**PROJECT OUTLINE**

Cardiovascular diseases (CVDs) are the number 1 cause of death globally, taking an estimated 17.9 million lives each year, which accounts for 31% of all deaths worldwide. Four out of 5 CVD deaths are due to heart attacks and strokes, and one-third of these deaths occur prematurely in people under 70 years of age. Heart failure is a common event caused by CVDs and this dataset contains 11 features that can be used to predict a possible heart disease. People with cardiovascular disease or who are at high cardiovascular risk (due to the presence of one or more risk factors such as hypertension, diabetes, hyperlipidaemia or already established disease) need early detection and management wherein a machine learning model can be of great help. Machine learning has shown great potential in predicting heart failure mortality, which can aid in early detection and management of CVDs. In this heart failure prediction project, we aim to develop a machine learning model to predict mortality by heart failure using the dataset given

**PURPOSE**

* Explore the use of other machine learning algorithms such as deep learning, reinforcement learning, or hybrid models to improve the accuracy of the heart attack prediction model.
* Incorporate additional features, such as patient lifestyle and behavioral factors, to provide more comprehensive risk assessments.
* Create a user-friendly application or web-based interface that healthcare providers can easily use to access the model's predictions and integrate them into patient care plans