

This bachelor's thesis focuses on the development of a web application designed for the visualization and interactive testing of algorithms needed for the design of relational database schemas. The primary goal of the application is to provide students with a deeper understanding and practice of relational database schema design, based on functional dependencies and normal forms. The application allows users to enter their own definition of a universal scheme and watch step-by-step how individual algorithms, starting with the algorithm for calculating the attribute closure, work on the entered data. This can help users better understand theoretical concepts and get feedback on the correctness of their solutions. The thesis also contains the theoretical basis needed for understanding the implemented algorithms, which can be a valuable basis for studying and preparing for exams on database systems.