Project – Business Management Software
(GROUP 27)
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Problem statement

Most of the small businesses and stores have the problem of not being able to maintain the business properly. Everything from sales to accounting is scattered and this leads to confusion and a major loss of efficiency. They can't effectively maintain the stocks and future demand of their products or services.

Contextual Inquiry to collect usability requirement:

During Contextual Inquiry, small shops, Kirana and utility were observed
The tools that were helpful in this process were:
Manual Observation (Active Mode of CI)
Notes taken on Pen Paper and important doubts related to observations were asked
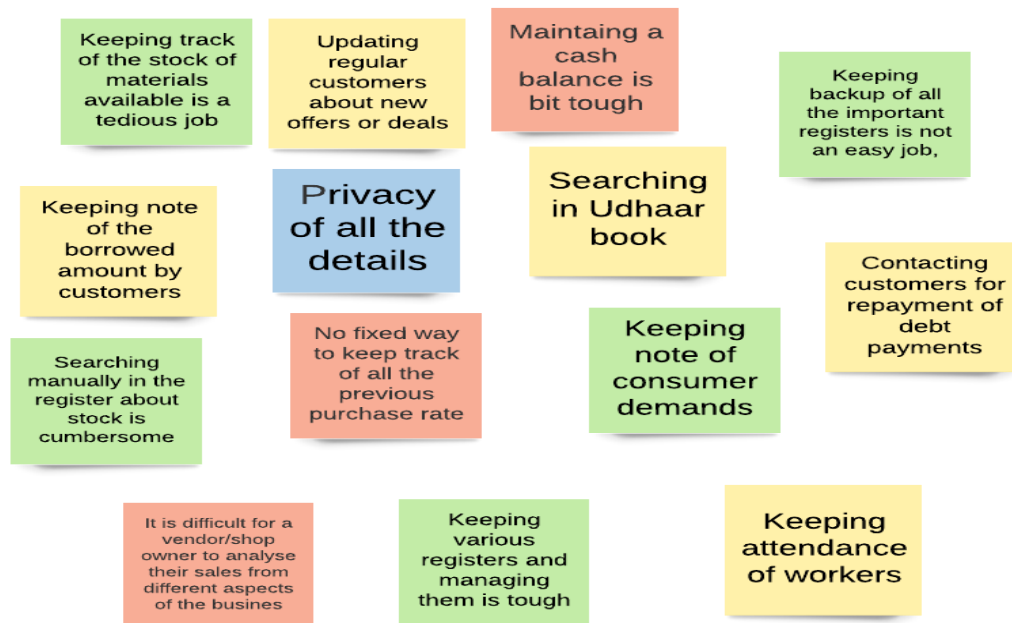We got a lot of observed data from our CI.
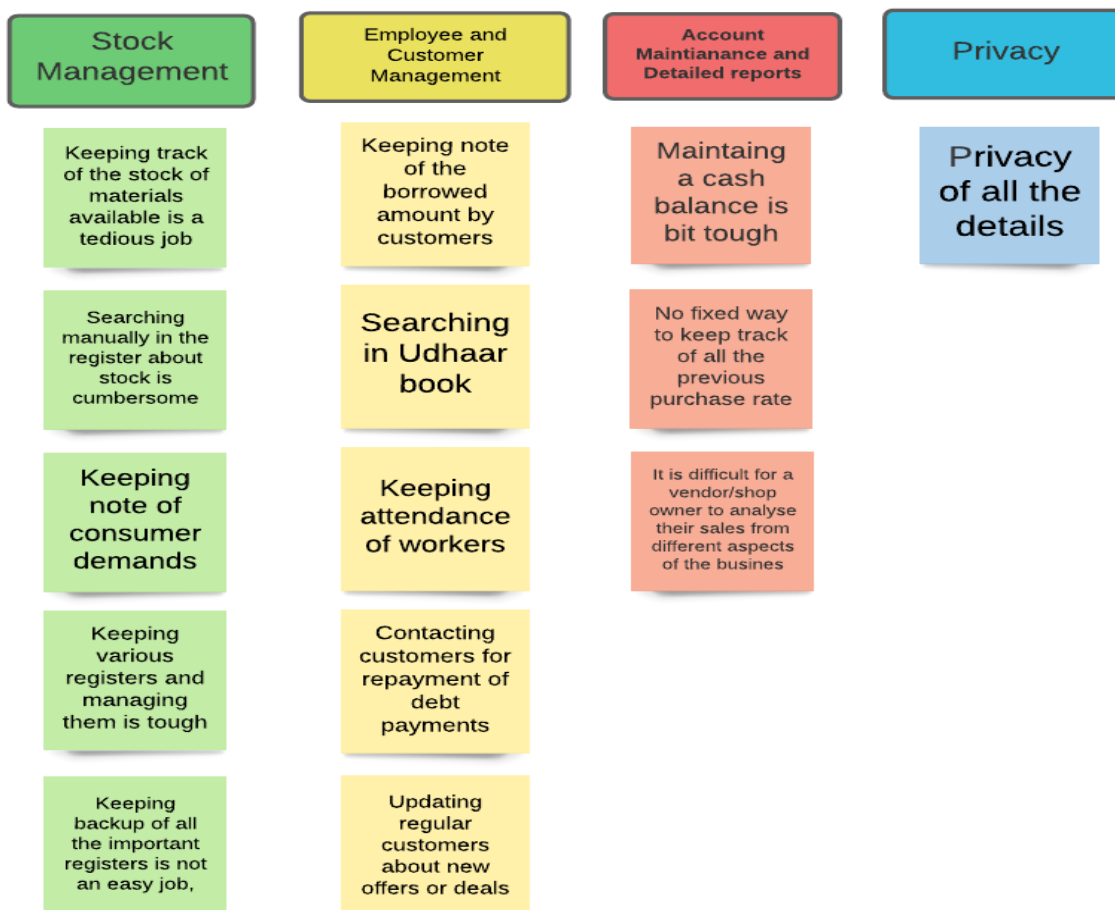For analysis of these observed data, we will use five stages of the Affinity Diagram Method

