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INNOVATION IN ACTION: TURNING IDEAS INTO REALITY

Chapter 12

Mental Wellness Application (Serenify)

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ABSTRACT

Mental health issues such as anxiety, depression, and burnout have become widespread concerns, especially among students and young adults. According to the World Health Organisation (WHO), mental disorders significantly affect emotional well-being, lower productivity, and contribute to physical health problems. In Malaysia, the situation has worsened in recent years, with rising mental health cases emphasising the urgent need for accessible, affordable, and stigma-free care. Despite growing awareness, challenges such as societal stigma, limited access to resources, and lack of personalised support continue to prevent individuals from seeking help. To bridge this gap, Serenify was conceptualised as a comprehensive digital mental wellness application offering a holistic solution. The name "Serenify" is a coined term derived from the noun serenity (calm and peace) and the suffix -ify (to make or become), symbolising the aim to foster calmness and emotional balance. Serenify addresses current challenges by offering basic stress management techniques, mindfulness practices, and an online booking system for professional consultations. Unlike other apps focusing on a single feature like guided meditation or self-assessment, Serenify integrates multiple components into one platform, enabling users to manage their mental health journey effectively. Personalised features include daily trackers for mood, mental health, and sleep quality, providing users with actionable insights. Developed using a user-centred design (UCD) approach via Figma, the app includes interactive features like breathing exercises, sound therapy, and a counselling booking system with smooth navigation. Currently at Technology Readiness Level 5 (TRL5). Serenify is being tested with a small user group to guide improvements. The application also has business potential through subscription plans, in-app purchases, and corporate partnerships. Ultimately, Serenify aims to remove barriers to mental health care while promoting resilience, self-awareness, and community well-being

Key Words: Mental Health, Stress Management, Mental Wellness Application, Accessibility to Mental Health Care, User-Centered Design (UCD)

1. INTRODUCTION

In recent years, the frequency of mental health issues such as depression, anxiety, and burnout has increasingly become a major concern in society, especially among students, young adults, and working professionals (X. Liu & Wang, 2024). According to data recorded by the World Health Organization (WHO) from studies conducted between 2019 and 2025, psychological disorders are among the most common factors contributing to decreased productivity, unstable emotional well-being, and physical health complications. Even in Malaysia, there has been a surge in mental disorder cases, which has become a growing concern and highlights the urgent need to address discrimination in mental health service delivery within the country (Raaj et al., 2021). Many individuals struggle to access affordable and proactive mental wellness resources due to stigma, lack of understanding, or a scarcity of professional care (Muhorakeye & Biracyaza, 2021). This gap in accessibility and personalized support calls for an immediate solution that enables individuals to manage their mental health effectively.

Serenify is designed to address these issues by providing a user-friendly platform that incorporates stress management techniques, mindfulness practices, and emotional self-regulation tools. The app plays a crucial role in encouraging users to build resilience and improve their overall mental and physical well-being. Serenify promotes accessibility by offering resources in a digital format, ensuring that users can access help and support anytime and anywhere. It aspires to dismantle traditional barriers to mental health care and challenge societal perceptions surrounding mental health.

2. LITERATURE REVIEW

The increasing awareness of mental health issues has led to the innovation of mental health management particularly in mobile applications. There are few mobile applications designed to help people in managing their psychological health using different approaches to psychological health such as Headspace, Smiling Mind, and Evernote (Flett et al., 2018;Hwang et al., 2021). Studies have found that these applications have proven to be effective to the users (Coelhoso et al., 2019; Flett et al., 2018). Research by Flett et al., (2018) and Coelhoso et al., (2019) did research on the effectiveness of Mental health mobile applications by conducting research on university students. The study found that the applications did significantly improve the mental health of the students. Although the studies focussed on different type of approaches, it is still proven that these applications did improve the users' psychological health.

However, these applications are focusing on different types of psychological health such as guidance for mindfulness, self-assessment or professional consultation (Lecomte et al., 2020). It can be concluded that there are no studies found in an application that integrate several features that focus on different types of mental health management. Hence, to address the gap, the researchers will design an application that has these features in one application.

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3. METHODOLOGY

The development of Serenify follows a user-centered design approach to ensure functionality, accessibility, and user-friendliness. Unlike other mental health applications that focus on a single feature, Serenify integrates three key components: (1) Stress Management Techniques, (2) Daily Trackers, and (3) Counselling Session Booking System. This combination helps users move smoothly from understanding their mental state to managing stress and getting professional help. The application's personalised nature makes it unique, as users can monitor their mental health, sleep quality, and mood through daily trackers. Additionally, the seamless booking system enables users to connect with professionals online, eliminating accessibility barriers and offering flexibility. Beyond individual benefits, Serenify aims to promote societal well-being by increasing awareness of mental health management and fostering a more resilient community.

