

## INTRODUCTION

### 1.1 OVERVIEW

This project is about Breast Cancer Risk Prediction using IBM AUTO AI

## TOOLS USED

Python,Python For Data Analysis,Machine Learning,IBM cloud,IBM Watson

### 1.2 PURPOSE

- . Computer Diagnosis system showed potential for improving diagnostic accuracy.
- . This project is used to early detection and prevention of Breast Cancer Risk Prediction.

## 2.SOCIAL SURVEY

### 2.1)EXISTING PROBLEM

#### PROPOSED SOLUTIONS:

In this project we are developing a machine learning model where in the model gets trained by considering the parameters such as:Radius ,Texture, Perimeter, Area, Smoothness, Concavity, Concaveness, Compactness here all these parameters are taken in mean, se and overall values are been taken. And the model is been trained using Auto AI service in IBM Watson cloud and that can be deployed in an application such as web or mobile applications.

#### TODAYS REPORT(1/JULY/2020)

1 STEP:we have to login into github account and next we have to go to project dashboard and then we have to go to workspace.

2 STEP:Click on project details

3 STEP:Click on 1st task download data.csv file from kaggle and save the file on pc .

4 STEP:Go GITHUB and select upload a file and next click on choose file and upload data.csv file.

5 STEP:Go to TASK&PROGRESS and click on complete today task.

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#### 2nd REPORT(2/JULY/2020)

### 1.) Todays task is we have to create IBM CLOUD ACCOUNT

#### 1.1 STEP1: first step is we have to register for IBM CLOUD

## 1.2 STEP2:login to IBM CLOUD

## 1.3 STEP3: Create cloud objective service

a)for creating cloud objective service 1st we have to login to IBM CLOUD .

.Then go to DASHBOARD click on catalogue and select services and select AI/ML option and click on wastonstudio.

. Go to waston studio and click on get started and click on create project select new project and create it.

.Go back to dashboard and click on services. select option wastonstudio in service and create cloud objective service.

## 1.4 step 4: Create wastonstudio platform

## 1.5 step 5: Create Machine Learning Service

## 3 rd DAY REPORT(3/JULY/2020)

### TASK NAME:MODEL BUILDING

3.1) STEP 1:Create project in Waston Studio

3.2) STEP 2:click on Add Project and add Auto AI Experiment

3.3) STEP 3:Setup Auto AI Environment

3.4) STEP 4:Import Dataset

3.5) STEP 5:Run the Model

3.6) STEP 6:Selection of Auto AI Pipeline

3.7) STEP 7:Deploy and Test the Model in Waston Studio

Review of the 3 rd task:

.we have to create project in waston studio after creating a project go to project and click on add project and add Auto AI expetiment and again come back to Waston studio and click on project and select a file .

. select a file and import Data.csv file and run the model and select Auto AI pi[peline .project model will save and view in project and Deploy and Test the Model in Waston Studio and predict the values.

## 4th DAY REPORT(4/07/2020)

### TASK 4: APPLICATION BUILDING

STEP1: Create a Nodered Service

STEP2: Go To Manage Palette & Install Dashboard Nodes

STEP3:Build UI With Nodered

### REVIEW OF THE TASK

.We have to create nodered service and go to nodered service and go to manage palette & install dashboard.

.Next step is go to import upload jason flow file.

.give the inputs in Form Node.Form node is which setup the values .and nrxt go to pretoken modify give API KEY and next go http request click on done next go to pre prediction node give the instancce id and modify inputs and next go to http request node click on done.Deploy it and copy the url and paste in new tab submit the values in default and predict the output in Nodered by click on debug.

**CONCLUSION:** IBM researches published research Radiology around new AI model that can predict the development of malignant breast cancer in patients within the year,at rates comparable to human radiologists.As the first algorithm of its kind to learn and make decision from both imaging data and comprahensive patient's health history,our model was able to correctly predict the development of breast cancer in 87 percentage of the cases it analyzed,and was able to correctly interept 77 percentage of non-cancertous cases.

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**\*THE END\***