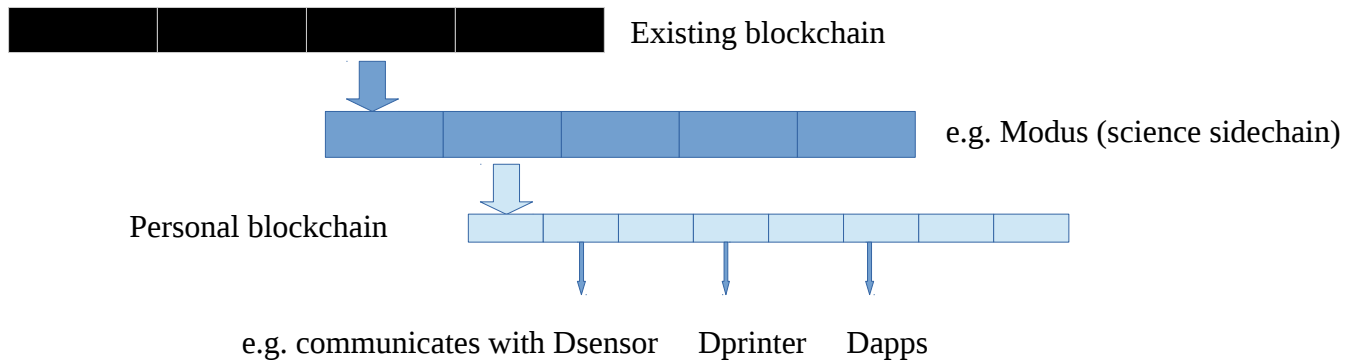


Proof of Data

1. Personal Blockchain setup from an existing blockchain

existing blockchain (secure via proof of work e.g. bitcoin or ethereum(pre mined))