The design and development process is conducted using Figma, an interface design tool that enables a collaborative and interactive approach. Prototypes and interactive components are created to simulate real usage situations, ensuring interactivity and responsiveness in key features. The Stress Management Techniques section, which includes Breathing Exercises, Mindfulness Practices, Progressive Muscle Relaxation, and Quick Stress Relief Tips, are developed using Figma's variant and prototyping functions to enhance user engagement. Features such as color-shifting buttons, interactive animations, and smooth transitions are implemented through smart animate and variant components to create a more engaging user experience. The design process follows an iterative prototyping and testing approach, ensuring that all interactive elements function effectively before finalising the user interface. All information, content, and advice integrated into Serenify are adopted and adapted from credible mental well-being sources, with proper acknowledgements provided. This structured methodology ensures that Serenify is not only a polished and operational mental wellness application but also an effective tool in helping individuals manage stress in a comprehensive, user-friendly, and innovative way.

4. RESULTS & DISCUSSION

Technology Readiness Level (TRL) is the measurement model that is used to determine the maturity level of a technology or software (NASA, 2023). It is a nine-step model ranging from TRL1 (early research) to TRL 9 (fully operational use). The Serenify app is at the TRL5 stage, which implies it has been tested in a context environment through a small user base. We have designed the app through Figma with thorough research and relevant models on content terms and a prototype has been developed and tested on a small user base in order to test its functionalities, enabling us to establish areas of improvement (Yfanti & Sakkas, 2024). The survey utilized a Likert scale to assess various aspects of the app, categorized into Usability, Functionality, Content Quality, User Engagement, and Visual and Aesthetic Appeal. The results of the user feedback collected on the Serenify application prototype are as follows:





Figure 2: User Feedback in Subcategories

The survey results are an overall evaluation of the performance of the Serenify app across several important aspects like usability, functionality, content quality, user interaction, and visual appeal. All these factors play an important role in the overall user experience and the app's efficacy in stress management.

4.1 Usability

88% of the users agreed that the app was simple to use, indicating a positive user experience in accessing features and information. 80% believed that the app is accessible to users with varying levels of tech-savviness, indicating that it is appropriate for various audiences. Thereby having a usability score of 84%. High usability and compatibility of users with techsavviness suggested that Serenify is easy to navigate, and crucial in stress management.

4.2 Functionality

84% of the users indicated that the features offered are adequate to meet their stress management requirements, reflecting the performance of the app in meeting user demands. 76% indicated that the app functions well without freezing or crashing, a necessity to attain a seamless user experience. Overall, 80% functionality. Therefore, the application has a high rate of stability and these reassure the users to have smooth and engaging experiences in using the application.

4.3 Content Quality

For content quality, 90% ensured that the content provided is helpful in managing stress, indicating that the users view the information as helpful. 88% indicated a good variety of resources and approaches provided, which can be adapted to different user tastes and needs. 78% felt that the information is presented well and clear to understand, which is vital for effective communication. Despite high levels of content quality, the lower levels in terms of clarity in information presentation highlights a need to improve. After all, this application strives to relieve stress to the users, not cause stress with unclear information.

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4.4 User Engagement

76% of the users indicated that the app motivates them to practice stress management regularly, which signifies that the app is doing a great job in encouraging positive behavior. 70% agreed that the app provided personalised recommendations based on their input, enhancing user satisfaction and personalization.

4.5 Visual and Aesthetic Appeal

92% of the participants considered that the general appearance of the app was beautiful and soothing, which is a fundamental aspect in a stress management application. 88% concurred that the color scheme has a positive effect on their experience, and therefore user satisfaction is regulated by aesthetics. 90% thought that the text is easy to read and pleasing to look at, which is a very important aspect in user engagement. With this, visual and aesthetic appeal is proven to be one of the strengths of Serenify application, as it is found to be visually calming.

Overall, the survey responses highlight the positives of the Serenify app from various points of view. To improve the application, the prototype must be tested in a larger setting with a higher control group. This will enhance the validity of the test results and provide more detailed information regarding Serenify's performance and user experience. Additionally, securing the intellectual property rights will further Serenify's uniques features and position it as the leading digital health tool in stress management niche.

5. CONCLUSION & RECOMMENDATION

In conclusion, Serenify is more than just a stress management app. It is an innovative and impactful digital tool that promotes mental well-being, self-awareness and accessibility to professional support. With further development and strategic implementation, Serenify has the potential to become a leading mental wellness platform, fostering healthier individuals and a more resilient society. The application also has a huge potential in both business development and intellectual property rights. In the interest of long-term viability and protection against unauthorised use, it is essential to secure intellectual property (IP) rights for the Serenify application. Obtaining trademark registration and software copyrights in the future will ensure the application's exclusivity and render its position in the market stronger. Hence, with these business and intellectual property strategies, Serenify will be poised to become a leading mental wellness of sustainability and innovation in digital mental healthcare.

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