

# Blockchain Introduction

What is Blockchain?

How It Changes the Economy?



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Software University  
<http://softuni.bg>



# About Svetlin Nakov

- Software engineer, trainer, entrepreneur, author of books, blockchain enthusiast

[www.nakov.com](http://www.nakov.com)

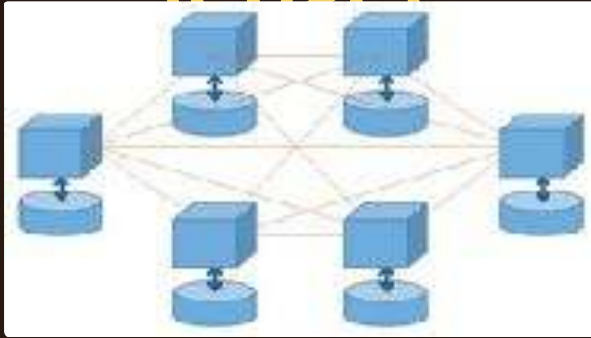
- Portfolio of 3 successful training initiatives:
  - National Academy for Software Development (NASD)
  - Telerik Software Academy
  - SoftUni (the Software University)



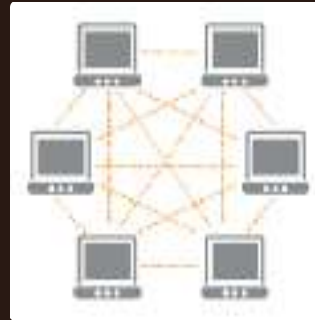


# What is Blockchain?

**Distributed  
ledger**

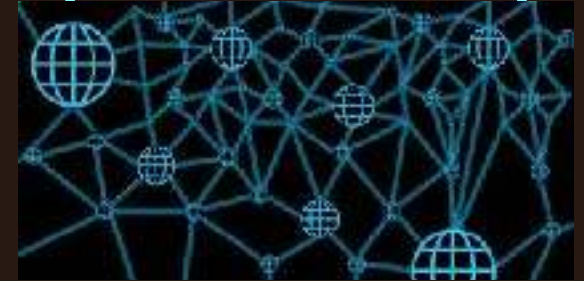


**Peer-to-Peer  
network**



Nodes hold  
ledger of facts +  
history of  
updates

**Decentraliz  
ed  
(no owner)**



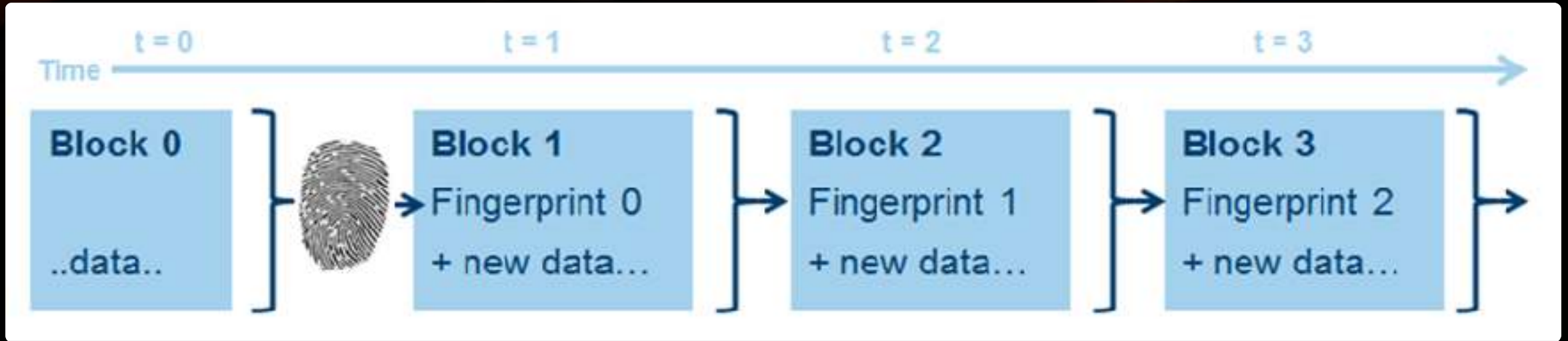
**Secure**

Transactions  
are verified by  
the entire  
network

**Immutable**



# Blockchain == Chain of Data Blocks SoftUni Foundation



Demo: <https://etherscan.io>

<https://blockchain.info>

# Blockchain Applications

## Cryptocurrencies



Digital money with  
no central bank

## Decentralized applications



Removing the  
middlemen

## Digital investments



Fund raising /  
ICO / token  
sales



# Blockchain Platforms

## Bitcoin



The first famous  
blockchain  
cryptocurrency

## Ethereum



The first famous  
smart contracts  
platform

 **Litecoin** **Ripple** **Dash** **Monero**

<https://coinmarketcap.com>

# Mining Farms

## Mining pools

**Mining farms:**  
validate  
transactions  
+ mine coins





# Traditional Money (Fiat Money)

## Traditional (fiat) money:

Guaranteed by the real  
economy + central bank  
+ government + army



Example: USD  
Guaranteed by the US  
economy + the US  
army



If a country rejects  
accepting USD, the  
*"democracy"* comes



# Cryptocurrencies

## Crypto-money:

Not guaranteed, virtual,  
highly risky, changeable



## Example: Bitcoin

A bubble, driven by  
the people  
expectations



Some day the Bitcoin  
bubble will burst

# Wallets

## Cryptocurrency wallets:

Store securely public and private keys of your blockchain



Hold multiple addresses + private keys  
May hold BTC, ETH, ERC20 tokens, etc.

