## **PROJECT REPORT**

#### INTRODUCTION

#### 1.1 Overview

It is a typical Regression Machine Learning project which is aimed at predicting average Life Expectancy rate of various countries taking in account of several features which serve as a historical data such as 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.

## 1.2 Purpose

The purpose of this project is to predict the life expectancy taking into the account of various features.

#### LITERATURE SURVEY

## 2.1 Existing Problem

The problem regarding the survey is that it becomes extremely tedious and unmanageable to handle and analyse such a large data manually.

## 2.2 Proposed Solution

So to overcome the above problem, the data is stored and given as an input to a system which automatically does the data analysis and based on the given data also gives the prior predictions for the future analyses.

This is done with the help of building a machine learning model.

## THEORETICAL ANALYZES

## 3.1 Block Diagram



# 3.2 Hardware/Software Requirements

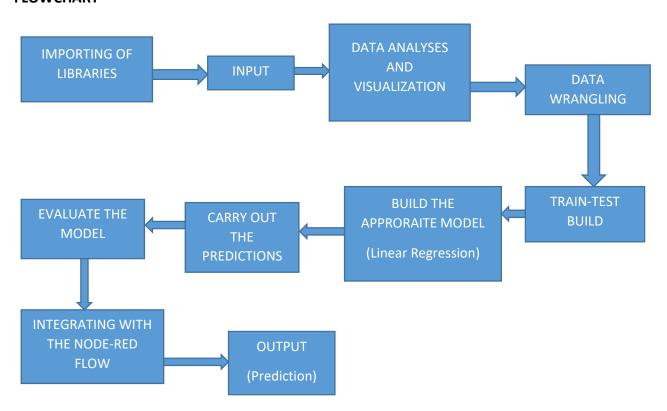
- A computer with minimum of i3 processor.
- IBM cloud services such as machine learning, Watson studio and node-red.
- Internet
- Enough memory.

#### **EXPERIMENTAL INVESTIGATIONS**

Experimentally, this model was found to give the output having proximity to the actual results.

It all depends upon the precision of the model built as the well the prevailing conditions of the country at that particular time.

## **FLOWCHART**



## **RESULT**

Based on the accuracy of the model, the model carries out the predictions.

#### **ADVANTAGES AND DISADVANTAGES**

The advantage of the model is that it relieves us from the process of handling the data manually.

Also the model accuracy is much more reliable than that of humans.

The main disadvantage is that it may not give the output with 100% precision.

It ultimately depends upon the data entered.

### **APPLICATIONS**

To carry out such kind of surveys.

### **CONCLUSION**

Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn for themselves.

The process of learning begins with observations or data, such as examples, direct experience, or instruction, in order to look for patterns in data and make better decisions in the future based on the examples that we provide. The primary aim is to allow the computers learn automatically without human intervention or assistance and adjust actions accordingly.

Thus as the definition says, the model interprets the data on its own and gives the output accordingly.

## **FUTURE SCOPE**

This survey becomes helpful for future analyses by carrying out the predictions which may become helpful for taking certain measures in advance in order to improve lifestyles of the people.

### **BIBLOGRAPHY**

Internet Resources.

# **APPENDIX**

Source Code Link.

https://eu-gb.dataplatform.cloud.ibm.com/analytics/notebooks/v2/14ed0445-6ab1-48bd-ac92-

3572a7aed1a8/view?access\_token=412229d6c9f7b68bf54d9cc450c27c4c904af9e1fec2d79 587958cc806962708