

PROJECT REPORT

SECJ1023 PROGRAMMING TECHNIQUE II SESSION 2023/2024 SEM 2

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1.0 Introduction

Our project aims to tackle the pressing issue of mental health awareness and support, directly aligning with Sustainable Development Goal (SDG) 3: Good Health and Well-being. SDG 3 aims to ensure healthy lives and promote well-being at all ages, recognizing mental health as an integral component of overall health. Despite its significance, mental health remains a vastly overlooked aspect of healthcare, with stigma and limited resources hindering access to support and services.

We aim to build a platform where users of all ages can access information about mental health conditions such as depression, stress, and anxiety. Additionally, the platform will allow users to schedule appointments and provide quizzes to help determine if seeking professional help is necessary.

By developing this project, we hope to raise awareness about mental health issues among people of all ages and provide them with resources to understand better and manage their mental well-being. Through engaging content and interactive features, we aim to create a supportive environment where individuals feel comfortable discussing mental health and seeking help when needed.

Our goal is to utilize coding and technology to address the important issue of mental health awareness. Through this project, we strive to empower individuals of all ages to prioritize their mental health and seek support when necessary, ultimately contributing to the promotion of overall well-being.

2.0 Problem Background and Proposed Solution

2.1 Problem Background

In today's society, mental health awareness and support are increasingly recognized as vital components of overall well-being. However, numerous obstacles persist in accessing essential information, resources, and services related to mental health. Stigma, misinformation, and a shortage of mental health professionals contribute to a widespread lack of understanding and awareness of mental health conditions across all age groups.

Moreover, the prevalence of mental health disorders such as depression, anxiety, and PTSD is on the rise, significantly impacting individuals' lives and imposing substantial social and economic burdens. The absence of user-friendly platforms for individuals to seek guidance, connect with professionals, and access relevant information exacerbates these challenges, leaving many individuals without the necessary support to address their mental health concerns effectively.

In addition, there is a pressing need to dismantle societal stigmas surrounding mental illness and normalize the act of seeking help when needed. Misconceptions and cultural taboos often deter individuals from seeking timely support, leading to prolonged suffering and adverse outcomes.

Given these critical challenges, there is an urgent call for a comprehensive solution to bridge the gaps in mental health awareness and support services. Such a solution should provide accessible resources, facilitate connections with mental health professionals, and promote proactive self-care and early intervention strategies. By addressing these issues, we aim to empower individuals, including first-year students like myself, to prioritize their mental health and well-being. Ultimately, this aim contributes to the broader goal of promoting overall health and achieving Sustainable Development Goal 3: Good Health and Well-being.

2.2 Proposed solution

Our mental health tracking and support platform is designed to provide users with comprehensive tools and resources to manage their mental well-being effectively. In our software, we offer tools for self-assessment, access to informative resources, and connections to professional support networks, fostering a supportive environment for individuals to manage their mental health effectively.

First of all, users will be exposed to information about mental health disorders such as anxiety, depression, and stress so that users can have a deeper understanding of their mental health condition.

Next, the platform will offer self-assessment tools based on validated questionnaires to evaluate users' mental health status. The results will be presented in a clear and understandable format, providing insights into potential areas of concern.

Furthermore, users can connect with licensed mental health professionals for one-on-one consultations, therapy sessions, and counseling services. Users can schedule appointments with mental health professionals based on their availability. There will be reminders and notifications to ensure the users never miss their scheduled sessions.

Last but not least, users' privacy and data security are a priority. User data is anonymized and aggregated for research purposes, with opt-in consent from users.

3.0 Objectives

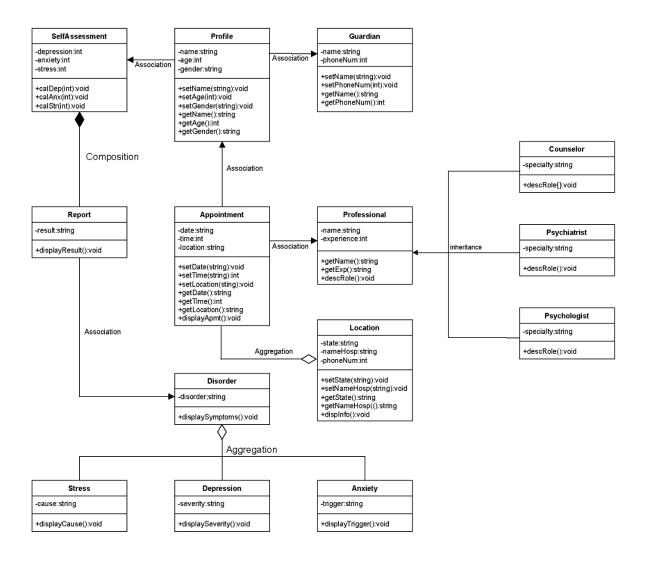
We analyze the issues that individuals tend to take their mental health for granted, so we design a mental health tracking system to increase public awareness and knowledge on illness prevention and healthcare. The objective is to provide a simple and efficient system to let people know more about mental health diseases. The platform's user-friendly design makes it suitable for many different kinds of users, including those with disabilities or limited technological proficiency. It is our goal to increase the reach and accessibility of the mental health tracking system to underserved populations with barriers to access such as awareness, stigma, financial constraints, and geographical limitations that prevent individuals from seeking help or utilizing mental health services.

