**Project Name: Predicting Life Expectancy using Machine Learning**

Project Manager: Rishab Kumar

**PROJECT SCOPE DOCUMENT**

Life expectancy is a statistical measure of the average time a humar is expected to live.It is affected by many factors such as: • Socioeconomic status, including employment, income, education and economic wellbeing. The quality of the health system and the ability of people to access it; health behaviors such as tobacco and excessive alcohol consumption, poor nutrition and lack of exercise. • Social factors; genetic factors; and environmental factors including overcrowded housing, lack of clean drinking water and adequate sanitation, etc.

It is a typical Regression Machine Learning project.My idea to implement this project is to use a dataset containing data based on different countries.It includes training the dataset on regression algorithms likeMultiple Linear Regression,Polynomial Regrssion,Logistic Regression, etc.

**Steps to be involved:-**

1. data collection (to import proper dataset)

2. feature selection -(to select those features that will contribute most in predicting the life expectancy and thus it will help in increasing the accuracy of prediction)

3.model selection

**Tool that can be used:-**

Python libraries particularly Numpy ,Pandas, etc.

Matplotlib and Seaborn for visualisation

Scikit-Learn and Statsmodels for regression analysis.

**SCOPE OF USE -**

It will be easier to determine the predicting factor which is contributing to lower value of life expectancy. This will help in suggesting a country which area should be given importance in order to efficiently improve the life expectancy of its population.

**PROJECT REQUIREMENTS:**

**FUNCTIONAL REQUIREMENT:**

Predicting the life expectancy of people in a country

**TECHNICAL REQUIREMENTS**

Operating System: windows 7,windows xp,windows 8 and higher version. (My version is Windows 10).

Python, IBM Cloud, IBM Watson

**HARDWARE REQUIREMENTS:**

Hard disk space: 10 GB or higher is recommended

Speed:- 2GHz or more

Processor: i3 7th generation or higher