

Title: MindScale: An AI-Driven Mental Wellness Portal for the DeKUT Community

Abstract

Mental health challenges among university students and staff often go unaddressed due to social stigma and limited access to resources. This project introduces MindScale, a web-based mental wellness portal designed specifically for the Dedan Kimathi University of Technology (DeKUT). The system leverages a Machine Learning backend, utilizing Logistic Regression and Decision Tree algorithms to classify users into low, moderate, or high-risk categories based on role-specific inputs. Developed using a Flask-based API and an HTML/CSS frontend, MindScale provides a secure, anonymous environment for early distress detection. By offering personalized, role-based recommendations for both students and staff, the platform bridges the gap between the onset of psychological distress and professional intervention. MindScale represents a shift toward "Ethical Innovation," prioritizing user privacy while providing the university administration with anonymized insights for better resource allocation.