

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 independence (if independent)

wasdependent: the political body where the area was dependent of; usually a country (but not always).

dependent: the country code where the area belongs to

government: type of government

Language: information about the languages spoken in a country

country: the country code

name: name of the language

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
elevation: the elevation (above sea level) 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
elevation: the elevation (above sea level) 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)

Sea: information about seas.

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

River: information about rivers.

name: the name of the river
length: the length of the river
river: the river where it finally flows to
lake: the lake where it finally flows to

sea: the sea where it finally flows to;
(note that at most one out of {river,lake,sea} can be non-null)
source: the coordinates of its source
sourceElevation: the elevation (above sea level) of its source
mountains: the montains where its source is located
estuary: the coordinates of its estuary

RiverThrough: information about rivers flowing through lakes.

river: the name of the river
lake: the lake where it flows through

Mountain: information about mountains

name: the name of the mountain
mountains: the montains where the it belongs to
elevation: the maximal elevation of the summit 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
elevation: the maximal elevation of 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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