## **VitalStep**

## **ABSTRACT**

VitalStep is a web-based counsellor management platform designed to simplify the workflows of mental health professionals while enhancing patient outcomes. It offers a comprehensive solution for managing appointments, patient records, session notes, and therapy plans, empowering counsellors to deliver more efficient care. The integration of machine learning (ML) enhances the platform by offering predictive analytics, sentiment analysis, and personalized therapy recommendations, providing counsellors with insights to track patient progress and adjust therapy plans. Unique features such as an interactive patient portal, self-assessment tools, and progress reports offer patients greater involvement in their therapy process. By addressing the inefficiencies of traditional systems, VitalStep provides a secure, user-friendly, and data-driven platform designed to streamline mental health care.

The platform is built using modern technologies such as HTML/CSS, React, and PHP for the frontend and server-side functionality, while Python libraries like scikit-learn and TensorFlow are employed for ML-based predictions and data modelling. With a dynamic calendar, session tracking tools, and scalable architecture, VitalStep is designed to support both individual counsellors and larger clinics. One of the standout features of VitalStep is its ability to combine administrative management with advanced ML tools, offering both efficiency and personalized care. Ultimately, VitalStep aims to improve the effectiveness of counselling practices, ensuring better engagement for patients and streamlined operations for mental health professionals.