

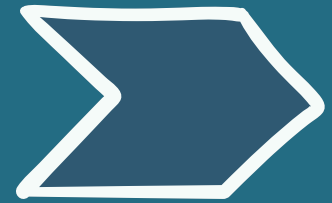
NFTickets

Presented by: RIP_scoorge

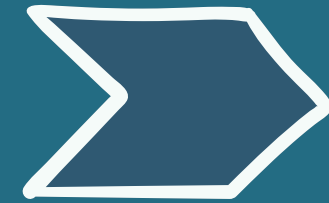
- Arihant jain
- Arunav Sameer
- Anmol joshi
- Vedant Jain
- Tanishq Godha
- Abhitulya Mishra



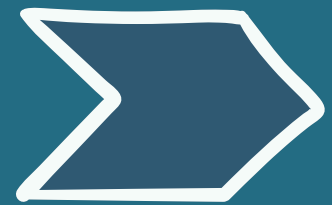
KEY FEATURES



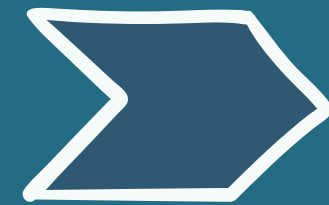
NFT-Based Ticketing



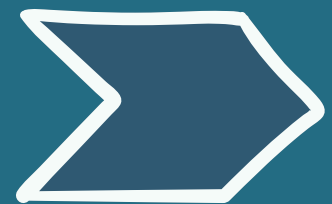
**Robust Security and
Reentrancy Prevention**



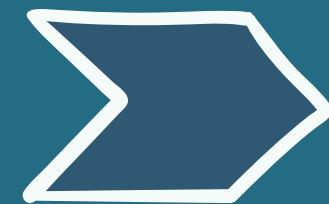
**Trustless and
Decentralized System**



**Wallet Integration
with MetaMask**



**Event Creation and
Ticket Marketplace**



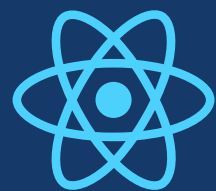
Gas-Efficient



TECH STACKS



Frontend



React.js



CSS



JavaScript

Backend



IPFS



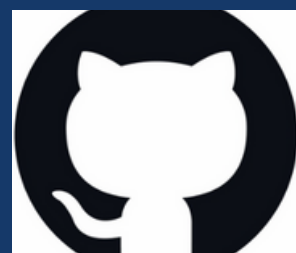
node.js

Tools for development



MetaMask

GitHub



Smart Contracts and Libraries



solidity

OpenZeppelin



Browser-Based Decentralized Interactions



Ether.js

Web3.js





CONTRACTS OVERVIEW



Event

Manages a single event's ticket sales and related details.

buyTicket()

getDetails()

ListTickets()

ownerWithdraw()



EventFactory

Creates multiple Event contracts and tracks them.



createEvent()

getAllEvents()



getEventDetails()



GAS CONSUMPTION



No.	function	Description	Gas Usage
1	constructor[]	Initializes the contract and sets event details.	3,987,609 [Event Creation]
2	buyTicket[]	Purchases a ticket with ETH and mints an ownership NFT.	175,335 [User buying ticket]
3	transferTicket[]	Transfers a ticket and updates ownership records.	111577 [transfer ticket]
4	listTicket[]	Lists a ticket for sale with a set price and expiry after approval.	96,361 [List Ticket]
5	cancelListing[]	Cancels an active ticket listing and revokes approval.	38,917 [Cancel Listing]
6	_safeMint[]	Minting a ticket for Event One.	111,577 [Event Ticket]
7	approveTicketPermission[]	Approves ticket permission to the contract for listing.	49,300 [Approve Permission]





