|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ID | Module | Functional /NF | Description | Priority | Risk | Status | Notes |
| 1 | Suppliers | NF | The system will allow different suppliers to supply products from the same manufacturer | NTH | Low | Done |  |
| 2 | Suppliers | F | The system must allow to add supplier cards to the system which include supplier name, business number, bank account, payment details, contact communication details, delivery days, option for self-delivery | MH | High | Done |  |
| 3 | Suppliers | F | The system will allow for each supplier to choose delivery days. | MH | Low | Done |  |
| 4 | Suppliers | F | The system will allow the user to view items that each supplier has in his catalog | MH | High | Done |  |
| 5 | Suppliers | F | The system will allow to add discounts (as part of the quantity agreement) for items based on their quantity. | NTH | High | Done |  |
| 6 | Suppliers | F | The system will allow to make reports of orders done | MH | Low | Done |  |
| 7 | Suppliers | F | The system will allow to save all catalog items that a given supplier has in the quantity agreement |  |  |  |  |
| 8 | Suppliers | F | The system must allow to make quantity agreement for each supplier | MH | High | Done |  |
| 9 | Suppliers | F | The system must allow the supplier manager to save the suppliers preference: self-delivery or pickup (so SuperLi will arrange the pickup) | MH | Low | Done |  |
| 10 | Suppliers | F | The system must allow to order from suppliers | MH | Low | Done |  |
| 11 | Suppliers | F | The system must allow to update bank account, payment details, pickup option, contact communication details | NTH | Low | Done |  |
| 12 | Suppliers | F | The system will allow to make a routine order from suppliers (only from the delivery days of the supplier) | MH | Low | Done |  |
| 13 | Suppliers + Inventory | F | The system will allow to check for items that are out-of-stock and order them from the supplier with the lowest price | MH | High | Done |  |
| 14 | Suppliers | F | The system will show the routine orders of tomorrow at start-up and will allow the user to alter those orders. | MH | High | Done |  |
| 15 | Suppliers | F | The system will allow to view all suppliers and their details. | MH | Low | Done |  |
| 16 | Suppliers | F | The system will allow to view all the routine orders | MH | High | Done |  |
| 17 | Suppliers | F | The system will allow to view all orders of a specific supplier | MH | Low | Done |  |
| 18 | Inventory | F | The system MUST send reports regarding products in stock when the user request it. | MH | LOW | Done |  |
| 19 | Inventory | F | The system MUST keep information about each product in stock: name, quantity, location, producer, category, quantity in store, quantity in warehouse, and discounts. | MH | LOW | Done |  |
| 20 | Inventory | F | The system MUST keep and track the cost price and the selling price of each product. | MH | LOW | Done |  |
| 21 | Inventory | F | The system CAN have an option to update discount on specific products or category by given dates. | NTH | HIGH | Done |  |
| 22 | Inventory | F | The system CAN categorize each product | NTH | LOW | Done |  |
| 23 | Inventory | F | The system MUST have an option to generate Inventory report including all information about products about to run out of stock. | MH | HIGH | Done |  |
| 24 | Inventory | F | The system MUST have an option to generate Inventory report including all information about expired products. | MH | HIGH | Done |  |
| 25 | Inventory | F | The system MUST have an option to generate Inventory report including all information about defective products. | MH | HIGH | Done |  |
| 26 | Inventory | F | Inventory report CAN be filtered by category. | NTH | HIGH | Done |  |
| 27 | Inventory | F | The system MUST track expired items in the stock | MH | HIGH | Done |  |
| 28 | Inventory | F | The system MUST be able to track defective items when a user reports about finding one. | MH | HIGH | Done |  |
| 29 | Inventory | F | The system MUST have an option to generate periodical reports about defective or expired items in the stock. | MH | HIGH | Done |  |
| 30 | Inventory | F | The system MUST have an option to generate out of stock products report. | MH | HIGH | Done |  |
| 31 | Employee | NF | The system will save in an SQLite database for each employee their:  Name, Id, Bank account details, Salary, work starting date and Working conditions containing their working hours, qualification as well as additional text information. | MH | High | Done |  |
| 32 | Employee | F | The system will allow the HR manager will be able to manage each employees' data. | MH | High | Done |  |
| 33 | Employee | NF | The system will save a day and night shift for each day. | MH | Low | Done |  |
| 34 | Employee | NF | The system will allow assigning a shift manager for each shift. | MH | High | Done |  |
| 35 | Employee | F | The system will allow the shift manager to manage his workers. | MH | High | Done |  |
| 36 | Employee | NF | The default system's roles will consist of: HR manager, Cash registry manager, Storekeeper, Driver. | NTH | High | Done |  |
