

Events are notifications that provide alerts when important events occur, such as new video uploads.

In Solidity, events work by logging important messages on the Ethereum Virtual Machine (EVM), which can be read from blockchain nodes. These logs can be written to the blockchain, making them crucial for smart contract developers.

Events enable communication between smart contracts and their user interfaces, consuming less gas and being cheaper as they are not accessed by smart contracts.

This makes events an essential aspect of smart contract development, as they enable important alerts to the front end or user interface.

Why Use Events?

1. Events are essential in blockchain application building as they help users and clients stay informed about ongoing processes and transactions.
2. They help users understand the status of transactions, allowing them to wait or cancel transactions based on the results of processing.
3. This is particularly useful when communication with smart contracts is limited.
4. Events send updates on ongoing processes to the user interface, enabling users to stay informed about the transaction's progress and make informed decisions.



How to use events in solidity?

1. **Declaring an Event:** To define an event you start with the keyword “event” followed by the name of the event and parameters wrapped inside ().

```
event AccountSwitched(address indexed from, bytes32 indexed to);
```

2. **Emitting an Event:** You emit an event in the respective function by writing a emit keyword followed by the name of the event and the specified parameters wrapped inside the ().

```
emit AccountSwitched(from, to);
```

3. **Parameters passed to the events:** There are two types of parameters you can pass to an event

- a. **Indexed Parameters** – Indexed parameters are searchable parameters and help to query events. They are also called “topics”.
- b. **Non-Indexed Parameters** – Non-Indexed parameters are regular parameters passed to an event that is not searchable and are only used to log the messages to the blockchain.



YouTube Link:



<https://www.youtube.com/embed/Q1FHFPsYI-w>

Solidity Source File

