

1. Dobrianskyi, B., Stetsenko I. V. (2024), 'Architectural framework for a unified blockchain interaction library', Problems in programming 1, 86-95.
2. Добрянський Б. Розробка уніфікованого інтерфейсу для взаємодії з блокчейн-мережами// Матеріали науково-практичної конференції молодих вчених та студентів «Інженерія програмного забезпечення і передові інформаційні технології» (SoftTech-2024).

Ключові слова: БЛОКЧЕЙН МЕРЕЖІ, ДЕЦЕНТРАЛІЗОВАНІ ДОДАТКИ, ІНСТРУМЕНТИ РОЗРОБКИ, АРХІТЕКТУРА ПРОГРАМНОГО ЗАБЕЗПЕЧЕННЯ

ABSTRACT

Explanatory note size – 104 pages, contains 16 illustrations, 2 tables, 3 applications, 27 references.

Topicality. Examines the problem of interaction with various blockchain networks, shows the main features of existing solutions on the subject, explains the advantages and disadvantages.

The aim of the study. The main target is to simplify and speed up the development of software modules for interaction with blockchain networks by using the unified interface

The object of research: development process of the applications that interact with blockchain.

The subject of research: methods, algorithms and software tools for interaction with blockchain networks.

To achieve this goal, the **following tasks** were formulated:

- Review and analysis of the existing solutions;
- Research of methods and approaches to designing interfaces in blockchain networks;
- Design and development of the unified interface for blockchain interaction;
- Research the effectiveness of the implemented solution

The scientific novelty of the results of the master's dissertation is that a new method of interaction with blockchain networks is proposed, which, due to the universal interface, makes it possible to ensure interaction with any blockchain network and, unlike existing ones, simplifies and speeds up the development of software modules for interaction with blockchain networks.

The practical value of the obtained results is that the developed library unifies and simplifies the interaction with blockchain networks.

Relationship with working with scientific programs, plans, topics. Work was performed at the Department of Informatics and Software Engineering of the

National Technical University of Ukraine «Kyiv Polytechnic Institute. Igor Sikorsky».

Approbation. The scientific provisions of the dissertation were tested at the All-Ukrainian Scientific and Practical Conference of Young Scientists and Students "Information Technologies" (SoftTech 2024) - Kyiv.

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1. Dobrianskyi, B., Stetsenko I. V. (2024), 'Architectural framework for a unified blockchain interaction library', Problems in programming 1, 86-95.
2. Dobrianskyi B. Development of the unified library for blockchain interaction// Proceedings of the scientific-practical conference of young scientists and students "Information Technologies" (SoftTech 2024) – Kyiv

Keywords: BLOCKCHAIN DEVELOPMENT, INTEROPERABILITY, DECENTRALIZED APPLICATIONS, DEVELOPMENT TOOLS, BLOCKCHAIN NETWORKS, SOFTWARE DEVELOPMENT KITS (SDKS)