# PREDICTING LIFE EXPECTANCY USING MACHINE LEARNING

## Project Summary

This project aims at creating a new model based on the data provided is to evaluate the life expectancy of the country.
The data set from WHO offers a time frame from 2000 to 2015. The output algorithms will be used to predict the life expectancy for data they have not been trained.
Some of the algorithms that can be possibly used are:

- Linear Regression
- Multinomial Logistic Regression
- Linear Regression with Polynomic features
- Decision Tree Regression
- Random Forest Regression

## Project Requirement

Life expectancy is one of the most important factors in end-of-life decision making. Good prognostication for example helps to determine the course of treatment and helps to anticipate the procurement of health care services and facilities, or more. By using supervised machine learning techniques. we can extract a model that will be able to predict the life expectancy of future years. One method of approach is to use LSTM models to achieve this task.

## Functional Requirement

1. Create a data model present on the database.
2. The data set are made available to the public to the purpose of health data analysis.
3. It is related to the different countries depending on the different countries while finding the data set in different countries might be difficult and hence some countries are excluded from the final data set.

## Technical Requirements

1. The merged data set by using the databases in the .csv formats from Kaggle
2. Datasets need to be integrated into the Python IDE.

## Software Requirements

- Python IDE
- Excel
- IBM Cloud
- IBM Watson
- IBM Node-Red Service

## Project Deliverables

The project creates a model which gives life expectancy of a country depending on various factors like schooling, GDP, BMI etc.

## Team

The project is done individually. With the help of IBM Cloud , the project can be written in Watson Studio and deployed using Node-Red Apps.