Requirements

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
1	transport	functional	The system will keep the following information for each transport: unique ID, date, departure hour, truck license number, driver ID, source, destinations, uniquely identifiable list of items for each destination, truck weight	HP	LR	done
2	transport	functional	The system will keep the following information for each site: transport zone, address, phone number, contact person name, site type	HP	LR	done
3	transport	functional	The system will keep the following information for each truck: license number, model, base weight, maximum weight, cooling capacity	HP	LR	done
4	transport	functional	The system will keep the following information for each driver: unique ID, name, driving license type	HP	LR	done
5	transport	functional	The system will allow adding new transports, drivers, trucks, sites, item lists	HP	LR	done
6	transport	functional	The system will allow editing transports, drivers, trucks, sites and item lists.	HP	LR	done
7	transport	functional	The system will allow deleting transports, drivers, trucks, sites and item lists.	HP	LR	done
8	transport	non-functional	The truck's cooling capacities are: 1:"none",2:"cold",3:"frozen"	HP	LR	done
9	transport	non-functional	The site types are the following: Logistical center, branch, supplier	HP	LR	done

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
10	transport	non-function	The types of driving licenses are defined as pairs of letter and number as such: 1-3 for cooling capacity and A-C for max weight. A : 0 - 10,000kg B : 0 - 20,000kg C : no limit 1 : no cooling 2 : cold 3 : frozen for example: C1, B3, B1 etc	HP	LR	done
11	transport	non-function	The driver's license adequacy is ordered as such: A1<B1<C1<C2<C3 A2<B2<C2<C3 A3<B3<C3 which means that drivers can drive trucks that require a weaker license	HP	LR	done
12	transport	functional	The system will reject the transport if the weight is higher than the maximum weight of the truck.	HP	LR	done
13	transport	functional	If a transport is rejected, the system will allow choosing between: changing or removing a destination, changing the truck, or changing the item list	HP	HR	done
14	transport	functional	The system will enforce that the driver of the transport has the adequate license type for the truck according to the cooling capacity and the weight of the truck	HP	HR	done
15	transport	functional	The system will not allow a truck to be assigned to two overlapping transports	LP	HR	backlog
16	transport	functional	The system will not allow a driver to be assigned to two overlapping transports	LP	HR	backlog

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
17	transport	functional	The system will document every transport in the transport history database	HP	HR	done
18	transport	functional	The system will document the list of items in the item history database	HP	HR	done
19	transport	functional	The system will validate that a store keeper is available in every branch at the requested date and time	HP	HR	done
20	transport	functional	The system will validate that the driver is available at the requested date and time	HP	HR	done
21	transport	functional	The system will calculated a predicted time of arrival for every destination in the transport	HP	high	done
22	Employees	Functional	The system will enable decision of required roles (Cashier, Storekeeper, GeneralEmployee, ShiftManager, SecurityGuard, Stweard, Cleaner) and quantity of each in every branch in anytime.	MH	High	Done
23	Employees	Non-Functional	The system will enforce requirements on all branches of the company.	MH	Low	Done
24	Employees	Functional	The system will enable scheduling morning and evening shifts to every branch separately by the user's input	MH	High	Done
25	Employees	Non-Functional	The system will enable each employee to work at several branches in separate days.	MH	Low	Done
26	Employees	Functional	The system will Identify illegal shift scheduling and will notify the HR manager about that. Illegal shift scheduling is when the schedule contradicts constraints.	MH	High	Done
27	Employees	Non-Functional	The system will Identify the following as illegal shift scheduling: an employee working more than two shifts a day, an employee working more than 6 days a week, an employee signed up for a shift on a day that the branch is closed,___.	MH	High	Done
28	Employees	Functional	The system will register users with a username and password for each user, with a unique username to each.(Inferred)	MH	Low	Done
29	Employees	Non-Functional	The system will Identify each user as a certain employee in the company.(Inferred)	NTH	Low	Done

