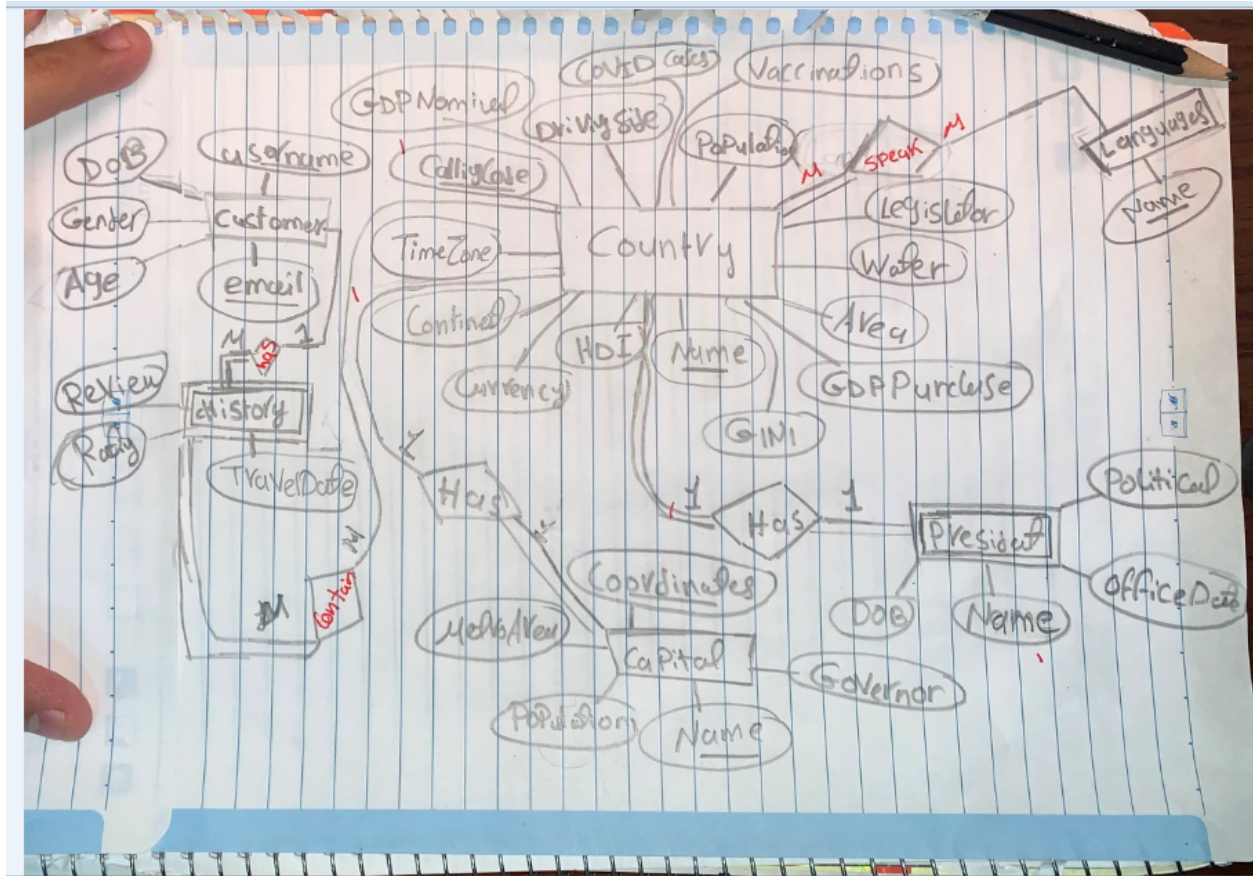