

Project Report

1. Project Statement

Predicting Average Life Expectancy of a person in Years using Machine Learning with Python.

2. Project Summary

Description-:

A general Regression Machine Learning Model in python is responsible for making future predictions and generating insights based on the observed historical data .

Life Expectancy of a person is a statistical measure of the average life span a person is expected to live, based on various **demographic factors**. There are great variations in life expectancy between different parts of the world, mostly caused by differences in public health, medical care, diet, mortality rates, etc.

Objective-:

This project aims at creating one such model for predicting **Average Life Expectancy in Years of a person of a country.**

Dataset Description-:

The data on which the model performs in this project is made available to the public for the purpose of health data analysis by World Health Organization (WHO).

The dataset is recorded for 193 countries accross the world, over

the past 16 years (from 2000 to 2015) and has various features affecting the Life Expectancy like, Adult Mortality, Deaths due to diseases, money spent in healthcare services, human development index, Bmi of population, alcohol consumption and several other factors. The dataset is available at the following link -:

<https://www.kaggle.com/kumarajarshi/life-expectancy-who>

This project uses one of the regression models to predict the future Life Expectancy of a country using the given feature values of the used dataset.

Outcome-:

The model gives the Average Life Expectancy of a person of a Country in Years as a result.

3. Project Requirements-:

Functional Requirements -:

The functional requirement of this project is to accurately predict the Average Life Expectancy of a country and provide insights about the factors affecting Life Expectancy.

Technical Requirements-:

The project has the following technical requirements-:

1. Python Programming Language
2. Machine Learning concepts using Python

Software Requirements-:

The project has the following software requirements-:

1. Python version 2 or 3
2. IBM Cloud Services
3. IBM Watson Services

4. Watson Machine Learning Service
5. Node-Red Cloud Foundry App
6. Watson Machine Learning Client
7. Zoho Writer
8. Github Repository

Project Deliverables:-

There were various deliverables made during the project:-

- I. Project Report containing scope and summary of the project.
- II. Project Documentation
- III. Project Demonstration Video
- IV. Data Insights regarding the factors affecting the Life Expectancy of a country.
- V. Regression Model development code
- VI. Simple User Interface for prediction of results.

Project Team:-

There is no team in this project. Everyone is working on it individually.

Project Schedule:-

The time schedule for this project is 30 days.

Project Manager

Supriya Punna

Project Report Submitted By:-

Anchal Agarwal

