Synopsis Submission details

Date : - August 21, 2023 Time : - _____

Project Proposal Group no.: - 10S

(Co-ordinator's Copy / Int. Guide's Copy) Internal Guide: -

Prof. Manasi Pathade

Duration of Project: - 6 months (6/4/3/2)

Title of the Project : - Mental Health App

Subject area : - App Development, Machine Learning, Cloud

Nature of the Project : - Software

Group member information: -

Full name (Starting with Surname)	Roll no.
Chawardol Avani Ranjit	4119
Desai Shreeya Satish	4126
Kale Janhavi Ramesh	4143
Retharekar Sakshi	4237

Academic Year : - 2023 - 2024

Cummins College of Engineering for Women, Karvenagar, Pune – 411052.

Department: Electronics and Telecommunication.

PROPOSAL CONTENTS

1) Problem statement of the Project : -

To develop a user-friendly mobile application that promotes self-care and addresses mental health. The goal is to improve users' overall wellbeing while offering individualized tools for managing and enhancing emotional and mental health.

2) Introduction: -

In the age of constant connectivity and demanding lifestyles, the quest for improved mental well-being and enhanced effectiveness has taken center stage. In today's fast-paced world, finding a balance between feeling good and getting things done can be a challenge. This introduction explores an exciting project: making a new app that helps people improve their mental well-being and get more things done. By combining practical strategies for mental health, personal growth, and productivity, this app aims to change how people live their daily lives for the better.

Our lives are often filled with stress, anxiety, and the pressure to do more. This app idea came about because we believe there's a need for a tool that can help people manage their mental well-being and be more effective in their lives. By bringing together helpful techniques and tools, this app could be a game-changer for anyone looking to feel better and accomplish their goals.

Literature Survey:

A Mental Health Tracker App using Flutter and Firebase: This app provides users valuable insights into their emotional state and provide personalized recommendations for improving their mental health. They have used sentiment analysis and lexicons for promoting early detection and intervention for mental health issues and for supporting users in their mental well-being.

Mobile Applications in Mood Disorders and Mental Health: Systematic Search in Apple App Store and Google Play Store and Review of the Literature: In this project, the authors conducted a systematic search in the Apple App Store and Google Play Store to identify mobile applications related to mood disorders and mental health. The authors identified a total of 2.209 applications related to mood disorders and mental health in the app stores. After applying inclusion and exclusion criteria, they selected 57 applications for further evaluation. These applications covered a range of mental health conditions, including depression, anxiety, bipolar disorder, and stress. The authors concluded that mobile applications have the potential to be a valuable tool for promoting mental health and well-being. However, they emphasized the need for further research to evaluate their effectiveness and to ensure that they are developed in a way that is evidence-based and user-centered. [3]

There are several existing mental health apps which provide mood tracking, habit tracking, self-care, etc. Some of these popular apps are Wysa, Head Space, Calm and many more. Some of these existing apps provide few features which are mentioned in the table below. These mental health apps have received positive feedback from users. However, there can be more development in this area.

The main goal of this project is to create an app that gives people the power to take control of their mental well-being while also improving their ability to get things done. Imagine an app where you can find ways to manage stress, anxiety, and other challenges. This app will also

provide guided exercises and tips to help users become more aware of themselves and make positive changes in their behavior. This app will have a variety of useful features designed to help people feel better and work smarter. Users will find evidence-backed strategies for handling stress and anxiety. There will be step-by-step mindfulness exercises and tools based on what science tells us works. The app will also help users get organized and focused by offering methods for managing time, setting priorities, and tracking goals.

Competitive Analysis											
App Name	Exclusive Features	Self - care	Meditation	Journaling	Mood Tracker	Habit Tracker					
Wysa	Voice support in chat	✓		√							
Calm	Meditations, Stories, Music, Soundscapes		√		V						
Head Space	Meditation and workout as per mood	✓	√		V						
Habit Now	Tracking habits, Organizing tasks			√		V					
Stoic	Mental health journaling, Self Assessment	√	√	√	V						
Simple Habit	Meditation, Guided Sleep Stories	√	√			V					
Inner Hour	Guided Sleep Stories, Channeling emotions	V	✓		V						
Done	Setting goals, Tracking progress	√		√		√					

3) Specifications of the proposed ENTIRE SYSTEM: -

1. User Registration:

- User account creation and login.
- Onboarding process to gather user information and goals.

2. Dashboard:

- Overview of user's progress, goals, and achievements.
- Visual representation of well-being and productivity metrics.

3. Mental Health Support:

- Relaxation activities like Journaling, Meditation and Positive Reminders.
- Community support via User Groups & Meetups and Online Events for Connections.

4. Trackers:

- Mood and Habit Tracking functionality.
- Social Media Apps Tracking.

5. Self-Care:

- Empathy Map Self-Care and Pains & Gains Survey
- Monitoring sleep schedule.

6. Data Security and Privacy:

- Strong data encryption for user information and personal data.
- Privacy settings to control data sharing and visibility.

