

# CSE486 Ontologies & Semantic Web

## Project

Name: Youssef Fawzy Ali

ID:16P3087

Name: Mohamed Mohamed Saeed

ID:16P6015



# SPARQL Queries

untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) : [D:\Uni\2022\Spring 2022\Airport.owl]

File Edit View Reasoner Tools Refactor Window Help

< > untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) Search...

Active ontology Entities Individuals by class DL Query SPARQL Query

SPARQL query:

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX uri: <http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3#>

SELECT ?Person ?Name
  WHERE {
    ?Person a uri:Pilot.
    ?Person uri:Name ?Name
  }
```

| Person | Name  |
|--------|---|
| Pilot1 | "Youssef Shaheen" <sup>^^</sup> <http://www.w3.org/2001/XMLSchema#string> |
| Pilot2 | "Moahmed Saeed" <sup>^^</sup> <http://www.w3.org/2001/XMLSchema#string>   |

Execute

untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) : [C:\Users\Saeed\Desktop\Ontologies\Airport (1).owl]

File Edit View Reasoner Tools Refactor Window Help

< > untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) Search...

Active ontology x Entities x Individuals by class x DL Query x SPARQL Query x

SPARQL query:

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>  
PREFIX owl: <http://www.w3.org/2002/07/owl#>  
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>  
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>  
PREFIX uri: <http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3#>  
SELECT ?Controller ?FlightID WHERE {  
    ?person a uri:Airport\_Controller .  
    ?person uri:Name ?Controller .  
    ?person uri:Instruct ?flight .  
    ?flight uri:Flight\_ID ?FlightID .  
}

| Controller    | FlightID  |
|---------------|---|
| "Esraa"       | "1" <xsd:http: 2001="" td="" www.w3.org="" xmlschema#int&gt;<=""></xsd:http:> |
| "Ahmed Alaa"  | "2" <xsd:http: 2001="" td="" www.w3.org="" xmlschema#int&gt;<=""></xsd:http:> |
| "Esraa Ahmed" | "4" <xsd:http: 2001="" td="" www.w3.org="" xmlschema#int&gt;<=""></xsd:http:> |

Execute

To use the reasoner click Reasoner > Start reasoner ☒ Show Inferences

untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) : [C:\Users\Saeed\Desktop\Ontologies\Airport (1).owl]

File Edit View Reasoner Tools Refactor Window Help

< > untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) Search...

Active ontology x Entities x Individuals by class x DL Query x SPARQL Query x

SPARQL query:

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX uri: <http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3#>
SELECT ?pilot ?FlightName WHERE {
    ?person a uri:Pilot.
    ?person uri:Name ?pilot.
    ?person uri:Drives ?flight.
    ?flight uri:Flight_Name ?FlightName.
}
```

| pilot             | FlightName   |
|-------------------|--------------|
| "Youssef Shaheen" | "USA"        |
| "Youssef Shaheen" | "EgyptAir A" |
| "Moahmed Saeed"   | "EgyptAir B" |
| "Moahmed Saeed"   | "UAE1"       |

Execute

To use the reasoner click Reasoner > Start reasoner ☒ Show Inferences

untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) : [C:\Users\Saeed\Desktop\Ontologies\Airport (1).owl]

File Edit View Reasoner Tools Refactor Window Help

< > untitled-ontology-3 (http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3) Search...

Active ontology x Entities x Individuals by class x DL Query x SPARQL Query x

SPARQL query:

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>  
PREFIX owl: <http://www.w3.org/2002/07/owl#>  
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>  
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>  
PREFIX uri: <http://www.semanticweb.org/kingo/ontologies/2022/4/untitled-ontology-3#>  
SELECT ?name ?department WHERE {  
    ?person a uri:Staff;  
        uri:Name ?name;  
        uri:Department ?department .  
}

| name              | department  |
|-------------------|-------------|
| "Mohamed"         | "Non_tech"  |
| "Abdelhakim"      | "Non_tech"  |
| "Youssef Shaheen" | "Fly"       |
| "Esraa Ahmed"     | "Operation" |
| "Ahmed"           | "Non_tech"  |
| "Ahmed Alaa"      | "Operation" |
| "Moahmed Saeed"   | "Fly"       |
| "Esraa"           | "Operation" |

Execute

To use the reasoner click Reasoner > Start reasoner ☒ Show Inferences 