Abstract

Mental health issues are a growing concern, requiring accessible and effective solutions for individuals to monitor and manage their well-being. **SereniMind** is a web-based application designed to analyze users' psychological and mental health conditions, offering personalized recommendations and interactive tools for stress management. The platform utilizes **machine learning models** to assess stress levels and provides actionable insights through **data visualization techniques** using **Plotly**.

SereniMind features **stress analysis, stress detection using K-Nearest Neighbors (KNN), music therapy, exercise recommendations, interactive quizzes, and games** to help users relax and improve their mental health. The platform also includes a **secure authentication system** using **Flask-Login**, ensuring user privacy and personalized experiences. Built with **Flask, SQLite, Pandas, NumPy, and Scikit-learn**, SereniMind is deployed on **Heroku** for seamless accessibility.

By integrating **machine learning, data analytics, and interactive wellness tools**, SereniMind empowers users to take proactive steps in managing their mental health. It serves as a supportive platform for individuals seeking mental health assistance, offering self-care strategies and the option for professional consultation when necessary.