Quest Journals Journal of Software Engineering and Simulation Volume 9 ~ Issue 4 (2023) pp: 88-91 ISSN(Online) :2321-3795 ISSN (Print):2321-3809 www.questjournals.org

Research Paper



Mental Health Tracker Application (Using Flutter and Firebase)

DR. K. Pushpalatha M.E., Ph. D¹., Ms. S. Kanchana, M.E, ², Mr. H. Praveen ³, Mr. V. Navaneetha Krishnan ⁴, Mr. M. Naveenkumar ⁵, Mr. K. A. Rohith ⁶ ¹Head of the Department, ² Assistant Professor.^{3,4,5,6} Department of Computer Science and Engineering, Coimbatore Institute of Engineering and Technology, Coimbatore, India.

Abstract:

This journal focuses on building a mental health tracker. You will try to get an idea of the mental state of your user (in the least intrusive ways). The emotional well-being circumstance has weakened because of a major number of individuals telecommuting and being isolated from their friends and family. Thus, it's basic to monitor and resolve any issues before they get excessively intense. Thus, this venture attempts to accomplish these things for client. This application carries yourself to a condition of quiet and wellbeing. Client will figure out how to oversee everyday pressure and work on their emotional well-being. Remembering that a few clients might be experiencing psychological instability and may not wish to communicate with an application as much as others. Thus, the application would be exceptionally easy to understand and inviting. To create the application, I will utilize java and firebase. This multitude of dialects will be utilized to foster the application which will be easy to use and have basic UI. The application will initially let the client to signed in and after that it will show a few arrangements of questionaries which client need to reply. As indicated by answers given by the client, the condition of mental prosperity is shown and based on which legitimate idea is given. What's more, in the extreme case, much appropriate medication and specialist is proposed to the client which will assist them with defeating their current state. Depending on the emotion, an appropriate measurement such as activities or mindfulness exercises is suggested by our application.

Keywords: Mental Health, Deep learning, Questions, Authentication, Reviewing and Tracking of user status.

Received 06 Apr., 2023; Revised 18 Apr., 2023; Accepted 21 Apr., 2023 © *The author(s) 2023. Published with open access at www.questjournals.org*

I. INTRODUCTION

In this computerized period, data security has turned into a vital space as a wide range of data is openly accessible in the web. Despite the fact that the safety efforts and the examination acted in this field are advancing, still various sorts of safety assaults are winning. Additionally, data has turned into extraordinary business significance lately. Indeed, even the information of huge organizations is inclined to assaults and are in the peril of losing their information. Specifically, human shortcomings are focused on by different social designing methods to control individuals and take their touchy data. Inspire of the advances, data security area is extremely youthful and still it has a more extensive examination scope. More proficient examination works are needed to investigate the arising security assaults like Man-in-the-centre, phishing assault, drive-by assault, secret key assault, SQL infusion assault, and so forth This paper generally focuses on phishing assaults by considering and investigating the PCAP record produced by wire shark at the hour of assault and the outcomes are introduced in an imagined and reasonable organization. Later which the assault will be classified. The other strategy will use the AI calculation. Moreover, various strategies are introduced to forestall the phishing assaults.

1.2 MOTIVATION OF THE PROJECT

The undertaking centres around building a psychological well-being tracker. You will attempt to find out about the psychological condition of your client (at all meddling ways), see whether they are enduring and afterward recommend measures they can remove to get from their current condition. A client responds to certain inquiries and in light of the appropriate responses that they give, you will recommend assignments to them and keep a record of their psychological state for showing on a dashboard. Mental issues are broad in nations from one side of the planet to the other we present, a portable application with that carries out strategies from intellectual conduct treatment (CBT) to help insane individuals in directing feelings and managing considerations and sentiments.

