Predicting Life Expectancy using Machine Learning

1. **Project Goals** : The main goal of the project is to predict the future life expectancy i.e The average time a human being is expected to live, in each country across the world based on historic data and visualize it graphically using statistical tools so that it is easy to look and understand the data to support population health management, financial success, and better outcomes in end-of-life decision-making.

2. **Team :** No team. It is a personal project.

3. **Description** : Regression Machine Learning project leverages historical data to predict insights into the future.The project tries to create a model based on data provided by the World Health Organization (WHO) to evaluate the life expectancy for different countries in years. The data offers a time frame from 2000 to 2015. The data originates from here: https://www.kaggle.com/kumarajarshi/life-expectancy-who/data The output algorithms have been used to test if they can maintain their accuracy in predicting the life expectancy for data they haven't been trained.

4. **Criteria for Acceptance :** The client will get the final code of the project in the ZIP format which consists of **ipnb i.e. jupyter notebok.** it contains all the code and dependencies tor un the project and it includes the data visualizations which shows the predictions and accuracy and loss values odf the created model.

5. **Limits Put in Place :** my limitations arr that I am not able to create a user interface or application that could run without any code and show the desired output due to lack of sufficient time.

6. **Assumptions & Exclusions :** There are no applications or UI that could be delivered. only code and output with visualization plots and final predictions could be delivered.

7. **Costs & Budget :** No cost . As it is a basic project and I am a student.

8. **Requirements :** A desktop/laptop , programming knowledge with python and familiarity with machine learning concepts and data visualizations.

9. **Key milestones :**
   1.collecting the dataset
   2. writing the code

3. performing the regression
4. calculating the accuracy and mean square errors
5. predicting the required output with the trained model.