Step 1&2: Generate and display ideas

Keeping track of the stock of materials available is a tedious job

Updating regular customers about new offers or deals

Maintaing a cash balance is bit tough

Keeping backup of all the important registers is not an easy job,

Keeping note of the borrowed amount by customers

Privacy of all the details

Searching in Udhaar book

Contacting customers for repayment of debt payments

Searching manually in the register about stock is cumbersome

No fixed way to keep track of all the previous purchase rate

Keeping note of consumer demands

It is difficult for a vendor/shop owner to analyse their sales from different aspects of the busines

Keeping various registers and managing them is tough

Keeping attendance of workers

Step 3: Sorting Ideas into groups

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Step 4&5: Header to groups and final drawing

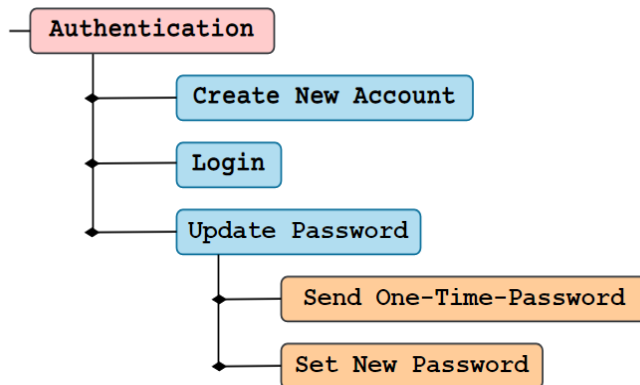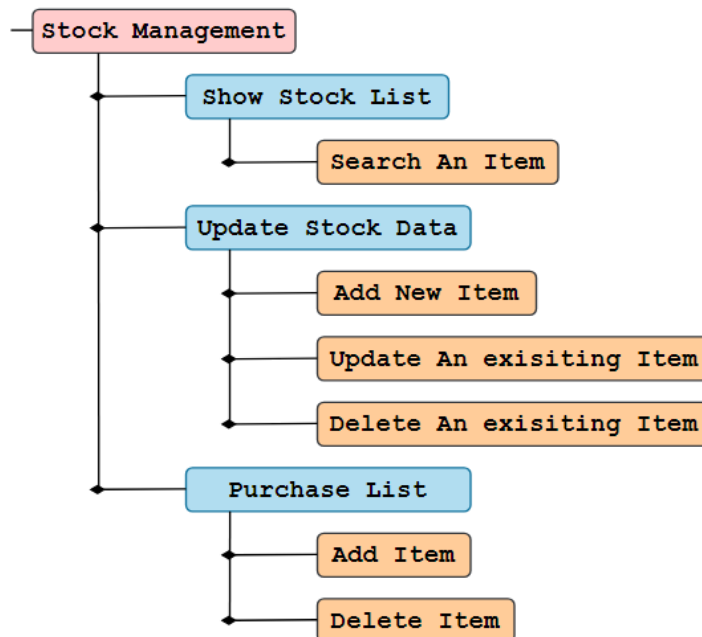| Stock Management	Employee and Customer Management	Account Maintianance and Detailed reports	Privacy
Keeping track of the stock of materials available is a tedious job	Keeping note of the borrowed amount by customers	Maintaing a cash balance is bit tough	Privacy of all the details
Searching manually in the register about stock is cumbersome	Searching in Udhaar book	No fixed way to keep track of all the previous purchase rate	
Keeping note of consumer demands	Keeping attendance of workers	It is difficult for a vendor/shop owner to analyse their sales from different aspects of the busines	
Keeping various registers and managing them is tough	Contacting customers for repayment of debt payments		
Keeping backup of all the important registers is not an easy job,	Updating regular customers about new offers or deals		