| 37 | Employee | F | The system will support adding additional roles. | NTH | Low | Done |  |
| 38 | Employee | F | Each worker will have his own qualifications and permissions to use specific functionality of the system  HR Manager will have permission to manage shifts and qualifications.  Inventory Manager will have permission to perform stock management, vendor card management and orders.  Branch Manager will be able to manage vendor cards and will have access to all data and reports.  Logistics manager will be able to manage deliveries. | MH | High | In work |  |
| 39 | Employee | F | The HR manager will be able to choose which roles are needed for each shift. | MH | High | Done |  |
| 40 | Employee + Delivery | F | The system will allow adding drivers to shifts. | MH | Low | Done |  |
| 41 | Delivery + Suppliers | F | The system must support adding sites (branches and supplier warehouses): delivery zone, address, contact name and phone number. | MH | High | Done |  |
| 42 | Delivery | F | Upon adding a new delivery site, the system will generate a unique id for it. | MH | Low | Done |  |
| 43 | Delivery | F | Deleting a site will be possible only if there aren’t any upcoming deliveries which have this site as their origin or destination. | MH | Low | Done |  |
| 44 | Delivery | F | The user will be able to view the different delivery sites of a specific delivery zone. | NTH | Low | Done |  |
| 45 | Delivery | F | The user will be able to search a site according to its id number. | NTH | Low | Done |  |
| 46 | Delivery | F | The system must support the management (adding, deleting, viewing, editing) of Super-Lee's trucks: plate number, model, max weight. | MH | High | Done |  |
| 47 | Delivery | F | The system will display an error if the user is trying to edit the max weight of a truck when it is assigned to an upcoming delivery with a driver whose license type does not allow driving a truck with the new max weight. | MH | High | Done |  |
| 48 | Delivery | F | The user will be able to view the different trucks ordered according to their max weight. | NTH | Low | Done |  |
| 49 | Delivery | F | Deleting a truck will be possible only if there aren’t any upcoming deliveries which this truck is assigned to. | MH | Low | Done |  |
| 50 | Delivery | F | The user will be able to search a truck according to its plate number | NTH | Low | Done |  |
| 51 | Delivery | F | The system must support adding a new upcoming delivery: start time, end time, truck, driver, origin site and destination site. | MH | High | Done |  |
| 52 | Delivery | F | The system will display an error if the start time of the delivery is \*invalid | MH | High | Done |  |
| 53 | Delivery | F | The system will display an error if the end time of the delivery is \*invalid | MH | High | Done |  |
| 54 | Delivery | NF | Start and end time of a delivery will be in the format: dd-MM-yyyy HH:mm | NTH | Low | Done |  |
| 55 | Delivery | F | The origin site of a delivery may be a “Super-Li” branch or a supplier’s warehouse. | MH | Low | Done |  |
| 56 | Delivery | F | A destination site of a delivery must be a “Super-Li” branch. | MH | Low | Done |  |
| 57 | Delivery | F | A delivery must contain at least one destination. | MH | Low | Done |  |
| 58 | Delivery | F | When an upcoming delivery is added the system will generate a unique identifier for it. | MH | Low | Done |  |
| 59 | Delivery | F | The system will display an error if the user is trying to assign a driver without a suitable license for the chosen truck (according to the truck’s max weight and the driver’s license type). | MH | Low | Done |  |
| 60 | Delivery  &  Employee | F | The system will display an error if the driver the user is trying to reserve to an upcoming delivery is not assigned to a shift at the time of the delivery | MH | Low | Done |  |
| 61 | Delivery | F | The system will display an error if the user is trying to reserve a truck for a delivery if it is already reserved for another delivery and their start time and end time overlap partially or completely. | MH | Low | Done |  |
| 62 | Delivery | F | The system will display an error if the user is trying to reserve a driver for a delivery if he is already reserved for another delivery and their start time and end time overlap partially or completely. | MH | Low | Done |  |
| 63 | Delivery | F | The system will display an error when the user is trying to edit the start time of an upcoming delivery if the new date is \*invalid | MH | High | Done |  |
| 64 | Delivery | F | The system will display an error when the user is trying to edit the end time of an upcoming delivery if the new date is \*invalid | MH | High | Done |  |
| 65 | Delivery | F | The system must support the editing of an upcoming delivery: start time, end time, truck, driver, and origin site. | MH | High | Done |  |
| 66 | Delivery  &  Employee | F | The system will display an error if the user is trying to replace the driver of an upcoming delivery if the new driver is not assigned to a shift at the time of the delivery | MH | High | Done |  |
