Homework 1 BGMNTE

3.1.1.

Margherita is vegetarian because Vegetarian pizza is defined as not having Seafood or meat topping, therefore margarita qualifies as vegetarian.

3.1.2.

Domain – food, Range – food.

Subproperties are: hasBase and hasTopping.

Inverse: IsIngredientOf.

Characteristics – Transitivity.

3.1.3.

* In the inferred class hierarchy, the inference engine creates and shows us the different properties of our instances that come from previously defined dependencies with other instances.
* If a class is a subclass of owl:Nothing it means that it’s an empty class, as owlNothing is an empty set.
* The classes appear to be empty because there are mistakes in their declaration. In the case of Cheesy Vegetable Topping it has 2 disjoint parents, which means it will never be instantiated. The other class is an IceCream and has a property of Topping, however topping has a domain of pizza and since the 2 are disjoint which causes an inconsistency.
* CheesyPizza, VegetarianPizza1, VegetarianPizza2

3.1.4.

Superclasses: NamedPizza, CheesyPizza, InterestingPizza, MeatyPizza. The reason for why these classes are superclasses of Grandiosa is that Grandiosa was created as a NamedPizza. Its toppings make it a candidate for being a child of the other classes.

3.1.5.

Norway added to the list of countries. Reasoner started and results are available.

3.2.1.

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text, application

Description automatically generated

3.2.2.

1. Graphical user interface, application

Description automatically generated

2. Graphical user interface

Description automatically generated with low confidence

3.Graphical user interface, application

Description automatically generatedGraphical user interface, text, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

4. Graphical user interface, text, application, email

Description automatically generated