

# **Project Title: NFT-Based Event Ticketing System**

The goal of this project is to create a decentralized, NFT-based ticketing platform that prevents bulk buying, enhances fairness in ticket distribution, and maintains user privacy.

## **Problem Statement**

In modern event ticketing systems, scalping and fraud are pervasive issues. Many tickets are sold at inflated prices by resellers, making it difficult for genuine fans and attendees to secure tickets at fair rates. Additionally, the risk of ticket fraud, including counterfeit and duplicated tickets, undermines trust in the system.

## **Proposed Solution**

We have proposed a solution where tickets are tokenized as Non-Fungible Tokens (NFTs) on the blockchain. These NFT tickets are unique, verifiable, and transferrable, providing a transparent and secure system for event admission, and eliminating the possibility of fraud or unauthorized resale at inflated prices by the following ways:

### **Smart Contract Ticket Limits:**

Implement smart contracts to enforce ticket purchase limits per wallet, preventing mass acquisition by a single entity.

### **Staggered Ticket Sales:**

Introduce multiple phases of ticket sales, where each phase restricts the number of tickets that can be bought per wallet. This reduces the chances of bulk buying during high-demand periods.

### **On-Chain Behavioral Detection:**

Use on-chain analytics to monitor wallet activity and detect patterns indicative of scalping, such as multiple new wallets purchasing tickets in quick succession. Suspicious wallets can be flagged or restricted.