

Creating Linked Data

See page 2 at the bottom which clarifies what is required for your Assignment 4, if you select this lab.

PART 1

1. SIMPLE: Complete the RDF Statement:

SUBJECT	PREDICATE	OBJECT
History of Chocolate	Has a predicate (a Dublin Core property) "dc.subject"	Containing object (a value; an LCSH value) <div>chocolate</div>

History of Chocolate: <https://www.history.com/topics/ancient-americas/history-of-chocolate>

2. SMARTER

2.1

SUBJECT	PREDICATE	OBJECT
<div>https://www.history.com/topics/ancient-americas/history-of-chocolate</div>	http://purl.org/dc/terms/subject	<div>http://lod.nal.usda.gov/nalt/25530</div>

2. SMARTER

2.1

SUBJECT	PREDICATE	OBJECT
<div>https://www.history.com/topics/ancient-americas/history-of-chocolate</div>	http://purl.org/dc/terms/modified	<div>2018-08-21</div>

PART 2

Validating Linked Data/RDF Statements

Think of your RDF statement as a single description, so your "resource" being described is not a webpage or something in a traditional library, like a monograph, rather it is a property [like subject, title, date].

1. Create a full linked data metadata record, with at least 5 RDF statements.
2. You may create your metadata record for any digital resource.
3. Validate your linked data record with the W3C RDF validator service:
<http://www.w3.org/RDF/Validator/>.
4. Please also create an RDF graph.

PLEASE use the separate shared text file, "Example1-RDF.txt"

You will need to copy-and-paste the text file (which has the RDF encoding) for the RDF validator. I have placed a screen shot here of what the encoding looks like. If you copy an example from MS WORD, you will likely get errors, b/c the of formatting character changes. Note, the XXX is for you to fill in.

A Metadata record for the HERSHEY'S CHOCOLATE WORLD Attraction:

https://www.hersheys.com/chocolateworld/en_us.html

Some facts: The factory is in Hershey, PA. They produce chocolate.

```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-
ns#"
xmlns:dc="http://purl.org/dc/elements/1.1/">
<rdf:Description
rdf:about="https://www.hersheys.com/chocolateworld/en_us.html"
<dc:title>HERSHEY'S CHOCOLATE WORLD Attraction</dc:title>
<dc:subject>Chocolate</dc:subject>
<dc:date>XXX</dc:date>
</rdf:Description>
</rdf:RDF>
```

For the assignment, below is a screen shot of the RDF encoding. This encoding is available in the file named, "Example2-RDF.txt"

Again, you will need to copy-and-paste the text file (which has the RDF encoding) into the RDF validator. You can extend the metadata working with both Dublin Core (dc) and DCTERMS properties.

For Assignment 4 - Add 5 to 7 more DC or DCMI properties.

You may also elect to work with another website or resources, instead of than the Hershey's site.

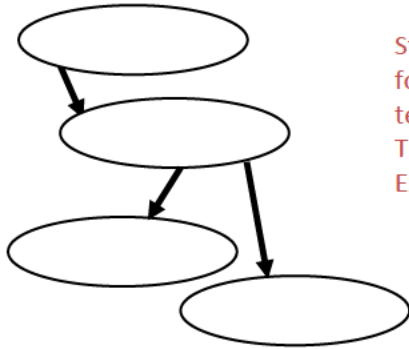
```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns:dc="http://purl.org/dc/elements/1.1/"
xmlns:dcterms="http://purl.org/dc/terms/">
<rdf:Description rdf:about="https://www.hersheys.com/chocolateworld/en_us.html">
<dc:title>HERSHEY'S CHOCOLATE WORLD Attraction</dc:title>
<dc:subject>Chocolate</dc:subject>
<dc:date>XXX</dc:date>
<dcterms:modified>XXX</dcterms:modified>
</rdf:Description>
</rdf:RDF>
```

PART 3

Experiment with thinking through a graph

Graph Theory is simply that you can make multiple statements about a resource

REMEMBER: Subject [first node] → predicate (is the arrow) → to object, continue on to world of connected data



Start with a unique ID (e.g., url, other unique ID, or name if you don't have a unique ID) for some object – person, place, thing. A thing can be an information object (dataset, text).

Think through a graph (look at the screen capture/examples provided)

Example here

- Drexel University is located in Philadelphia (relationship located in)
- Philadelphia is a City in Pennsylvania (relationship located in)
- You can then make statements about Pennsylvania
- Pennsylvania is named for William Penn (relationship named after)
- And, then you could make statement for William Penn

For the LAB Exercise the point is just think through a graph, and as long as you illustrate having a few nodes, and edges, that is sufficient. You can draw this and just take a screen shot, or use power point, or even MS WORD.

For Assignment 4

Hand in

- PART 2: A screen capture/evidence of your parsed metadata record, either the triples and/or the RDF Graph
- PART 3: An illustration/image that captures your thinking through a graph