***MentoBliss***

Problem Statement :-

Mental stress has become a widespread issue, affecting millions of people globally.

The lack of awareness and timely intervention often leads to prolonged mental stress, impacting individuals' overall health and productivity. The need for accessible and proactive mental health solutions has never been more critical.

* 51% of adults who felt stressed reported feeling depressed, and 61% reported feeling anxious.
* Of the people who said they had felt stress at some point in their lives, 16% had self-harmed, and 32% said they had had suicidal thoughts and feelings.
* 37% of adults who reported feeling stressed reported feeling lonely as a result.

Data source : https://www.mentalhealth.org.uk/

Our application aims to address this problem by providing a comprehensive platform for stress detection and care.

Our Approach :-

We take a holistic approach to mental health by combining the following –

**1. Research and Planning:**

* Conduct thorough research on mental stress, symptoms, and relevant factors.
* Considering legal and ethical aspects related to mental health applications.

**2. Application Development:**

* Train and validate the stress detection model.
* Design an intuitive User Interface (UI) and User Experience (UX) with seamless integration of features.
* Providing assistance to handle mental stress.

**3. Collaboration:**

* Collaborate with mental health organizations, professionals, or academic institutions to enhance credibility and reach.

Key Features:

1. *Personalized Stress Level Detection* –

Our app employs intelligent algorithms to assess and track individual stress levels, enabling personalized care and support.

1. *Access to Educational Modules –*

Empower yourself with evidence-based learning modules covering various topics related to stress management and mental well-being.

1. *Connect with Mental Health Professionals –*

Easily find and connect with qualified mental health doctors who can provide guidance and treatment options tailored to your needs.

1. *Talk to Compassionate Volunteers –*

Share your feelings and concerns with our supportive network of volunteers. Sometimes, a listening ear can make all the difference.

Technology Stack :

1. Android –

Firebase - For authentication and data storage.

API's for navigation - to provide uninterrupted navigation.

1. Intuitive User Interface –

Animation, Gradient, style for interactive UI to offer a seamless and user-friendly experience.

1. Machine Learning –

Python, Numpy, Pandas, Matplotlib to process the data for training.

TensorFlow Lite for integration of ML model into the app

Using Machine Learning for Stress Level Prediction :

Our app leverages the power of machine learning algorithms to analyze user responses and predict stress levels. This enables us to offer personalized recommendations and interventions for effective stress management.

We collect data such as sleeping hours, heart rate, blood oxygen levels etc. from the user based on which the prediction of his/her stress level will be made.