1. Table 1: Functional Requirements

ID	Module	Description	Priority	Risk	Status
1.	Suppliers	The system **MUST** manage all of its suppliers' details, including: supplier ID, Bank account, Payment agreement and contact information.	MH	L	
2.	Suppliers	The system **MUST** be able to save the fixed supplying days of a supplier (or none if it doesn't have any).	MH	L	
3.	Suppliers	The system **MUST** manage the items supplied by each of its suppliers, including price and item ID (as specified by the supplier).	MH	L	
4.	Suppliers	The system **MUST** be able to save a "Quantity Agreement" for each supplier, which describes special discounts according to total price of an order and per quantity of an item.	MH	H	
5.	Suppliers	The system **MUST** save whether a supplier sends a shipment or the company has to collect the order from the supplier.	MH	L	
6.	Suppliers	The system **MUST** allow to update supplier's shipping conditions (fixed days, self shipment).	MH	L	
7.	Suppliers	The system **MUST** support managing orders: each order will include items, quantity of each item, total price , date of order and delivery status.	MH	H	
8.	Suppliers	The system **SHOULD** save what categories of products the company orders from each supplier.	NTH	L	<mark>Done</mark>
9.	Suppliers	The system **SHOULD** save the manufacturers names that a supplier works with.	NTH	L	
10.	Suppliers	The system **SHOULD** support fixed orders (recurring orders).	NTH	H	
11.	Suppliers	The system **MUST** automatically issue an order for low-quantity products	MH	H	
12.	Suppliers	The system **MUST** support updating a fixed order at least one day before shipment	MH	H	
13.	Suppliers	The system **MUST** choose the cheapest supplier when issuing an order for a product	MH	L	
14.	Suppliers + Inventory	The system **MUST** check that the inventory quantity is always higher than the minimal quantity when receiving orders	MH	H	
15.	Inventory	The system **MUST** manage items in the inventory	MH	L	
16.	Inventory	The system **MUST** manage categories and sub-categories of the inventory	MH	L	
17.	Inventory	The system **MUST** support adding discounts to products according to categories	MH	L	
18.	Inventory	The system **MUST** support adding discounts to a specific product	MH	L	

19.	Inventory	The system **MUST** display product's details according to a given area in the store	MH	L	
20.	Inventory	The system **MUST** record sales	MH	L	
21.	Inventory	The system **MUST** be able to produce inventory-records according to categories/specific category	MH	H	
22.	Inventory	The system **MUST** be able to display all expired products	MH	H	
23.	Inventory	The system **MUST** be able to produce a record of low-quantity products in the inventory	MH	L	
24.	Inventory	The system **MUST** be able to produce a record of all about-to expire products	MH	L	
25.	Inventory	The system **MUST** store the alert-time before a product expires	MH	L	
26.	Transport	The system **MUST** record every transportation.	MH	L	
27.	Transport	The system **MUST** record every item contract per destination.	MH	L	
28.	Transport	The system **MUST** record every site and save its properties.	MH	L	
29.	Transport	If a truck exceeds its weight limit, the system **MUST** alarm the user.	MH	L	
30.	Transport	The system **MUST** not allow a driver to be registered with a truck he doesn't have a license to.	MH	L	
31.	Transport	The system **CAN** allow changes in past records.	NTH	M	
32.	Transport	The system **MUST** show all the information about past records.	MH	L	
33.	Registration	The system **MUST** support registration and deletion of employees.	MH	L	
34.	Personal Details	The system **MUST** store the name, ID, bank account details, salary, working conditions, start working date and job role for each employee.	MH	L	
35.	Personal Details	The system **MUST** allow modification of employee's personal details	MH	L	Done
36.	Shifts	The system **MUST** store the shifts for each employee	MH	L	
37.	Shifts	A shift can be a morning shift or an evening shift only	MH	L	
38.	Shifts	A shift must contain the day of the week	MH	L	
39.	Shifts	A shift must have (at least)? 1 shift manager	MH	L	
40.	Shifts	A shift contains the number and type of employees that takes place in it	MH	L	
41.	Shifts	The system will store all shifts history	MH	L	
42.	Shifts	The system shall allow employee to read and modify its shift personal preferences	MH	L	
43.	Shifts	The system shall allow modification of shift roles and number of employees by the HR manager only	MH	L	
44.	Shifts	The system shall display all shift assignments on the "Assignment Screen"	MH	L	
45.	Shifts	An employee cant be assigned to a job that isn't his role	MH	L	