II. LITERATURE SURVEY

Life satisfaction and mental health of Chinese older adults in different living arrangements. In order to compare life satisfaction and mental health status of older adults in different living arrangements, we investigated a sample of 1, 915 Chinese older adults using Satisfaction with Life Scale and Mental Health Inventory for the Urban Elderly. Difference in life satisfaction between three living arrangements is significant even after controlling age, education and income. Life satisfaction of older adults living in elderly apartments is better than those living at home. Income and co-residence with children interact to influence life satisfaction than those living with high income, older adults living alone or with spouse have the greater life satisfaction than those living with children; while among older adults with average and low income, living with or separate form children have no difference on life satisfaction. The result indicates that institutionalized older adults have equal mental health with those living at home and even greater life satisfaction.[1]

Data Science in Public Mental Health: A New Analytic Framework. Understanding public mental health issues using data science and finding solutions based on the findings from the data science projects can be complex and requires advanced techniques, compared to conventional data analysis projects. It is important to have a comprehensive project management process to ensure that project associates are competent and have enough knowledge to implement the data science process. Therefore, this paper presents a new framework that mental health professionals can use to solve challenges they face using data science. Although a large number of research papers have been published on public mental health, few have addressed the use of data science in public mental health. Recently, Data Science has changed the way we manage, analyse and leverage L.G.N.S.C.O.E, Department of Computer Engineering 2021-2022 6 data in healthcare industry. Data science projects. One of the motives for introducing a new framework is to motivate healthcare professionals to use" Data Science" to address the challenges of mental health. Having a good data analysis framework and clear guidelines for a comprehensive analysis is always a plus point. It also helps to predict the time and resources needed in the early in the process to get a clear idea of the problem to be solved.[2]

Jan Bohacik, Ivan Skula, Michal Zabovsky," Benefiting from online mental status examination system and mental health diagnostic system", Computer Science and Information Systems (FedCSIS) 2020 15th Conference on, pp. 27-30, 2020. In this really hectic world, quite a number of people are exposed to situations where mental stress Is unavoidable. This leads to people having all kinds of mental health problems that eventually may turn to chronic mental disorders. People with mental health problems normally have the tendency of not admitting their health problems because of the stigma attached to these kinds of illnesses. Most of them are in denial state, and this situation may cause very serious social problems since people with mental problems will develop some kind of mental disorders, and as a result, they might be harmful to others around them. People with mental health problems must receive proper treatments and medications. If their mental status can be assessed and examined easily, then most probably their mental problems can be detected at a very early stage, and can be easily controlled and cured. The above scenarios become the motivation for conducting this research. This research paper presents some findings on mental health and disorders on past research study's results and also proposes an online mental status examination (MSE) system that examines individuals' mental health status. The result of the MSE system is used in determining whether the respective person needs to undergo a more detailed diagnosis for more specific mental disorders. It is hoped that the outcomes of this research study are able to assist new psychotherapists and psychiatrists in examining and diagnosing those who are affected by some kind of mental disorders in a more efficient manner.

3.1 PROBLEM STATEMENT

Mental health is an important issue in the world today. With a large population now working from home and staying away from loved ones, the mental health situation has deteriorated. As such, it becomes important to track and remedy any problems before they get too serious. We try achieving this using the Companion App. Keeping in mind that users might be suffering from mental illness and wouldn't want to engage much with an app, you'll have to design the app to be very friendly and welcoming.

3.2 GOALS AND OBJECTIVES

- To make a system which is user friendly.
- Security providing to important data of user.
- Tracker the mental Health of user and try to suggest the better way to improve.

4.1 PROJECT SCOPE

The project focuses on building a mental health tracker. You will try to get an idea of the mental state of your user (in the least intrusive ways), find out if they are suffering and then suggest measures, they can take to get out of their present condition.

4.2 PROPOSED SYSTEM

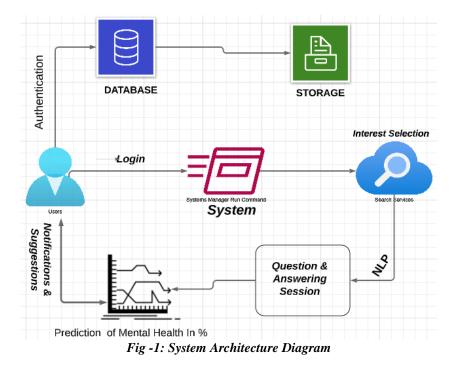
DUE to the rapid development of the Internet, cyber security has become an important research topic, and the energy waste caused by the occurrence of various cybersecurity incidents is immeasurable. In recent years, a large number of Internet companies have stolen user information data, resulting in the intrusion of users' online bank accounts. If the above information leakage incidents occur in the data platform of the relevant departments of the state finance and government affairs, the consequences will be unimaginable. The damage to national cybersecurity will be unprecedented. Web application layer attacks can cause long-term disruption to the resource availability, controllability, confidentiality, and integrity of data. Its influence is very persistent and secretive. A large number of web applications can construct executable commands, SQL injections, XSS and other web attacks simply by embedding executable code or malicious code in URLs. Therefore, the detection of malicious URLs has become the focus of intrusion detection.

