# TEST PLAN OUTLINE (IEEE 829 FORMAT)

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# IEEE TEST PLAN TEMPLATE

## TEST PLAN IDENTIFIER

A Heart Attack Prediction Model using ML algorithms and Deep Neural Networks

## REFERENCES

## SRS

## Project Plan

## SOW

## INTRODUCTION

The purpose of this system test plan document is to write, test cases, test scripts and test script automation for Heart Fail Prediction project

## TEST ITEMS (FUNCTIONS)

Following are test items:

* Inputs of medical parameters
* Tuning of Deep Neural Network using epochs
* Display of prediction by all models

## SOFTWARE RISK ISSUES

* + Nill

## FEATURES TO BE TESTED

## Decision Tree

## Random Forest

## Logistic Regression

## KNN

## Naïve Bayes

## SVM

## Deep Neural Networks

## FEATURES NOT TO BE TESTED

## Nill

## APPROACH (STRATEGY)

Through the input we will check if a given parameters of a heart attack patient gives positive result

E.g: Age: 58, Sex: 0, cp:0, trestbps:100, chol:248, fbs:0, restecg:0, thalach:122, exang:122, oldpeak:1, slope:1, ca:0, thal:2 . Result: 1

Age: 60, Sex: 1, cp:2, trestbps:140, chol:185, fbs:0, restecg:0, thalach:155, exang:0, oldpeak:3, slope:1, ca:0, thal:2 . Result: 0

## ITEM PASS/FAIL CRITERIA

## We pass repeatedly many parameters of heart patients and verify if the model is accurate on the results.

## SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

We use following suspension criteria for the test activities. For heart prediction project if we write 20 test cases, out of 20 if 25% that is, 5 test cases fail, we suspend the system test activities. The developers have to provide the build again for resuming the testing.

## TEST DELIVERABLES

## Test Plan

## Test Script

## Test Cases

## Test Script Automation

## REMAINING TEST TASKS

Nill

## ENVIRONMENTAL NEEDS

## Nill

## STAFFING AND TRAINING NEEDS

Staff for 1 week to develop, and test the model

## RESPONSIBILITIES

## Developing team is responsible for building of the program. Test team is responsible for all the deliverables mentioned above.

## SCHEDULE

October 1st week

## PLANNING RISKS AND CONTINGENCIES

Nill

## APPROVALS

## Development Team

## Project Manager

## Product Manager

## Customer

## GLOSSARY

SRS: Software Requirement Specification

SVM: Support Vector Machine

KNN: K-Nearest Neighbors

ECG: Electrocardiography