* Project Summary

The project is titled "Projecting life expectancy using machine learning". The

skills required are Python,IBM cloud and Watson studio.Life expectancy is the key metric for assessing population health. Broader than the narrow metric of the infant and child mortality which focus solely at mortality at a young age, life expectancy captures the mortality along the entire life course. It tells us the average age of death in a population. Now this is an effort to link it with Machine

Learning. The document provided contains an array of countries with statistics

related to GDP, Diseases, Mortality etc.

* Project Requirements

This project requires a basic idea of what life expectancy is. It is going to estimate the life expectancy using the data given as an input to a machine

learning model. Coding knowledge of python is required for the same. In

2017, Indian life expectancy stands at 69.16 years. If the trends are true, it will

definitely decrease. It also requires a working knowledge of Python, a basic idea

how to use a cloud service. Watson studio can be accessed with the help of

tutorials provided by the website.

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* Functional Requirements

1.Collect data.

2.Make a test and train set (basic strategy in creating a dataset)i.e the csv excel

file provided in references.

3.Use the data made available to public for health research

Collect enough data to make two different sections train and test data. The train

data is used to tell how exactly the model should respond to the input data. It is

drawn with different kinds of parameters acting on it. The test and train data

should not be same as it would be unfair and would lead to biasing. One good

effective strategy would be taking a part of train data and use it as test data.

4.The results can be tested by giving the appropriate inputs to the model(both

python based and using Auto AI).

* Technical Requirements

1.The databases in csv format

2.Data science can be used to implement the project. A dataframe can be

created and python language can be used to edit, create, delete or format. It

should be kept in mind that python is a crucial tool in this regard. The data is

already provided in the form of a csv file.

* Software Requirements

The software requirements suggested by the organization is

1.Python IDE

2.Excel

3.IBM Cloud

4.IBM Watson Studio

5.Machine Learning Instance

6.Node Red Instance

* Project Deliverables

The end product would be a code , data set and a working Machine Learning model to predict life expectancy with the following inputs.

1.Year

2.Status(Developing or developed)

3.Adult Mortality

4.Infant Deaths

5.Alcohol

6.Percentage Expenditure

7.Hepatitis B

8.Measles

9.Under five deaths

10.Polio

11.Total Expenditure

12.Diphtheria

13.HIV/AIDS

14.GDP

15.Population

16.Thinness in 1-19years

17.Thinness in 5-9years

18.Income composition of resources

19.Schooling

LIfe expectancy is predicted using all these fields provided by the user.

* Project Team

This project is to be done individually so I make up the team. I have created Slack, Github, IBM cloud accounts and intend to make efficient use of them .

Additionally I have posted by code on Git repository.

* Project Schedule

I was assigned this project on 15th of May,2020. It is mentioned that a month

time is given to complete the same.