Project Report Titles

1 INTRODUCTION 1.1 OverviewCardiovascular diseases (CVDs) are the no.1 cause of death globally, taking an estimated 17.9 million lives each year, which accounts for 31% of all deaths worldwide. Heart failure is a common event caused by CVDs and this dataset contains 9 features that can be used to predict mortality by heart failure.1.2 Purpose

Heart failure is a common event caused by CVDs and this dataset contains 9 features that can be used to predict mortality by heart failure.

2 LITERATURE SURVEY 2.1 Existing problem

the prediction of heart failure due to CVDs by Using Watson Studio

We considered the following data point

AVGHEARTBEATSPERMIN

PALPITATIONSPERDAY

CHOLESTEROL

BMI

AGE

SEX

FAMILY HISTORY

SMOKERLAST5YRS

EXERCISEMINPERWEEK

2.2 Proposed solution

Machine learning, Auto AI using Watson studio- to build a model using Auto AI and build a web application where we can showcase the prediction of heart failure.

We followed the following steps for acheiving the solution

Log in to IBM account

Create IBM Watson Studio and Node-RED Service

Create a Watson studio project

ADD Auto AI Experiment

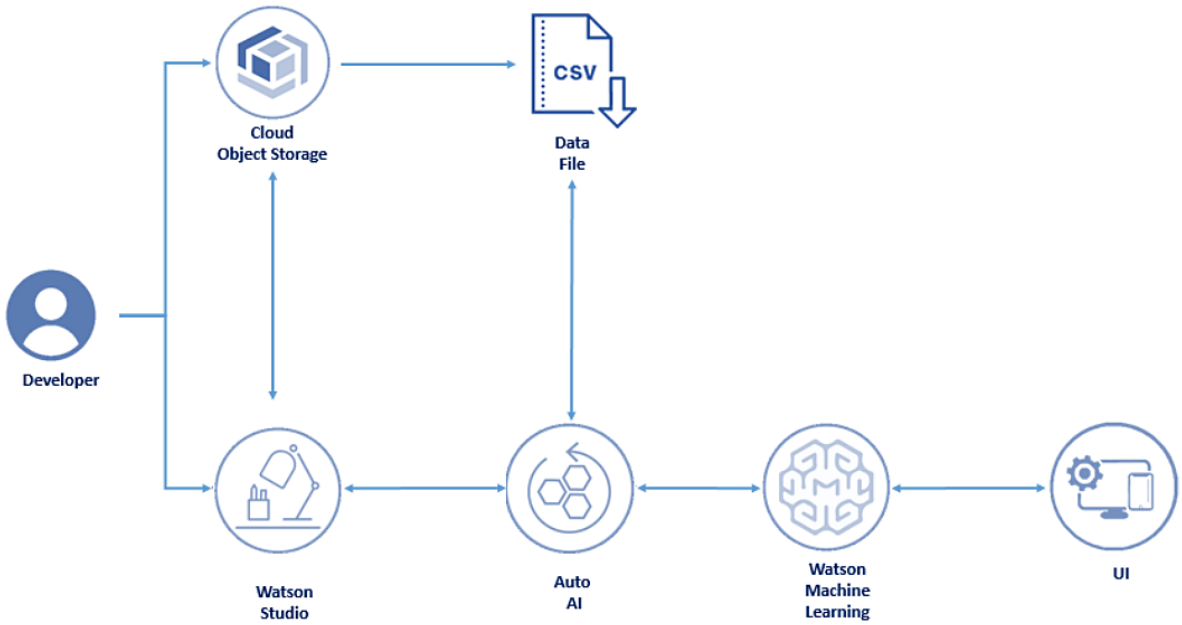
Run the Auto AI Experiment to build a Machine learning model on the desired dataset

