

Smart Contracts and Solidity

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Can we program an e-lawyer?

What is a smart contract?

What is a smart contract?

A **program**.

What is a smart contract?

A program.

Seriously, any program can be a smart contract.

What is a smart contract? #2

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A **program**, which executes actions in reaction to triggers, based on rules.

What is a smart contract? #2

A **program**, which executes **programmed** actions in reaction to **programmed** triggers, based on **programmed** rules.

Use cases

Use cases

Banking.

Use cases

Banking.
Healthcare.

Use cases

Banking.
Healthcare.
Supply chain.

Use cases

Banking.

Healthcare.

Supply chain.

Legal issues.

Use cases

Banking.

Healthcare.

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Legal issues.

Real estate.

Use cases

Banking.

Healthcare.

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Legal issues.

Real estate.

Government.

Use cases

Banking.

Healthcare.

Supply chain.

Legal issues.

Real estate.

Government.

Everything*.

Use cases

Banking.

Healthcare.

Supply chain.

Legal issues.

Real estate.

Government.

Everything*.

** But it doesn't make sense.*

History

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1994 - Nick Szabo, first use of *smart contract*.

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- 2013 - Ethereum concept (Vitalik Buterin).
- 2014 - Solidity concept (Gavin Wood).



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- 1994 - Nick Szabo, first use of *smart contract*.
- 2008 - Blockchain concept (Satoshi Nakamoto).
- 2009 - Blockchain live.
- 2013 - Ethereum concept (Vitalik Buterin).
- 2014 - Solidity concept (Gavin Wood).
- 2015 - Ethereum and Solidity live.



Solidity

Solidity

Contract-oriented.

Solidity

Contract-oriented.
Statically-typed.

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ECMAScript-like syntax.

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Variadic return types.

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Multiple contract inheritance.

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Still 0.x!

Remix

Remix

An **official** Solidity IDE.

Sources

ethereum.org

remix.ethereum.org

solidity.readthedocs.io

Thank you!