



TezAsia-2k23

Empowering Change with Blockchain: NGO Smart Contract

Submitted by : Team Web Player

What is a Smart Contract?

A smart contract is a self-executing program that automatically enforces the rules and regulations of an agreement on a blockchain network.

Benefits of Blockchain

- Increased transparency and accountability.
- Enhanced security and privacy.
- Improved efficiency and cost-effectiveness.

How Smart Contracts can benefit NGOs

Smart contracts
can increase
transparency and
accountability in
NGO operations.

They can facilitate
fast and secure
transactions with
reduced fees.

Blockchain
technology can
help build trust with
donors and
streamline donation
management.

Our Solution

Our smart contract solution based on Tezos blockchain technology enables transparency, security, and efficiency in NGO donations and operations.

The smart contract allow participants to purchase tickets for the lucky draw by sending a specified amount of Tez . Each ticket has an associated cost, and participants must pay at least the ticket price to enter the draw. The total amount collected from ticket purchases will be donated to the designated NGO to support their cause.

How the code works ?

1. **Ticket Purchase and Cost:** The **buy_ticket** entrypoint allows participants to purchase tickets by sending a specified amount of Tez. The entrypoint checks whether the sent amount is greater than or equal to the ticket cost, ensuring that participants pay at least the ticket price to enter the draw.

2. **NGO Support:** The smart contract collects funds from ticket purchases, and the **end_game** entrypoint specifies that the contract's balance is sent to the winner's address. In the provided code, it sends the entire balance to the winner, which could represent the donation to the designated NGO to support their cause.

3. **Random Winner Selection:** While the code selects a winner using a random mechanism, the method used (`sp.mod(sp.as_nat(sp.now - sp.timestamp(0)), self.data.max_tickets)`) is for randomness.

Our Team

Team Leader : Satvik Maheshwari

Team member : Anushka Bohre

*Thank
you!*