## Software wallets



## Hardware wallets

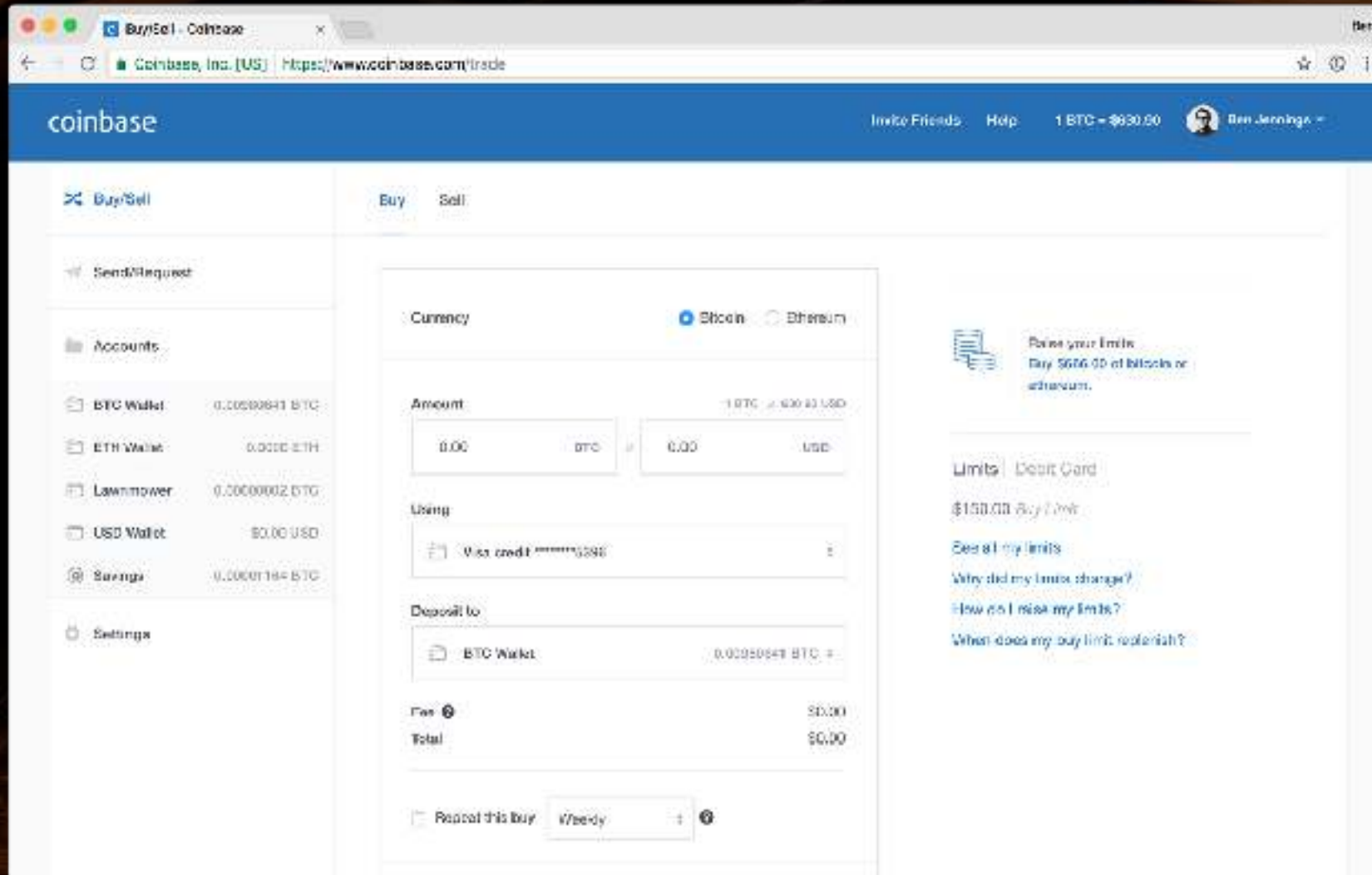


## Online wallets





# Cryptocurrency Exchange Services



# Smart Contracts

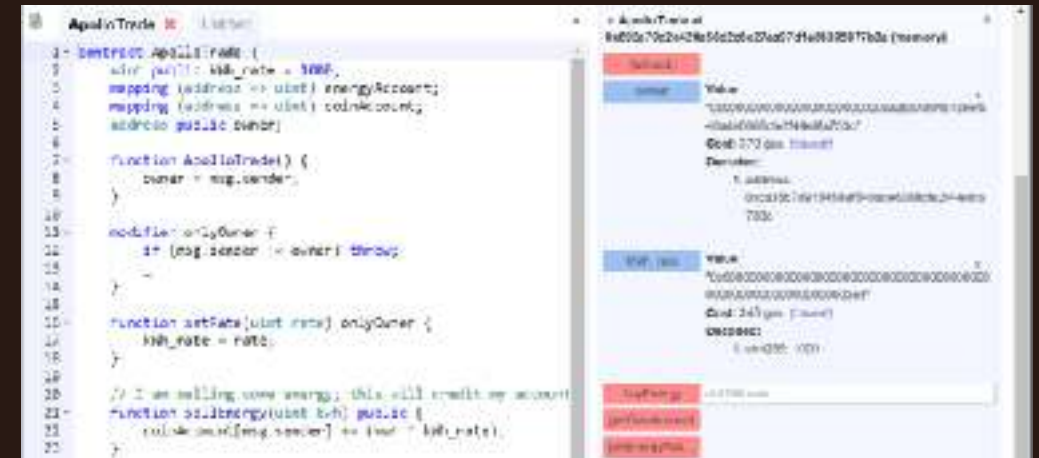
## Smart Contracts

Code (custom logic)  
running in the blockchain  
network



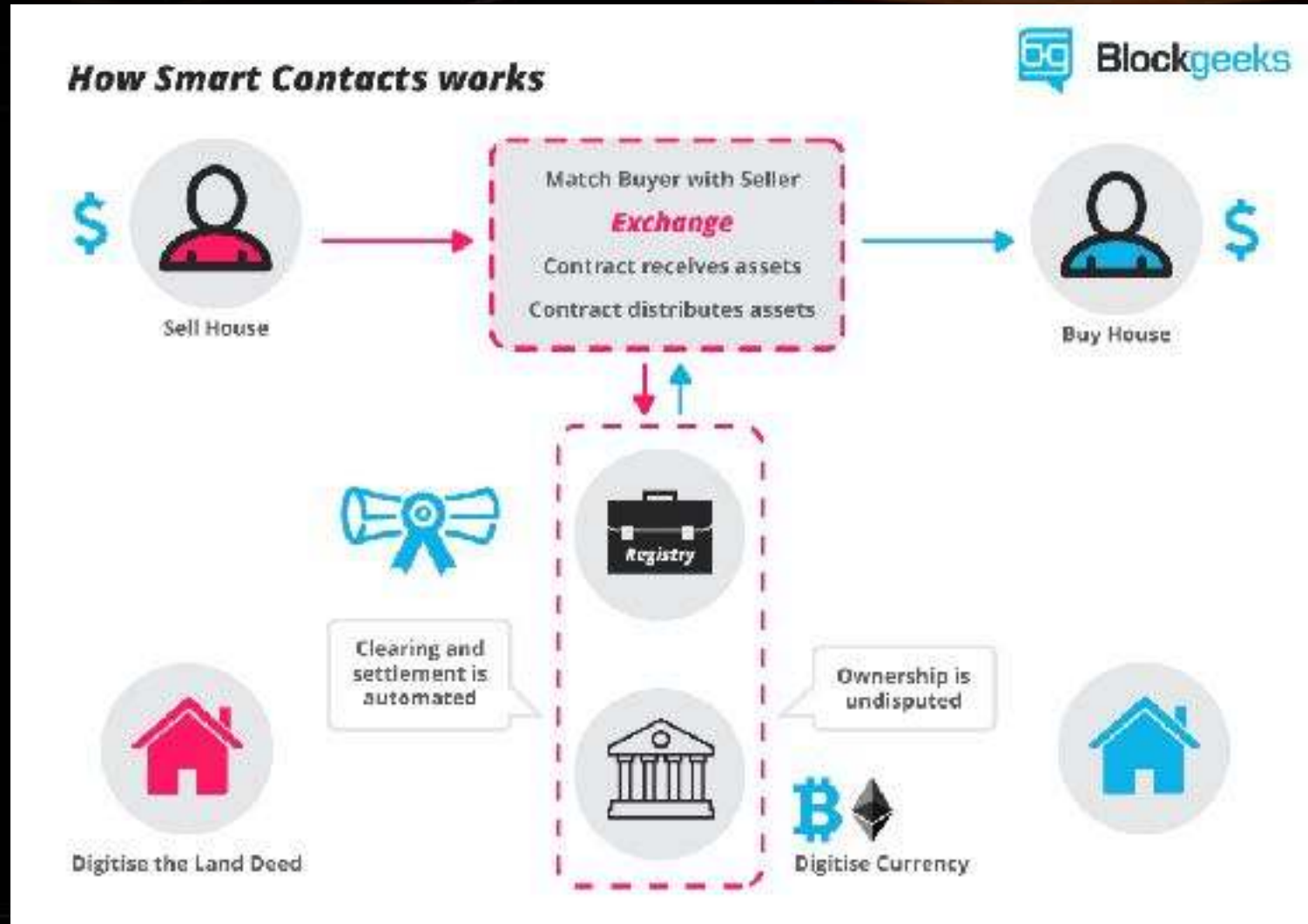
## Solidity

Blockchain programming  
language for the Ethereum  
network, running on EVM





# How Smart Contracts Work?



# ICO / Token Sale Events

## ICO (Initial Coin Offering)

Funds raised for a new cryptocurrency venture



