**Topic Area: Health sector**

**Project:** Predict the likelihood of chronic diseases such as diabetes, depression, dementia, cardiovascular diseases in Australian populations.

*Note: A specific disease will be chosen based on the quality of dataset we get.*

**Model:** Use machine learning models like Logistic Regression or Deep Neural Networks.

**General Research Questions**

*Prediction Accuracy:* How accurately can we predict the onset of chronic diseases using demographic, lifestyle, and medical data from Australian populations?

*Feature Importance:* Which features (e.g., age, gender, lifestyle factors, medical history) are the most important predictors for each chronic disease?

*Model Performance:* How do different machine learning models (e.g., Logistic Regression, Decision Trees, Neural Networks) compare in terms of prediction accuracy and robustness?

Proposed Target for prediction accuracy: **80 percent.**

**Data source:** Use datasets from Keggle, Australian Institute of Health and Welfare (AIHW), Health Data Australia, ABS, or state health departments.