

FunSQL

A library for compositional construction
of SQL queries

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

Clark C. Evans,
Kyrylo Simonov

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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
```

Find all patients born between *and*

```
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")
  end
  if !isempty(predicates)
    sql *= "\nWHERE " * join(predicates, " AND ")
  end
  DBInterface.execute(conn, sql)
end
```

Find all patients born between
and
living in
with conditions
who visited a doctor

```
function find_patients(conn; start_year = nothing,  
                        end_year = nothing,  
                        state = nothing,  
                        conditions = [],  
                        latest_visit = nothing)
```

???

```
  DBInterface.execute(conn, sql)  
end
```