

International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 3, June 2025



Mental Health Wellness "MOOD_FIT"

Vaishnavi Zadbuke¹ and Mahesh Swami²

Lecturer, Department of Computer Technology, S.E.S.Polytechnic, Solapur, India¹, Lecturer1Department of Computer Technology, S.E.S.Polytechnic, Solapur, India².

Abstract: This project is aimed at creating 'Mood_Fit', an app that focuses on the betterment of mental health well-being in its users. It will include features like personalized relaxation music, health-based recommendations, and emergency contact options. Using Flutter and building within Android Studio, this project will create an accessible tool that innovates and helps someone maintain mental wellness. Mood_Fit is the latest and most innovative mobile application designed to respond to the growing demand for a relationship with the fundamental facilitation of mental health and well-being using technology. It aims to develop an end-user-oriented tool that will have the capability to influence the control of its end users' mental health through relaxation methods, integrative health suggestions, and access to other features, such as emergency support. Some functionality like instrumental music, which has no voice to soothe the user's mind, and bespoke strategies to motivate users to increase wellbeing, and contacts for emergencies such as ambulance, police, and women's helpline would be integrated within the application. Recommended freeware for Project development

Keywords: Flutter, Android Studio, mobile application, bespoke strategies, freeware

I. INTRODUCTION

The integration of Artificial Intelligence (AI) in business is one of the most significant technological developments of the 21st century. Companies across sectors are increasingly leveraging AI to automate processes, enhance customer experience, and drive data-informed decisions. While AI offers numerous advantages, its adoption also presents challenges such as ethical con Mental health wellness has grown to be an important part of overall wellness, no longer just a personal issue but affecting society at large. Stress, anxiety, and mental health issues are becoming common occurrences in today's fast-paced lifestyle among people irrespective of their age or background. The process of dealing with mental health will be used to enable individuals to live more balanced and productive lives and community where mutual support in the time of emotional or psychological challenges is encouraged. Our project, "Mood_Fit," aims to celebrate mental health wellness in a modern, friendly way through a novel mobile application.

Designed to give users all-rounded support, the app comes with features such as soothing music, tailor-made health recommendations, and contact numbers in case of emergencies. The approach taken here is wholesome and addresses the diversity of users' mental health needs, equipping them with all tools associated with calm minds and emotional wellness. "Mood_Fit," built using Flutter on Android Studio, is designed with mobile performance in mind. Our aim is to make an app more than just a 'sheerly mental health support' by including meaningful functionalities like a 'Nearby Hospital' locator and personalized user insights. This report will reflect on the background, technical development, and potential impact of our project in promoting mental wellness in such a stressfully increasing world.

"Mood_Fit" was thus born with such knowledge in mind, seeking to fill the gap that traditional mental health services left wide open when it comes to the everyday needs of the user. While conventional approaches may be limited to specific interventions alone, the app gives users the complete range where their self-care routines can include calming music, get customized health insights through the emergency contact options. These features cater to diverse needs of people - from the need for routine mental relaxation and being counseled in case of acute mental health conditions. "Mood_Fit" aims at cerns, security issues, and potential job losses. This paper aims to explore the comprehensive impact of AI on businesses by analysing existing literature and practical applications..

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568



228



ISSN: 2581-9429

International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 3, June 2025



II. LITERATURE REVIEW

With growing mental health disorders, there has been growth for digital solutions, which have seen mobile applications play a key role in accessible personalized support. Research shows that self- assessment is effective in the early detection and management of mental conditions. According to Cook et al. (2018), self-assessment modules allow users to keep track of their mental well-being and spot patterns over time, whereas Tang et al. (2019) highlighted the therapeutic benefits of mindfulness exercises and music therapy in reducing stress and anxiety. These features, which are the core of mental health apps, provide a supporting environment for those seeking help for their mental well-being. The importance of mental health as part of overall well-being has been greatly emphasized. As it was stated by the World Health Organization (WHO), the strengthening of an international response to mental health problems is essential to foster improved individual and collective well-being (WHO, n.d.) [1]. In addition, the American Psychological Association underlined the significance of mental health awareness through which the stigma could be reduced and early intervention promoted, imperative to enhancing outcomes (APA, n.d.).

[2] Advances in technology have revolutionized the way mental health care services are delivered. Smith and Robinson (2020) discussed how technological innovation can be used to break down barriers to mental health care delivery, such as accessibility and affordability. They stress this improves personalized care (Smith & Robinson, 2020) [3]. Internetbased interventions, according to Andersson, provide scalable and effective responses for treatment of mental health; they embrace greater access (Andersson, 2018) [7].