REFLECTION:-
- "For maintaining privacy, there should be a provision for authentication. So that only authorised people get access to the data.This will increase security."
- "There should be a provision for "search" so that required data can be easily accessed by the user."

Functional Requirements and Hierarchical Depiction :-

- Requirement for "authentication" – for a user to access the app features
  - Requirement to "create account"
 - Requirement to "log in"
  - Requirement for "account management"

```
─┌ Authentication ┐
         ├─┤ Create New Account ┤
         ├─┤ Login ┤
         ├─┤ Update Password ┤
                  ├─┤ Send One-Time-Password ┤
                  ├─┤ Set New Password ┤
```

- Requirement for "stock management"
  - Requirement for "stock list"
    - Requirement for "Show stock list"
    - Requirement for "updating stock data"
    - Requirement for "adding new item"
    - Requirement for "deleting an existing item"
  - Requirement for "searching an item"
    - Showing previous rates at which purchased
  - Requirement for "To be brought list"

```
─┌ Stock Management ┐
         ├─┤ Show Stock List ┤
         │        ├─┤ Search An Item ┤
         ├─┤ Update Stock Data ┤
         │        ├─┤ Add New Item ┤
         │        ├─┤ Update An exisiting Item ┤
         │        ├─┤ Delete An exisiting Item ┤
         ├─┤ Purchase List ┤
                  ├─┤ Add Item ┤
                  ├─┤ Delete Item ┤
```

- Requirement for "Account Management" - for maintaining account
  - Requirement for "Sales record"
    - Requirement for "Add items "
    - Requirement for "Edit prices and Quantity"
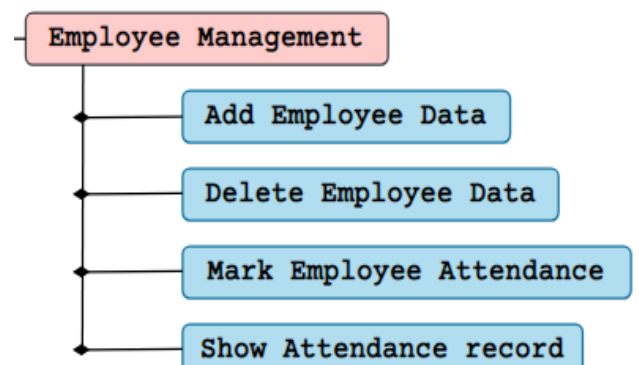   - Requirement for "Deleting record after payment"

