## HEART DISEASES PREDICTION USING DATA MINING TECHNIQUES

### VI SEMESTER IT8611 MINI PROJECT REPORT

Submitted by

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# in INFORMATION TECHNOLOGY



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#### **BONAFIDE CERTIFICATE**

Certified that this project report "HEART DISEASES PREDICT DATA MINING TECHNIQUES" is the bonafide work of MANOJ M (312417205026), YUVARAJ R (312417205058), ZAKIR HUSSAIN (312417205059) who carried out the project work under my supervision, for the partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Information Technology.

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#### **ABSTRACT**

Data Mining is the most popular knowledge extraction method for knowledge discovery (KDD). The healthcare industry contains a huge amount of data. But most of it is not effectively used. Heart disease is one of the main reasons for the death of people in the world. Nearly 47% of all deaths are caused by heart diseases. We use four algorithms including Decision Table Hoeffding Tree, Naïve Bayes and Sequential Minimal optimization to predict heart diseases. Accuracy of the prediction level is high when using more number of attributes. Using ROC curve, the prediction technique is identified effectively. Our aim is to perform predictive analysis using these data mining techniques on heart diseases and conclude which techniques are effective and efficient.

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#### LIST OF ABBREVIATIONS

Abbreviation	Expansion	Page No
ARFF	Attribute-Relation File Format	6
WEKA	Waikato Environment for Knowledge Analysis	17
SMO	Sequential Minimal Optimization	20
ROC	Receiver Operating Characteristic Curve	30

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