INTRODUCTION

1.1 OVERVIEW

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

TOOLS USED

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

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

Breast cancer is one of the main causes of cancer death worldwide. Early diagnostics significantly increases the chances of correct treatment and survival, but this process is tedious and often leads to a disagreement between pathologists. Computer-aided diagnosis systems showed potential for improving the diagnostic accuracy. But early detection and prevention can significantly reduce the chances of death. It is important to detect breast cancer as early as possible.

2.2) 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.

THEOROTICAL ANALYSIS:

3.1)Block diagram

- Dataset .....>IBM CLOUD ACCOUNT .....> MODEL

BUIDING.....> APPLICATION BUILDING>

3.2)Hardware/Software Designing

SOFTWARE USED

- Python,Python For Data Analysis,Machine Learning,IBM cloud,IBM Waston

EXPERIMENTAL INVESTIGATION

In this retrospective study we had collected data from 570 people .we had collected sixteen parameters
are:radius_mean,perimeter_mean,smoothness_mean,concavity_mean,symmetry_mean,radius_se,perimeter_se,smoothness_se,concavity_se,symmetry_se,radius_worst,perimeter_worst,smoothness_worst,concavity_worst,symmetry_worst.
By using this parameters we have predict diagnosis.

FLOWCHART

<DOWNLOAD DATADSET.....>CTRATE IBM ACCOUNT..... > CRATE CLOUD..... OBJECT STORAGE SERVICE..... > CREATE WASTIN STUDIO PLATFORM.....>CREATE MACHINE LEARNING SERVICE.....>MODEL BUILDING.....>CREATE PROJECT IN WASTON STUDIO.....>AUTO AI EXPERIMENT IN ADD PROJECT.....>SETUP YOUR AUTO AI ENVIRONMENT.....>IMPORT DATASET.....>RUN THE MODEL.....>CREATE NODERED SERVICE.....>GO TO MANAGE PALETTE&INSTALL DASH BOARD.....>BUILD UI WITH NODERED.....>

RESULT:
The final result in our 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.

Finally we have predict Diagnosis as "M".

ADVANTAGES &DISADVANTAGES

ADVANTAGS:

- IBM AI is also used to predict Breast cancer risk prediction .Reasearches have develop a AI MODEL that can predict miligant breast cancer within ayear with 87precent accuracy rate comparable to human radiologists.
- while there are already AI predict methods that relay on mammogram images or medical records,IBM's stands out by using both-- and it's potentiality more reliable as result.

DISADVANTAGES:

- By using software we can predict Breast cancer risk prection .but predicting cancer it requires to collect data earlier .then ponly we can predict risk of the cancer and also it requires more data from past years .so it is difficult to collect data and predict cancer.

APPLICATIONS

- IBM AUTO AI helps to predict breast cancer risk a year before it appears.
- there is a real possibility that more breat cancer patients will start treatment befre the first tumor even appears.

COCLUSION:

The algorithm,which combined machine-lreaning and IBM AUTO AI approaches,can be applied to asses breast cancer at a level comparable to radiologist and has the potential to substanitially reduce missed diagnosis of Breast cancer risk.

FUTURE SCOPE

- Now a days technology ids developing day by day.In future mostly will use software and doctors also easily identify the cancer by using machine learning.

BIBILOGRAPHY AND APPENDIX

1.) https://www.kaggle.com/merishnasuwal/breast-cancer-prediction-dataset
2)https://cloud.ibm.com/registration

3)https://cloud.ibm.com/catalog?search=object
4)https://cloud.ibm.com/catalog/services/watson-studio
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THE END