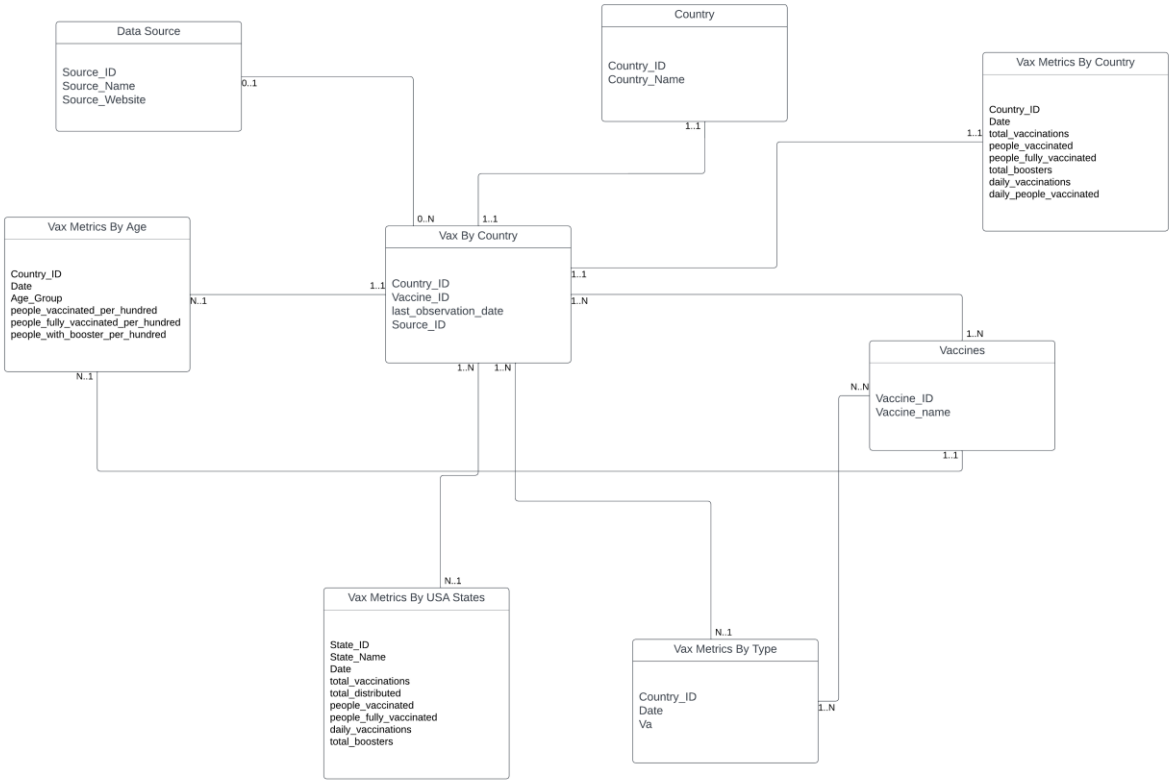
ER Diagram:



Schema:

- **Country (Country_ID*, Country_Name)**
- **Vaccines (Vaccine_ID*, Vaccine_Name)**
- **Data_Source (Source_ID*, Source_Name, Source_Website)**
- **Vax_By_Country (Country_ID*, Vaccine_ID*, Source_ID*, last_observation_date, total_vaccinations, people_vaccinated, people_fully_vaccinated, daily_vaccinations, daily_people_vaccinated, total_boosters)**
- **Vax_Metrics_By_Country (Country_ID*, Date*, Vaccine_ID*, people_vaccinated_per_hundred, people_fully_vaccinated_per_hundred, total_distributed, people_with_booster_per_hundred)**
- **Vax_Metrics_By_Type (Vaccine_ID*, Age_Group, Total_Vaccinations, people_vaccinated, people_fully_vaccinated, total_boosters)**
- **Vax_Metrics_By_Age (Country_ID*, Vaccine_ID*, Age_Group, Date*, people_vaccinated, people_fully_vaccinated, total_boosters)**
- **Vax_Metrics_By_USA_States (State_ID*, State_Name, Date*, total_vaccinations, people_vaccinated, people_fully_vaccinated, people_with_booster_per_hundred, daily_vaccinations)**

Database SQL :

1) **Create Country table**

```
CREATE TABLE Country (
 Country_ID INT PRIMARY KEY,
 Country_Name VARCHAR(255)
);
```

2) **Create Vaccines table**

```
CREATE TABLE Vaccines (
        Vaccine_ID INT PRIMARY KEY,
        Vaccine_Name VARCHAR(255)
);
```

3) Create Data_Source table

```
CREATE TABLE Data_Source (
  Source_ID INT PRIMARY KEY,
  Source_Name VARCHAR(255),
  Source_Website VARCHAR(255)
);
```

4) Create Vax_By_Country table

```
CREATE TABLE Vax_By_Country (
  Country_ID INT,
  Vaccine_ID INT,
  Source_ID INT,
  last_observation_date DATE,
  total_vaccinations INT,
  people_vaccinated INT,
  people_fully_vaccinated INT,
```

```
  daily_vaccinations INT,
  daily_people_vaccinated INT,
  total_boosters INT,
  PRIMARY KEY (Country_ID, Vaccine_ID, Source_ID),
  FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
  FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID),
  FOREIGN KEY (Source_ID) REFERENCES Data_Source (Source_ID)
);
```

5) Create Vax_Metrics_By_Country table

```
CREATE TABLE Vax_Metrics_By_Country (
  Country_ID INT,
  Date DATE,
  Vaccine_ID INT,
  people_vaccinated_per_hundred DECIMAL(5, 2),
  people_fully_vaccinated_per_hundred DECIMAL(5, 2),
  total_distributed INT,
  people_with_booster_per_hundred DECIMAL(5, 2),
  PRIMARY KEY (Country_ID, Date, Vaccine_ID),
  FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
  FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);
```

6) Create Vax_Metrics_By_Type table

```
CREATE TABLE Vax_Metrics_By_Type (
  Vaccine_ID INT,
  Age_Group VARCHAR(255),
  Total_Vaccinations INT,
  people_vaccinated INT,
  people_fully_vaccinated INT,
  total_boosters INT,
```

```
  PRIMARY KEY (Vaccine_ID, Age_Group),
  FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);

-7)Create Vax_Metrics_By_Age table
CREATE TABLE Vax_Metrics_By_Age (
  Country_ID INT,
  Vaccine_ID INT,
  Age_Group VARCHAR(255),
  Date DATE,
  people_vaccinated INT,
  people_fully_vaccinated INT,
  total_boosters INT,
  PRIMARY KEY (Country_ID, Vaccine_ID, Age_Group, Date),
  FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
  FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);

8) Create Vax_Metrics_By_USA_States table
CREATE TABLE Vax_Metrics_By_USA_States (
  State_ID INT PRIMARY KEY,
  State_Name VARCHAR(255),
  Date DATE,
  total_vaccinations INT,
  people_vaccinated INT,
  people_fully_vaccinated INT,
  people_with_booster_per_hundred DECIMAL(5, 2),
  daily_vaccinations INT
);
```