

Standards and Functions Implemented

ERC20 Standard

The contract implements the **ERC20** token standard, which is the most widely used standard for fungible tokens on Ethereum.

Core ERC20 Functions:

- `name()` - Returns "MyToken"
- `symbol()` - Returns "MTK"
- `decimals()` - Returns 18 (default)
- `totalSupply()` - Returns total token supply
- `balanceOf(address account)` - Returns balance of an account
- `transfer(address to, uint256 amount)` - Transfers tokens to another address
- `allowance(address owner, address spender)` - Returns remaining allowance
- `approve(address spender, uint256 amount)` - Approves spender to use tokens
- `transferFrom(address from, address to, uint256 amount)` - Transfers tokens on behalf of owner

Additional Functions:

- `mint(address to, uint256 amount)` - Mints new tokens (owner only)
- `owner()` - Returns contract owner address
- `transferOwnership(address newOwner)` - Transfers ownership

Inherited Contracts:

- **OpenZeppelin ERC20** - Standard implementation
- **OpenZeppelin Ownable** - Access control for minting