

Chapter 7: Smart Contracts.

Smart contracts to refer to immutable computer programs that run deterministically in the context of an Ethereum Virtual Machine as part of the Ethereum network protocol.

The attributes of a smart contract are:

Computer programs, immutable, deterministic, EVM context, Decentralized world computer.

Smart contracts own themselves, and cannot run on their own or in the background. The transaction has to be triggered by an EOA.

**** Is there anyway to write contracts to trigger themselves? ****

If execution fails due to an error, all of its effects (changes in state) are “rolled back” as if the transaction never ran.

To delete a contract, you execute an EVM opcode called SELFDESTRUCT (previously called SUICIDE) or selfdestruct(address) in the contract code.

Smart contract languages include: LLL, Serpent, Solidity, Vyper, Bamboo. LLL was the first though, and its unnecessarily beautiful.

ABI - Application Binary Interface. Using this ABI, any DApp or website or wallet can interact with our contract once it has been deployed.

There is a long list of global variables.

How to minimize gas:

- Avoid dynamically sized arrays.
- Avoid calls to other contracts.