Project Report :

HEART FAILURE PREDICTION MODEL

(using IBM Auto AI service)

Declaration

This is to certify that the work being presented in the project entitled "**HEART FAILURE PREDICTION MODEL**" submitted by undersigned student of **Panipat Institute of Engineering and Technology** pursuing Bachelor of technology in Computer Science and Engineering is a record of my own work carried out by me under guidance and supervision of Mr. Hemant Kumar Gahlot

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INTRODUCTION

Cardiovascular diseases (CVDs) are the number 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.

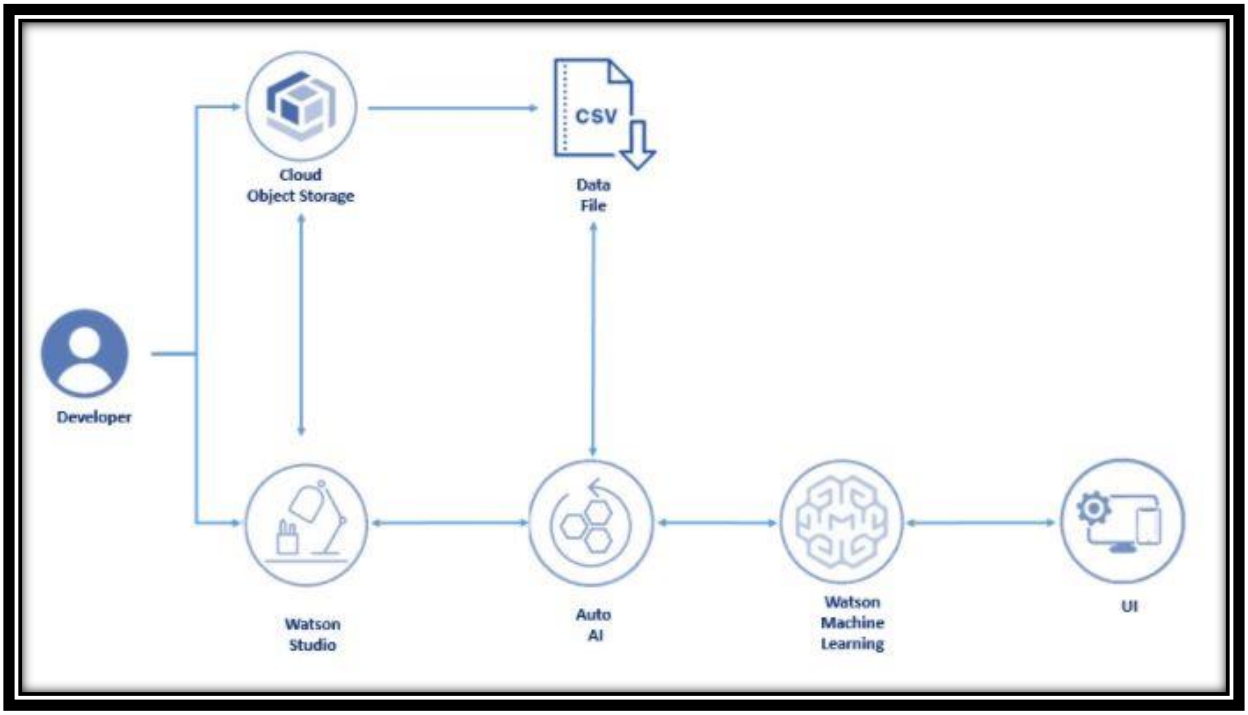
In this project, I built a model using Auto AI and build a web application where we can get the prediction of heart failure.

PURPOSE

The main objective of this research is to develop a heart-failure prediction sytem. The system can predict an instance of heart failure on the basis of certain information regarding certain diseases.

