Prediction and Visualisation of Heart Disease with Interactive Dashboard

Literature Survey:

Heart diseases have emerged as the number one killer in the world according to the largest ever study of deaths and is considered the deadliest. About 25 per cent of deaths in the age group of 25- 69 years occur because of heart diseases.

It is difficult to control most of these heart diseases as they are diagnosed at later stages at which aggravates the problem. Quick diagnosis, early treatment and constant observations is essential for patients who suffer from heart diseases. Moreover, cardiologists often diagnose cardiovascular disease based on current clinical tests and previous experience in diagnosing patients with similar symptoms.

An enormous amount of data, so-called big data generated by the healthcare industries accommodates hidden knowledge or pattern for decision making. The huge volume of data is used to make decision which is more accurate than intuition based on very few data of the person available with the hospital . A set of important feature scores and rules were identified in diagnosing heart disease and cardiologists were consulted to confirm the validity of these rules.

An unsupervised learning algorithm like k mean clustering would enable us to carefully analysis the stats based on different parameters and predicts the likelihood of the occurrence of the Heart disease.

References:

1)Visualization and Prediction of Heart Diseases Using Data Science Framework | IEEE Conference Publication | IEEE Xplore
2)(4) (PDF) Early Prediction of Heart Diseases Using Data Mining Techniques (researchgate.net)
3) A novel approach for heart disease prediction using strength scores with significant predictors | BMC Medical Informatics and Decision Making | Full Text (biomedcentral.com)
4)(4) (PDF) Heart Disease Prediction using Exploratory Data Analysis (researchgate.net)