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Decentralised Data Storage

The full text is currently only available in the Deutsch version. A translation will follow.

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Decentralised data storage is a complex topic, especially with regard to authenticity and integrity of data. On the one hand, local storage puts the user in full control of all data, but does not directly guarantee data integrity. Moreover, additional measures need to be taken to ensure data availability. On mobile devices with limited storage space, cloud-based data storage is being used more and more to outsource even sensitive data. While this does relieve users from operating their own infrastructure, it also lead to a loss of control. Decentralized storage of data can improve this situation. This project explored opportunities for decentralized data storage with a primary focus on blockchain technology. The key challenge in this context is to find ways to distribute data to different nodes in ways that prevent data loss, but still retain the basic characteristics of authenticity and integrity inherent to the blockchain technology.