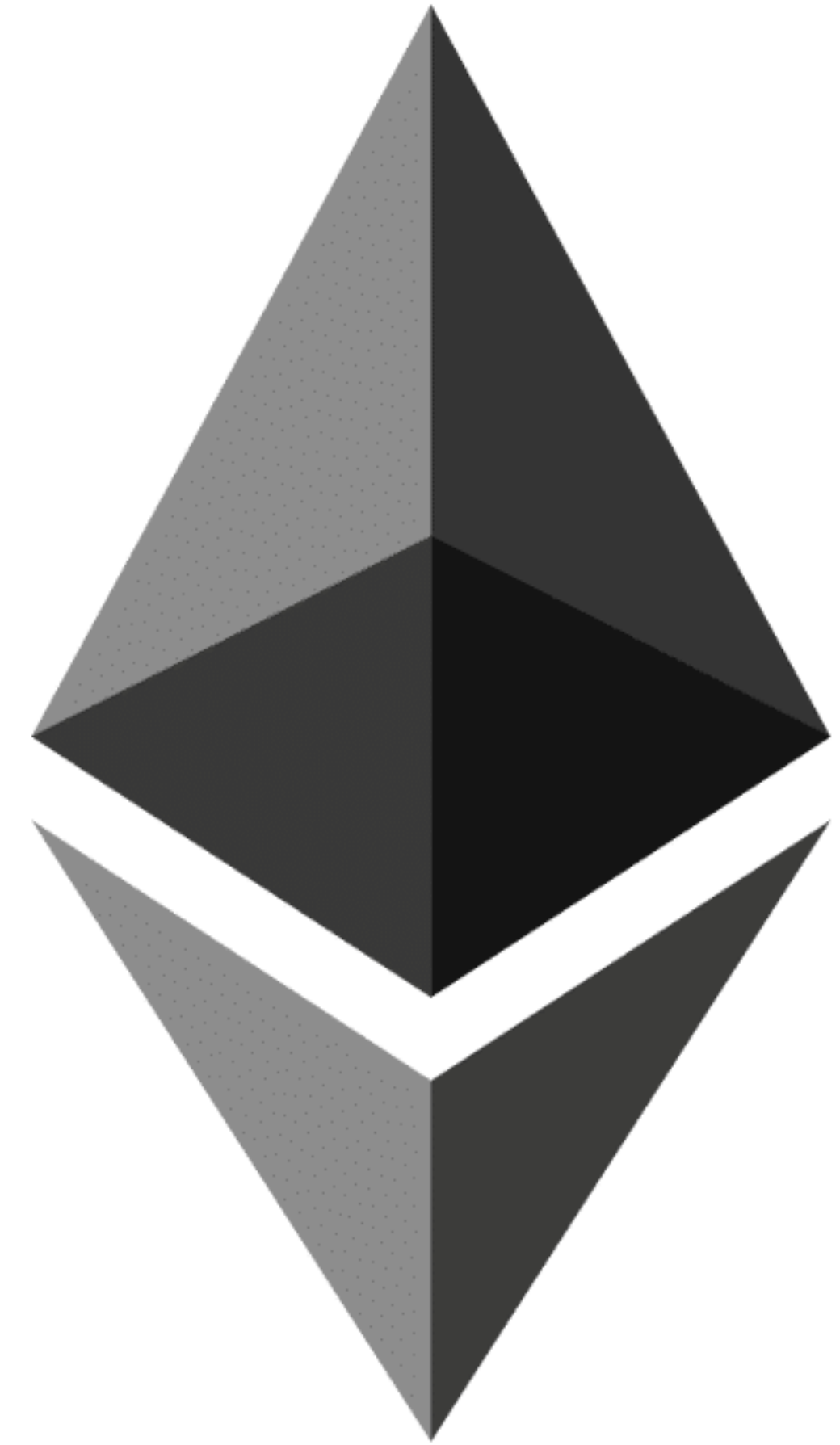


# ERC20



Token Standard



# ETHEREUM REQUEST FOR COMMENTS

*“The ERC-20 introduces a standard for Fungible Tokens, in other words, they have a property that makes each Token be exactly the same (in type and value) of another Token. For example, an ERC-20 Token acts just like the ETH, meaning that 1 Token is and will always be equal to all the other Tokens.”*



# FUNCTIONS

[Show less](#)[!\[\]\(919a2cb85b99741a73c0c31a427236a8\_img.jpg\) Copy](#)

```
1  function name() public view returns (string)
2  function symbol() public view returns (string)
3  function decimals() public view returns (uint8)
4  function totalSupply() public view returns (uint256)
5  function balanceOf(address _owner) public view returns (uint256
   balance)
6  function transfer(address _to, uint256 _value) public returns (bool
   success)
7  function transferFrom(address _from, address _to, uint256 _value)
   public returns (bool success)
8  function approve(address _spender, uint256 _value) public returns
   (bool success)
9  function allowance(address _owner, address _spender) public view
   returns (uint256 remaining)
```

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# EVENTS

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```
1  event Transfer(address indexed _from, address indexed _to, uint256
    _value)
2  event Approval(address indexed _owner, address indexed _spender,
    uint256 _value)
3
```



# GETTERS

- function `totalSupply()` external view returns (uint256);
- Amount of tokens in existence
- function `balanceOf(address account)` external view returns (uint256);
- Amount of tokens owned by address
- function `allowance(address owner, address spender)` external view returns (uint256);
- Remaining number of tokens that the **spender** will be allowed to spend on behalf of **owner**



# FUNCTIONS

- `function transfer(address recipient, uint256 amount) external returns (bool);`
- `amount` of tokens from the function caller address (`msg.sender`) to the recipient address
- `function approve(address spender, uint256 amount) external returns (bool);`
- Set the amount of `allowance` the `spender` is allowed to transfer from the function caller (`msg.sender`) balance.
- `function transferFrom(address sender, address recipient, uint256 amount) external returns (bool);`
- Moves the `amount` of tokens from `sender` to `recipient` using the allowance mechanism



# EVENTS

- `event Transfer(address indexed from, address indexed to, uint256 value);`
- This event is emitted when the amount of tokens (`value`) is sent from the `from address` to the `to address`.  
\*minting or burning tokens
- `event Approval(address indexed owner, address indexed spender, uint256 value);`
- This event is emitted when the amount of tokens (`value`) is approved by the `owner` to be used by the `spender`.