Ticket Store

NEM Final Project

This ticket store, implemented using NEM and Java, is an online ticket store that sells tickets for select events.

This ticket store was designed to prevent ticket reselling (and 'scalping') and fake/duplicate tickets.

Each ticket in this store has its own unique ticket ID to prevent ticket reselling (and 'scalping') and fake/duplicate tickets.

Once a ticket is sold and transferred, it cannot be transferred again, to prevent reselling.

Once launched, the ticket store will ask the customer for the quantity of tickets that he/she will order.

In a transaction, if the quantity of tickets ordered is less than 5, this order will be classified as a regular order. Each ticket in the order will be considered a regular ticket.

If the quantity of tickets ordered is 5 or more, the order will be classified as a bulk order. Each ticket in the order will be considered a discounted (bulk) ticket.

The price for a regular ticket is 10.00 XEM

For bulk orders, each ticket has a 10% discount, making the price for each ticket 9.00 XEM

After specifying the quantity of tickets in the transaction, the ticket store will ask for the customer's NEM address.

After making a transaction, the customer may choose to make another order, print an official digital receipt of the transaction, or terminate the program.

This ticket store application will benefit entities who deal with the events market (which includes concerts, live shows, live games, conferences, seminars, etc.) and those who pay to attend these events. With this ticket store, customers will be protected from entities that resell or scalp (resell tickets at a price higher than the original cost), or duplicate or sell fake tickets for these events.

Also, the ticket vendor can also monitor and keep track of all the tickets sold and the customers who purchased these tickets. Because each ticket has its own unique ID, it cannot be duplicated, and duplicated tickets may be easily identified.

A blockchain is needed in this application because this ticket store involves multiple transactions and multiple ticket customers. By using a decentralised blockchain, the ticket store can keep track of the transactions that occur within the system, the tickets that get sold and transferred, and the customers who purchased these tickets.

WELCOME TO TICKET STORE.

Input 'end' to terminate TICKET STORE
Please input the quantity of tickets that you will purchase.

Input 'end' to terminate TICKET STORE Please input your NEM address.

This is a REGULAR TICKET, priced at 10.0.

Ticket ID: 0

ORDER SUCCESFUL

Your order has been processed! The total cost of your order is 10.0. Thank you for your business.

Input 'end' to terminate TICKET STORE

Input 'rec' to view your official digital receipt.

Input any letter to make a new order.

This is a DISCOUNTED TICKET, priced at 9.0.
Ticket ID: 0

ORDER SUCCESFUL

Your order has been processed! The total cost of your order is 90.0. Thank you for your business.

Input 'end' to terminate TICKET STORE

Input 'rec' to view your official digital receipt.

Input any letter to make a new order.

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--- OFFICIAL RECEIPT ---
Order Type: Bulk
Ticket Quantity: 10
Customer Address: 21345-ABCDE
Total Cost: 90.0
Input 'end' to terminate TICKET STORE
Input any letter to make a new order.
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↑ TAH2P	Z-YGG6NQ-FOSFEU-T	3SZGH-IT3HT7-PACIFH-3AVO	+ 1	Thank you for purchasing	Sat, 08 Jun 2019 14:20:07
Transfer	transaction				
From		TAH2PZ-YGG6NQ-FOSFEU-T3SZGH-IT3HT7-PACIFH-3AVO			
То		TAH2PZ-YGG6NQ-FOSFEU-T3SZGH-IT3HT7-PACIFH-3AVO			
Fee		1.000000 XEM			
Mosaics	attached: 1 🏭				
	Name	antontest2-ns:ticket			
	Quantity	0.0010			
Message		Thank you for purchasin	g from TICKET ST	ORE!	
Block		2018873			
Hash		ef964f4e14278065ba9d	8ad6ea58f887aa26	2cd4bf4ae23fb082d18dd22e2866	