

Define Problem / Problem Understanding

Business Requirements

Team ID	NM2023TMID04387
Project Name	Project – Ethereum Decentralised Identity Smart Contract

The Requirements For A Smart Contract :

For a smart contract to be enforceable, they must follow basic contract law requirements: The contract must have Offer, Acceptance, Consideration to be legally enforceable. Offer: One or both parties offer the terms of the agreement. Acceptance: Both parties accept the terms.

The 4 Major Parts Of A Smart Contract :

These basic components are the properties (static and variable), the logic and the ledger. Each of these components can be mapped directly into technical concepts. Properties represent a data schema, logic represents code, and the ledger corresponds to a database.

The Size Limit For Smart Contract :

A smart contract can be a maximum of 24KB or it will run out of gas. This can be circumnavigated by using The Diamond Pattern

Limitations of Smart Contract :

- Difficult to change. Changing smart contract processes is almost impossible, any error in the code can be time-consuming and expensive to correct.
- Possibility of loopholes. ...
- Third party. ...
- Vague terms.



The 5 Requirements Of A Valid Contract :

The Nature Of A Contract

To be legally enforceable, an agreement must contain all of the following criteria: An offer and acceptance; Certainty of terms; Consideration; An intention to create legal relations; Capacity of the parties; and, Legality of purpose.

The 4 Requirements For A Valid Contract :

A contract is an agreement between parties, creating mutual obligations that are enforceable by law. The basic elements required for the agreement to be a legally enforceable contract are: mutual assent, expressed by a valid offer and acceptance; adequate consideration; capacity; and legality.

The Main Smart Contract Challenges

- Security and privacy. ...
- Legal challenges. ...
- Reliance on oracles. ...
- Usability challenges. ...
- Impact challenges.

Drawback Of Smart Contracts :

Smart Contracts: Drawbacks

The immutability factor of smart contracts becomes a hurdle to flexibility concerning them and their deployment. It is impossible to make changes in an already implemented agreement, making it bothersome for the parties while they create and code them throughout the process

