

### AuctionCoin

Functions		
constructor	(initialSupply: uint256)	Mints 'initialSupply' tokens to sender
mint	(amount: uint256)	Mints 'amount' tokens to sender

### DigitalItem

Variables		
nextTokenId	uint256	Token ID of the next minted token
auctionHouse	uint256	Address of the Auction House

Functions		
constructor	(name: string memory, symbol: string memory, auctionHouseAddress: address)	Sets the Auction House address and notifies the Auction House that a collection was created
createItem	(tokenURI: string memory)	Mints a new token with URI 'tokenURI'. Notifies Auction House of its creation
auctionItem	(tokenId: uint256, startPrice: uint256, endTime: uint256, tokenURI: string memory)	Transfers the item to the Auction House

### AuctionHouse

Variables		
auctions	mapping	Mapping of tokens to Auction structs
managers	mapping	Mapping of user addresses to boolean values (representing whether they are a manager or not)
auctionCoin	address	Address of the Auction Coin contract
feePercentage	uint256	Fee for successful auctions

Auction Struct		
price	uint256	Current price of the item
endTime	uint256	Time the auction ends
seller	address	Address of the item seller
highestBidder	address	Address of the current highest bidder, or the zero address if there are no bids

Functions		
createCollection	(owner: address, name: string memory, symbol: string memory)	Emits a CollectionCreated event
createItem	(tokenId: uint256, from: address, to: address, tokenURI: string memory)	Emits an ItemTransfer event for the newly created item
auctionItem	(collection: address, tokenId: uint256, startPrice: uint256, endTime: uint, tokenURI: string memory, seller: address)	Lists an item for auction. Records information about the auction and emits ItemTransfer event
cancelAuction	(collection: address, tokenId: uint256)	Cancels an auction and transfers the item back to the

		owner
lowerStartingPrice	(collection: address, tokenId: uint256, newPrice: uint256)	Lowers the starting price of an auction with no bidders
placeBid	(collection: address, tokenId: uint256, bidAmount: uint256)	Places a bid of amount 'bidAmount' on an item
endAuction	(collection: address, tokenId: uint256)	Ends an auction that has bids already
claimItem	(collection: address, tokenId: uint256)	Claims an item for an auction that has ended
setFeePercentage	(newFeePercentage: uint256)	Changes the Auction fee rate
toggleManager	(manager: address)	Reverses/flips the address' current manager status
withdrawFees		Withdraws fees to the admin address

<b>Events</b>		
CollectionCreated	(name: string, symbol: string, collection: address, owner: address)	A user has created a new collection
ItemTransfer	(collection: address, tokenId: uint256, from: address, to: address, tokenURI: string)	An item has been transferred from one address to another (e.g. through auction, claim, auction ended, etc.)