Document name	System Tasks
Document author	Kaveh
Version	1.0.1
Date created	09.03.2025
Last update	09.03.2025
Reviewers	-
Status	Draft In review Approved Rejected Deprecated

Definition

 We skip the CRUD operation system tasks. Obviously when any of the users create, view, update or delete something, the system must persist it in the database.

User Stories

- 1. The system checks the stock level and marks the product as "not available" if the stock level is zero.
- 2. Purchasing of a "not available" product is locked.
- 3. In regular 10 min intervals, the system queries the database and sends a confirmation email to the users for their new orders.
- 4. After a technician was assigned to a service task by the manager, the system must forward the task to the technician's dashboard.
- 5. Depending on the customer profile, purchase history and distance, the installation price should be calculated by the system.
- 6. After a service request's status was changed to "assigned" (the technician was assigned to work on the service request), an installation service note must be created which contains the service order details including the price, assigned technician, address, installation service category..., and an empty space for the customer's signature. When the technician downloads (prints) this document, the ticket's status will be updated to "in progress". The customer must sign it and then the technician uploads a scanned file. The system then updates the status to "done".
- 7. After a delivery person changes the status of an order to "assigned" (the delivery person picked the delivery ticket), an inventory pick up note must be created which contains the product order details including the price, assigned delivery person, address, category..., and an empty space for the delivery person's signature. Delivery person must download, print, sign and hand it to the inventory staff in order to receive the product from the inventory. By download, the status will be updated to "ready for pick up" by the system.

After downloading (printing) the pick up note, the delivery ticket will be assigned to the inventory staff. After he opened the ticket, he should be able to insert the serial number of the items, upload the signed pick up note and click on the "picked up" button. Afterwards, the delivery ticket's status should be updated to "picked up from inventory", be forwarded to the delivery staff's dashboard and a delivery note must be

- generated. By clicking on the download (print), the status must be updated to "in delivery process". By uploading the delivery note which contains the customer's signature and clicking the "finished" botton, the status must be updated to "done".
- 8. Automatic serial number produced by the system with category and goods IDs and a random number. When the inventory staff adds an item via stock level update, it is created and assigned automatically by the system before being persisted in DB.
- 9. Comprehensive auditing for disaster recovery.
- 10. System and hardware failure alert to the system admin.
- 11. Passwords must be encrypted before being persisted in DB or transferred on the internet.
- 12. At any point of time, regardless of the system or transaction status, the system should be possible to roll back to a stable status. E.G. if in the middle of a transaction due to a hardware failure or system bug, a transaction was interrupted, the system must reset itself to an stable status after the system restart, instead of a hanging payment, undefined transaction status after the payment was performed successfully ...