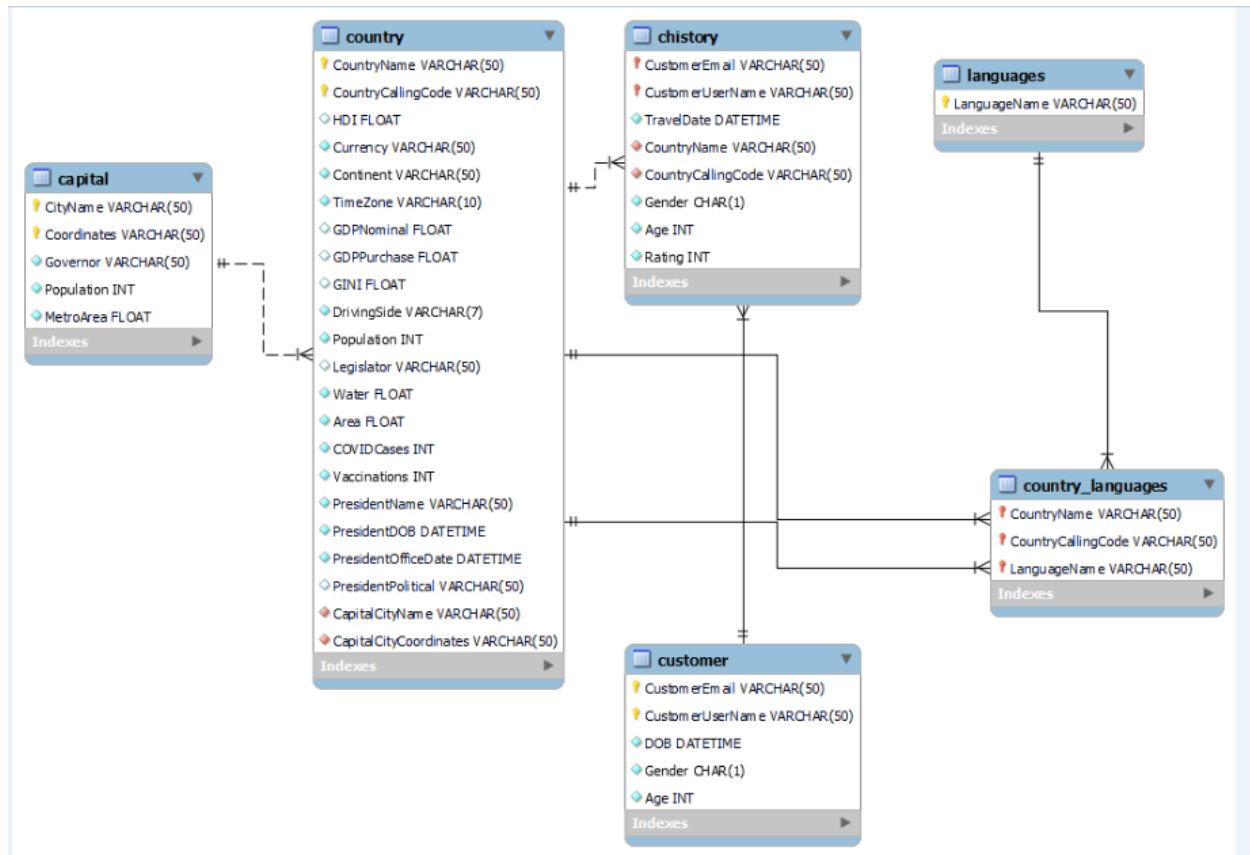**ERD**

