

The idea of the Semantic Web brings new requirements such as to create and store metadata of documents or resources. Also ability to search in such metadata is needed. Existing query languages for the Semantic Web are unfortunately either too weak or have complicated syntax or semantics. The aim of this thesis is to compare existing Semantic Web query languages and to propose new one considering its expression strength. This comparison is done by juxtapositioning of their approaches to various issues in querying. Such issues are, for example, a basic selection of data, an ability to select data with recursively defined structure, creating data, a way of working with blank nodes, etc. On the basis of this comparison, the Tequila language is proposed. The Tequila is based on named pattern and provide general recursion. This thesis also shows the way how to use Tequila language and further, it compares the Tequila with other query languages.