

**A PROJECT ON**

**Predicting Life Expectancy  
using  
Machine Learning**

**By**

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## 1:Project Summary:

Life expectancy is a statistical measure of the average time a human being is expected to live. It depends on various factors like regional variations, Economic circumstances, Sex difference, Mental illness, Physical illness, Education and other demographic factors. This project tries to create a model based on data provided to predict the life expectancy for different countries in years using Machine Learning. The data gives us the various factors like 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. Based on the data provided, the project will predict the life expectancy of different countries.

## 2:Project Requirements:

It includes Functional requirements, Technical requirements and Software requirements which are mentioned below:

### 2.1 Functional Requirements:

Firstly, it will ask the user to provide the data about the people of a country. The input data will be country,expenditure on health care system, GDP, education, alcohol, hepatitis B, measles. Then it will apply linear regression on that data. At last it will give Output. The output will be the average life expectancy of people. The output will then be displayed on screen.

## 2.2 Technical Requirements:

- a. Operating system: Windows 8 or above / Mac
- b. Browser: Firefox, Chrome, etc

## 2.3 Software Requirements:

- a. Python 3.6 or above
- b. Node-red for user interface
- c. IBM-cloud
- d. Jupyter Notebook on IBM

## 3:Project Deliverables:

- Project Documentation
- Create Machine Learning Prediction model
- Node-Red flow model

## 4:Project Team:

Project Manager: Arshid Bashir - *individual work*

## 5:Project Schedule:

- 19/5 to 21/5: Project Planning and Kickoff
- 22/5 to 26/5: Explore Ibm Cloud Platform
- 27/5 to 30/5: Explore IBM Watson services
- 31/5 to 5/6: Introduction to IBM Watson studio
- 6/6 to 13/6: Predicting life expectancy with Python