**Project Proposal: Obesity Risk Prediction for Cardiovascular Disease Prevention**

**Problem/Application:**

The project aims to address the critical issue of predicting obesity risk as it relates to cardiovascular disease (CVD) prevention. Obesity is a major risk factor for CVD, and early identification of individuals at risk can facilitate targeted interventions to mitigate this risk and promote healthier outcomes.

**Methods to be Tested or Implemented:**

I will explore various machine learning algorithms to develop predictive models for assessing obesity risk. Methods such as logistic regression, random forests, support vector machines, and neural networks will be tested to identify the most effective approach. Ensemble methods may also be implemented to enhance predictive accuracy and robustness.

**Data Sets to be Used:**

I will be using data collected from Kaggle to with features such as Gender, age, height, weight, family\_history, FAVC, Smoke, CALC, NObeyesdad etc

Kaggle : <https://www.kaggle.com/competitions/playground-series-s4e2/data>

**Deliverables:**

**Predictive Models**: Development of machine learning models capable of predicting obesity risk based on various factors.

**Model Evaluation Report:** Comprehensive evaluation of the developed models, including performance metrics and comparative analyses.

**Documentation**: Detailed documentation outlining the methodology, data sources, model development process, and ethical considerations.

**Presentation:** A presentation summarizing the project objectives, methodologies, findings, and potential impact for stakeholders.