4) Methodology proposed for achieving the end-result (output): -

- 1. We have done study on user preferences and mental health procedures, methods, and practices.
- 2. Designed prototypes and wireframes to represent user journeys.
- 3. To facilitate user-to-user help, we must create interactive forums and discussion boards.
- 4. The pillars of our strategy are personalization, expert cooperation, data security, community participation, and iterative development.

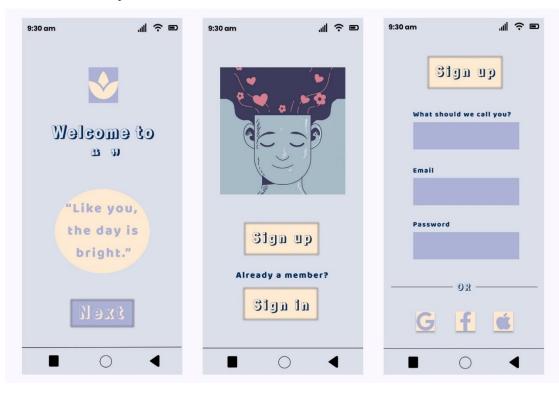
1. Platforms:

Android / iOS mobile applications.

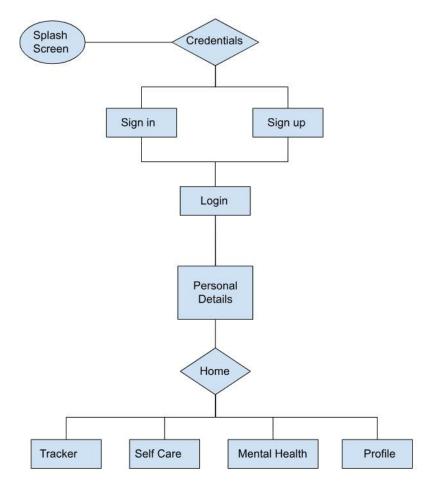
2. Technology Stack:

- Front-end: Flutter Dart / Android Studio (Java).
- Database: Firebase for data storage.
- Cloud Services: Integration with cloud services for data backup and synchronization.

a) Real-life view of the System



b) Block schematic: -



5) Resources required: -

Software: Android Studio, VS Studio

6) Possibility of demonstrating the Project's working in the College premises during the Final exam: -

Yes

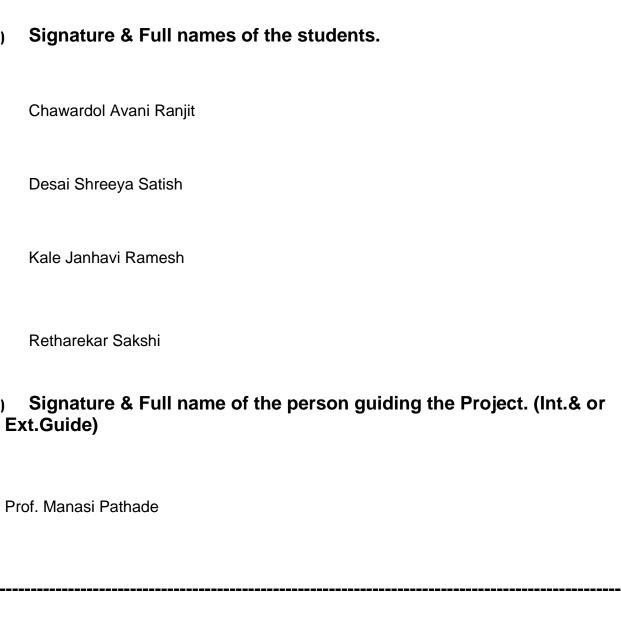
- 7) Approximate Time required for completing the Project: -
 - 6 Months
- 8) Work Plan (to be PASTED / ATTACHED here)
- 9) Cost of the Project: (Bill of Materials)

Sr.	Name of the	Specifications	Qty.	Cost
No.	Component / Device		-	

References: -10)

- [1] 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.
- [2] Won Ju Hwang, Ji Sun Ha, and Mi Jeong Kim, "Research Trends on Mobile Mental Health Application for General Population: A Scoping Review".
- [3] Sophie Eis, Oriol Solà-Morales, Andrea Duarte-Diaz, Josep Vidal-Alaball, Lilisbeth Perestelo-Pérez, Noemi Robles and Carme Carrion, "Mobile Applications in Mood Disorders and Mental Health: Systematic Search in Apple App Store and Google Play Store and Review of the Literature".

11)



WORK PLAN / Work COMPLETED

	1																									
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1. Literature Survey & Concept development																										
2. Specifications of ENTIRE SYSTEM																										
3. System-level design (Block Schematic)																										
4. Real-life Layout of the ☐ System																										
5.																										
6. Detail design (Software Programming of each Block)																										
a) Break up Task 6□																										
b) into suitable stag				$\vdash \vdash$																					<u> </u>	-
c) 7. Validation of each module's Design (Software) thro'. SIMULATION																										
8.				\vdash	-																					
9.																										
10. Integration & Testing of the Complete System																										
11. Internal Project Demo.																										
12. Project Report (with Plagiarism Check)				\coprod																						
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