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
30	Employees	Functional	The system will allow employee users to register themselves to shifts that hasn't happened yet (Inferred) only If they abide legal shift scheduling.	MH	High	Done
31	Employees	Functional	The system will enable HR manager user to verify each shift.	MH	High	Done
32	Employees	Non-Functional	The system will Identify some of its users as HR manager. (Inferred)	MH	Low	Done
33	Employees	Functional	The system should allow the HR manager to specify the work days and shift hours of each branch.	MH	High	Done
34	Employees	Functional	The system should note the different activities that occurred during each shift (such as the starting and end time of the shift, product cancellations at the register, etc.)	NTH	High	Done
35	Employees	Functional	The system should allow product cancellations at the register, and only to employees with a cancellation card.	MH	High	Done
36	Employees	Non-Functional	The system should enforce that there will always be a shift manager in every shift, the shift manager will be certified to use his cancellation card and manage the team.	MH	High	Done
37	Employees /Inventory	Functional	For every product cancellation at the register, the system should save the following cancellation details: cancelled product id, cancelling employee id, date and time of cancellation, in order to track the activity of the shift workers.	NTH	Medium	Done
38	Employees	Functional	The system should allow the HR manager to update each employee's details, as well as certify/remove different roles/certifications for each one.	MH	Medium	Done
39	Employees	Non-Functional	The system should save the following details for each employee: name, id, bank details, salary, employee conditions, employment date and other information if needed.	MH	Low	Done
40	Employees	Non-Functional	The system should support managing a number of different branches, each branch should have an HR manager and should be able to manage its employees and shifts independently.	MH	High	Done

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
41	Employees	Non-Functional	The system should enforce that each employee will only be able to work in certain shifts according to his certifications.	MH	High	Done
42	Employees	Functional	The system should calculate the employee's salary automatically, and allow modifying it (for example, by giving a bonus)	NTH	High	Done
43	Employees	Non-Functional	The system will only allow the following possible roles for the employees: Shift Manager, Cashier, Storekeeper, Security Guard, Cleaner, Steward, General Employee and Driver. It won't be possible to add new roles.	MH	Low	Done
44	Employees	Non-Functional	The system should allow for different employee roles to exist in each branch, but all branches will always have the following roles: Shift Manager, Cashier, Storekeeper and General Employee.	MH	Low	Done
45	Employees	Non-Functional	The system will enforce that there will be a valid shift schedule at least 24 hours before the shift, otherwise, the system will notify the HR manager about that.	NTF	High	Backlog
46	Inventory	Functional	The system should notify the client when products from the supply are shortage and order from the supplier	NTH	high	finished
47	Inventory	Functional	The system should enable to add the minimume amount for each product	NTH	low	finished
48	Inventory	Functional	The system should enable to add detailes about each product: - location - supplier - manufacturer - amount(in store and in the warehouse) - store price	MH	low	finished
49	Inventory	Functional	The system should calculate and save for each product the finall supplier price and the selling price considering the discounts	MH	low	finished
50	Inventory	Functional	The system should save all the discounts that each product had from the supplier or the store	MH	low	finished

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
51	Inventory	Functional	The sysytem should enable to add for each product it's catgory and sub-categories	MH	low	finished
52	Inventory	Functional	The system should enable produce reports of all products in stock according to a chosen category and sub-catagories	NTH	high	finished
53	Inventory	Functional	The system should enable to save whether a product is damaged or expired	MH	low	finished
54	Inventory	Functional	The system should enable to produce a report of all products that are gonna run out	NTH	high	finished
55	Inventory	Functional	The system should enable to produce a report of all damaged products, it's details and where their location	NTH	high	finished
56	Inventory	Functional	The system should enable to add a discount for a catagory	MH	low	finished
57	Inventory	Functional	The system should supply product details	MH	high	finished
58	Inventory	Functional	The system should verify that the amount of the new supplie is higher that the minmume	MH	low	finished
59	Suppliers	Functional	The system must keep suppliers details, such as: name, bn number, bank account, payment method, fields of products, contact's names and their contact information	MH	Low	Finished
60	Suppliers	Functional	The system must not allow an order to be ordered if it can't be fully ordered	MH	Low	finished
61	Suppliers	Functional	The system must allow product to be supplied by different suppliers	MH	Low	finished
62	Suppliers	Functional	The system must allow the user to change every detail on the agreement	MH	Low	finished
63	Suppliers	Functional	The system must give the option to see the history of orders from every supplier	MH	Low	finished
64	Suppliers	Functional	The system must support getting an inventory report that includes products to be ordered, and to automatically order the products	MH	Low	finished
65	Suppliers	Functional	The system must keep agreements for every supplier with the following details: payment method, whether he arrives in fixed days or only by invitation. if by invitation, the system should also keep the number of days it takes the order to arrive. In addition, it should keep whether he have transport, or he needs us to send him one. Also needs to keep details on every product included in the agreement such as: the product's catalog number according to the supplier, its price and also the number of units that are available from that product. optional - Bill of quantities, which defines for every product what discount it have, the size of the discount changes by the quantity ordered.	MH	Low	finished

