Analysis Report

Classification Model.

**This project is focused on the healthcare industry for identifying heart disease.**

**Purpose:**

* Develop a model to predict the likelihood of patients developing chronic heart disease and accurately identify individuals with heart disease.
* Assessing whether the model can enhance early prediction capabilities may enable timely intervention and effective management of heart disease.
* Uncover patterns, distributions, and relationships within the data
* Evaluate the high recall of the True positive case

**Note**: high recall is of utmost importance in a medical context, where missing a patient with potential heart disease could have dire consequences.

**Results:**

**Based on our classification report on recall value. the following result was recorded.**

Value for recall:

* **K-Nearest Neighbors (KNN):88%**
* **Support Vector Machine (SVM):95%**
* **Random Forest:83%**
* **Decision tree:**
* **Logistic Regression:**
* **Neural Network:90%**

**Summary:**

Based on the results on recall value, our team recommend using the support vector machine to help identify any presence of heart disease. The **SVM** identified the most heart disease. With recall value of 95%. This will help control the consequences of having heart disease and early intervention for treatment.