Project ID	Project Title	Start Date
SPS_PRO_215	Predicting Life Expectancy using Machine Learning	19/05/2020

Project Manager	Objective
Alle Shiva Sai	To Predict the Life Expectancy of Country by taking factors like: alochol intake,smoking,physical illness and other demographic factors by using the **Machine Learning Model**

1.Project Summary:

A typical Regression **Machine Learning** project leverages historical data to predict insights into the 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 variations, Economic Circumstances, Sex Differences, Mental Illnesses, Physical Illnesses, 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 year, GDP, education, alcohol intake of people in the country, expenditure on healthcare system and some specific disease related deaths that happened in the country are given

Where do we get data to predict the life expectancy?

The ***Global Health Observatory*** (GHO) data repository under the ***World Health Organization*** (WHO) keeps track of the health status as well as many other related factors for all countries the data-sets are made available to the public for the purpose of health data analysis. The data-set related to life expectancy, health factors for 193 countries have been collected from the same WHO data repository website and its corresponding economic data was collected from the United Nations website. Among all categories of health-related factors, only those critical factors were chosen which are more representative

Why do we use big datasets?

To get the accurate solutions of the problem.When we train the Machine Learning Model by using more datasets.Then there is possibility of getting acccurate results

Dataset Link:-*https://www.kaggle.com/kumarajarshi/life-expectancy-who*

2.Project Requirements:

2.1 Functional Requirements:

1)The functionality that must be provided by the UI is to predict the life expectancy based upon the user data provided.

2)A good Dataset.

2.2 Technical Requirements:

Hardware Requirements:

- *Processor:*- Intel i3 7th generation (or) Higher
- *Clock Speed:*- 2Ghz or more
- *Hard Disk Space:*- 10GB or More(for smooth movement)
- *RAM:*- 4GB or Higher(Because We are using IBM Cloud)
- *Network Bandwidth:*- 5mbps or Higher.

2.3 Software Requirements:-

- ✓ *Operating System:*- Windows Xp or Higher
- ✓ *Browser:*- Chrome,Safari,Firefox.
- ✓ Python (or) Auto AI(Provided by IBM)
- ✓ IBM Cloud
- ✓ IBM Watson

3.Project Deliverables:

This Machine Learning Model delivers rate of life expectancy of human country wise.

- Project Documentation
- ML Prediction Model & Auto AI Model.
- Node-RED UI
- Node-RED Flow
- Project Demonstration Video

4.Project Team:

Project Manager: Alle Shiva Sai(Individual)

Project Sponser: SmartBridge

5.Project Schedule:

Task(dd/mm)	19/5-20/5	21/5-22/5	23/5-27/5	28/5-30/5	31/5-3/6	4/6-7/6
Project Planning& Kickoff	Done					
Explore IBM Cloud Platform		Done				
Explore IBM Watson Services			Done			
Introduction To Watson Studio				Done		
Predicting Life Expectancy With Python					Done	
Predicting Life Expectancy Without Python						Done