## Token Sale Events

Digital tokens raised through a smart contract



Example:  
LockChain



# Corporate Blockchains

## Hyperledger



<https://www.hyperledger.org/members>

## Azure Blockchain



<https://azure.microsoft.com/solutions/blockchain>

## Why Corporate Blockchain?

Public immutable ledger: trust  
between businesses + b2b smart  
contracts

# The Future of Blockchain

## Blockchain Future

Democratization and  
decentralization

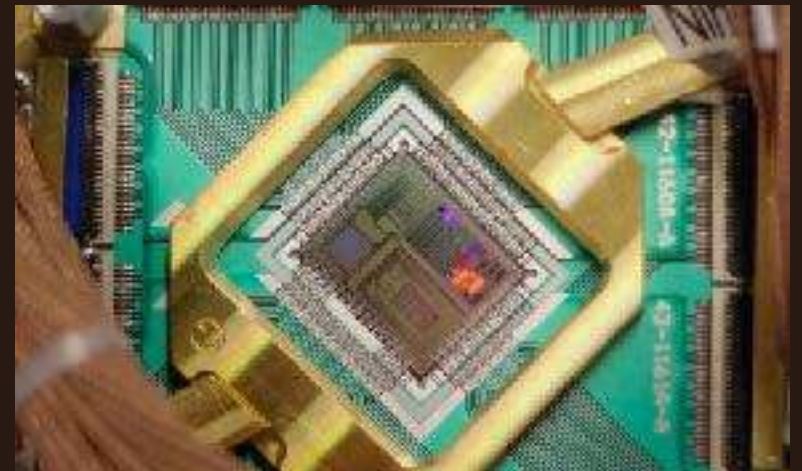
Remove middlemen

Disrupt many industries



## Quantum Computers?

Blockchain will  
need a major  
transformation!





# Blockchain Introduction



Questions?



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# Trainings @ Software University (SoftUni)

- Software University - High-Quality Education, Profession and Job for Software Developers
  - [softuni.bg](http://softuni.bg)
- Software University Foundation
  - <http://softuni.foundation/>
- Software University @ Facebook
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