

INVENTORY MANAGEMENT – REQUIREMENT ANALYSIS

As mentioned in the abstract, the central entity in inventory management is the warehouse. The entity warehouse is related to other entities like company and distributor. The data taken in inventory management is regarding the supply of raw materials and the stocks of finished products in the company. This data is generally acquired from the warehouse where all the materials exist. The whole process occurs in the warehouse where all the processes like procurement and sales are done. Based on the above information we can come up with the entities and the cardinalities between them.

<u>TABLES IN INVENTORY MANAGEMENT</u>	
<u>ENTITY</u>	<u>ATTRIBUTES</u>
Company	cname, clocation, cphn
Distributor	<u>did</u> , dname, dphn
Warehouse	<u>wid</u> , wlocation
<u>Inventory</u>	i_id, iname , type , in_qty, out_qty, balance_qty, in_price, fn_price, result_price
Stock_IN	<u>sin_id</u> , sin_name, sin_date, sin_price, supplier, o_quantity
Stock_OUT	<u>sout_id</u> , sout_name, sout_date, sout_price, mf_place, o_quantity
<u>Orders</u>	did, sout_date
<u>Invoice</u>	sout_id, sout_name, qty

<u>RELATIONS BETWEEN ENTITIES</u>		
<u>RELATION</u>	<u>ENTITIES</u>	<u>CARDINALITY</u>
SELLS	Company, Distributor	One : Many
OWNS	Company, Warehouse	One : Many
HAS	Warehouse, <u>Inventory</u>	One : Many
IN	Stock_IN, <u>Inventory</u>	One : One
OUT	Stock_OUT, <u>Inventory</u>	One : One
PLACES	Distributor, <u>Order</u>	One : Many
SPECIFY	<u>Order</u> , <u>Invoice</u>	One : One
GETS	Distributor, <u>Invoice</u>	One : One

(NOTE: Entities underlined are consider as Weak Entities and underlined attributes are Primary Key)