

This thesis concerns the development of a graphical application for conceptual modeling of database schemas without prior knowledge of the target database paradigm. The purpose of a conceptual model is to allow describing the abstract structure of data independently of their physical storage. These days, a lot of different logical data models are used in database systems. The expressive power of well-known conceptual models like ER or UML is sometimes insufficient for describing the structure of data for target logical models. For this reason, we exploit a recent concept called schema categories, which is more general, has a higher expressive power, and unifies data modeling for different database systems, including the multi-model ones. Furthermore, schema categories erase the border between the conceptual and logical layers of data modeling. The resulting graphical web application allows modeling schemas of the well-known ER model and their automatic conversion into schema categories with a user-friendly visualization.