DON BOSCO INSTITUTE OF TECHNOLOGY BENGALURU

Department of CSE(AI&ML)

Academic year:2023-24 (Event)

Mini Project (21AIMP67) (6th Semester)

Project Title: Human Stress Analyzer

Abstract: Interactive Human Stress Level Assessment using Python

This web app offers a simple and accessible way to understand your stress levels. Unlike other methods that rely on video or sensors, this app uses sliders to gather information about your current state (mood, sleep, workload, etc.). Behind the scenes, a machine learning model analyzes your input and estimates your stress level. With clear results and potential next steps, this app empowers you to take charge of your well-being and explore stress management strategies.

Keywords: Well-being, Stress management

Problem Statement: While various methods exist for stress detection, such as video analysis or physiological monitoring, they can be intrusive, expensive, or require specialized equipment. There is a need for a more accessible and user-friendly approach to assess stress levels for individuals seeking to manage their well-being.

Objectives:

1. Primary Objective: Develop a web application that estimates a user's current stress level based on self-reported information.
2. Secondary Objective: Raise awareness about stress and its associated features through informative text or graphics within the application.
3. Additional Considerations: To ensure User-friendliness, increase accuracy of the model and easy Accessibility.

Outcome:

Empowerment: Users gain control by understanding their stress levels and exploring personalized management strategies.

Stress Awareness: The app sparks self-reflection and helps users identify stress triggers.

Well-being Boost: Reduced stress can lead to better sleep, focus, and overall mental health.

Language / Software Tools used:

Language: Python: Versatile for web dev, machine learning, and data analysis.

Web Frameworks: Streamlit (Simple): Easy to build interfaces with sliders and results.

Machine Learning Libraries: scikit-learn (Basic), TensorFlow/Keras (Advanced)

Group Members Names:

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