- ○ Requirement for "Purchase record"
    - ■ Requirement for "Add items"
    - ■ Requirement for "Payment statement per items"
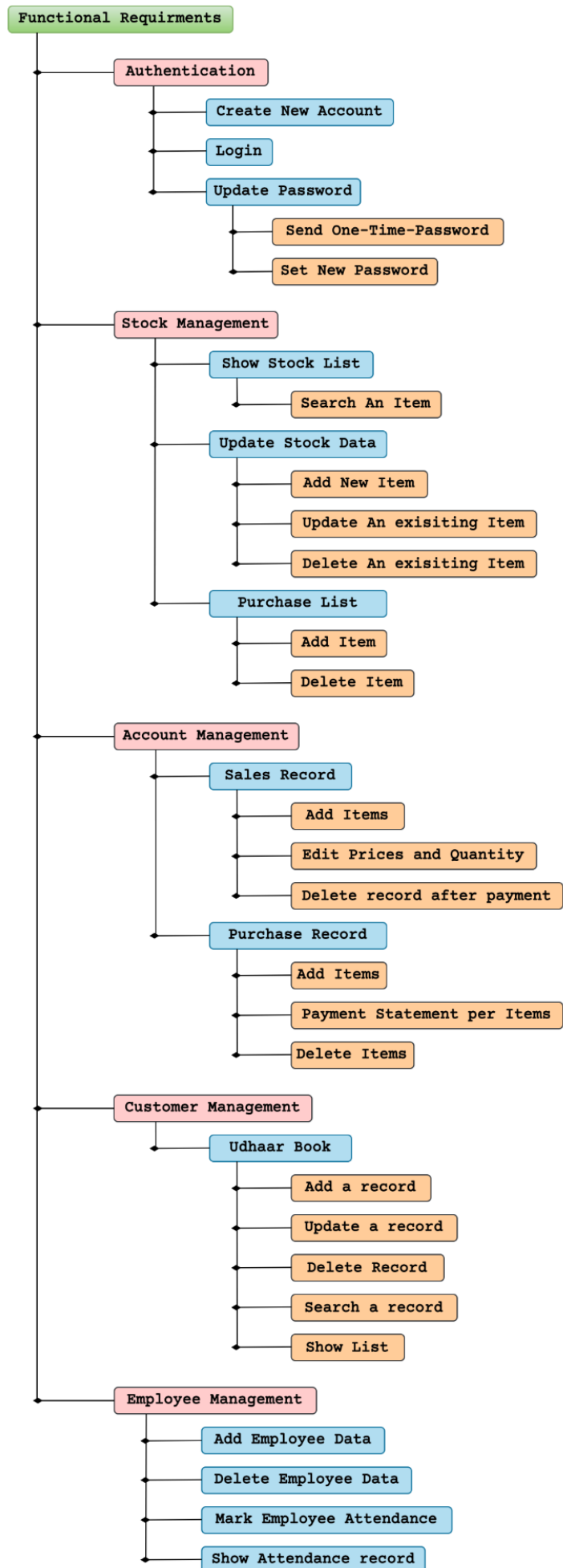   - ■ Requirement for "Deleting items list"

```
Account Management
    │
    ├── Sales Record
    │       ├── Add Items
    │       ├── Edit Prices and Quantity
    │       └── Delete record after payment
    │
    └── Purchase Record
            ├── Add Items
            ├── Payment Statement per Items
            └── Delete Items
```
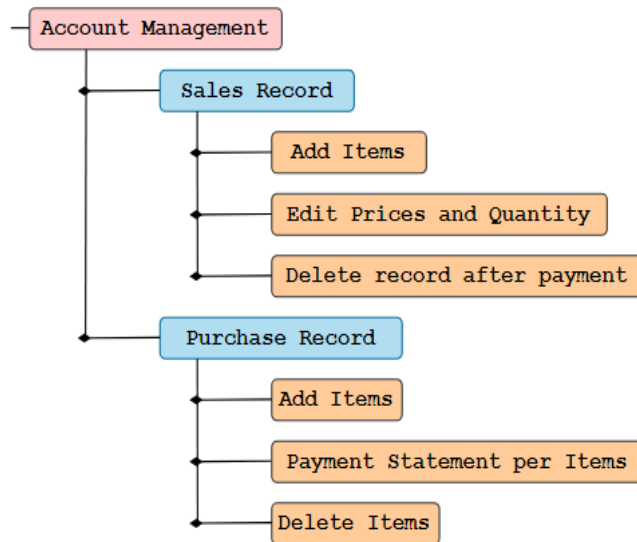
- ● Requirement for "Customer management"
    - ○ Requirement for "Udhaar Book"
        - ■ Requirement for "Adding a record"
        - ■ Requirement for "Updating a record"
        - ■ Requirement for "Deleting a record"
        - ■ Requirement for "Searching a record"
        - ■ Requirement for "Showing a list"

```
Customer Management
    │
    └── Udhaar Book
            ├── Add a record
            ├── Update a record
            ├── Delete Record
            ├── Search a record
            └── Show List
```
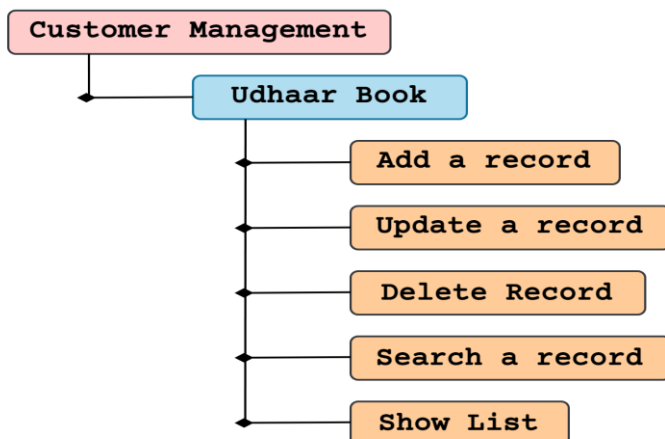
- ● Requirement for "Employee management"
    - ○ Requirement for "Adding employee"
    - ○ Requirement for "Deleting employee"
    - ○ Requirement for "Marking attendance"
    - ○ Requirement for "Showing attendance record"

```
Employee Management
    │
    ├── Add Employee Data
    ├── Delete Employee Data
    ├── Mark Employee Attendance
    └── Show Attendance record
```

