CS 2704 Final Project Proposal

Title: Analyzing the Impact of Healthcare Expenditure on Life Expectancy across Countries

Group Members: Kuvalesh Parsad

GitHub Repository: https://github.com/Nileshp1007/Project-Proposal.git

1. **Introduction**
   Life expectancy is a key indicator of a country's overall well-being and quality of life. Understanding the relationship between healthcare expenditure and life expectancy can help policymakers make informed decisions to improve public healthcare. This project aims to analyze if increased healthcare spending leads to longer life expectancy.

2. **Hypothesis**
   Countries with higher healthcare expenditure per capita have higher life expectancy rates.

3. **Dataset**
   - **Healthcare Expenditure per capita (US$)**
     Source: https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD
     Description: Provides data on healthcare spending per capita for various countries.
     Attributes: Country, Year, Expenditure per Capita

   - **Life Expectancy at birth (Years)**
     Source: https://data.worldbank.org/indicator/SP.DYN.LE00.IN
     Description: Provides life expectancy at birth for various countries over several years.
     Attributes: Country, Year, Life Expectancy

4. **Plan for Testing the Hypothesis**
   1. **Descriptive Analytics**
   - Analyze correlations between healthcare expenditure and life expectancy.
   - Generate statistics to better understand the data
   - Use visualizations to understand better.

   2. **Predictive Analysis**
   - Response Variable: Life Expectancy
   - Predictor Variable: Healthcare Expenditure per Capita

3. Evaluation

- Compare predicted against actual life expectancy