**1.INTRODUCTION**

**1.1 OVERVIEW**

Life expectancy is a statistical measure of the average time a human being is expected to live, Life expectancy depends on various factors: Regional variations, Economic Circumstances, Sex Differences, Mental Illnesses, Physical Illnesses, Education, Year of their birth and other demographic factors. This project 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 are given. The user shall be able to interact with the program using the UI built with Node-RED.

**1.2 PURPOSE**

This project uses the data of 193 and considers factor like schooling, GDP, alcohol intake and various diseases to predict the life expectancy of the people of a country.

Using the model, the user is also able to predict by giving his own input to see how life expectancy changes with respect to various factors.

**2. LITERATURE SURVEY**

Organisations around the world including WHO do maintain the data on life expectancy of various countries. There are also many models which predict life expectancy.

**2.1 EXISTING PROBLEM**

The WHO maintains annual life tables for all its member countries. It maintains a two-year cycle to update this table. Even then, not all information is available and this may cause errors.

**2.2 PROPOSED SOLUTION**

In this project, machine learning is used to predict the life expectancy. It takes in various factors from alcohol intake to schooling to provide a good prediction. The project uses linear regression to train its model and has a very user-friendly UI built using Node-RED.

**3. THEORITICAL ANALYSIS**

**3.1 BLOCK DIAGRAM**

**3.2 HARDWARE / SOFTWARE DESIGNING**

**4. EXPERIMENTAL INVESTIGATIONS**

**5. FLOWCHART**

**6. RESULT**

**7. ADVANTAGES AND DISADVANTAGES**

**8. APPLICATIONS**

**9. CONCLUSION**

**10. FUTURE SCOPE**

**11. BIBLIOGRAPHY**

APPENDIX

1. Source Code