

The bachelor thesis' topic is aimed at the blockchain database technology that deals with possible use-cases in libraries.

The author analyzes the possibilities of implementing blockchain databases into sectors that are not the most open to the innovations, namely the librarianship. The author also emphasizes the different types of the theoretical and the practical applications of blockchain databases. The theoretical part also introduces the fundamental principles of blockchain databases and also explains the operation of the general blockchain database. Furthermore, the author focuses on a detailed description of the indicators of advantages and disadvantages associated with every each one use-case. At the same time, there is briefly mapped the current situation of library systems.

In the practical part there are described and designed two conceptual models of how to proceed to the implementation of blockchain. At first the author discusses the problem that the model solves. Then follows a description of a particular solution. This is followed by the conceptual model itself with the analysis of the selected consensus. In the end of this thesis there are explained the possible extensions for the future and the evaluation of the benefits of this solution are discussed.