ICO

Initial Coin Offering on the Ethereum Blockchain

WHAT IS THAT?

- A Smart Contract

- A set number of tokens (coins)
  - For example 1m

- A date where they can be bought
  - Fixed price
  - Auction
  - Dutch Auction
  - …

SMART CONTRACT

- Has a few functions
  - „Interfaces"

- Standard Pattern
  - ERC20
  - https://github.com/ethereum/EIPs/issues/20
    - EIP: Ethereum Improvement Proposals
    - ERC: Ethereum Request for Comments
  - Standardized set of functions
    - Other Contracts can interact with

ERC20 TOKEN INTERFACES

```
 1 // https://github.com/ethereum/EIPs/issues/20
 2 contract ERC20 {
 3     function totalSupply() constant returns (uint totalSupply);
 4     function balanceOf(address _owner) constant returns (uint balance);
 5     function transfer(address _to, uint _value) returns (bool success);
 6     function transferFrom(address _from, address _to, uint _value) returns (bool success);
 7     function approve(address _spender, uint _value) returns (bool success);
 8     function allowance(address _owner, address _spender) constant returns (uint remaining);
 9     event Transfer(address indexed _from, address indexed _to, uint _value);
10     event Approval(address indexed _owner, address indexed _spender, uint _value);
11 }
```

- https://theethereum.wiki/w/index.php/ERC20_Token_Standard

ERC20 TOKEN VARIABLES

```
1    string public constant name = "Token Name";

2    string public constant symbol = "SYM";

3    uint8 public constant decimals = 18;

4    // 18 is the most common number of decimal places
```

PROPERTIES WE USE

- A token has a name, symbol and decimals

- We use the "FixedSupplyToken"
  - https://theethereum.wiki/w/index.php/ERC20_Token_Standard
  - Has a fixed amount of tokens
  - And can transfer tokens between addresses

LAUNCH THE ICO

- Theoretically: Publish the Smart Contract

- Reality:
  - Right Idea
  - Regulation&Law
  - Marketing
  - PR Events
  - Whitepaper
  - Community

  - Then publish the smart contract

WHAT YOU LEARNED

- There is a standard pattern for tokens

- It's called ERC20

- It is a set of functions used as interface
  - Great for other Dapps to interact
  - Or Wallets to receive/send tokens

- An ICO is nothing else than deploying the smart contract

THANKS!

- Questions/Suggestions?
  - Head over to the Q&A

- Feedback?
  - Yes, please!

- Not satisfied?
  - Shoot us a message…