Why Ontology Reasoning?

- Given key role of ontologies in many applications, it is essential to provide tools and services to help users:
  - Design and maintain high quality ontologies, e.g.:
    - **Meaningful** — all named classes can have instances
    - **Correct** — captured intuitions of domain experts
    - **Minimally redundant** — no unintended synonyms
    - **Richly axiomatised** — (sufficiently) detailed descriptions
  - Answer queries over ontology classes and instances, e.g.:
    - Find more general/specific classes
    - Retrieve individuals/tuples matching a given query
  - Integrate and align multiple ontologies