PROJECT NAME: Predicting Life Expectancy using Machine Learning - SB54135

PROJECT ID: SPS_PRO_215

PROJECT MANAGER: Charan M

Date: 31/05/2020

PROJECT SCOPE DOCUMENT

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.

2. Project Requirements:

2.1 Functional Requirements:

Predicting the life expectancy rate of a country

2.2 Technical Requirements:

Python, IBM CLoud, IBM Watson

Hardware Requirements

PC/Laptop/desktop with

Processor: i3 or above

Speed: 2 GHz or more

Hard disk space: 10 GB or more

RAM: 4GB or more

Software Requirements

Operating System: Linux/Windows

IBM Cloud

IBM Watson

Python compile

Zoho writer

Git hub

3. Project Deliverables

A typical Regression Machine Learning project leverages historical data to predict insights into the future. Output is predicting Life Expectancy rate of a country given various features thus we can use for finding life expectancy rate.

4. Project Team

Name: Peyala Samarasimha Reddy

Application ID: SPS_APL_20200003800

SBID:SB20200054135

5. Project Schedule

Project Scope, Schedule, team and deliverables - 1 day

Setup the Development Environment - 1 day

Create IBM Cloud Account - 0.5 day

Create a Node-RED Starter Application - 1day

Explore IBM Watson Usecases -0.5 day

Explore IBM Watson Machine Learning - 3days

Build your own ML model in IBM Watson Studio- 2 days

Automate your ML model - 1 day

Collect the Dataset for the Project- 0.5

Create Necessary IBM Cloud Services- 1day

Create a Watson Studio Project- 1 day

Configure Watson Studio- 0.5 day

Create Machine Learning Service- 0.5day

Create a Jupyter Notebook in IBM Watson and import data- 0.5 day

Build a Machine Learning model and create Endpoints for Node-RED integration- 2 days

Build Node-RED Flow to Integrate ML Services- 2 days

Collect the Dataset for the Project- 0.5 day

Create Necessary IBM Cloud Services- 0.5 day

Create a Watson Studio Project- 1 day

Configure Watson Studio- 0.5 day

Create Machine Learning Service- 0.5day

Import dataset and create AUTO AI Experiment- 1day

Build Node-RED flow to integrate AutoAI- 1day