The relational schema of the Mondial database

Country: the countries (and similar areas) of the world with some data.
name: The country name
code: The car code
capital: The name of the capital
province: The province where the capital belongs to
area: the total area
population: the population number

Economy: economical information about the countries.
country: the country code
GDP: gross domestic product (in million $)
agriculture: percentage of agriculture of the GDP
service: percentage of services of the GDP
industry: percentage of industry of the GDP
inflation: inflation rate (per annum)

Population: information about the population of the countries.
country: the country code
population_growth: population growth rate (per annum)
infant_mortality: infant mortality (per thousand)

Politics: political information about the countries.
country: the country code
independence: date of indepenedence (if independent)
dependent: the country code where the area belongs to
government: type of government

Language: infomation about the languages spoken in a country
country: the country code
name: name of the languange
percentage: percentage of the language in this country

Religion: information about the religions in a country
country: the country code
name: name of the religion
percentage: percentage of the language in this country

EthnicGroup: information about the ethnic groups in a country
country: the country code
name: name of the religion
percentage: percentage of the language in this country

borders: informations about neighboring countries. Note that in this relation, for every pair of neighboring countries (A,B), only one tuple is given – thus, the relation is *not* symmetric.
country1: a country code
country2: a country code
length: length of the border between country1 and country2

Continent: Information about continents.
name: name of the continent
area: total area of the continent

encompasses: information to which continents a country belongs.
country: the country code
continent: the continent name

percentage: percentage, how much of the area of a country belongs to the continent

City: information about cities.
name: the name of the city
country: the country code where it belongs to
province: the name of the province where it belongs to
population: population of the city
longitude: geographic longitude
latitude: geographic latitude

Province: information about administrative divisions.
name: the name of the administrative division
country: the country code where it belongs to
area: the total area of the province
population: the population of the province
capital: the name of the capital
capprov: the name of the province where the capital belongs to
note that *capprov* is not necessarily equal to *name*. E.g., the municipality of *Bogota (Columbia)* is a province of its own, and *Bogota* is the capital of the surrounding province *Cudinamarca*.

Organization: information about political and economical organizations.
name: the full name of the organization
abbreviation: its abbreviation
city: the city where the headquarter is located
country: the country code where the headquarter is located
province: the province where the headquarter is located
established: date of establishment

isMember: memberships in political and economical organizations.
organization: the abbreviation of the organization
country: the code of the member country
type: the type of membership

Lake: information about lakes.
name: the name of the lake
area: the total area of the lake
depth: the depth of the lake
altitude: the altitude of the lake
river: the river that flows out of the lake (may be null)
type: the type of the lake, e.g., salt, caldera, ...
coordinates: its geographical coordinates as (longitude, latitude)

River: information about rivers.
name: the name of the river
length: the length of the river
river: the river where it flows to
lake: the lake where it flows to
sea: the sea where it flows to
source: the coordinates of its source
sourceAltitude: the altitude of its source
mountains: the montains where its source is located
source: the coordinates of its estuary

Sea: information about seas.

name: the name of the sea
depth: the maximal depth of the sea

Mountain: information about mountains
name: the name of the mountain
mountains: the montains where the it belongs to
height: the height of the mountain
type: the type of the mountain, e.g. volcanic, (active) volcano, ...
coordinates: its geographical coordinates as (longitude, latitude)

Island: information about islands
name: the name of the island
islands: the group of islands where it belongs to
area: the area of the island
height: the height of the highest point on the island
type: the type of the island, e.g. volcanic, coral, atoll, ...
coordinates: its geographical coordinates as (longitude, latitude)

Desert: information about deserts.
name: the name of the desert
area: the total area of the desert
coordinates: its geographical coordinates as (longitude, latitude)

geo_Mountain: geographical information about mountains
mountain: the name of the mountain
country: the country code where it is located
province: the province of this country

Note that for a country there can be several provinces where the mountain is located in.
analogous for *geo_island*, *geo_desert*, *geo_river*, *geo_lake*, *geo_sea*. Analogously, there are also *geo_source* and *geo_estuary*.

mergesWith: information about neighboring seas. Note that in this relation, for every pair of neighboring seas (A,B), only one tuple is given – thus, the relation is *not* symmetric.
sea1: a sea
sea2: a sea

located: information about cities located at rivers, lakes, and seas.
city: the name of the city
country: the country code where the city belongs to
province: the province where the city belongs to
river: the river where it is located at
lake: the lake where it is located at
sea: the sea where it is located at
Note that for a given city, there can be several lakes/seas/rivers where it is located at.

locatedOn: information about cities located in islands.
city: the name of the city
country: the country code where the city belongs to
province: the province where the city belongs to
island: the island it is (maybe only partially) located on
Note that for a given city, there can be several islands where it is located on.

islandIn: information the waters where the islands are located in.
island: the name of the island
sea: the sea where the island is located in

lake: the sea where the island is located in
river: the sea where the island is located in
Note that an island can have coasts to several seas.

MountainOnIsland: information which mountains are located in islands.
mountain: the name of the mountain
island: the name of the island

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