| 67 | Delivery | F | Destinations can be added to an upcoming delivery. | MH | Low | Done |  |
| 68 | Delivery | F | Removing a destination from an upcoming delivery will be possible only if it is not the only destination of the delivery. | MH | Low | Done |  |
| 69 | Delivery + Suppliers | F | Items are loaded as list of items to be supplied to “superLee” upon delivery creation. | MH | Low | Done |  |
| 70 | Delivery | F | Items can be removed from the list of items to be supplied of an upcoming delivery. | MH | Low | Done |  |
| 71 | Delivery | F | The quantity of a certain item to be supplied for a destination of un upcoming delivery can be edited. | MH | Low | Done |  |
| 72 | Delivery | F | The system must support the deletion of an upcoming delivery. | MH | Low | Done |  |
| 73 | Delivery | F | The user will be able to view the list of upcoming deliveries. | MH | Low | Done |  |
| 74 | Delivery | F | The user will be able to search an upcoming delivery according to its id number. | NTH | Low | Done |  |
| 75 | Delivery | F | When a delivery arrives at its destination the user will be able to “complete” the delivery. | MH | Low | Done |  |
| 76 | Delivery | F | A delivery can be “completed” only if the truck’s actual weight is updated to be greater than 0. | MH | Low | Done |  |
| 77 | Delivery | F | Completing a delivery will add the record of the delivery to the Delivery Archive. | MH | Low | Done |  |
| 78 | Delivery | F | Completing a delivery will remove it from the upcoming deliveries list. | MH | Low | Done |  |
| 79 | Delivery | F | The system will display an error if the actual truck weight is higher than the max weight of the truck. | MH | Low | Done |  |
| 80 | Delivery | F | A record of a completed delivery will contain the id of the delivery, driver’s id, truck’s plate number, start and end time of the delivery, the origin site’s id, the truck’s actual weight, and for each of the destination- their id and a list of the items to be delivered to that destination and the quantity from each item. | MH | Low | Done |  |
| 81 | Delivery | F | A record of a completed delivery cannot be deleted. | MH | Low | Done |  |
| 82 | Delivery | F | A record of a completed delivery cannot be modified. | MH | Low | Done |  |
| 83 | Delivery | F | The user will be able to view the Delivery Archive. | MH | Low | Done |  |
| 84 | Delivery | F | The user will be able to search a completed delivery according to its id number. | NTH | Low | Done |  |
| 85 | Delivery &  Employee | F | The System will display an error if the user is trying to delete a driver that is assigned to an upcoming delivery | MH | Low | Done |  |
| 86 | Delivery &  Employee | F | The system will display an error if the user is trying to edit a driver’s license type when the driver is assigned to an upcoming delivery with a truck which the new license type doesn’t allow him to drive. | MH | Low | Done |  |
| 87 | Delivery & suppliers | F | The system will be able to create a new delivery for every new order made | MH | High |  |  |
| 88 | Delivery & suppliers | F | The system will find a driver to do the delivery for a new order within a week OR alert the HR manager if no driver is found | MH | High |  |  |
| 89 | Delivery & suppliers | F | The system will allow to change driver’s shifts to make the new delivery within a week of it’s creation | MH | High |  |  |
| 90 | Suppliers & employees | F | The system will allow to cancel an order with the agreement of inventory manager, logistic manager or HR manager | MH | High |  |  |
| 91 | Employees & delivery & Inventory & suppliers | F | The system will allow for the inventory manager to confirm the arrival of the delivery | MH | High |  |  |
| 92 | Employees & delivery & Inventory & suppliers | F | The system will update the inventory based on the delivered order | MH | High |  |  |
| 93 | Employees & delivery & Inventory & suppliers | F | The system will allow the inventory manager to check order item’s propriety (missing or flawed) and not add those items to the stock | MH | High |  |  |
| 94 | Employees & delivery & Inventory & suppliers | F | The system will allow the inventory manager to add delivered items to stock | MH | High |  |  |
| 95 | Employees & delivery & Inventory & suppliers | F | The system will allow the inventory manager to update the delivered order after checking all item’s propriety | MH | High |  |  |
| 96 | Suppliers | F | The system will allow to store item ID for each item and the supplier of that item | NTH | Low |  | The system (as of part 2) works without this part |
| 97 | User Interface/ Employees | NF | Only a user with a permission to use certain functionality would be able to see a menu option for it. | NTH | Low | Done |  |
| 98 | Delivery + Supplier | F | The system must support deleting (branches and supplier warehouses): delivery zone, address, contact name and phone number. | MH | High | Done |  |
| 99 | Delivery | F | The system must support viewing of sites (branches and supplier warehouses): delivery zone, address, contact name and phone number. | MH | High | Done |  |

