**📘 Project Summary: Life Expectancy Dashboard (Power BI)**

**🎯 Objective**

To visually explore and analyze the global patterns and disparities in **life expectancy** and related health indicators from **2000 to 2015**, using **Power BI** to deliver an interactive, data-rich experience. The goal is to identify correlations between development status, healthcare access, vaccination rates, and longevity—offering key insights for public health decision-makers, researchers, and educators.

**📂 Dataset Overview**

* **Format**: CSV file
* **Coverage**: 193 countries (Developed & Developing)
* **Years Spanned**: 2000 to 2015
* **Core Features**:
  + **Life expectancy at birth**
  + **Child & infant mortality rates**
  + **Immunization coverage** (Hepatitis B, Polio, Diphtheria)
  + **BMI**, **Thinness prevalence** (ages 1–19)
  + **Alcohol consumption**
  + **HIV/AIDS cases**
  + **Health expenditure**
  + **Socioeconomic status** (Developed vs Developing)

**📈 Key Power BI Report Components**

**1️⃣ Summary Overview Panel**

* **KPI cards** show:
  + Life Expectancy (Max: 89.00 | Avg: 68.99 | Min: 0.00\*)
  + BMI, thinness stats
* **World map** breaks down life expectancy by region
* Countries are color-coded: **Yellow = Developed**, **Green = Developing**
* Visual insight into regional health inequality

**2️⃣ Country Analysis Table**

* Interactive data table showing:
  + Vaccination rates per country
  + Under-5 deaths and measles cases
  + HIV prevalence and alcohol consumption
* Dropdowns for **status** and **year** allow users to filter dynamically

**3️⃣ Infant Mortality Pie Chart**

* Visual representation of the **top 5 countries** with the highest infant mortality:
  + 🇮🇳 India: 48.82% of deaths
  + 🇳🇬 Nigeria: 19.13%
  + 🇵🇰 Pakistan: 13.14%
  + 🇨🇳 China: 10.53%
  + 🇨🇩 DR Congo: 8.38%

**🔍 Insights & Observations**

* **Developing nations** consistently show **lower life expectancy**—strongly tied to weaker healthcare infrastructure
* **Vaccination rates** positively correlate with childhood survival and longer life spans
* The concentration of infant mortality in a handful of countries indicates urgent need for **targeted global health efforts**
* High alcohol consumption and HIV prevalence negatively impact longevity in certain regions
* **Interactive dashboards** empower users to filter trends by year, status, and country, enabling customized storytelling