4.0 Scopes

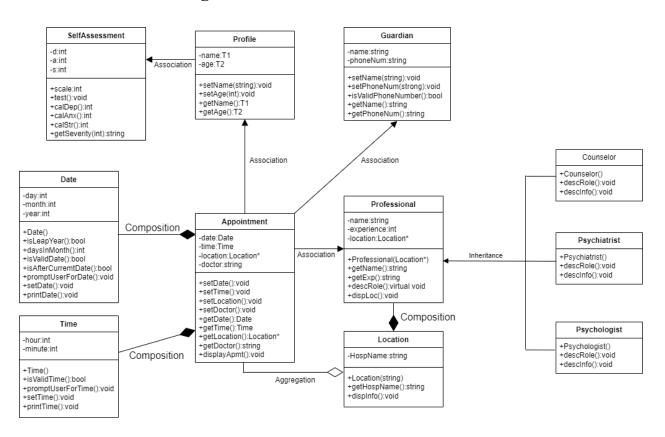
Our target audiences are the individuals of all ages seeking mental health support, including but not limited to students, professionals, and marginalized communities. Our platform will initially target urban areas and then be scalable to extend its coverage to rural areas through partnerships with local healthcare providers, community organizations and telecommunications networks.

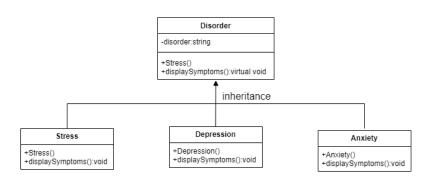
5.0 Class Design

5.1 Class Diagram (Association, Aggregation, and Composition)



5.2 Extended Class Diagram





6.0 Benefit and Summary of the Proposed System

Benefits of the project is we can enhance the understanding and mental health awareness to the user. By providing comprehensive disorder information and detailed self-assessment results, our system empowers users to understand their mental health better. This awareness is the first step towards effective management and improvement. Secondly, this system can also have an ability to store and use personal and guardian information to ensure that support is tailored to the user's specific needs, especially for youngsters who require additional supervision. Thirdly, it is also convenient and accessible for professionals to help and make it easier for users to make appointments and connect users with mental health professionals. Lastly, the self assessment tool uses validated scales and prompts users for accurate inputs, ensuring reliable results.

This accuracy helps users and professionals make informed decisions about necessary interventions and treatments. Our system compared to other systems is providing a more comprehensive and user-friendly approach while many systems may offer basic self-assessment or professional directories, our system combines these features with detailed disorder information and personalized support, making it more holistic and effective tools. We designed it to evolve with the user's needs and offer a cost effective solution for mental health management. Users typically see significant value in terms of improved mental health and reduced costs for professional consultations and treatments.

In conclusion, our mental health system stands out due to its comprehensive self-assessment tools, detailed disorder information, personalized user profiles, and integrated professional appointment scheduling. These features collectively provide users with the support they need to understand and manage their mental health effectively.

7.0 Conclusion

This project is aimed to address the issue of mental health awareness and support, aligning with Sustainable Development Goal 3: Good Health and Well-being. This goal is to develop a platform where the users can access the information about mental health conditions such as depression, stress, and anxiety. Moreover, the platform has also offered tools for self-assessment and facilitated scheduling appointments with mental health professionals, hence providing comprehensive support to all ages of the users.

The challenges that we had faced throughout the development of the project included user engagement. We are facing the challenge of designing an engaging platform that the users would consistently utilize for their mental health needs and require innovative approaches to content delivery and user interaction. The next challenge we faced is the resource availability. There is limited availability of mental health professionals and resources posed a challenge in providing timely support to users. This necessitated the development of a robust system to connect the users with professionals efficiently.

Through the way we develop this project, there are several valuable lessons we have learnt. We learned about the importance of accessibility which making mental health resources easily accessible is crucial. This project underscored the need for user-friendly designs and the importance of reaching underserved populations.

In conclusion, the project has successfully developed a comprehensive mental health platform that stands out due to its detailed self-assessment tools, disorder information, personalized user profiles and integrated appointment scheduling. These features collectively provided users with the necessary support to understand and manage their mental health effectively, thereby contributing to overall well-being.

8.0 Link to Recorded Video Demonstration

Below is the link for video presentation and demonstration:

https://youtu.be/rfFu6KJGI6s?si=xTL8nGaocqbAfHLf