4.3 ADVANTAGES

- 1. User friendly system
- 2. Hacking secure
- 3. Centralized system
- 4. Security providing to important data of user
- 5. Avoiding the malicious attacks by hacker

5.1 SYSTEM ARCHITECTURE

Application asks the user on a daily basis on events that occurred and on emotions. It determines automatically the basic emotion of a user from the natural language input using natural language processing and a lexicon-based approach. Depending on the emotion, an appropriate measurement such as activities or mindfulness exercises are suggested by application.



5.2 APPLICATIONS

- 1. Industrial
- 2. Hospitals
- 3. Personal

6. CONCLUSION

We are overcoming the drawback of existing system, and providing a smart system that will not only monitor user mental health with security but also show recommendation whenever necessary. The undertaking centres around building an emotional wellness tracker. You will attempt to find out about the psychological condition of your client (at all meddling ways), see whether they are enduring and afterward propose measures they can remove to get from their current condition. A client responds to certain inquiries and in view of the appropriate responses that they give, you will recommend errands to them and keep a record of their psychological state for showing on a dashboard.

REFERENCES

- Y. Zeng and Z. Wang," Chinese family and change in living arrangement among the elderly," China Population Science, 5, 2020, pp.2-8 (in Chinese), Doi: CNKI: SUN: ZKRK.0.2004-05-000.
- [2]. M. Silverstein, Z. Cong and S. Li," Intergenerational transfers and giving arrangements of older people in rural China: Consequences for psychological well-being," The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, vol. 294, 2019, pp. 256-266.
- [3]. F. Chen, and S. Short," Household context and subjective well-being among the oldest old in China," Journal of family issues, vol. 29, 2018, pp. 1379-1403, doi:10.1177/0192513X07313602.
- [4]. D. Li, T. Chen and Z. Wu," Life satisfaction of Chinese elderly and its related factors," Chinese Mental Health Journal, vol 22, 2020, pp 543-549 (in Chinese).
- [5]. L. Li and J. Liang," Social exchanges and subjective well-being among older Chinese: Does age make a difference?" Psychology and aging, vol. 22, 2021, pp. 386-391, doi:10.1037/0882-7974.22.2. 386.
- [6]. V.L. Patel, J.F. Arocha and A.W. Kushniruk," Patients' and physicians' understanding of health and biomedical concepts: relationship to the design of EMR systems", Journal of biomedical informatics, vol. 35, no. 1, pp. 8-16, 2009.
- [7]. P.B. Jensen, L.J. Jensen and S. Brunak," Mining electronic health records: towards better research applications and clinical care", Nature Reviews Genetics, vol. 13, no. 6, pp. 395-405, 2018.
- [8]. R. Hillestad, J. Bigelow, A. Bower, F. Girosi, R. Meili, R. Scoville, et al.," Can electronic medical record systems transform health care? Potential health benefits savings and costs", Health affairs, vol. 24, no. 5, pp. 1103-1117, 2021.
- [9]. S. Riahi, I. Fischler, M.I. Stuckey, P.E. Klassen and J. Chen," The value of electronic medical record implementation in mental health care: a case study", JMIR Medical informatics, vol. 5, no. 1, pp. e1, 2020.
- [10]. E.R. Hong, J.B. Ganz, L. Neely, M. Boles, S. Gerow and J.L. Davis," A meta-analytic review of family-implemented social and communication interventions for individuals with developmental disabilities", Review Journal of Autism and Developmental Disorders, vol. 3, no. 2, pp. 125-136, 2022.