What data should we maintain in blockchain

<https://ethereum.stackexchange.com/questions/31321/what-data-should-we-maintain-in-blockchain>

*I need little direction on what must be maintained in BC and what must be maintained outside BC. For example I have to maintain book info like name, title, author, book cover as image, price. Can I maintain all the attributes in blockchain? Should I keep the images outside blockchain?*

*Also how can we keep the information of an entity in sync between the 2 sources?*

*Thanks in advance for your time and help!*

In general the blockchain is not meant to to save a lot of data. Data storage in ethereum is quite expensive. One approach would be to save a hash of the data in the blockchain and store the actual data in a database or on IPFS or Swarm. It is definitely a good idea to keep images outside the blockchain. If you store images in IPFS or Swarm you will get a hash of the data and you would store the hash in the blockchain. Since the is calculated based on the actual data of the image you also can make sure that the image was not changed after you stored it.

The right approach to sync between the two source is to use events. You can define events in your smart contracts. When you call a function of the smart contract the event will be fired. You can catch the events in your application. If the transaction was successful you can write the data to your database or to IPFS/Swarm.

This is more like a general explanation. If you need detailed guidance on how to implement this kind of approach you can write a comment and I will post some links where you can find the detailed information.

如何在区块链保存私密信息 - 我的第一个 ETH 智能合约应用

<https://bitshuo.com/topic/5a6740dddefe6eca3c422aa9>

[http://www.secret-note.one](http://www.secret-note.one/)

数据库那么便宜，为何还要死贵的区块链来存储数据？

<https://yq.aliyun.com/articles/581280>

Why IPFS is the Future of Decentralised File Storage

<https://medium.com/canyacoin/why-ipfs-is-the-future-of-decentralised-file-storage-8958f3bd02c5>

【IPFS】戴嘉乐：详解IPFS的本质、技术架构以及应用

<http://ipfser.org/2018/03/28/r33/>

IPFS与区块链：原理与实战(预告精读版) Kindle电子书

http://ipfser.org/2018/06/27/r45/

<https://www.amazon.cn/dp/B07FY3Y3L4>

https://www.ipfsfirst.com/ipfszixun\_178