Group A

Self-Reflection Report

Daniel Farrell

Contribution: I contributed when carrying out the original data selection process, finding suitable datasets online and discovering relationships between them. I carried out the mapping & uplifting of my datasets, finding suitable vocabulary that could be used across all. JUMA was used for the majority of this, but I also used the R2RML engine for mapping whilst JUMA was down. I helped to document our queries and mappings on Widoco, adding them directly into the html file. I also contributed to the ontology, adding more properties and data types for further improvement.

Strengths & Weaknesses: My main strengths for this project would have been my understanding of the mapping process as well as team communication and planning. As a weakness I believe we could have found more suitable vocabulary to use for certain data entitles when uplifting the data, but some can be difficult to find.

Sachin Arvind Gade

Contribution: At the start of the project, I searched for the datasets in many domains to find interesting datasets that will also qualify the required conditions. Then I came up with the domain Education. After finalizing datasets, I looked at the datasets to find the classes and to check how we can merge datasets. I also tried mapping and uplifting the datasets. For the UI part of the project, I built the frontend using React and for the server part, I created the Fuseki Jena server.

Strengths & Weaknesses: I always try to learn new things that's why while working on this project I decided to work on UI using React and to configure Fuseki Jena Server. Since I have experience with JavaScript, working in React was not difficult and also I have worked on many servers that helped me in configuring Fuseki Jena. As a weakness, I can say I could have made the UI more dynamic where users can give inputs and for the server part, I could have hosted the server on AWS.

Min Wu

Contribution: Before the project I took part in finding suitable datasets for our topic. I lead in competency questions design and helped to uplift the datasets using JUMA. I also helped to look into the ontology built in protégé to add more properties and other requirements. Then I used Widoco to generate the documentation, I tried to build the local

web service using apache, which is time-consuming, but finally we got the visualization by which we improved our ontology little by little, and finally got the best one!

Strengths & Weaknesses: My strengths for the project are my understanding of Widoco, and building the local web service to visualize the ontology. I'm also good at creating competency questions, each question shows the feasibility and relationship of the datasets. My weaknesses are my unfamiliarity with JUMA especially the prefixes, and also creating UI.

Xiaokang Wang

Contribution: The general design of ontology is drafted by me, and the OWL file representation is created with the help from Daniel. I have designed a way to output the query result in the form of a html table tag, which used awk and bash. Juma is used to uplift input data into RDF format. I have composed the SPARQL query for all the questions, and some of them are amended for improvement.

Strengths & Weaknesses: I have experience in a lot of tools, which allow me to find efficient and effective solutions to issues. I love to create automated tools to solve problems, but it also can hide the issue within the system since there is likely no manual processing needed and issues can slip away.