There are 3 parts to this assignment and a checklist of what to hand in.

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Note on Group work: If you pursue group work, you may each hand in the same assignment. You may also do a combination of group and individual work (just let me know). Please note, group work is not required; it is simply an option. Please note there is a place on the discussion board for people to find group partners.
****SEE Checklist for Assignment Deliverables at the end of this assignment**

Part 1: Ontology creation

Work with **Protégé** and create an ontology of chocolate or fruit.

Your assignment should include the following:

1. A case statement: A sentence or two on why this ontology is necessary (imagine a scenario where you will need this ontology). You can also include a few more sentences to explain your ontology.
2. An ontology using at least 20 terms. For this assignment, paste the OWL code generated by Protégé, as well as a screenshot taken from Protégé of your schema, and appreciated if you simply past the image into a WORD document.
   There are TWO ontology topic "options." Please select only one option:
   - Chocolate: If you choose to make an ontology of chocolate, start with these terms: Hershey, Milk, Godiva, Lindt, 85% cocoa, Truffle, Dark, Tablet, White, Bar, Mars, MadeBy
   - Fruit: If you choose fruit, start with these terms: Green, Berries, HasColor, Purple, Blackberry, Strawberry, Citrus, Lemon, Yellow, Red, Lime, Blueberry, Color
     - If you feel you need to delete one or two of these terms, that is fine, but **please make sure you have 20 terms total**

In addition to terms listed above, include 8 additional terms.

Part 2: Thesaurus scavenger hunt

A thesaurus is a vocabulary tool that encodes lexical semantic relationships. There are many types of vocabulary tools labeled as thesauri. For example, you are all familiar with the well-known *Roget's Thesaurus* that encodes synonymous concepts for nouns, verbs, adverbs, and adjectives. There are also algorithmic or similarity thesauri, which are vocabularies generated based on automatic algorithms. These outputs include term frequencies, term proximity counts, and other calculations to establish semantic relatedness.

The information/library science community's conception of a well-formed standardized thesaurus is supported by the Z39.19 standard, *Guidelines for the Construction, Format, and Management of Monolingual Controlled Vocabularies* (link on our syllabus). Following this standard, thesauri generally include single term concepts or bound term concepts (that is two or so terms combined to represent a single concept, such as "sweet tea" or "information science"). Standard thesauri differ from subject heading lists, which contain single term and bound term concepts, but also phrases and strings, such as "woman in business" or "elementary education—Pennsylvania").

With this background in mind, I would you to embark on the following scavenger hunt….and complete the following activities.

2.1 Find an example of information/indexing thesaurus on the web (or in print). Here are two examples, but you may locate another option on the Web or in an information database:

- Thesaurus and Glossary Home: https://agrovoc.fao.org/browse/agrovoc/en/
- ERIC Thesaurus: https://eric.ed.gov/?ti=D

(There are many examples out there, and they have various title names)

2.2 Tell me title of the thesaurus you selected to explore, examine and identify and record examples of:

- A single term concept.
- A bound term concept, with two or more words (e.g., think "post office," "artificial intelligence," and "ice cream cake." Indeed, a compound term can be a bound term, e.g., "mailbox," but see if you can find a multi word bound term that conveys a single concept.

2.3 Skim a few screens (or pages) and simply and see if you can find any problems, such as the inclusion of a subject string or phrase that doesn't quite match Z39.19, or something else that seems odd. You may not find anything that is odd but look. For this answer, feel free to say, nothing seemed odd.

Part 3: Visual thesaurus exploration

Search the ThinkMap Visual Thesaurus at: http://www.visualthesaurus.com/

3.1 Go to and click on the red box "Look it Up" and click "try."
3.2 Search for the word "cream."
3.3 View the results. Explore by navigating with your mouse, clicking on the "red" and "green" circles, and reading the text when you overlay your mouse. Briefly explain the types of relationships being presented in this thesaurus. You may want to conduct a search for another concept too, to explore further. If so, tell me what you have done.
3.4 Go back to the "cream" results for your initial search and click on the "sound icon;" click and will hear the thesaurus utter the concept "cream."
3.5 Concluding analysis: List 2 to 4 positive and/or problematic aspects to this thesaurus.

** Checklist for assignment deliverables

Item #	Description	Format to hand items in: WORD document
Part 1(1)	Case statement for your ontology	▪ WORD document. A few lines.
Part 1(2)	Try your best to hand in: 1. A screen capture of your full list of classes and sub-classes (like Figure 5B, Protégé guide, but your list will include 20 terms). 2. An example of entity (like Figure 6D, Protégé guide)	▪ Images: screen capture or photograph, paste or insert into the WORD document.
1(3)	Optional fun – RDF Graph output with either: 1. WebVOWL: http://vowl.visualdataweb.org/webvowl.html And/or 2. W3C RDF Validator: https://www.w3.org/RDF/Validator/ (see assignment review video)	▪ Image screen capture (a snippet) or photograph, paste/insert on WORD doc. ▪ Remember to do visualizations, you need to change your file extension to "txt".
Part 2(1)	Bullet/ list your answers to 2.2 and2.3	▪ Record answers/observations on the WORD document
Part 3(1)	Bullet/ list your answers for 3.3 and 3.5	▪ Record answers/observations on the WORD document