## SWS 2015 - 2016 Coursework Marking Scheme

## Note on the intended use of this marking scheme:

• The numbers in brackets denote the maximum points to be earned for each element.

## **Assignment 1**

## Marking scheme:

- 1. [20/100] Include your converted RDF dataset in the zipped file. Your converted RDF data needs to be in <u>Turtle</u> (.ttl) format.
  - o (20) the file is well-formatted and does not contain syntax errors
- 2. [24/100] Explain how you performed the transformation as step-by-step instructions, in such way that another person could replicate your transformation process. Make sure to include in your instructions valid links to (1) the third party tools you have used (if any) and (2) the program code you have developed (if any). If you have developed your own parser, do not include your code in the zipped submission file, but instead upload it on a storage website, such as <u>GitHub</u> or <u>Bitbucket</u> (in this case please verify that the files are openly available to users with the correct link).
  - (8) The student clearly explained how the data in the original format was processed.
  - (10) The transformation process is sound, and it should result in a correct RDF representation.
  - (4) The overall transformation process is efficient and makes use of existing tools and resources when appropriate (i.e. the student is not reinventing the wheel).
  - o (2) Links have been supplied to all the third party tools / all the code developed
- 3. [24/100] Describe and justify any 3rd-party vocabulary that you used in your RDF data. If you need to add some vocabulary of your own, explain why it is necessary, and explain the intended meaning of each vocabulary term. If your own vocabulary contains more than 5 classes or properties, then create a Turtle file that describes it using the <a href="RDFS">RDFS</a> model and include it in the zipped submission file.
  - (8) All highly relevant external vocabularies have been adopted, or good reasons have been provided on why this hasn't been done in some cases.
  - (4) The student has provided a clear description of the vocabularies that were adopted

- (4) The vocabularies have been used correctly according to their intended meaning.
- (8) IF: the student did not use any new vocabulary term,
  ELSE:
  - (2) The student explained the need for the newly created vocabulary terms
  - (2) The new vocabulary is well described and well designed
  - (4) IF: the student has used 5 or less new vocabulary URI, ELSE:
    - (2) The student has made the vocabulary available as an independent Turtle document described using RDFS
    - (2) The vocabulary description in RDFS is correct and complete
- 4. [24/100] Choose one class of resources for which you have identified existing entity-URIs, and explain which existing dataset contains these URIs. For this class: List 5 existing URIs that you have reused in your dataset. These 5 URIs can be URIs that you have manually matched.
  - Describe the integration system that you have used to match all the entities of the class. Describe it as step-by-step instructions, in such way that another person could replicate it. Make sure to include in your instructions valid links to (1) the third party tools you have used (if any) and (2) the program code you have developed (if any). Similarly to question 2, do not include your code in the zipped submission file, but upload it on a storage website instead.
    - (2) The student has identified a class of resources for which there are existing URIs
    - (2) The student has correctly matched 5 URIs for this class of resources.
    - (10) The student has used an automated data integration system and matched all the entities of the class.
    - (4) At least 50% of the entities matched are matched correctly
    - (4) At least 70% of the entities matched are matched correctly
    - (2) At least 90% of the entities matched are matched correctly
- 5. [8/100] Provide a visualisation, as a graph, of all the RDF vocabularies that you have used (you shouldn't visualise the whole dataset, but only the vocabularies). This visualisation should include 3rd-party vocabularies and any new vocabulary that you might have created. Briefly explain how this visualisation was produced. Include this visualisation, as a JPEG file, in the zipped submission file.
  - o (4) The student has provided a graph visualization of the vocabularies used.
  - o (2) This visualization shows all the vocabulary terms used.
  - (2) It is clear how the visualization was created (e.g. which tool was used and how).