

Programming Assignment 3: Building an OWL Ontology

Due Apr 23 by 11:59pm **Points** 30

Submitting a file upload

Available Apr 9 at 11:59pm - Apr 24 at 2:59am

This assignment was locked Apr 24 at 2:59am.

For this assignment you need to submit two files (one PDF and one OWL) :

You need to combine answer of Q1,Q6 and Q7 [and all of their sub parts] in a single PDF file

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Your OWL file that cover all parts of tutorial and including Q2,Q3,Q4, Q5,Q6 and Q7.

This assignment requires you to complete an introductory-level tutorial aimed at newcomers to ontologies and those using formalisms other than OWL. It will give you hands-on experience in the construction of ontologies as you follow the instructions in the tutorial and build an OWL ontology using the domain of pizzas. The tutorial is organized into three parts and comprises four specific exercises:

Exercise 1: Create a Primitive Class Hierarchy (expected, missing some classes)

Exercise 2: Add disjoints

Exercise 3: Properties and Restrictions

Exercise 4: Define a MeatyPizza

Please follow the overall steps listed here to successfully complete the assignment.

Step 1- Prepare.

Download the assignment guide (see below), preview the entire tutorial and assigned tasks, and review the evaluation criteria section below.

CSE579_Unit-7_GradedAssignmentGuide_inc-tutorial**(<https://canvas.asu.edu/courses/143179/files/59528819?wrap=1>)**

Step 2 - Access Protege on your local machine.

You must use Protege installed on your local machine to complete this assignment.

Step 3 - Complete the tutorial and integrated problems.

With the assignment guide PDF close at hand, complete the entire tutorial, saving the information indicated for submission on Canvas. You must save the following information and files:

- Your answer to prompt 1 (see page 12 in the guide)
- Your screen shot of DL queries (see page 25 in the guide)
- Your OWL file (see page 25 in the guide)

Some Rubric (1)

| Criteria | Ratings | | Pts |
|--|-----------------------------------|---------------------------------|-------|
| Q1- Correct answer to whether there is any inconsistent class. | 2 pts Full Marks | 0 pts No Marks | 2 pts |
| Q1-1-Explanation of inconsistency | 4 pts Full Marks | 0 pts No Marks | 4 pts |
| Q1-2-Describe a way to resolve the inconsistency | 4 pts Full Marks | 0 pts No Marks | 4 pts |
| Q2-Add two more pizza. | 4 pts Full Marks | 0 pts No Marks | 4 pts |
| Q3-Add two more PizzaBase. | 1 pts Full Marks | 0 pts No Marks | 1 pts |
| Q4-Add two more PizzaTopping. | 1 pts Full Marks | 0 pts No Marks | 1 pts |
| Q5-Add at least four more properties. | 4 pts Full Marks | 0 pts No Marks | 4 pts |
| Q6-The first query of your own choice. | 1 pts Full Marks | 0 pts No Marks | 1 pts |
| Q6-1-Explanation of the first query. | 2 pts Full Marks | 0 pts No Marks | 2 pts |
| Q6-2-Screen shot for the first query. | 2 pts Full Marks | 0 pts No Marks | 2 pts |
| Q7-The second query of your own choice. | 1 pts Full Marks | 0 pts No Marks | 1 pts |
| Q7-1-Explanation of the second first query. | 2 pts Full Marks | 0 pts No Marks | 2 pts |

| Criteria | Ratings | | Pts |
|--|---------------------|-------------------|------------------|
| Q7-2-Screen shot for the second query. | 2 pts Full Marks | 0 pts No Marks | 2 pts |
| | | | Total Points: 30 |