Documentation

OF

LIFE EXPECTANCY

Project Summary :-

A major concern is rise by **WHO** about the life expactancies of human. As the world expand day to day ,some factor is also generated which effect the life cycle and decrease the life span to study of these factors , **WHO** collect the data (from 2015-2022) of varous factors such as Life expectancy , Adult Mortality, infant deaths, Alcohol, percentage expenditure, Hepatitis B,Measles , BMI ,under-five deaths ,Polio,Total expenditure and more . With study of these data any one can predict the average life span ,but it is a difficult task to overcome it we use MACHINE LEARNING algorithms which gives abality to review large volume of data and discover specific trends and patterns that would not easily apparent to human .

The **Smartinternz** and **Smartbridge** are working over these data and apply different algorithms of ML .Model shall created by regression such as linear , logistic , polynimial , ridge and lasso .

Project Requirement :-

Data Set provided by WHO which is avilable on
https://www.kaggle.com/kumarajarshi/life-expectancy-who
This project extend the reasearch of prediction about available knowledge and limited the time in reasearch . Scientist have discovered that 15% chances of life expectancy will decline in future ,If we consider this fact than at 2050 our expactancy become 70 years (same as female expactance currenly) .

Functional Requirement :-

Some of the functional requirements -

- Model should be present on database .
- Software shall contain a user interface .

- Software shall be deployed on Node red ,so model is public and available for futher research .
- This dataset is created as country wise ,so region factor is also be consider .

Technical Requirement :-

As the WHO provide the dataset in csv formate ,we have to merge it with databases.This dataset will be consider as standard and implement by a machine learning algorithm and visualised with data sciense , In this project python is base language.

Software Requirement :-

Some of the software which is used in this project are -

- Python IDEL and its modules .
- Excel and CSV file to represent data .
- IBM cloud .
- IBM watson .

Project Deliverables :-

This project have multiple scope of interest as -

- It help in to futher study in human cycle in future year.
- It help in create a life predictor software which and calculate the life as https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/articles/lifeexpectancycalculator/2019-06-07
- It help in planning of future bussiness and help government to create policies for citizen.
- It help in generate certain condition in insurance policies by company .
- It help the medical deparment in research to enhance the life expantancy .

Project Team :-

This is a project for enhance the skill of machine learning provided by smartinternz ,so every prject contribution as single .

Project Schedual :-

Week 1- Document preparation and set up all the apropiate environments.
Week 2- Start work on IBM plateform and basic code of python for data filtering
Week 3- Implement proper machine learning algorithm on python and without pyhton
Week 4- Prepare a user interface to make a user freindly program .

Project Scope :-

This project is inspired by smartinternz and contain dataset of WHO which is standard and genralise. This project require 4 week of time.This project delivered a prediction software with proper gui .The dataset contain diffrent types of expects at with life depend on it to servive by which our software predict the life expactancy . Project used in various field in study , reseach , business in world . This software is created on IBM plateform and use regresstion to solve the problem with certain accuracy .