This section gives a brief overview of the profiles defined in OWL2 and their typical application areas.

OWL2 EL The EL profile is an extension of the $\mathcal{EL}$ description logic. Its primary strength lies in the ability to reason in polynomial time on ontologies with a large number of class axioms, and it was designed to cover the expressive power of several existing large-scale ontologies in the health care and life sciences domain (e.g., SNOMED-CT, Gene Ontology, and GALEN).[9]

OWL2 EL's primary strength is in dealing with *conjunction*s and *existential* restrictions. It is lightweight and supports sound and complete reasoning in polynomial time. The most significant difference with OWL2 DL is that it drops the @powl:allValuesFrom restriction, though it does support @prdfs:range restrictions on properties, which can have a similar effect.

OWL2 QL Reasoners developed for OWL2 DL and OWL2 EL are optimized for reasoning on class axioms, and are relatively inefficient when dealing with ontologies that have relatively uncomplicated class definitions but contain a large number of individual assertions. The QL profile of OWL2 was developed to efficiently handle *query answering* on such ontologies, and adopts technologies from relational database management. It is based on the DL-Lite description logic and extended with more expressive features such as the property inclusion axioms (@powl:subPropertyOf) and functional and inverse-functional object properties.

OWL2 RL The OWL2 RL profile is based on so-called Description Logic Programs and enables interaction between description logics and rules: it is the largest syntactic fragment of OWL2 DL that is implementable using rules. This is a very important

[9] See http://www.snomed.org, http://www.geneontology.org, and http://www.openclinical.org/prj_galen.html respectively.