Save the model

Deploy the model as a web server and generate scoring End Point

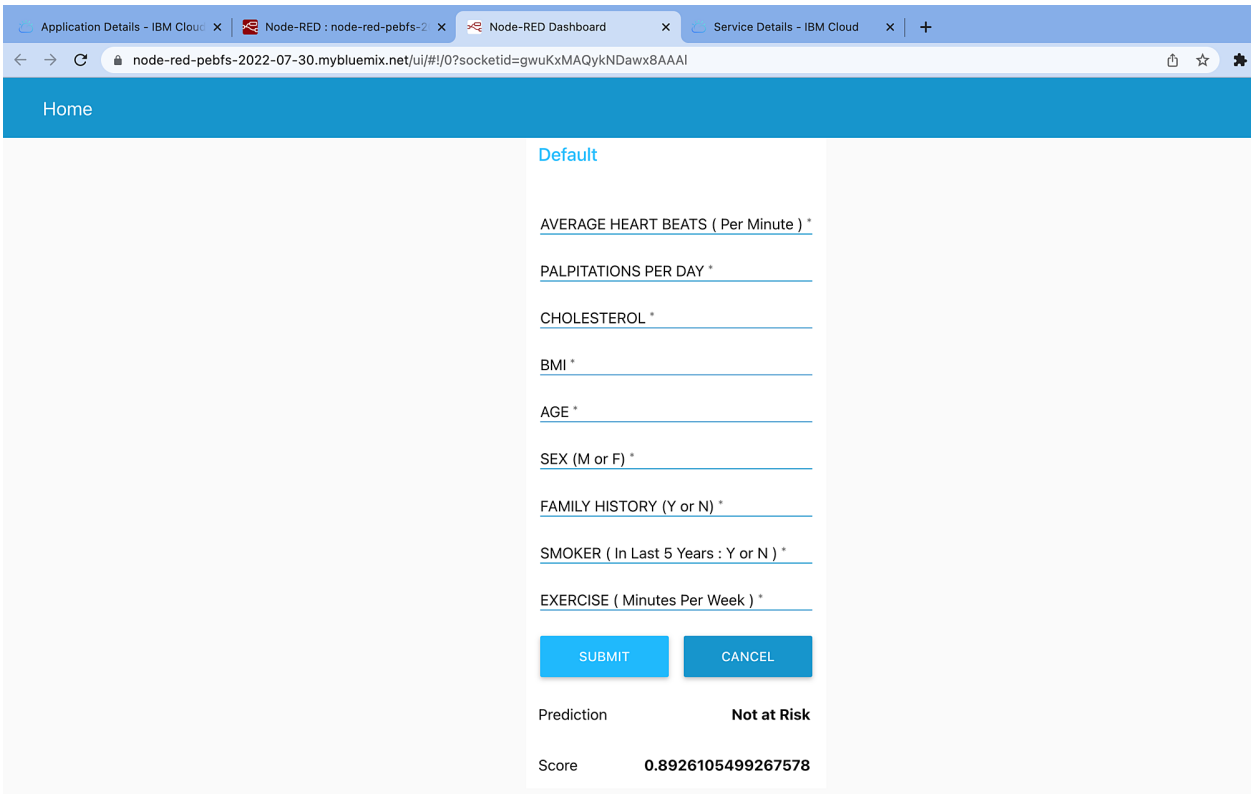
Create a WEB application Using Node-RED to take user input and showcase Prediction on UI

3 THEORITICAL ANALYSIS 3.1 Block diagramDiagrammatic overview of the project.



3.2 Hardware / Software designingHardware and software requirements of the project
IBM Watson Studio
IBM Watson Machine Learning
Node-RED
IBM Cloud Object Storage

4 EXPERIMENTAL INVESTIGATIONS Analysis or the investigation made while working on the solution. We faced many errors and trials were made to get the best results.
5 FLOWCHART Diagram showing the control flow of the solution
6 RESULT Final findings (Output) of the project along with screenshots.



7 ADVANTAGES & DISADVANTAGES List of advantages and disadvantages of the proposed solution

Advantages: We can easily predicts the solutions and get to know the possible threats

Disadvantage: As per the developments we need to update it

8 APPLICATIONS The areas where this solution can be applied The possible threat calculation in terms of CVDs

9 CONCLUSION Conclusion summarizing the entire work and findings.

We used the Machine learning and Auto AI on Watson studio and predicted the results with the previous data set of 10801 cases and found very satisfactory prediction.

This work was done Watson Studio IBM found very efficient and results very accurate.

10 FUTURE SCOPE Enhancements that can be made in the future. As per developments and future theatres diagnosed will be keep updating and modifying for the further challenges.

11 BIBILOGRAPHY

References of previous works or websites visited/books referred for analysis about the project, solution previous findings etc. These website visited for the study of CVDs.

https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)

https://www.nhs.uk/conditions/cardiovascular-disease/

APPENDIX

A. Source CodeAttach the code for the solution built.