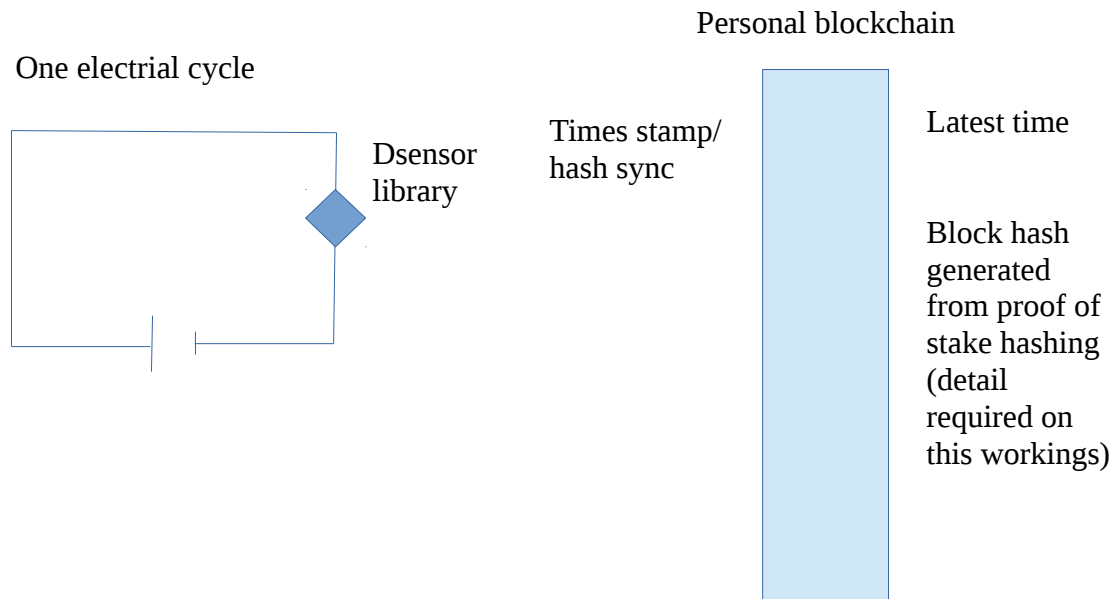


2. Firmware loader adds Dsensor library to micro-controller i.e. at electronics level

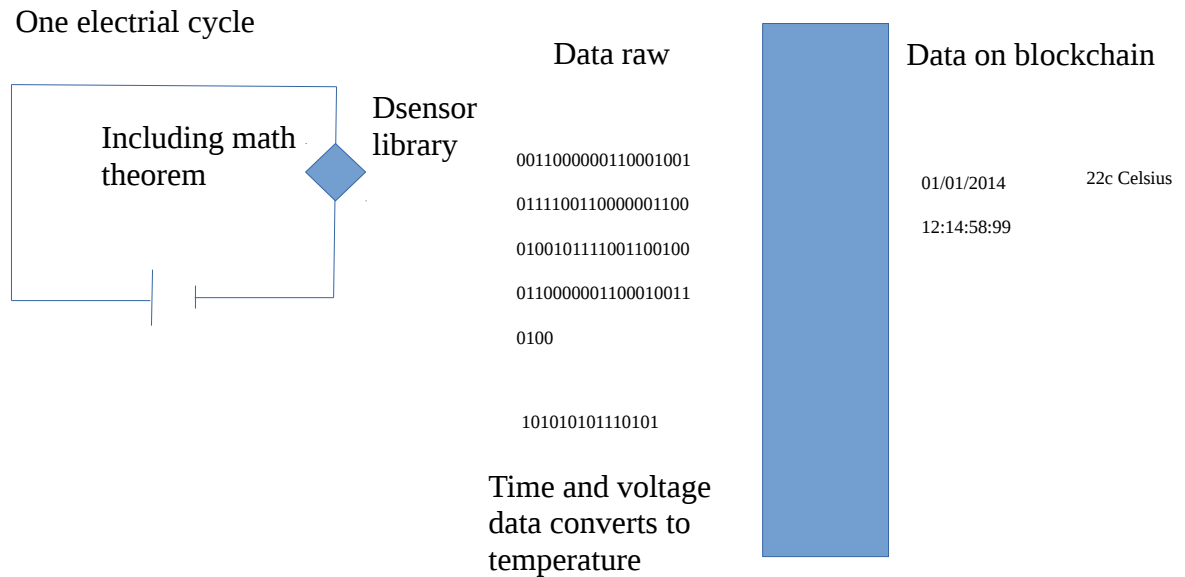
3. When the sensor starts the library automatically starts also.

4. Detail going on inside electronics

4.1 Dsensor and Personal Blockchain sync up



4.2 Detail going on inside electronics – one cycle



- can the electronic cycle be tampered with?

- how can it be proved on electronic circuit has completed?

A. make a simple mathematical theorem be 'calculated' each cycle, did it complete? if so go ahead and allow data to sync to personal blockchain.

What if no access to personal blockchain or the current personal blockchain has run out of a new personal blocks? ie. Run out of proof of stake from the sidechain?

A. Data will be store directly, a different proof of data path will need to be followed. See (coming soon)

Time to Blockchain notes:

If the Dsensor library and the Personal Blockchain is synced to the SideChain blockchain then the time syncing between all are aligned thus in theory the data from a sensor could go straight on to the personal blockchain i.e. the sensor time stamping and personal blockchain are valid.

Could a fake Dsensor library be created to create sensor data from an imaginary sensor and still feed straight into a personal blockchain, even if all blockchains are in sync?

A. Yes, this would be possible but a record of this data has been published on the blockchains thus if subsequent use invalidates it as a data source then the reputation of this personal data block or the entire blockchain could be black listed across the network. It then comes a question of how many and how frequently such fake personal blockchain 'account' can be set up? The cost of setting up a new personal blockchain and its associate proof of stake will have a computation cost and history of a personal blockchain could be use to infer reputation. ie. How often has the data been used. What is length, how regularly is it update etc. (more thinking required)