The Applications such as Headspace provide examples of the value realized with regards to meditation and mindfulness - showing measurable improvements in stress management and better emotional balance (Headspace, n.d.) [6]. In addition, Rizvi et al. (2020) discuss the benefits of self-assessment tools that are included in the apps for mental health-enhancing self-awareness and thus targeted interventions (Rizvi et al., 2020) [9].

According The NIMH offers critical statistics illustrating the prevalence of mental health disorders and their widereaching impacts (NIMH, n.d.) [4]. Kessler and Ustun (2017) shed light further on the global burden of mental health disorders by stating the need for urgent interventions in order to curb these challenges (Kessler & Ustun, 2017) [13].

Wellness apps have emerged as a significant tool in management of mental health. Kumar and Adhikari, who analyzed their effectiveness, especially to reduce stress and increase mindfulness, hint at main features such as guided meditation, tracking tools, and personalized recommendations being crucial characteristics of a successful mental health app (Kumar & Adhikari, 2019) [5].

As demonstrated by Mood path, mental health applications contribute to everyday wellness through providing accessible resources and structured approaches to managing mental health management (Mood path, n.d.) [14]. According to NAMI, innovations such as artificial intelligence, virtual reality, and telehealth are transformational elements of mental health care. These technologies provide more accessible, efficient, and effective solutions (NAMI, n.d.) [10].

The adoption of state-of-the-art frameworks, such as Flutter, allows developers to produce high-quality, cross-platform applications. Using Flutter in well-being applications development, Pfitzer and Goncalves discussed how Flutter can be leveraged to create on-demand user experiences with reduced time to market (Pfitzer & Goncalves, 2019) [11]. Best practices for mental health apps are outlined by Google Developers. Some of the key points included in this article are user data privacy, ethical considerations, and feature optimization (Google Developers, n.d.) [16].

Harvard Medical School states that mindfulness practices reduce anxiety and improve emotional regulation considerably (Harvard Medical School, n.d.) [8]. Stress management techniques, according to Mayo Clinic, are also important because of their effectiveness in improving mental health conditions generally (Mayo Clinic, n.d.) [12]. In addition to this, Barak et al. outline an excellent review of internet-based psychotherapeutic interventions which can effectively supplement traditional therapeutic approaches (Barak et al., 2008) [15].

III. METHODOLOGY

The development of the Mood_Fit application combines advanced technologies and frameworks to deliver an effective mental health wellness solution. Every component was chosen for its functionality, user experience, and the

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568



229



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal





productivity and efficiency that the system could maintain. The following are some of the technologies applied in the project:

Flutter

The application Mood_Fit is developed using Flutter - an open-source UI kit developed by Google. It enables the development of natively compiled applications for mobile platforms from a single codebase. In turn, with its expressive and flexible UI components, Flutter guarantees a smooth and engaging user interface, which is critical to the appeal and functionality of the app.

Dart Programming Language

The app's logic is written in Dart, the programming language used for Flutter. Its asynchronous features, such as Future and Stream, enable real-time updates and ensure that everything works well when a user uses different features, such as self-assessment or making an emergency call.

Machine Learning for Personalization

The app offers suggestions based on the self-assessment health reports of users. It also integrates machine learning algorithms that tailor music recommendations and relaxation techniques, thus working based on self-assessment data and tailoring their trends for notification purposes.

REST APIs

REST APIs are used for integrating external data sources, such as emergency helplines or health tips, to keep the app updated with relevant and accurate information. In addition, the modularity provided by REST APIs will allow scalability and future feature enhancements.

SQLite

Offline functionality SQLite is embedded into the app to store important user data locally so that users can still access self-assessments, previous results, and music tracks even without being connected to an internet source.

Audio Player Plugin

The application makes use of audio player plugins compatible with Flutter to offer non-lyrical music. This lightweight component ensures high-quality playback without affecting app performance or battery life, contributing to the stress-relief features of Mood Fit.

Emergency Calling Integration

Implementing the emergency calling feature in Flutter uses platform-specific integration. On an Android device, the app employs the use of Intent to access the functionality on the device to make calls to ambulances, police, and women's helplines for immediate and effective response.

Android Studio

Android Studio is the development IDE used, with its collection of integrated tools that include Dart analysis and AVD (Android Virtual Device) to help streamline debugging and eventually improve app quality.

Windows 10 Development Environment

Android Studio is utilized for developing and testing Mood_Fit on a Windows 10 operating system. This deployment provides a relatively stable environment in which the coder can code, debug, and simulate the features of the application with robust performance.

