

Chapter 3

Querying the Semantic Web

In the previous chapter, we saw how we can represent knowledge using RDF. Once information is represented in RDF, we need to be able to access relevant parts of it both for reasoning and developing applications. In this chapter, we look specifically at a query language, called SPARQL, for letting us select, extract, and otherwise easily get a hold of particular sections of knowledge expressed in RDF. SPARQL is specifically designed for RDF, and is tailored to and relies upon the various technologies underlying the web. If you are familiar with database query languages like SQL, you will notice many similarities. If you are not, this chapter does not make any assumptions and will provide everything you need to get started.

Chapter Overview

We begin the chapter by discussing the infrastructure (i.e., software) that enables SPARQL queries to be performed. We then discuss the basics of SPARQL, and progressively introduce more complex parts of it. Finally, we wrap up with a discussion of ways to collect RDF from the Semantic web.