

Functions

EventCreation.sol Contract

Function name	Function visibility	Input Parameters	Return Parameters	Function Type	Modifier/Called By	Description
createEvent	external	uint256 maximumSeats	bool eventCreated, address eventTicketingTokenAddress, uint8 eventId	N/A	onlyEventOwner	<ul style="list-style-type: none"> - creates the event (lets say small music concert) every time owner wants to create - Will have maximum limit on the total number of seats available for the event - deploys the EventTicketingToken contract - notifies the event owner about the event creation - creates the mapping of event created with the event owner address
maximumSeats	public	N/A	uint256 maximumSeats	view	N/A	- fetch the value of maximum number of tokens sold
constructor	public	N/A	N/A	N/A	N/A	- set the owner of the event

EventTicketingToken.sol Contract

Function name	Function visibility	Input Parameters	Return Parameters	Function Type	Modifier/Called By	Description
buyToken	public	uint256 tokenId	uint256 tokenId, bool tokenBought	payable	onlyBuyer	<ul style="list-style-type: none"> - Used to buy the tickets (which are basically now treated as tokens) for the event. - Mint the token, buyer is willing to buy. - Increment the total number of tokens sold. - Notifies the buyer with the token details (like price) <p>Note: tokenId will be basically corresponds to the seatNumber.</p>
isEventOwner	public	N/A	bool isEventOwner	view	N/A	- Used to check whether the current login in user is event owner or buyer
constructor	public	address _eventOwner	N/A	N/A	N/A	<ul style="list-style-type: none"> - validates the address of the event owner - store the address of event owner - notify the event is initialized

ERC721 Contract functions (High-Level layout)

Function name	Input Parameters	Return Parameters	Function Type (pure/view/payable)	Modifier/Called By	Description
ownerOf	uint256 tokenId	address _owner	N/A		This function is used to get the owner/buyer of the tokenId

Function name	Input Parameters	Return Parameters	Function Type (pure/view/payable)	Modifier/Called By	Description
safeMint	uint256 tokenId		onlyBuyer		This function will be used to mint the token which is willing to buy, Note: There will be additional checks to restrict the buyer to mint again and also additional checks to restrict minting of invalid tokenIds
burn	uint256 tokenIds	N/A	onlyEventOwner		This function is used to burn all the tokens after the event ends up.

SafeMath.sol Contract functions (High-Level layout) Main Contract functions

Function name	Input Parameters	Return Parameters	Function identifier	Modifier/Called By	Description
add	uint256 a, uint256 b	uint256 sum	N/A		This function will be used to calculate the number of tokens sold and to restrict the overflow error

Few Future scope functions

Function name	Input Parameters	Return Parameters	Modifier/Called By	Description
registerUser	N/A	bytes32 userId	User/Owner	To register the user logged in for the first time and creates the userId for new users registered.
getUserId	address _address	bytes32 userId	Logged in User	Get the user id for the current logged in user
getAllUserId	N/A	bytes32[] userIdList	Only Owner	Get all the user ids for all users