What is an Ontology?

Creating a domain which is clear and distinct can cause problems. It begins with real-world languages, whereby words can have different meanings. Hence, translations can alter the definition of the information within the domain.

An ontology can represent a common vocabulary that needs to share information in a domain. It includes interpretable definitions of basic concepts in the domain and their relationship.

Why would anyone want to develop an ontology? Some of the reasons are:

- To share a common understanding of the structure of information between people or software agents
- To enable the reuse of domain knowledge
- To explicitly represent domain assumptions
- To separate domain knowledge from operational knowledge
- To analyze domain knowledge (Noy & McGuiness, n.d.)

Regarding our summative assignment, our domain name needs to be simple and understandable. The National Centre for Cyber Security (NCSC) web application in the Netherlands, where the public user can submit vulnerabilities, needs an official domain that third parties cannot falsify. Therefore, the domain should have the official Netherlands and cybersecurity vocabulary.

References

Noy, F. N. & McGuiness, L. D. (n.d.) Ontology Development 101: A Guide to Creating Your First Ontology. Available from:

https://protege.stanford.edu/publications/ontology_development/ontology101-noy-mcguinness.html [Accessed 01 November 2022].