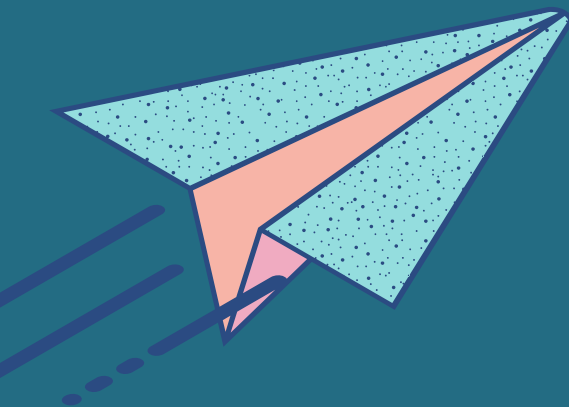
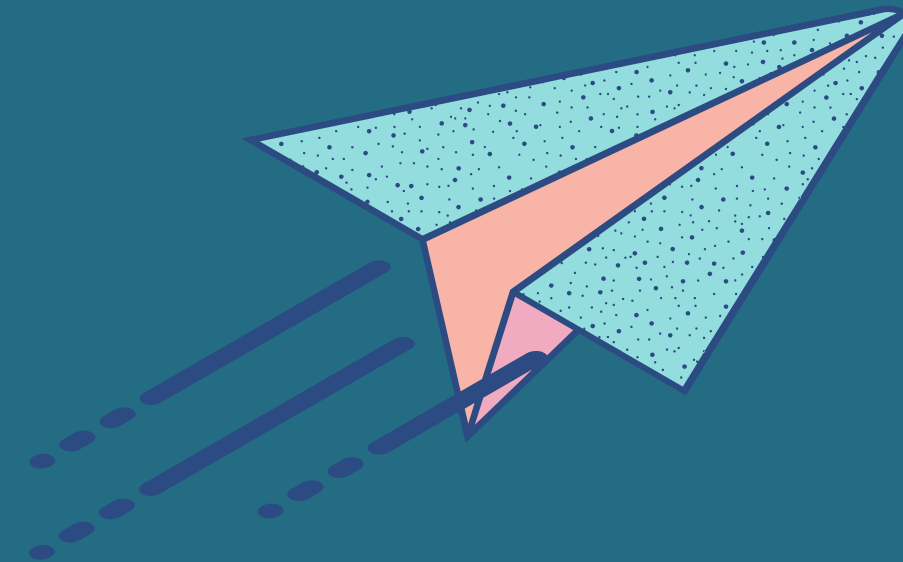
GAS OPTIMIZATION



Optimized Ticket Removal

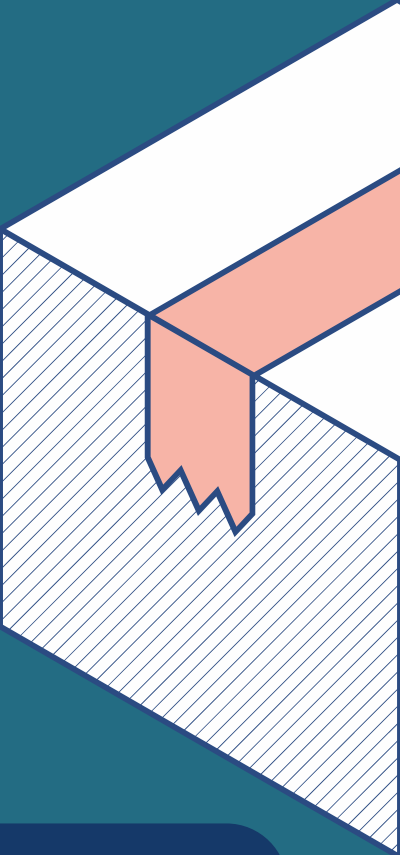
Off-Chain Metadata (IPFS)

Minimal Structs/Listing





FUTURE IMPROVEMENTS



Event Cancellation and messaging

Waitlist Buy order for oversold events



Event Refund and Discounts

Limited Period Ticket



Updating Event Details

