

XML is still more and more important format for storing and exchanging data. In the face of this tendency, there are still lots of documents, and new ones are created, without any description of their structure. However, for correct exchanging and efficient storing and querying of data, there is a weighty need for some structure description. This thesis is focusing on a possibility to automatically generate such description from the set of given documents. The presented algorithm clusters document elements into groups according to the similarity of their structure. For each group is then inferred a regular expression describes the structure of input elements using advantages of XML Schema language. Finally, all partial schemas are joined to the XML Schema document.