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568





International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 3, June 2025

System Architecture Diagram for Mental Health Wellness Mood_fit



IV. RESULTS / FINDINGS





Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568





International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 3, June 2025





V. ADVANTAGES/DISADVANTAGES

This mental wellness app offers a wide range of benefits through its integration of advanced technology and userfriendly design. It provides personalized suggestions based on user health data, promotes self-awareness through selfassessment, and encourages positive lifestyle habits. Emergency support features like quick-dial access to critical services enhance user safety, while relaxing, scientifically composed music helps reduce stress and improve sleep. The app is cost-effective, highly customizable, and integrates seamlessly into users' daily routines. With real-time feedback, a responsive Flutter-based interface, and holistic mental care tools, it serves as a comprehensive solution for promoting mental well-being.

Despite its benefits, the app may face a few limitations. Users without reliable internet access or smartphones may find it difficult to use the app effectively. Privacy concerns could arise due to the sensitive nature of mental health data, especially if security measures are not robust. Additionally, while AI-generated suggestions are helpful, they cannot replace professional medical advice, which may limit the app's usefulness in severe mental health cases. Some users may also find self-assessments inaccurate or feel overwhelmed by too many features, affecting long-term engagement

VI. CONCLUSION

The Mood_Fit project successfully integrates the most modern technology into mental health wellness, reflecting a comprehensive user-friendly platform that allows individuals to control their mental health. It takes advantage of the strength of Flutter with Firebase and AI-driven personalization in its music therapy approach to managing stress, self-assessment, and emotional well-being.

With real-time feedback, emergency support, and personalized suggestions on demand, Mood_Fit is a very valuable tool in the hands of individuals, conveniently accessible, yet able to manage one's mental health through such aids. The app does not only bolster up mental well-being but also safety features with some containing emergency contact linking one immediately to the services when needed.

The project "Mental Health Wellness Mood Fit" addresses the most critical issues in the present period mental health. As stress, anxiety, and other mental difficulties are on the rise, Mood Fit comes as an application to help people take control of their minds. Features that will be added include self assessment tools, peaceful music, and emergency contact options to promote mental wellness.

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568



232



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 3, June 2025



Whereas awareness is built up, it also empowers users with the resources to facilitate effective management of mental health.

This project also exemplifies how technology can be a fine and practical tool to produce change in society for mental health support. Mood_Fit's holistic approach ensures that users' emotional as well as rational selves are supported, thereby creating a culture of self-care. Mood_Fit encourages early intervention and provides an easy platform through which barriers around mental health issues can be reduced and encourage people to take better care of themselves. Prioritizing their well-being. This undertaking remains a potent testament to the role of innovation in addressing critical social challenges toward a healthier, more compassionate future.

REFERENCES

- [1]. World Health Organization (WHO). Mental health: Strengthening our response. Retrieved from https://www.who.int./
- [2]. American Psychological Association (APA). The importance of mental health awareness. Retrieved from https://www.apa.org.
- [3]. Smith, J., & Robinson, L. (2020). The role of technology in mental health care. Journal of Health Psychology, 15(2), 125–139.
- [4]. National Institute of Mental Health (NIMH). Statistics on mental health. Retrieved from https://www.nimh.nih.gov.
- [5]. Kumar, S., & Adhikari, R. (2019). The effectiveness of wellness apps in mental health management. International Journal of Digital Health, 8(1), 23-34.
- [6]. Headspace. Benefits of meditation for mental wellness. Retrieved from https://www.headspace.com.
- [7]. Andersson, G. (2018). Internet-based interventions for mental health. Clinical Psychology Review, 33(3), 302-315.
- [8]. Harvard Medical School. Mindfulness and mental health. Retrieved from https://www.health.harvard.edu.
- [9]. Rizvi, S. L., et al. (2020). Applications of self-assessment in mental health apps. Journal of Behavioral Research, 18(4), 227-240.
- [10]. National Alliance on Mental Illness (NAMI). Innovations in mental health technology. Retrieved from https://www.nami.org.
- [11]. Pfitzer, L., & Goncalves, A. (2019). Using Flutter to develop cross-platform wellness applications. Journal of Mobile Development, 12(7), 58-68.
- [12]. Mayo Clinic. Stress management and mental health. Retrieved from https://www.mayoclinic.org.
- [13]. Kessler, R. C., & Us tun, T. B. (2017). The global burden of mental health disorders. Psychological Medicine, 27(3), 357-365.
- [14]. Mood path. How mental health apps support everyday wellness. Retrieved from https://www.moodpath.com.
- [15]. Barak, A., Hen, L., et al. (2008). A comprehensive review of internet-based psychotherapeutic
- [16]. interventions. Journal of Technology and Human Services, 26(2-4), 109 160.
- [17]. Google Developers. Best practices for developing mental health apps. Retrieved from https://developers.google.com.resources for mental health.