ERD Generated from Workbench after Reverse Engineering

Relational Model:

CAPITAL (**Name**, **Coordinates** Governor, Population, MetroArea)

COUNTRY (**Name**, **CallingCode,** HDI, Currency, Continent, TimeZone, GDPNominal, GDPPurchase, GINI, DrivingSide, Population, Legislator, Water, Area, COVIDCases, Vaccinations, PresidentName, PresidentDOB, PresidentOfficeDate, PresidentPolitical, CapitalCityName, CapitalCityCoordinates)

- CapitalCityName and CapitalCityCoordinates are FOREIGN KEYS referencing CAPITAL (Name, Coordinates)

LANGUAGES (**LanguageName**)

COUNTRY_LANGUAGES(**CountryName**, **CountryCallingCode,** **Language**)

CUSTOMER (**Email**, **UserName**, DOB, Gender, Age)

CHISTORY (**CustomerEmail, CustomerUserName,** TravelDate, Rating, Review, CountryName, CountryCallingCode)

- CountryName and CountryCallingCode are FOREIGN KEYs referencing COUNTRY(Name, CallingCode)
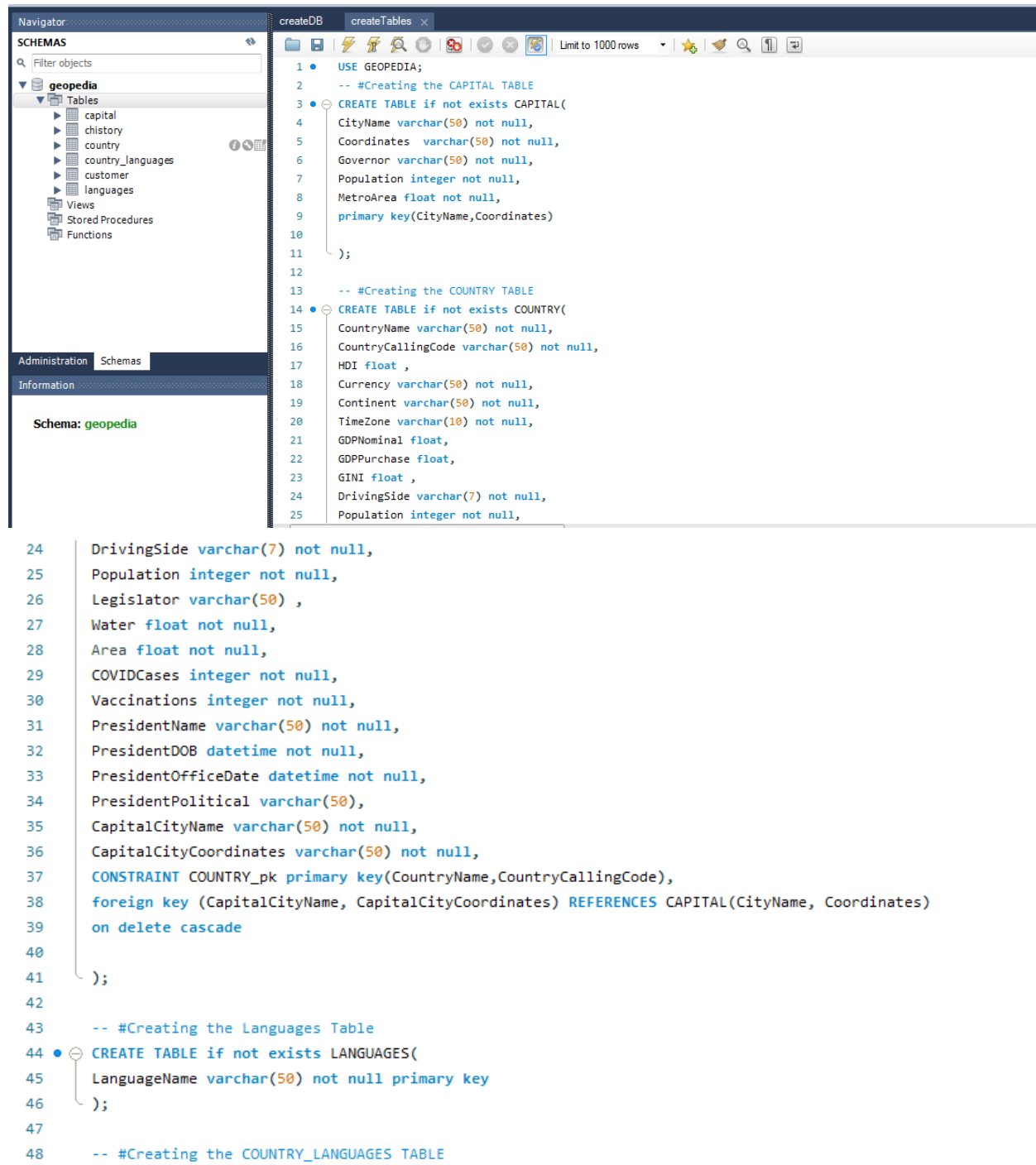
MYSQL Scripts
All scripts are saved to CreateDB.sql and CreateTables.sql

Creating the Schema

```
1    #Create Database
2 •  DROP SCHEMA  IF EXISTS GEOPEDIA;
3 •  CREATE SCHEMA if not exists GEOPEDIA;
4
5
```

