**Culminating Project Week 2**

**Selected Databases:**

World Development Indicators (WDI)

International Debt Statistics

Global Financial Development Database

**Entities and Attributes:**

1. Country
   * Country\_ID (PK): A unique identifier for each country.
   * Name: The name of the country.
   * Region: The geographical region the country belongs to.
2. World Development Indicators
   * Indicator\_ID (PK): A unique identifier for each economy indicator.
   * Name: The name of the indicator.
   * Description: A brief description of the indicator.
   * Source: The source of the data.
3. International Debt Statistics
   * Indicator\_ID (PK): A unique identifier for each gender indicator.
   * Name: The name of the indicator.
   * Description: A brief description of the indicator.
   * Source: The source of the data.
4. Global Financial Development Database
   * Indicator\_ID (PK): A unique identifier for each education indicator.
   * Name: The name of the indicator.
   * Description: A brief description of the indicator.
   * Source: The source of the data.
5. Data\_Record
   * Country\_ID (FK): A foreign key referencing the Country\_ID in the Country entity.
   * Indicator\_ID (FK): A foreign key referencing the Indicator\_ID in the respective indicator entity based on Indicator\_Type.
   * Indicator\_Type: A field that specifies whether the indicator is Economy, Gender, or Education.
   * Year: The year the data was recorded.
   * Value: The value of the indicator for the given year, country, and indicator.

**ERD:**

**A diagram of a model

Description automatically generated**

**Relationships:**

* Country and Economy\_Indicator are connected through Data\_Record.
* Country and Gender\_Indicator are connected through Data\_Record.
* Country and Education\_Indicator are connected through Data\_Record.
* In the Data\_Record entity, Country\_ID serves as a foreign key, creating relationships with the Country entity. Indicator\_ID serves as a foreign key, referencing the respective indicator entity based on the Indicator\_Type. Together, these foreign keys form a composite key. This composite key uniquely identifies each record in the Data\_Record table by combining the values of the foreign keys from Country and Indicator tables.

**Indicators:**

* **World Development Indicators (WDI)**

1. GDP per capita
2. Literacy Rate
3. CO₂ Emissions
4. Population Growth Rate
5. Life Expectancy
6. Infant Mortality Rate
7. Education Expenditure
8. Unemployment Rate
9. Poverty Headcount Ratio
10. Access to Electricity

* **International Debt Statistics**

1. External Debt
2. Foreign Direct Investment (FDI)
3. Remittances
4. Debt Service
5. Debt-to-GDP Ratio
6. Net International Reserves
7. Public Debt
8. Credit to Private Sector
9. Short-term Debt
10. Long-term Debt

* **Global Financial Development Database**

1. Financial System Stability
2. Access to Finance
3. Non-performing Loans
4. Bank Capital to Assets Ratio
5. Private Credit by Deposit Money Banks
6. Domestic Credit to Private Sector
7. Financial Inclusion
8. Interest Rate Spread
9. Bank Z-Score
10. Market Capitalization

**Research Questions:**

1. How does education expenditure impact GDP per capita? (WDI)
2. What is the relationship between CO₂ emissions and economic development (GDP per capita)? (WDI)
3. How has the debt-to-GDP ratio changed over the last 20 years for developing countries? (International Debt Statistics)
4. Can we predict unemployment rates based on past economic indicators (GDP per capita, education expenditure)? (WDI)
5. How does access to electricity influence GDP per capita in developing countries? (WDI)
6. What is the impact of foreign direct investment (FDI) on GDP per capita? (International Debt Statistics and WDI)
7. How does the literacy rate affect life expectancy in different regions? (WDI)
8. What is the correlation between public debt and financial system stability? (International Debt Statistics and Global Financial Development Database)
9. How does the infant mortality rate correlate with GDP per capita? (WDI)
10. What is the relationship between remittances and poverty headcount ratio? (International Debt Statistics and WDI)
11. How does the population growth rate impact CO₂ emissions? (WDI)
12. Can financial inclusion predict GDP per capita in emerging economies? (Global Financial Development Database and WDI)
13. What is the effect of short-term debt on financial system stability? (International Debt Statistics and Global Financial Development Database)
14. How do net international reserves influence GDP per capita? (International Debt Statistics and WDI)
15. What is the relationship between external debt and unemployment rate? (International Debt Statistics and WDI)
16. How does access to finance affect literacy rates in developing countries? (Global Financial Development Database and WDI)
17. What is the impact of debt service on GDP per capita? (International Debt Statistics and WDI)
18. How does credit to the private sector influence economic development (GDP per capita)? (International Debt Statistics and WDI)
19. What is the relationship between long-term debt and financial system stability? (International Debt Statistics and Global Financial Development Database)
20. How does education expenditure impact life expectancy in different countries? (WDI)
21. What is the effect of financial system stability on GDP per capita? (Global Financial Development Database and WDI)
22. How does market capitalization influence GDP per capita? (Global Financial Development Database and WDI)
23. What is the relationship between non-performing loans and financial system stability? (Global Financial Development Database)
24. How does private credit by deposit money banks impact GDP per capita? (Global Financial Development Database and WDI)
25. What is the effect of domestic credit to the private sector on economic development (GDP per capita)? (Global Financial Development Database and WDI)
26. How does the bank capital to assets ratio influence financial system stability? (Global Financial Development Database)
27. What is the relationship between interest rate spread and GDP per capita? (Global Financial Development Database and WDI)
28. How does financial inclusion impact literacy rates? (Global Financial Development Database and WDI)
29. What is the effect of the bank Z-score on financial system stability? (Global Financial Development Database)
30. How does education expenditure influence the poverty headcount ratio? (WDI)
31. What is the relationship between CO₂ emissions and life expectancy? (WDI)
32. How does the unemployment rate affect financial system stability? (WDI and Global Financial Development Database)
33. What is the impact of foreign direct investment (FDI) on financial inclusion? (International Debt Statistics and Global Financial Development Database)
34. How does public debt influence GDP per capita? (International Debt Statistics and WDI)
35. What is the relationship between remittances and education expenditure? (International Debt Statistics and WDI)
36. How does the population growth rate impact financial inclusion? (WDI and Global Financial Development Database)
37. What is the effect of short-term debt on GDP per capita? (International Debt Statistics and WDI)
38. How do net international reserves influence financial system stability? (International Debt Statistics and Global Financial Development Database)
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