In the present work it was considered creation of the application for recording and storage of the information on reception by students of the certificates confirming the termination of the Higher education institution on the basis of technology blockchain, essentially different from classical decisions with client-server logic methods of data storage. It was carried out the system analysis of blockchain technology and its applicability in modern realities. Mathematical models and algorithms for implementation of blockchain components are considered. It was made a brief review of Etherium and Hyperledger Fabric platforms, and a comparison of performance of test applications built on Etherium and Hyperledger Fabric platforms was presented. There were adapted client part of the application as well as the logic of receiving and processing incoming transactions for practical realization of the tasks.