ID	Module	Functional / Non-Functional	Description	Priority	Risk	Status
66	Suppliers	Functional	The system must alert the user by a message if his order couldn't be ordered	MH	Low	finished
67	Suppliers	Functional	The system should support multiple discounts on order (כפל הנחות)	MH	Low	finished
68	Suppliers	Functional	The system must support periodic order from supplier – order that happens every week	MH	Low	Unfinished
69	Suppliers	Functional	The system must not allow to edit a periodic order if left less than a day to the order-day	MH	Low	Unfinished
70	Suppliers	Functional	The system must prioritize the suppliers that will supply an order due to shortage in that order: 1. Time – the supplier that comes in the shortest time. 2. The supplier that can supply the biggest amount of products – divide the order to smallest amount of suppliers. 3. The supplier that is the cheapest.	MH	Low	Unfinished
71	Suppliers	Functional	The system should ensure the day of periodic order such that: If its supplier with fixed days – than the order-day must be one of those days. Else, it can be in every day of the week.	MH	Low	Unfinished
72	Suppliers	Functional	The system must ensure that in the day that the periodic order arrives, the inventory level of every product in the order, will be higher than the minimum inventory amount of the product	MH	Low	Unfinished
73	Suppliers	Functional	The system should automatically schedule a transport for a supplier that has an order for "super li" and don't have transport of his own.	MH	Low	Unfinished

תנאי תשלום: שוטף, שוטף +30, שוטף +60**

תנאים עסקיים: תנאי תשלום וכתב כמויות**

כל הדרישות ימומשו באיטרציה הנוכחית, חוץ מהדרישה על הוצאת הובלה – הדרישה האחרונה.**

Definition of concepts:

1) Supplier – a company/person from whom you can order products.

2) Order due to shortage - an order created for certain products when a shortage of their stock is discovered

3) Periodic order - an order of products that is defined on a fixed day of the week, coordinated with a single supplier

4) Agreement with a supplier - contains the list of products that the supplier can supply to the supermarket, the supplier's contact details, his bank account details, and sometimes also contains * quantity sheet.

5) Quantity sheet - contains products' discounts: bulk based discounts, price threshold discounts and global order discounts.

6) Discount – either percentage based or absolute, determined by the supplier.

7) Transport – suppliers that can't deliver, super-li's transport system will ship the delivery from the supplier to the appropriate branch

8) Branch – one of super-li's branches

9) product – a product in super-li's inventory. has a catalog number and a serial that is unique per branch

10) category – there are various categories and sub-categories that are ordered as a category tree. every product can be a part of some category.

