Blockchain

- New way of keeping records

- Distributed, no central maintainer

- Distributed append only ledger

- Data/entries/updates are linked via hashes

- essentially a new database technology

Private vs. Public blockchain

- No trust between node in public
- Some level of trust in private
- Private blockchain is permissioned and public is permissionless
- Users are authorised in private blockchain and anonymous in public.
- Moderate energy consumption in private blockchain
- Massive energy consumption. For no other reason than to generate the hash. Proof by work system
- By design public blockchain is slow. Users must come to agreement
- Private blockchain is fast.
- The energy consumption is causing climate problems. Massive energy consumption

Smart Contracts

Tracking

Useful in

- Financial Services
- Supply Chain
- Healthcare: Keeping record of IoT devices via blockchain

When is it useful

- Whenever you have to make a decision in a group
- Stop malicious individuals manipulating the data.
- Collective decision making

Acronyms