CONTENTS

Table of Contents	**Page No**
Title Page	I
Declaration	II
Certificate	III
Approval Sheet	IV
Acknowledgement	V
Abstract	VI
Contents	VII
List of Figures	IX
List of Tables	X
Chapter 1 - Introduction	1
1.1 Introduction	1
1.2 Objectives	2
1.3 Feasibility	3
1.4 Existing Methodologies	4
1.5 Proposed Methodology	6
1.5.1 Data Preprocessing	6
1.5.2 Feature Selection Techniques	6
1.5.3 Classifier Training and Testing	7
1.5.4 Evaluation Metrics	7
1.6 Implementation Details	7
1.7 Analysis and Discussion	8
1.8 Significance of study	8
1.8.1 Advancement of Non-Invasive Diagnostics	8
1.8.2 Enhanced Predictive Accuracy and Reliability	9
1.8.3 Optimization of Clinical Decision Support Systems	10
1.8.4 Cost-Effective Screening Solutions	10
1.8.5 Empowering Healthcare in Resource-Limited Regions	11
1.8.6 Data Collection	12
1.8.7 Data Preprocessing	12
1.8.8 Feature Selection	13
1.9 Model Building	14
1.9.1 Model Training	14
1.9.2 Scope of the Study	15
1.9.3 System Requirements	16
Chapter 2 - Review of Relevant Literature	18
Chapter 3 - Methodology	24
3.1 Project Structure	25
3.2 Statistical Feature	30
3.3 Numerical Distribution	32
3.4 ROC Curves	35
Chapter 4 - Results and Discussions	37
4.1 MRMR Model Results	37
4.2 ANOVA Model Results	38
4.3 FCBF Model Results	39
4.4 LASSO Model Results	40
4.5 RELIEF Model Results	41
4.6 Accuracy of Each Model	42
4.7 Accuracy Table	42
4.8 Confusion Matrix Table	43

4.9 Pearson Correlation and Confusion Matrix 44
Chapter 5 - Conclusions and Future Scope 45
5.1 Conclusion 45
5.2 Future Scope 45
References 46