



AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH

SOFTWARE ENGINEERING (SPRING 2023-2024)

Group 2: Section: B

Project Proposal Title:

Tracking Mental Health Through Web and Mobile Check-Ins

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PROJECT PROPOSAL

1. Problem statement:

The modern era recognizes the importance of mental health to total wellbeing, leading to a significant increase in awareness of the issue in recent years. However, there remains a significant gap in providing individuals accessible resources to enable them to regularly evaluate their mental health and take proactive steps to improve it. Therefore, the proposed project recognises this gap and aims to address it by creating advanced software solution that makes use of machine learning to monitor users' mental health, assigning personalized activities, and tracking system. This will provide users with the tools and resources to support them on their journey towards improved mental health.

2. Background description:

As per the World Health Organization (WHO), one out of each and every four people on the planet experiences a psychological or neurological issue, and around 450 million individuals overall are presently experiencing dysfunctional behavior (Yadav, 2022). The Mental Health Check-in App is a user-friendly platform for understanding and managing emotions during challenging times. The app offers informative articles, audio files, and a structured questionnaire to gauge symptom intensity. Users can track their moods, gaining insights into factors like sleep and medication. The app goes beyond tracking, providing actionable insights, cultivating skills like mindfulness, and allowing users to design personal experiments, such as tracking the impact of specific foods on mood. This multifaceted approach sets the app apart, making it a valuable tool for mental health improvement. According to experts, such an App can be most effective when used in conjunction with medicine and/or in-person counseling. Clinicians can also use the App to collect data about their practices (Yadav, 2022).

3. Project objective:

The primary objective of the Mental Health Check-in App project is to develop a user-centric mobile application aimed at enhancing mental well-being. The app intends to achieve the following goals:

- ❖ **Enhance Mental Well-being:** Create a user-centric mobile app to foster a deeper understanding of emotional experiences during challenging periods.

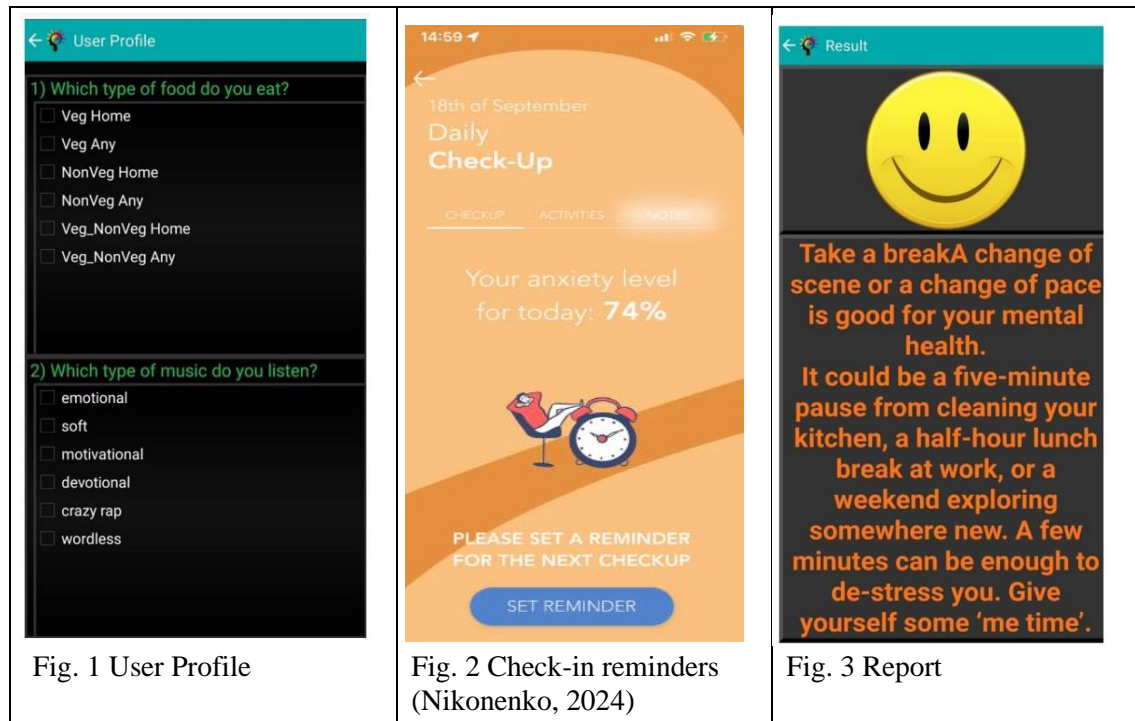
- ❖ **Self-Assessment:** Incorporate a structured questionnaire for users to gauge the intensity of symptoms systematically.
- ❖ **Empower Decision-Making:** Provide actionable insights to empower users in making informed decisions about their mental well-being.
- ❖ **Skill Cultivation:** Cultivate skills like appreciation and mindfulness through daily exercises for overall mental health improvement.

4. Functionality:

Provided below are the main functionalities of the app:

- ❖ **Structured self-assessment:** provide a well-designed questionnaire to enable users to gauge the intensity of their symptoms systematically.
- ❖ **Skill development:** offer short, daily exercises for users to cultivate skills like mindfulness and appreciation, contributing to overall mental health improvement.
- ❖ **Mood monitoring:** users can log their current mood, emotions, and any relevant factors such as sleep, exercise, or medication. This data is then aggregated and presented over time in a visual format, in the form of charts or graphs, allowing users to observe patterns and trends in their mood.
- ❖ **Experimental monitoring:** allow users to monitor and analyze the results of their personalized experiments within the app and get suggestions for their improved well-being. Based on the questions asked in the profile question page, the report shown in Fig. 2 will be generated (Bhilawade, 2022).
- ❖ **Professional assistance:** allow users to get in touch with knowledgeable Psychiatrist' for assistance. A list of psychiatrists' brief work profile will be accessible to users that will include their information like qualifications, areas of expertise and chamber details to locate them and schedule convenient meetings.
- ❖ **Patient profile:** to manage essential information of users including their name, age, and unique ID's.

- ❖ **Weekly check-in reminders:** receive timely notifications to ensure frequent check-ins.
- ❖ **Reward system:** users can earn recognition through achievement badges, such as 4- and 5-star ratings.



5. Target user:

The App is designed for a diverse user base seeking proactive mental well-being tools. Individuals facing challenges such as worry, sadness, or stress can benefit from its supportive features. Additionally, self-help enthusiasts looking for personal well-being or personal development resources, busy professionals with hectic schedules seeking convenient mental health management, and students having academic pressures and seeking emotional support can find value in the app.

6. Conclusion:

In conclusion, the Mental Health Check-in App stands as an adaptable and inclusive solution, offering support to individuals facing various mental health challenges. With its user-friendly interface and flexible features, the app is positioned to empower a diverse audience, encouraging active participation in the journey towards improved mental well-being.

References:

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