JM, Dunstan DA. The digital psychiatrist: in searchof evidence-based apps for anxiety and depression. Front Psychiatry.2019;10:831.
[4] Benedict Bender. The Impact of Integration on Application Success and Customer Satisfaction in Mobile Device Platforms. 29 January 2020.
[5] Mauro Cherubini. Apps that motivate : a taxonomy of app features based on self - determination theory. August 2020
[6] Lai J, Jury A. Te Pou o te Whakaaro Nui. Auckland: Te Pou ote Whakaaro Nui; Effectiveness of e-mental health approaches: Rapid review. 2018. [2020-05-21].
[7] M, K.,NC, R., Isaac, O., Harish, K. S., Iqbal, M. I., Srivvastava, K., Studyof Effective Meditation on Individual's Performance at Workplace. 2021.
[8] Corpus ID: 236997578, S. Schueller, Martha Neary, +1 author Daniel
A. Epstein, Understanding People's Use of and Perspectives on Mood- Tracking Apps: Interview Study, Medicine JMIR Mental Health Published3 April 2021.
[9] DOI:10.9790/9622-1107023640, Subhani ShaiK, Sentimental Analysis using Logistic Regression on International Journal of Engineering Re- search and Applications Published July 2021.
[10] Top 10 Apps to Increase Your Productivity,] Mobile App Download andUsage Report 2019: Stats You Must Know. (n.d.). Retrieved 26 August 2021.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)