Appendix SPARQL QUERIES

In this section, we present the SPARQL queries used to find entities sub/superclass and synonyms.

```
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
select ?resource where {
?resource rdfs:label ?concept
}
```

Listing 1: SPARQL Query for Linking Concepts with DBpedia

```
PREFIX dbpedia: <http://dbpedia.org/resource/>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
SELECT ?obj ?label WHERE  {
conceptUri (owl:sameAs|^owl:sameAs) ?obj
FILTER(CONTAINS(str(?obj), "http://www.wikidata.org"))
}
```

Listing 2: SPARQL Query for retrieving the same DBpedia concept from Wikidata

```
PREFIX dbpedia: <http://dbpedia.org/resource/>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX wdt: <http://www.wikidata.org/prop/direct/>
PREFIX wd: <http://www.wikidata.org/entity/>
prefix rdfs:    <http://www.w3.org/2000/01/rdf-schema#>
SELECT ?item2 ?item02 WHERE {
{?item rdfs:label ?item2.
 ?item wdt:P279* ?item1.
?item1 rdfs:label "facade"@en.
FILTER (?item2 = "emergency TV"@en).
} UNION {?item rdfs:label ?item2.
 ?item wdt:P279* ?item1.
?item1 rdfs:label "emergency TV"@en.
FILTER (?item2 = "facade"@en).
}}
```

Listing 3: SPARQL Query to check if the first concept is sub/superclass of the second concept

```
PREFIX dbpedia: <http://dbpedia.org/resource/>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX wdt: <http://www.wikidata.org/prop/direct/>
PREFIX wd: <http://www.wikidata.org/entity/>
prefix rdfs:    <http://www.w3.org/2000/01/rdf-schema#>
SELECT distinct ?property WHERE {
?property a wikibase:Property .
?property  skos:altLabel|rdfs:label ?idLabel.
?property  skos:altLabel|rdfs:label ?idLabel2.
FILTER(CONTAINS(LCASE(?idLabel),  "composed of"@en)).
FILTER(CONTAINS(LCASE(?idLabel2),  "display"@en)).
}
```

Listing 4: SPARQL Query Query to check if both predicates have a common synonym