THEORITICAL ANALYSIS

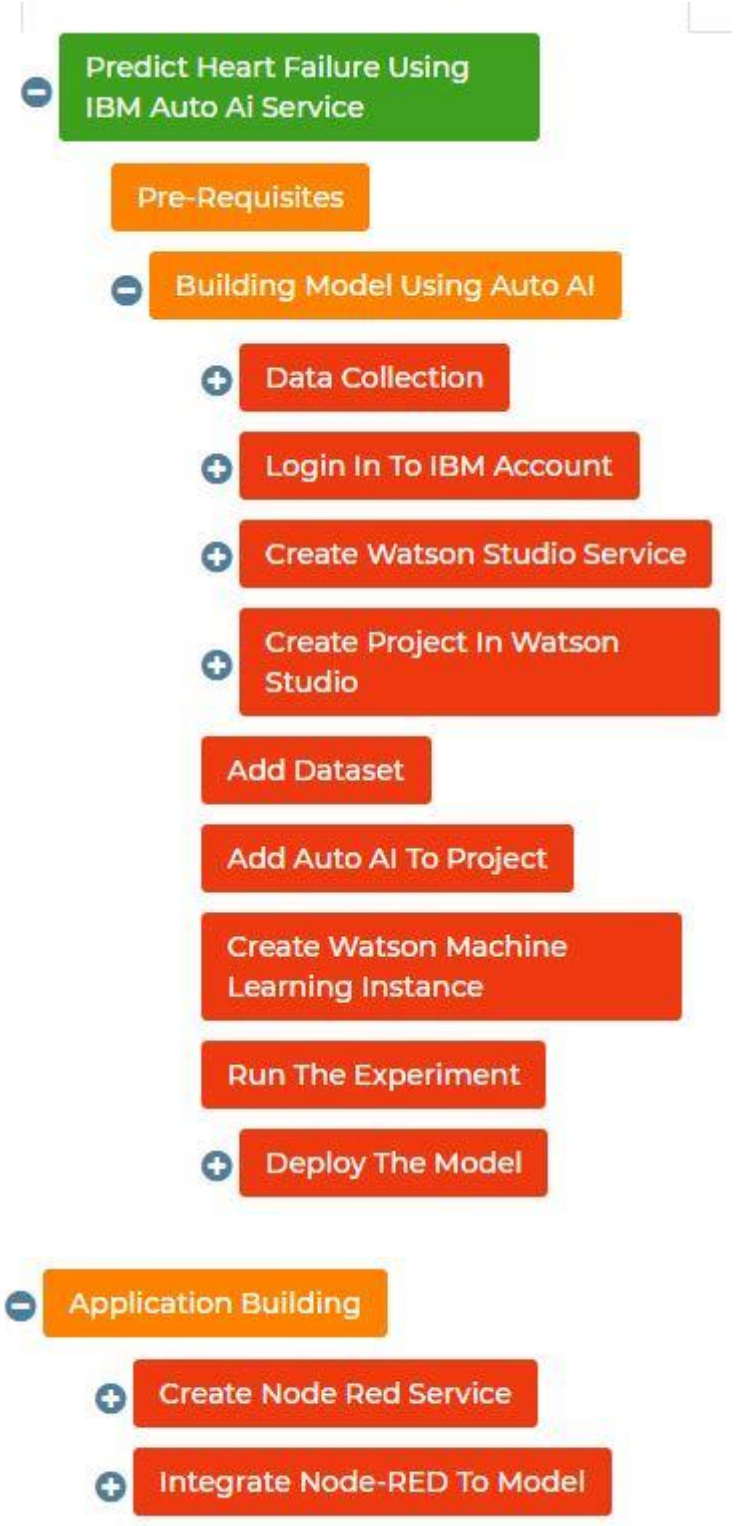
Block diagram :



Services Used:

1. IBM Watson Studio
2. IBM Watson Machine Learning
3. Node-RED
4. IBM Cloud Object Storage

Flowchart


Predict Heart Failure Using IBM Auto Ai Service
Pre-Requisites
Building Model Using Auto AI
Data Collection
Login In To IBM Account
Create Watson Studio Service
Create Project In Watson Studio
Add Dataset
Add Auto AI To Project
Create Watson Machine Learning Instance
Run The Experiment
Deploy The Model
Application Building
Create Node Red Service
Integrate Node-RED To Model

CONCLUSION

In this project, by taking the information from the patient regarding certain disease we predicted the heart failure/ death event.

In this project we trained by giving dataset.On the basis of which the model predicted the heart failure event. Here we used binary classfication. We can provide larger dataset for increasing the accuracy of prediction model.