## FunSQL A library for compositional construction of SQL queries

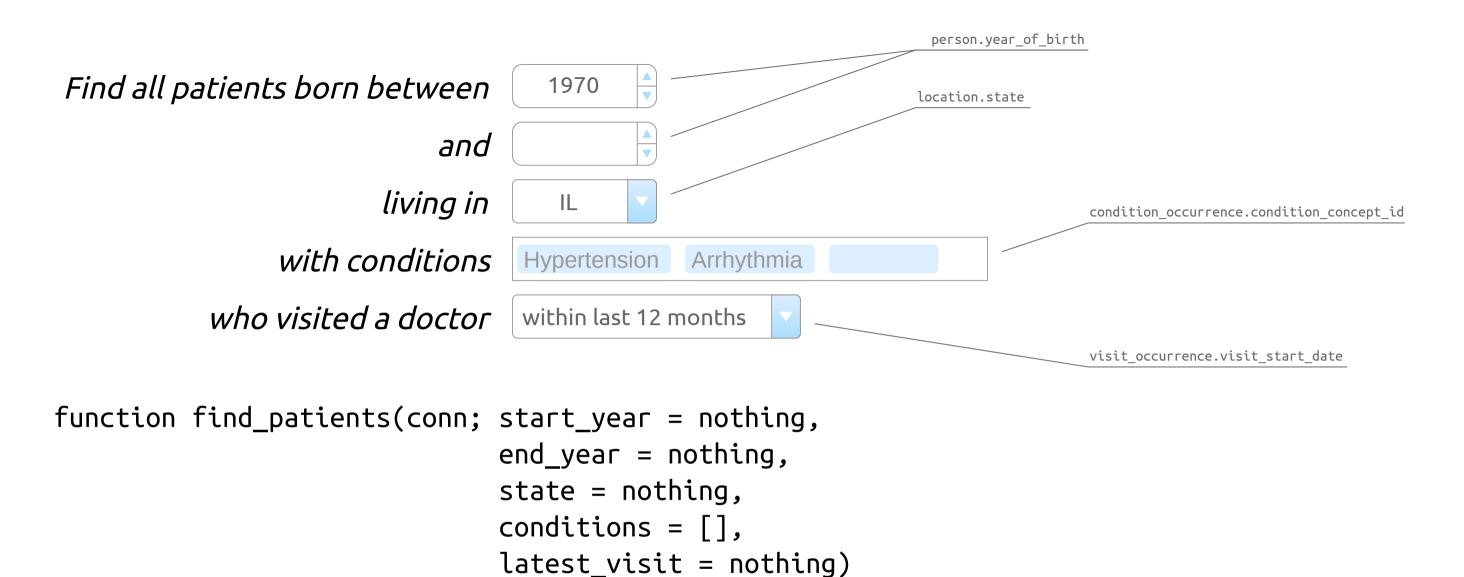
https://github.com/MechanicalRabbit/FunSQL.jl

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## Find all patients born in or after 1970.

```
function find_patients(conn)
    sql = """
    SELECT p.person_id
    FROM person p
    WHERE p.year_of_birth >= 1970
    """
    DBInterface.execute(conn, sql)
end
```

```
function find_patients(conn; start_year = nothing, end_year = nothing)
    sql =
    SELECT p.person_id
    FROM person p
    predicates = String[]
    if start year !== nothing
        push!(predicates, "p.year_of_birth >= $start_year")
    end
    if end_year !== nothing
        push!(predicates, "p.year_of_birth <= $end_year")</pre>
    end
    if !isempty(predicates)
        sql *= "\nWHERE " * join(predicates, " AND ")
    end
    DBInterface.execute(conn, sql)
end
```



sql = ???
DBInterface.execute(conn, sql)

end



```
location
using FunSQL: SQLTable
                                                                                      person
const person =
    SQLTable(name = :person,
                                                                          condition occurrence
             columns = [:person_id, :year_of_birth, :location_id])
const location =
                                                                            visit occurrence
    SQLTable(name = :location,
             columns = [:location id, :city, :state, :zip])
const condition_occurrence =
    SQLTable(name = :condition_occurrence,
             columns = [:condition_occurrence_id, :person_id, :condition_concept_id,
                        :condition_start_date, :condition_end_date])
const visit_occurrence =
    SQLTable(name = :visit_occurrence,
             columns = [:visit_occurrence_id, :person_id, :visit_concept_id,
                        :visit_start_date, :visit_end_date])
```