

## Proposal: AI Mental Fitness Tracker

### Research Question:

The aim of this project is to develop an AI-powered mental fitness tracker that can help individuals (employees, students) track their mental health and well-being. Specifically, we seek to investigate how machine learning (ML) techniques can be used to analyze various data sources, such as remote work benefits, work life balance, wellness programs, gender ratio, ability to take leave without feeling guilty, rapport with manager and coworkers, family history to provide personalized insights and recommendations to improve mental health and well-being.

### Initial Literature Review:

Mental health and well-being are crucial for overall health and productivity for working people and students. Working individuals and students are often faced with high levels of stress and pressure that can impact their mental health and well-being. The use of digital tools, such as mental health apps, has become increasingly popular in recent years, and advancements in AI technology have made it possible to develop intelligent mental fitness trackers that can help working individuals track and improve their mental health. The research in the field of ML has demonstrated that these techniques can be used to analyze various data sources, such as mood logs and work patterns, to provide personalized insights and recommendations to improve mental health and well-being. The impact of few therapies such as music and meditation on improving mental health will also be explored.

### Data Collection Plan:

The data for this research project will be collected from working individuals and students who are interested in tracking their mental health and well-being. The data will include mood logs, sleep patterns, physical activity data, and other relevant data sources. The data will be collected using a variety of methods, including mobile apps, wearables, and online surveys. The data will be anonymized to maintain privacy of the user.

We will use the data to train the mental fitness tracker using state-of-the-art ML algorithms, such as deep learning and clustering algorithms. The mental fitness tracker will be designed to provide personalized insights and recommendations to help individuals improve their mental health and well-being. The mental fitness tracker will use the data to identify patterns and trends in the user's mental health and provide recommendations, such as meditation or exercise, to improve mental well-being.

Features: To develop a mental fitness tracker for working individuals and students, we will use work-related stressors and work schedule as key features. These features can include work-related or school-related stress factors such as workload, job satisfaction, and job demands, as well as work schedule factors such as the number of hours worked, work flexibility, and commute time. These features will be used to help identify patterns and trends in the user's mental health and provide personalized recommendations to improve mental health and well-being.

#### Conclusion:

This project aims to contribute to the research in the field of AI and mental health by investigating the use of ML techniques in developing a mental fitness tracker that can provide personalized insights and recommendations to improve mental health and well-being for working individuals. By developing a mental fitness tracker that can analyze various data sources, including work-related stressors and work schedule, we hope to provide working individuals with personalized insights and recommendations to improve their mental health and well-being.