

H owl exei megalyterh ekfrastikh isxy se sygkrish me thn RDF

Px mporoume na vazoume **property types, logikous synduasmous**, na xrhmoipoioume **restrictions** stis klaseis mas kai **value restrictions**

1. Property Types (object properties)-p39

Poio object property tha mporouse na thewrhthei symmetric??

1.To border einai **symmetric** gt an h xwra A

exei border me th xwra B tote k h xwra B exei borders me th xwra A

Poio object property tha mporouse na thewrhthei functional??

Px to located in **to subject μπορεί να έχει το πολύ ένα value**

2.to is_isolated_in einai **functional** dioti syndeeei mia polh me mono mia xwra (dvo xwres den mpouroun na exoun thn idia polh)

Inverse: To *object* δεν μπορεί να συνδέεται με 2 διαφορετικά subjects

Estw twra oti theloume na doume ena paradeigma gia to inverse

3. dhmioyrgw **neo property** to "**contain**" (den einai sub property kanenous) k tou vazw oti einai **inverse** of tou property **is_part_of**

2. Βασικοί περιορισμοί που χρησιμοποιούνται για να ορίσουν τη λογική σχέση μεταξύ κλάσεων-p27,p40-43

Pws xrhsimopoiw to **disjoint** (ksenes klaseis metaksy tous)

country **disjoint** me state kai city

Pws xrhsimopoiw to **complement/simplhrwma**

Gia na efarmosw to simplhrwma dhmiourgw 2 nees klaseis (upoklaseis tou country)

europaian_countries ,non_europaian_countries

epilegw-> **non_europaian_countries** ->Sub Class Of->class expression editor-> **not europaian_countries**

Pws xrhsimopoiw to union/enwsh

Gia na efarmosw to union dhmiourgw mia nea klash **region** me thn opoia mporei na ekfrastoun kai h klash **country** kai h **state**

opote dhmiourge mia nea klash region (den einai subclass kanenous)

epilegw-> **region**->Equivalent To->class expression editor-> **country or state**

Pws xrhsimopoiw to **intersection/tomh**

Gia ayto to paradeigma tha xreastw tis klaseis

northen_european_country (den einai subclass kanenous), **northen_country** (upoklash tou country), **european_country** (pou yparxei hdh)

epilegw ->**northen_european_country**-> Equivalent To->class expression editor-> **european_country and northen_country**

-----Pws dhmiourgw classeis me restrictions-----

Estw oti thelw na dhmourghsw mia nea klash, th “**central_european_country**” h opoia den ginetai na exei **borders**/sunora me alla **countries** pera apo European country mias kai einai central

Pws to dhlwnw ayto:

Dhmiourgw mia nea klash “**central_european_country**” h opoia tha einai ypoklash tou “**european_country**”

Epilelw th **central_european_country**-> Sub Class Of-> object restriction creator-> **border kai European_country (restriction type: only universal)** mono

Estw oti oti thelw na dhmourghsw mia nea klash, th “**europen_neighbor_country**” einai mia **non_european_country** pou synoreyei (**borders**) me toulaxiston mia **european_country**.

Dhmiourgw loipon th klash “**europen_neighbor_country**” h opoia tha einai upoklash ths “**non_european_country**”

Epilelw th “**europen_neighbor_country**” -> Sub Class Of-> object restriction creator-> **border kai European_country (restriction type: some existencial)** toulaxiston

-----Pws dhmiourgw **value restrictions**-----

Estw twra oti thelw na dhmiourgisw mia nea klash “**german_city**” (upoklash ths city) oti exei ena sygkekrimeno value to **located_in Germany**

Paw sth kartela **Individuals** dhmiourgw ena **individual** to **Germany** kai dhlwnw oti einai **type european_country**

Epeita paw pisw sth kartela me tis klaseis kai epilegw thn klash **"german_city"** -> Sub Class Of-> class expression editor->**located_in value Germany**

Estw twra oti thelw na dhmiourgisw mia nea klash thn **island_country** (h opoia einai upoklash ths **country**) kai thelw na pw pws den synoreyei (**border**) me kamia allh xwra.

Epilelw th **"island_country"** -> Sub Class Of-> object restriction creator-> **border kai country (restriction type: Exactly)** kai vazw **0** apo dipla

-----Individuals-----

Estw oti thelw na dhmiourghsw ena individual, to **Berlin** to opoio tha einai **GermanCity** kai na dhlwsw poso plhthusmo exei

Paw sth kartela **Individuals** kai dhmiourgw neo **Individual to Berlin** ->**Types->GermanCity** kai dipla **Data property Assertions-> Data type->population 350000**

Epishs thelw na dhlwsw sygkekrimena oti einai prwteuoussa ths (**capital_of**) Germanias (**Germany**)

Paramenw sth kartela **Individuals-> object property Assertions->is capital_of kai Germany**

Pame twra na dhmiourghsoume ena epitideumeno lathos gia na tsekaroume ta restrictions mas

Dhmiourgw ena neo **Individual to Iceland** to opoio einai **type european_county, island_country** kai tou lew oti sunoreuei (**borders**) me th Germany?!