46.	Shifts	The system will only allow the manager to assign employees to shifts and display the schedule for him	MH	L	
47.	Shifts	The system MUST store all shifts history	NTH	L	
48.	Shifts	The system will be able to display a weekly schedule of shifts for each employee	NTH	L	
49.	Transport	The system must not allow a transportation to arrive without Storage Employee present in the shift	MH	L	
50.	Transport	The system must not allow a transportation to be executed if a driver isn't present in the shift	MH	L	
51.	Transport + Suppliers	The system must put a transport to an order which isn't supplied by its supplier.	MH	H	Not done
52.	Transport + Suppliers	The system must prompt an appropriate message if no transport is available within a week	MH	L	Not done
53.	Presentation	The system must define actions to specific types of users (Logistic manager, storage manager, HR manager, store manager)	MH	L	Done
54.	Transport + Suppliers	The system must allow to receive only part of an order (i.e faulty/expired items)	MH	H	Not done

Table 2: Open questions that affect the implementation (including assumptions)

#	Topic	Issue	Client's answer (assumptions/as answered in forum)
1	Supplier's contacts details	Who is considered a contact?	A supplier's manger (assumption).
2	Supplier's contacts details	What details should be saved for each contact?	First and last name, phone number (assumption).
3	Quantity agreement	How to determine if a purchase is large?	There are some fixed scales that the company receives discounts (elaborated in forum)
4	Quantity agreement	What is the relationship between the discount and the number of products in an order?	Each supplier can give a discount as it wishes (elaborated in forum).
5	Payment agreement	What kinds of payment agreement there are?	Payment for each order or Payment once a month (assumption).
6	Quantity agreement	How is a discount calculated?	First, the discount of item quantity is calculated, and only then, the final discount (if it exceeds a total of a certain price) for all of the order. (assumption).
7	Quantity agreement	Can the agreement be changed? (discounts).	Yes, in any time (assumption).
8	Supplying days	Are items supplied on Saturday?	No (assumption).
9	Quantity agreement	What types of discounts can a supplier provide?	1. Discount per quantity of an item 2. Discount per total price of an order (assumption).
10	Minimal quantity	How do you know the minimal quantity of the product?	The user inserts it when inserting a new product to the system
11	Location	Who decides the shelf-location of a product?	The user inserts it as an input
12	Discount	What happens when inserting new discount?	Summing the total discounts
13	Category		The user inserts the category of the product when inserting it to the system
14	Expiration date alert		The user inserts the alert time as an argument
15	Transportations	Can an order be used in two different transportations?	No, an order should be only in one transportation (assumption).
16	Employees	Will the system allow an employee to work in back to back shifts?	No (assumption).
17	Employees	What are the shift hours?	Morning: 06:00 – 14:00 Evening: 14:00 – 22:00
18	Employees	Is the salary defined by the role of the employee?	Each employee has its own contract and employment conditions (assumption).

Table 3 - Definitions:

Entity	Definition
Supplier	A supplier is an organization that works in co-operation with the company. The company may have a various number of suppliers that all supply different items. In addition, there may be 2 or more suppliers that supply the same item to the company. Each supplier has its own catalogue, which describes the items, discounts and price per unit for each item in the catalogue.
Contract	A contract between the company and the supplier, this is actually a single entry in a supplier's catalogue.
Order	As elaborated above, the company works with different suppliers from which it can order items. Each order in the system is related to a specific supplier, and it may only contain items that appear in the supplier's catalogue. The order details are as shown in the attached file to the assignment.
Item	An item that is sold in the company.
Category	Super-li classifies its items by categories. Each category may have sub-categories. The company may include a global discount for all items under the same category.
Sale	A sale of a single item with a given quantity. Includes the issued date as well.
Report	There are all kinds of reports in the system: In general, a report is a list of items that all share a common characteristic, for example: about to expire product, faulty products, low quantity products and so on.
Sale Report	Similar to a report of items, but for sales. Starting from and ending at given dates.
Transportation	A shipment that contains source and one or more sites , orders to deliver, one driver and one truck
Employee	A worker in super-li, contains all his personal details, and the shifts he prefer to work in.
Shift	Identified by Type (Morning or Evening) and date, contains its currents employees and constraints of how many employees of each type.
Daily Schedule	Identified by Id, contains all shift in the day
Site	The address, section and contact info of a supplier