11) inventory discounts – every product can have a branch discount and a category discount

Changes made:

1) Change of the requirement of the preference of the suppliers in an order due to a shortage (requirement from the forums)
2) Added a requirement to support a recurring periodic order
3) Added a requirement that you can change a recurring periodic order up to one day before its due date
4) Added a requirement that the stock of products will be above the minimum after a shipment has arrived to a branch
5) Added a requirement that the system will automatically order a transport for a supplier that has an order but cannot ship it.
6) Added requirements for verifying that drivers and store keepers are available during the scheduled date and time of the transport
7) Added requirement for verifying that the system will calculate a predicted time of arrival for every destination in the transport.
8) The system now disallows approval of a shift by the HR Manager, if it is not a fully valid shift, with assigned workers to every single one of the needed roles specified by the HR Manager himself.
9) The system now supports the role of a Driver and allows the HR Manager or the Transport Module to add new drivers to the system.
10) The system now integrates the Branches a type of Site, every Branch in the Employees module corresponds to a Site in the Transport Module.

System assumptions (things we don't know but we assumed):

1) As of now, every truck is always available for a transport, regardless of whether they actually are. We are not enforcing this requirement because we currently don't have the information to verify when a truck is back to availability

2) We're assuming 9 types of drivers' licenses exist, based on the max weight of the truck and the cooling capacity of the truck.

   A: 0-10 Tons, B: 0-20 Tons, C: no limit
   1: no cooling, 2: cold, 3: frozen

   every combination of these letters and numbers are a type of license number.
   for example: A1, B2, C3 etc.

3) When the transport weight exceeds the max weight of the truck, we're allowing to change both the truck and the driver if necessary to accommodate the heavier truck.

4) The employment conditions of each employee are given as a string.

5) A shift with more than the needed amount of employees, is also a valid shift construction.

6) We're assuming that orders occur automatically, meaning that when the time comes the stock updates accordingly. That's because we're not currently connected to the transport module.

7) We're assuming that a product has a catalog number and every branch has a serial number whose combination grants us the unique identification of a single product.

8) We're assuming that if a product has a discount by it self and has a discount by the sub-tree it is in, we're taking the largest discount among them.

Open questions:

no.	topic	question
1	transport validation	How do you know when a truck is available to be put in a transport?
2	Salary	How is the employee's salary calculated? Which information should the system save to calculate it? (Total worked hours, hourly rate for each role, base salary, bonuses, etc.)
3	Cancellation Card	How should we save the cancelled product details, and is it related to the Inventory Module?
4	Alert for minimum supply	How the users should get the notify? by email, popup window in the system..
5	Alert for minimum supply	What is the trigger for sending the alert? what is the meaning of about to run out?
6	Item location	Should the system save the specific item location inside the store and warehouse or mention if the item is in the store or warehouse?
7	Discount of a certein product	What if we have more than one discount on a certein product? one from the product and others from it's catagories
8	Categories of items	Does every item must have a prime catagory? is it can be more than one?
9	Categories of items	Does every item must have a sub catagory?
10	Reports	For each report, what details are the users want to see about each product?
11	Product	Is it a requirement to see all the details about a certein product?
12	Product	Is it a requirement to save all the sold products? or do we need to delete it from the system?
13	Contract vs. agreements	Does contract and agreements are the same or do they have different meaning?
14	Products	Does all the products you intend to buy from a supplier have to be in the agreement with the supplier?
15	Supplier visit date	Does in "Supplier visit date" you mean to the day that the order will arrive or to the day that the order will be ready for transport?
16	Discounts	What kind of discounts will you want us to support
17	Order of discount	You have three types of discounts, what order would you want us to apply the discounts?
18	Contact information	What Contact information would you want us to keep for contact
19	Periodic order frequency	What frequency of periodic order will you want us to allow?

Topic	Answer
Contract vs. agreements	Yes, they are the same. Thank you from the bottom of my heart dear developer
Products	Yes! I can only order a product from a supplier if its written in the agreement
Discounts	Three types: 1. Discounts as we talked about in the system story 2. Discounts on total amount of products – when reached certain amount, apply discount. 3. Discounts on total payment – when reached payment higher than set in the agreement, apply discount. The discounts are – discount by percentage and discount by fixed amount of money.
Order of discounts	You need to give me the option to decide the order – it will depend on the supplier's policy.
Contact information	Email and phone number
Periodic order frequency	I want a week frequency, for example – "every Monday"
Supplier visit date	To the day that the order will arrive