

Bài 4

-Hiển thị tất cả các subClassOf lớp có chứa lớp con

Active ontology x Entities x Individuals by class x DL Query x OntoGraf x SWRLTab 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#>
SELECT ?subject ?object
WHERE { ?subject rdfs:subClassOf ?object }
```

subject	object
Bracelet	Accessories
Hat	Accessories
Necklace	Accessories
Waist	Accessories

-Lấy tất cả các instance(thực thể của một lớp)

TrangPhucTruyenThong (http://www.semanticweb.org/a/ontologies/2023/8/TrangPhucTruyenThong) : [C:\Users\...\Documents]

File Edit View Reasoner Tools Refactor Window Help

TrangPhucTruyenThong (http://www.semanticweb.org/a/ontologies/2023/8/TrangPhucTruyenThong)

Active ontology x Entities x Individuals by class x DL Query x SWRLTab x OntoGraf 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 tppt: <http://www.semanticweb.org/a/ontologies/2023/8/TrangPhucTruyenThong#>
SELECT ?festival
{
    ?festival rdf:type tppt:Festival
}
ORDER BY ?festival
```

festival
Cho_Vosa
Choi_Chnam_Thmay
Chrul_Col
Com_Moi
Dam_Duong
Dam_Trau
Den_Hung
Doan_Ngo
Don-Ta
Dooc_Moong
-

Execute

-Truy vấn tìm kiếm một thực thể của một lớp liên kết với một lớp khác theo property

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 tppt: <http://www.semanticweb.org/huyphuc/ontologies/2021/4/TrangPhucTruyenThong#>
SELECT *
WHERE {
    tppt:Dress-Khmer tppt:isCostumeof ?Dantoc
}
```

Dantoc

Khmer

-Tìm tất cả các Instance thuộc về lớp Phụ Kiện

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 tppt: <http://www.semanticweb.org/huyphuc/ontologies/2021/4/TrangPhucTruyenThong#>
SELECT ?nameAccessories
WHERE { ?nameAccessories rdf:type tppt:Waist
}
```

nameAccessories

Belts-Cham
Fabric-Belts
Silver-Belts
Belts-Khmer
Pa-Than-Belts

-Tìm kiếm tất cả các mối quan hệ của một trang phục mới với tất cả các lớp khác và lấy instance của các mối quan hệ.

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 tppt: <http://www.semanticweb.org/huyphuc/ontologies/2021/4/TrangPhucTruyenThong#>
SELECT distinct ?property ?value
WHERE {tppt:Dress-Khmer ?property ?value .
    filter ( ?property not in ( rdf:type, tppt:isCostumeof ) )}
```

property	value
hasHatis	Pket-Plac
wearinFestival	Ok-Orr-Bok
hasWaistis	Belts-Khmer
wearinFestival	Choi-Chnam-Thmay
hasBraceletis	Gold-Bracelet
wearinFestival	Choi-Vosa
wearinFestival	Don-Ta

Bài 5:

5.1: Lấy tất cả pizza từ quốc gia Mỹ

The screenshot shows the Protege OWL editor interface. On the left, a class hierarchy for 'SpicyPizza' is displayed, including subclasses like 'AmericanHot', 'Cajun', 'PolloAdAstra', 'SloppyGiuseppe', 'SpicyPizzaEquivalent', 'ThinAndCrispyPizza', and 'VegetarianPizza'. The 'SpicyPizza' class is selected. On the right, the 'Query (class expression)' panel shows the query: `Pizza and (hasCountryOfOrigin value America)`. Below the query, there are buttons for 'Execute' and 'Add to ontology'. The 'Query results' panel shows 5 subclasses: 'American', 'AmericanHot', 'CheesyVegetableTopping', 'IceCream', and 'owl:Nothing'.

5. 2: Lấy tất cả pizza có topping là Spinach

The screenshot shows the Protege OWL editor interface. On the left, the same class hierarchy for 'SpicyPizza' is displayed. On the right, the 'Query (class expression)' panel shows the query: `Pizza and (hasTopping some SpinachTopping)`. Below the query, there are buttons for 'Execute' and 'Add to ontology'. The 'Query results' panel shows 4 subclasses: 'CheesyVegetableTopping', 'Fiorentina', 'IceCream', and 'owl:Nothing'. On the far right, there is a 'Query for' section with checkboxes for 'Direct superclas', 'Superclasses', 'Equivalent class', 'Direct subclasse', 'Subclasses', and 'Instances'. Below this is a 'Result filters' section with a 'Name contains' field and two checked options: 'Display owl:Thir (in superclass resul)' and 'Display owl:Notl (in subclass results)'.

5. 3: Lấy tất cả pizza có độ cay Medium

Active ontology × Entities × Individuals by class × DL Query × SWRLTab × OntoGraf × SPARQL Query ×

Class hierarchy: Medium DL query

Inferred

- Parmense
- PolloAdAstra
- PrinceCarlo
- QuattroFormaggi
- Rosa
- Siciliana
- SloppyGiuseppe
- Soho
- Veneziana
- NonVegetarianPizza
- SpicyPizza
 - AmericanHot
 - Cajun
 - PolloAdAstra
 - SloppyGiuseppe
- SpicyPizzaEquivalent
- ThinAndCrispyPizza
- VegetarianPizza
- PizzaBase
- PizzaTopping
 - MeatTopping
 - SeafoodTopping
 - SpicyTopping
 - VegetarianTopping
- ValuePartition
 - Spiciness
 - Hot
 - Medium
 - Mild

Query (class expression)

Pizza and (hasTopping some (hasSpiciness some Medium))

Execute Add to ontology

Query results

Subclasses (16 of 16)

- American
- AmericanHot
- Cajun
- Capricciosa
- CheesyVegetableTopping
- Fiorentina
- FourSeasons
- FruttiDiMare
- Giardiniera
- IceCream
- PolloAdAstra
- Siciliana
- SloppyGiuseppe
- Soho
- Veneziana
- owl:Nothing

5. 4: Lấy tất cả pizza chay

Active ontology × Entities × Individuals by class × DL Query × SWRLTab × OntoGraf × SPARQL Query ×

Class hierarchy: Medium DL query

Inferred

- Parmense
- PolloAdAstra
- PrinceCarlo
- QuattroFormaggi
- Rosa
- Siciliana
- SloppyGiuseppe
- Soho
- Veneziana
- NonVegetarianPizza
- SpicyPizza
 - AmericanHot
 - Cajun
 - PolloAdAstra
 - SloppyGiuseppe
- SpicyPizzaEquivalent
- ThinAndCrispyPizza
- VegetarianPizza
- PizzaBase
- PizzaTopping
 - MeatTopping
 - SeafoodTopping
 - SpicyTopping
 - VegetarianTopping
- ValuePartition
 - Spiciness
 - Hot
 - Medium
 - Mild

Query (class expression)

Pizza and (hasTopping only VegetarianTopping)

Execute Add to ontology

Query results

Subclasses (13 of 13)

- Caprina
- CheesyVegetableTopping
- Fiorentina
- Giardiniera
- IceCream
- Margherita
- Mushroom
- PrinceCarlo
- QuattroFormaggi
- Rosa
- Soho
- Veneziana
- owl:Nothing

5.5: Lấy tất cả pizza có Veneziana từ ThinAndCrispy