User Administrator,	
ID password sessionID	

User **Administrator** allCategories Category allDCenters **Product** DistributionCenter sessionID Graph addAdmin Node addCategory ProductManager getScreenReport addProduct changePhoto changeDescription changePrice changeAvailableQuantity changeTotalQuantity seeProductsByCategory seeProductsByAvailability addNewDistributionCenter

Shopper		User Customer
shoppingCart sessionID customerID idNum shoppingOrder cancelProduct saveCart uploadCart addToShoppingCart removeFromCart cancelCart	Product ShoppingOrder	

Customer Shopper	
city street customerID orderMap invoiceList sessionID shoppingCart shippingPrice shoppingOrder	DistributionCenter Invoice Order Product ShoppingOrder
totalCost totalInvoice shippingCost ship emptyOrderMap purchase	

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UserManager	
userMap activeSessionIDs user	User
adminRegistration shopperRegistration saveToFile readFromFile	

Product Invoice, Orde		Invoice, Order
category image ID description price quantityDistributionMap availableQ	DistributionCenter DistributionCenterManager	

ProductManager	
products	Product
addProduct saveToFile readFromFile	

Category	
code description products	Product
searchProduct searchPriceRange	

CategoryManager	
idNum categories	Category
add saveToFile readFromFile	

	Invoice	Product
quantity cost		

Order		Product
customer quantityDistributionCenter	Customer DistributionCenter	

Shoppi	ngOrder
orders idNum orderID	Product

DistributionCenter	
centerName centerCity centerID products	Product

DistributionCenterManager		
distributionmanagers	DistributionCenter Product	
transferProduct add		
saveToFile		
readFromFile		

Queue		
queue		
pop add isEmpty		

Node	
name edges child parent cumulativeCost existsDistribCenter distributionCenter	DistributionCenter Edge
equals compareTo	

Edge	
jointNode cost	Node

Graph	
nodes	DistributionCenter Node
addNode addEdge findPath returnPathFrom resetGraph addDistributionCenter getClosestDistribution getNode getCost	Queue

Create	eGraph
main	Node Graph

	Shopp	ingCart	
shoppingCart		Product	

ChopDictionary		
list	DoubleArray	
populate returnNode getList		

DoubleArray		
array index		
add isFull		