Project Scope, Schedule, Team & Deliverables

1. Project Summary

   A typical Regression Machine Learning project leverages historical data to predict insights to future. This problem statement is aimed at predicting Life Expectancy rate of a country given various features.Life Expectancy is a statistical measure of the average time a human being is expected to live. Life expectancy depends on various factors: Regional variances, Economic circumstances, Sex, Mental illness, Physical illness Education, Year of their birth and other demographic factors. This problem statement provides a way to predict average life expectancy of people living in a country when various factors such as GDP, year, education, alcohol intake of people in the country, expenditure on health care system and some specific diseases related deaths that happened in the country are given.

2. Project Requirements

   Requirements of this project is the dataset from WHO website that contain various factors that affect life expectancy of a country like Adult mortality, BMI, GDP, Infant deaths, Polio etc. and an IBM account to use the services of IBM that help to build this project simply.

3. Functional Requirements

   - Download the dataset.
   - Analyze and clean the dataset.
   - Create an IBM account.
   - Create the required services i.e.WatsonStudio, Watson Machine Learning, and NodeRed
   - Train the regression model on different algorithms.
   - Check for the best one and finalize that algorithm to train our model.
   - Build Node-red flow for GUI.
   - Create a scoring endpoint for integrating our model to node-red flow.

4. Technical Requirements

    - Python
    - Machine Learning
    - Data exploration
    - Perform Data manipulation
    - Perform Exploratory data analysis
    - Apply various algorithms to predict the output

5. Software Requirements

    - IBM cloud
    - Microsoft Excel
    - Node red
    - Jupiter notebook
    - Watson studio

6. Project Deliverables

    A machine learning model that will predict life expectancy(software).

7. Project Team

    Individual Project:

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    BTech. CSE. (Bundelkhand Institute of Engineering and Technology, Jhansi)

8. Project Schedule

    This is a 4 - week project.

    Start date - 2 July

    End date - 1 August