System assesments - inventory:

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| --- | --- |
| 1 | The minimum quantity of a product determined by the inventory manager |
| 2 | The inventory manager issue a report by manually inserting an input |
| 3 | Only the inventory manager have access to the system |
| 4 | Each products can have up to 3 categories, which managed by the inventory manager |

Terms:

|  |  |
| --- | --- |
| 1 | Product - an item that exists in the store database but not in the inventory |
| 2 | Store Product - a product that have quantity, location and expiration date |
| 3 | Report - includes a headline of the report and a table that represents the required data of the report |
| 4 | Defective Product - a product that manually got reported by the inventory manager |
| 5 | Minimum Quantity Order - sending all products with quantity that below their minimum quantity |

Explain changes:

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| --- | --- | --- |
| # | Topic | Description |
| 1 | first requirement | the description was too ambiguous about when to send the reports, and also the client asked the system to send reports and not notifications. |
| 2 | second requirement | adding which information the system keeps about each product |
| 3 | 6th requirement | we split this requirement to requirements 6-8  to explain what kind of reports the system should generate, moreover, the reports must include all the information about the products as described in the second requirement. |
| 4 | 9th requirement (used to be the 7th) | risk changed to HIGH just like requirements 6-8 because they all talk about the same part of functionality in the system. |
| 5 | 11th requirement | adding when this functionality is being called to make the requirement more clear and more specific. |
| 6 | 41st requirement | Changed from management to addition (removal and viewing are written as new requirements) due to lack of ability to edit their details |
| 7 | 69th requirement | Changed to be added only upon creation |
| 8 | 70th requirement | Changed to be removed only from “superlee” |

System assesments - suppliers:

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| --- | --- |
| 1 | Discounts - Discount is added by the user that is adding the supplier to the system. Discounts can be added for each item (after specifying the discount amount and item quantity for which the discount will be activated). |
| 2 | Orders - We make an Order object in the system and store all the order details in the system. We do not manage money or money transfers. |
| 3 | Supplier catalog – we can order every item in the supplier’s catalog. |
| 4 | Items – different suppliers can supply the same item. |
| 5 | Out-of-stock items - The inventory manager will start the process of checking the out-of-stock items and send them to the supplier module. |
| 6 | Inventory & Supplier integration - Inventory module shouldn’t know about the supplier module and should not care. |

Terms:

