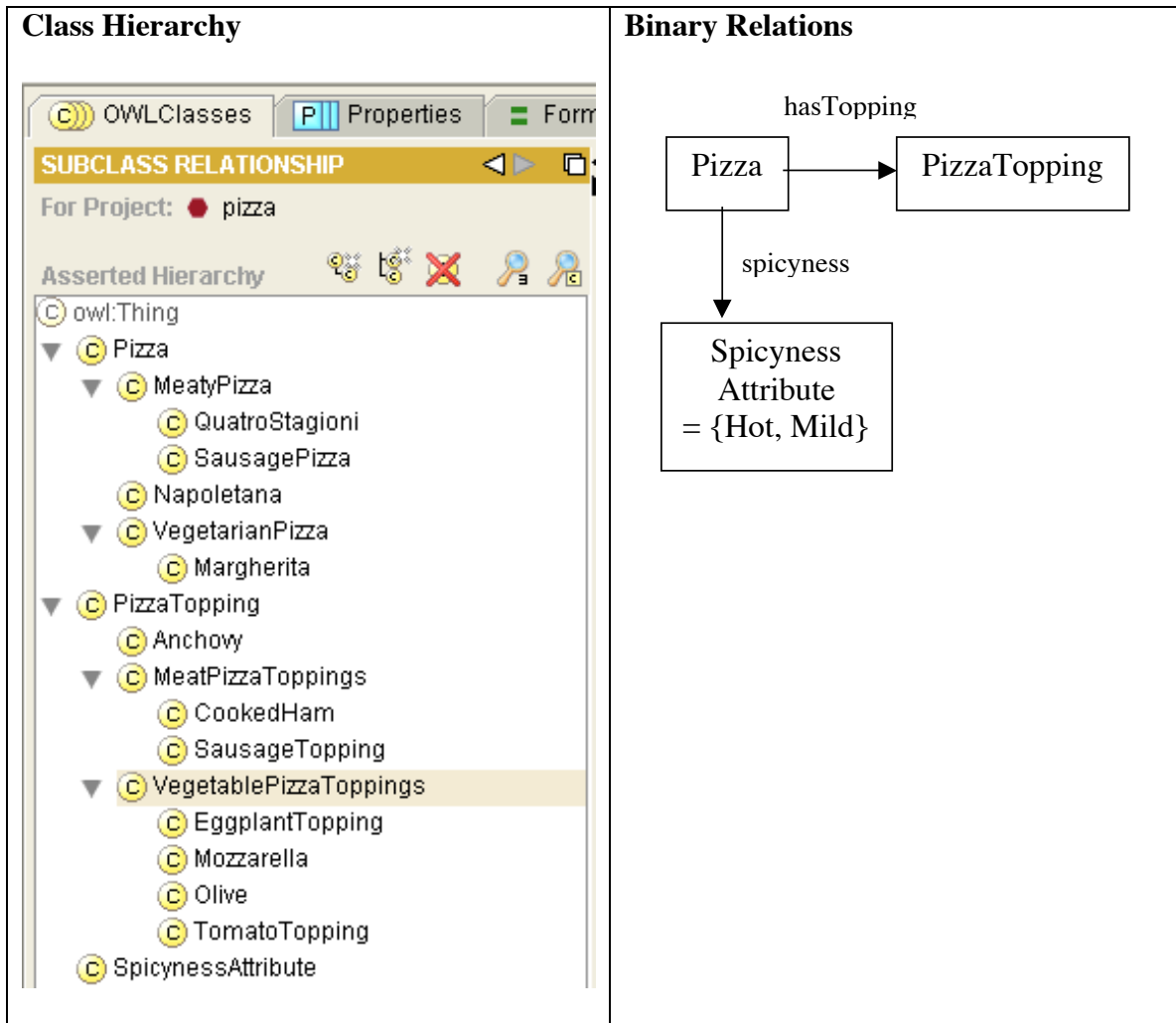


Tutorial 1

The objective is to define reusable resource describing items sold on-line by Pizza Inc. – traditional pizzas. The purpose is to support software design and development by providing an underlying model for website design, and data exchange between systems for product ordering and order tracking. The granularity of the ontology is from categories of products, to individual items ordered by customers. The scope is limited to pizzas and pizza toppings, viewed from the perspectives of i) the composition (ingredients) of the pizzas, ii) likely dietary requirements of customers, limited to suitability for vegetarians and spicyness.

Glossary of Terms

| Name | Synonyms | Acronyms | Description | Type |
|-------------------------|-------------------|----------|--|--------------------|
| Pizza | | | Flat baked dough covered with tomato sauce cheese and other toppings | concept |
| Margherita | | | A pizza with mozzarella, tomatoes, olive oil, basil | concept |
| Napoletana | Pizza alla Romana | | A pizza with mozzarella, tomatoes, anchovies, olive oil, and oregano | concept |
| Quatro Stagioni | Four seasons | | A pizza with cooked ham, tomatoes, mushrooms, artichoke, eggplant | concept |
| Meaty Pizza | | | A pizza with some meat topping | concept |
| Vegetarian Pizza | | | A pizza with no meat or fish topping. | concept |
| Sausage Pizza | | | A pizza with pork sausage and green peppers, mozeralla and cheese. | concept |
| Has-topping | | | Identifies that toping(s) a pizza may have. | relation |
| Spicyness | | | Identifies the hotness, in the sense of being spicy, of a dish. | instance attribute |
| Tomato topping | | | Chopped tomatoes used in toppings | concept |
| Anchovy | | | Anchovy, a fish, usually in oil. | concept |
| Olive | | | Olive | concept |
| Sausage topping | | | Pork sausages used as toppings | concept |
| Eggplant topping | Aubergine | | Eggplant, usually roasted when used as a topping | concept |
| Hot | | | Hot degree of spicyness | instance |
| Mild | | | Mild degree of spicyness | instance |
| Pizza topping | | | Category of all pizza toppings | concept |
| Vegetable pizza topping | | | Pizza toppings suitable for vegetarians | concept |
| Meat pizza topping | | | Pizza toppings that are or contain meat | concept |
| Spicyness Attribute | | | A category for the instances (values) Hot and Mild | concept |
| | | | | |
| | | | | |



Concept Dictionary

| Name | Synonym | Acronym | Instances | Class Attributes | Instance Attributes | Relations |
|--------------------|---------|---------|-----------|------------------|---------------------|------------|
| Pizza | | | | | spicyness | hasTopping |
| PizzaTopping | | | | | | hasTopping |
| SpicynessAttribute | | | Hot, Mild | | spicyness | |
| | | | | | | |

The domain of *hasTopping* is Pizza, the range is PizzaTopping. A pizza can have any number of toppings so this is not a functional relation and cardinality cannot be defined. This relation has no other properties (transitivity, symmetry etc).

The domain of *spicyness* is Pizza, the range is SpicynessAttribute. Spicyness is an attribute, it is functional (a pizza cannot be both Hot and Mild). This relation has no other properties (transitivity, symmetry etc).