**Predicting life expectancy using machine learning**

**1. Project Summary :-**

In this project I have created a working model that evaluates the life expectancy of a country with the help of dataset given to it.

The output algorithms have been used to test if they can maintain their accuracy in predicting the life expectancy for data they have not been trained. Five algorithms have been used :-

1. Linear Regression
2. Polynomial Regression
3. Logistic Regression
4. Extra Trees Regression
5. Decision Tree Regression

**2. Project Requirements :-**

This project guesses the life expectancy by the help of training given to it using a dataset, after training it can predict data.

It takes various factors on which life rate of a country depends as input such as Adult mortality, Infant deaths, Alcohol intake, BMI, HIV, GDP, Population etc. and give life expectancy as an output.

**3. Functional Requirements :-**

1. Create a data model present on the database.
2. The dataset are made available to the public to the purpose of health data analysis.
3. It is related to the different countries, while finding the dataset in different countries might be difficult and hence we decided that we exclude these countries from the final dataset.

**4. Technical Requirements :-**

1. The merged dataset by using the databases in the csv formats.
2. We can use datasets with the help of machine learning and data science with the help of python.

**5. Software Requirements :-**

1. Python IDE
2. Excel
3. IBM Cloud
4. IBM Watson Studio
5. IBM machine learning
6. Node red
7. Jupyter Notebook
8. IBM cloud storage

**6. Project Deliverables :-**

This project inputs the values mentioned above and return age expectancy as an output of it.

This project is implemented on web with the help of node red and therefore results as an user interface.

**7. Project Team :-**

This is an individual project and is solely implemented and coded by Tanmay Goel.