## Ownable +modifier onlyOwner() +renounceOwnership() +transferOwnership(address newOwner) +owner(): address +isOwner(): bool #transferOwnership(address newOwner) **FarmerRole** DistributorRole RetailerRole ConsumerRole #farmers map(address,bool) #farmers map(address,bool) #farmers map(address,bool) #farmers map(address,bool) +event FarmerAdded +event DistributorAdded +event RetailerAdded +event ConsumerAdded +event FarmerRemoved +event DistributorRemoved +event RetailerRemoved +event ConsumerRemoved + modifier onlyFarmer + modifier onlyDistributor + modifier onlyRetailer + modifier onlyConsumer +addFarmer(address: account) +addDistributor(address: account) +addRetailer(address: account) +addConsumer(address: account) +renounceFarmer() +renounceDistributor() +renounceRetailer() +renounceConsumer() +isFarmer(address: account) +isDistributor(address: account) +isRetailer(address: account) +isFarmer(address: account) Item SupplyChain +sku:uint +upc:uint #sku: uint +ownerId: address #items: map(uint,Item) +originFarmerId: address +originFarmName: string +originFarmInformation: string +event Harvested(upc: uint) +originFarmLatitude: string +event Processed(upc: uint) +originFarmLongitude: string +event Packed(upc: uint) +productID: uint +event ForSale(upc: uint) +productNotes: string +event Sold(upc: uint) +productPrice: uint +event Shipped(upc: uint) +itemState: uint +event Recieved(upc: uint) +distributorID: address +event Purchased(upc: uint) +retailerID: address +consumerID: address +harvestItem(data: Item) +processItem(upc: uint) +packItem(upc: uint) +sellItem(upc:uint, price:uint) +buyItem(upc:uint) +shipItem(upc:uint) +receiveItem(upc:uint) +purchaseItem(upc:uint) +fetchItemBufferOne(upc:uint) +fetchItemBufferTwo(upc:uint)

**Coffe Supply Chain Class Diagram**