

AUCTION HOUSE

Variables

admin	address payable	Admin of the Auction House
MANAGER	bytes32	Represents the manager role
_nextTokenId	uint	Represents the next token ID
_addressPaymentToken	address	Address of AUH ERC20 contract
_addressNFTCollection	address	Address of NFTCollection contract
fee	uint	Fee that contract gets, multiplied by 10
feesAccumulated	uint	Fees that contract has gotten from auctions
idToAuction	mapping	Mapping of id to Auction object

Auction struct

id	uint	Auction ID
nftId	uint	NFT ID
currentBidPrice	uint	Current bid/price of auction
currentBidOwner	address	Address of current bidder
creator	address	The seller of NFT
fee	uint	Fee deducted from auction on success
endAuction	uint	End timestamp of auction
complete	bool	Whether auction is complete or not
bidCount	uint	Number of bids placed on auction

Functions

constructor	(addressPaymentToken: address, addressNFTCollection: address)	Sets the payment token contract address (AUH ERC20 contract) and the NFTCollection contract (ERC721) address.
changeAdmin	(newAddress: address)	Removes the admin role from the caller and gives admin role to newAddress (only if the caller is the admin).
isAdmin	(_address: address)	Returns true if _address is the admin. False otherwise
isManager	(_address: address)	Returns true if _address is a manager. False otherwise

		otherwise.
addManager	(adr: address)	Gives manager role to adr. (Given that this was called by admin)
removeManager	(adr: address)	Removes manager role from adr. (Given that this was called by admin)
withdrawFees	(amt: uint256)	Withdraw amt of AUH from the contract. (Given that caller has admin or manager role)
getCurrentToken		Returns the next ID to be set for an auction
getAddress		Returns address of the contract
createAuction	(_nftId: uint256 _startingBid: uint256, _endAuction: uint256)	Creates an auction object
getUnclaimedAuctions		Returns all incomplete auctions
getOpenAuctionsBySender	(sender: address)	Returns all open auctions created by sender
isOpen	(_id: uint256)	Returns true if auction can still be bid upon. False otherwise.
getCurrentBidOwner	(_id: uint256)	Returns the current bid owner address for auction with id _id.
getCurrentBid	(_id: uint256)	Returns the current bid for auction with id _id.
getCurrentBidCount		Returns the number of bids on auction with id _id.
bid	(_id: uint256, newBid: uint256)	Place a bid with amount newBid on auction with id _id.
endAuction	(_id: uint256)	Helper function to end the auction with id _id.
claimItem	(_id: uint256)	Claims the item after auction end time has passed. Transfers NFT to buyer and AUH to seller.
endAuctionForce	(_id: uint256)	Ends the auction before its end time - only called by the seller.
cancelAuction	(_id: uint256)	Cancels the auction with _id id, only can happen by the seller and before the end date.
lowerStartingPrice	(_id: uint256, newPrice: uint256)	Lowers the starting price of auction with id _id to newPrice if no bids have been placed.

NFTCollection

Variables

_nextTokenId	uint256	The id of the next NFT made.
idToNFT	mapping	Mapping of id to NFT object.

Events

Mint	(tokenId: uint256, mintedBy: address)	The NFT with id tokenId has been minted by address mintedBy
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Structs

id	uint256	Id of NFT
name	string	Name of NFT
description	string	Description of NFT
uri	string	ipfs URL

Functions

constructor		
mint	(name: string, description: string, uri: string)	Mints a new NFT.
getMyNFTs		Returns all the NFTs belonging to the sender.
getNFT	(uint256 tokenId)	Returns NFT object with id tokenId
transferNFTFrom	(from: address, to: address, tokenId: uint256)	Transfer NFT from from address to to address
getAddress		Return contract address

Auction House Coin Contract

Functions

constructor	(initialSupply: uint256)	Initial amount of AUH to mint
mint	(to: address, amount: uint256)	Mint AUH
getAddress		Return contract address