Creating the Tables:

createDB　　createTables ✕

Limit to 1000 rows

```sql
1    USE GEOPEDIA;
2    -- #Creating the CAPITAL TABLE
3    CREATE TABLE if not exists CAPITAL(
4      CityName varchar(50) not null,
5      Coordinates  varchar(50) not null,
6      Governor varchar(50) not null,
7      Population integer not null,
8      MetroArea float not null,
9      primary key(CityName,Coordinates)
10
11   );
12
13   -- #Creating the COUNTRY TABLE
14   CREATE TABLE if not exists COUNTRY(
15     CountryName varchar(50) not null,
16     CountryCallingCode varchar(50) not null,
17     HDI float ,
18     Currency varchar(50) not null,
19     Continent varchar(50) not null,
20     TimeZone varchar(10) not null,
21     GDPNominal float,
22     GDPPurchase float,
23     GINI float ,
24     DrivingSide varchar(7) not null,
25     Population integer not null,
```

```sql
24     DrivingSide varchar(7) not null,
25     Population integer not null,
26     Legislator varchar(50) ,
27     Water float not null,
28     Area float not null,
29     COVIDCases integer not null,
30     Vaccinations integer not null,
31     PresidentName varchar(50) not null,
32     PresidentDOB datetime not null,
33     PresidentOfficeDate datetime not null,
34     PresidentPolitical varchar(50),
35     CapitalCityName varchar(50) not null,
36     CapitalCityCoordinates varchar(50) not null,
37     CONSTRAINT COUNTRY_pk primary key(CountryName,CountryCallingCode),
38     foreign key (CapitalCityName, CapitalCityCoordinates) REFERENCES CAPITAL(CityName, Coordinates)
39     on delete cascade
40
41   );
42
43   -- #Creating the Languages Table
44   CREATE TABLE if not exists LANGUAGES(
45     LanguageName varchar(50) not null primary key
46   );
47
48   -- #Creating the COUNTRY_LANGUAGES TABLE
```

```sql
48      -- #Creating the COUNTRY_LANGUAGES TABLE
49  ● ⊖ CREATE TABLE if not exists COUNTRY_LANGUAGES(
50      CountryName varchar(50) not null,
51      CountryCallingCode varchar(50) not null,
52      LanguageName varchar(50) not null,
53      #This step needs further revision whether these are also Foreign keys or not
54      constraint COUNTRY_LANGUAGES_pk primary key(CountryName,CountryCallingCode,LanguageName ),
55      constraint foreign key (CountryName,CountryCallingCode ) REFERENCES COUNTRY(CountryName,CountryCallingCode)
56      on delete cascade,
57      constraint foreign key (LanguageName) REFERENCES LANGUAGES(LanguageName)
58      on delete cascade
59
60      );
61
62
63      -- #Creating the CUSTOMER TABLE
64  ● ⊖ CREATE TABLE if not exists CUSTOMER(
65      CustomerEmail varchar(50) not null,
66      CustomerUserName varchar(50)  not null,
67      DOB datetime not null,
68      Gender char(1) not null,
69      Age integer not null,
70      constraint CUSTOMER_pk primary key(CustomerEmail,CustomerUserName)
71      );
72
```

```sql
69      Age integer not null,
70      constraint CUSTOMER_pk primary key(CustomerEmail,CustomerUserName)
71      );
72
73      -- #Creating the CUSTOMER TABLE
74  ● ⊖ CREATE TABLE if not exists CHISTORY(
75      CustomerEmail varchar(50) not null,
76      CustomerUserName varchar(50)  not null,
77      TravelDate datetime not null,
78      CountryName varchar(50) not null,
79      CountryCallingCode varchar(50) not null,
80      Gender char(1) not null,
81      Age integer not null,
82      Rating integer not null,
83      -- this line makes sure that the rating is between 0 and 10
84      CONSTRAINT Rating CHECK (Rating BETWEEN 1 AND 10),
85      CONSTRAINT CHISTORY_pk primary key(CustomerEmail,CustomerUserName),
86      foreign key (CountryName,CountryCallingCode) REFERENCES COUNTRY(CountryName,CountryCallingCode),
87      foreign key (CustomerEmail, CustomerUserName) REFERENCES CUSTOMER(CustomerEmail, CustomerUserName)
88      on delete cascade
89
90      );
91
92
```