

## **SCOPE OF PROJECT**

### **PREDICTING LIFE EXPECTANCY USING MACHINE LEARNING**

#### **PROBLEM STATEMENT:-**

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.

#### **PROJECT SUMMARY:-**

Design a Regression model to predict life expectancy ratio of a given country based on some features provided such as year, GDP(gross domestic product), education, alcohol intake of people in the country, expenditure on healthcare system and some specific disease related deaths that happened in the country.

#### **PROJECT REQUIREMENTS:-**

1. A Supervised Machine learning Regression algorithm with maximum accuracy to be trained and tested on the dataset.
2. The Dataset consists of 21 columns excluding the predicting column i.e. Life expectancy.

## **FUNCTIONAL REQUIREMENTS:-**

Functionality that must be provided by the user is to enter the input values and click the submit button

## **SOFTWARE REQUIREMENTS:-**

1. IBM Cloud
2. IBM Watson Studio
3. Node-red App

## **PROJECT DELIVERABLES:-**

The end product is an webpage created and deployed on node-red app of IBM cloud. The backend of webpage is a Regressor Model created and deployed on watson studio using machine learning service. The web-page has input fields similar to dataset columns such as Country, BMI, percentage expenditure, Alcohol etc and an output field named as prediction i.e similar to dataset column Life expectancy which gives the life expectancy prediction based on the inputted values.

**PROJECT TEAM:-**

No team,this is individual based project

**PROJECT SCHEDULE:-**

This project is scheduled for 30 days