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| --- | --- | --- |
| # | Term | Description |
| 1 | Supplier | The person/company that supplies the store’s items so the store can sell those items. |
| 2 | Order | The agreement of a said supplier to deliver (by himself of by SuperLi deliveries) items that are in the agreement. |
| 3 | Quantity agreement | The contract for each supplier that contains: the supplier’s catalog, prices and discounts. |
| 4 | Routine order | The agreement of a said supplier to deliver (by himself of by SuperLi deliveries) items that are in the agreement on said days each week. |
| 5 | Contact | The person that SuperLi can call for communicating with a given supplier. |

Explain changes:

|  |  |  |
| --- | --- | --- |
| # | Title | Description |
| 1 | Routine Order | We added a new type of order – routine order. It’s described in the terms section. |
| 2 | Item ID | We now identify items by the pair of item name and item producer. This combination is unique to each item. |
| 3 | Quantity agreement | Because of the change of #2, we now have 1 less hashmap in the QA class while the functionality remains the same. |
|  |  |  |

System assesments - employees:

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| --- | --- | --- | --- |
| ID | Topic | Issue | Answer |
| 1. | Roles | What roles will exist in the system by default? | The system will initially have the following roles:  HR manager, Cashier, Driver, Branch Manager, Shift Manager, Stock Clerk, Warehouse Worker, Cleaner, Inventory Manager, Logistics Manager  Adding/removing roles will be implemented. |
| 2. | Workers | Which workers should be on every shift? | Each shift needs to have: Cashier, Warehouse Worker, Stock Clerk, Driver. Management staff – branch manager, HR manager, inventory manager - work only in DAY shifts. |
| 3. | Availability of functionality | Which parts of the system can each employee use? | HR manager can view and employee data, view and manage qualifications. Branch manager can manage his branch, shifts on his branch and view qualifications. |
| 4. | Adding shift | What data about an employee should the branch manager see while adding employees to a shift? | He will see their names and how many DAY or NIGHT shifts (depends on the current shift) the have already made. |
| 5. | Branches | Can the branches work with the same system? | Yes |
| 6. | Shifts | Can a shift be opened without all workers that must be on the shift? | No |
| 7. | Multiple jobs | Can an employee fill several roles during the shift? | Yes |
| 8. | Messaging system | Will the system have any kind of messaging system, for example to tell an HR manager to open a shift so that the logistics manager will be able to plan a delivery? | No, the system will not support sending messages to users, the users need to contact using other ways like phones |

Terms:

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| --- | --- | --- |
| ID | Term | Description |
| 1. | Bank account details | Consist of bank id, branch id, account id, bank name, branch name, account owner name |
| 2. | Worker/Employee | A person that works in SuperLi |
| 3. | Role/Job | A position of an employee at work |
| 4. | Working hours | A time interval that an employee adds into the system to mark the time when he can work |

System assesments - delivery:

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| --- | --- | --- | --- |
| ID | Topic | Issue | Answer |
| 1 | Delivery zones | What delivery zones are there? | North, Center, South |
| 2 | Delivery zones | How do the delivery zones limit the reservation of deliveries? | They don't. The user can view the delivery zone of every site for easier and reasonable planning of the delivery |
| 3 | Truck’s weight | What is the unit of measurement for a truck’s weight? | kg |
| 4 | Actors | Who are the relevant actors? | Delivery coordinator |
| 5 | Delivery time | When can a delivery take place? | A delivery can take place within a shift |

Terms:

|  |  |  |
| --- | --- | --- |
| ID | Term | Description |
| 1. | Delivery | Carries items from an Origin site to a Destination site. |
| 2. | Site | Either a supplier's warehouse or a Super-Li branch. |
| 3. | Origin | Either a supplier's warehouse or a Super-Li's branch. |
| 4. | Item | A product supplied by a Super-Lee's supplier. |
| 5. | Destination | A Super-Li's branch. |
| 6. | License Type | C1- permits driving a truck with max weight is equal or below 12000 kg  C- permits driving all trucks |
| 7. | Invalid delivery start time | Date has passed. |
| 8. | Invalid delivery end time | 1. End time is earlier then start time 2. Is in different shift than start time |