Functional Requirements Hierarchy:--

Converting to SRS:-

R.1 Authentication
R.1.1 Create New Account
Input: User Information
Output: Validation Prompt Message
Description: Create a new account based on the provided information and display account creation message

R.1.2 Login
Input: Account details
Output: Login status
Description: Verify entered details and give access to user data on success

R.1.3 Update Password
R.1.3.1 Send One-Time-Password
Input: User Email
Output: One-Time-Password
Description: Send an One-Time-Password to user's email

R.1.3.2 Set New Password
Input: One-Time-Password, New Password
Output: Password change message
Description: Verify One-Time-Password, new password entered and the password is updated

R.2 Stock Management
R.2.1 Show Stock list
Input: (On Touch)
Output: Stock List
Description: On touch shows the items present in stock list

R.2.1.1 Search an Item
Input: Stock Item Name
Output: Stock Item data
Description: Searches in the stock item list for given data and shows if present

R.2.2 Update Stock Data
R.2.2.1 Add New Item
Input: Stock Item Name, Item Quantity, Item Price
Output: Add success message
Description: Adds the new item to item list

R.2.2.2 Update an Existing Item
Input: Stock Item Name, New Quantity, New Price
Output: Update success message
Description: Update the existing record with provided new value

R.2.2.3 Delete an Existing Item
Input: Stock Item Name
Output: Delete success message
Description: Delete an existing item from the stock list

R.2.3 Purchase List
Input: (On Touch)
Output: Purchase List
Description: On touch shows the items present in stock purchase list

R.2.3.1 Add Item
Input: Stock Item Name, Item Quantity
Output: Add success message
Description: Adds the new item to the purchase stock list

R.2.3.2 Delete Item
Input: Stock Item Name
Output: Delete success message
Description: Delete an existing item from the purchase stock list

R.3 Account Management
R.3.1 Sales Record
R.3.1.1 Add items
Input: Item Name and Quantity
Output: Success message.
Description: Add items of each sales

R.3.1.2 Edit prices and Quantity
Input: Item Name
Output: Changed cost according to quantity.
Description: Change or update the prices and quantity of items after
                each sales

R.3.1.3 Delete items after payment
Input: Item Name
Output: Delete success message
Description: Delete an existing item from the sales list at the end
                of the day

R.3.2 Purchase Record
R.3.2.1 Add items
Input: Item Name and Quantity
Output: Success message.
Description: Add items of each purchases after confirmation and cross
                checking

R.3.2.2 Payment statement per items
Input: Item Name
Output: Payment statement with yes or no.
Description: Provide payment statement for each item according to
            the purchases

R.3.2.3 Delete items after payment
Input: Item Name
Output: Delete success message
Description: Delete an existing item from the purchase list at the
            end of the deal

R.4 Customer Management
R.4.1 Udhaar Book
R.4.1.1 Add a record
Input: Customer Name, Amount, Phone number
Output: Add success message
Description: Add a new customer's debt record

R.4.1.2 Update a record
Input: Customer Name, New Amount
Output: Update success verdict
Description: Updates the previous record of the customer

R.4.1.3 Delete a record
Input: Customer name
Output: Success message of delete
Description: Delete the name of customer after all payments and deal

R.4.1.4 Search a Record
Input: Customer Name
Output: Data of Customer
Description: Provide customer data according to search

R.4.1.5 Show a List
Input: (On Touch)
Output: Debt record list
Description: Show the debt record list

R.5 Employee Management
R.5.1 Add Employee Data
Input: Employee Name, Father's name, Age, Phone number, Address
Output: Add success message
Description: Add the information provided to employee record

R.5.2 Delete Employee Data
Input: Employee Name
Output: Delete success message
Description: Delete the given employee record

R.5.3 Mark Employee Attendance
Input: Employee Name
Output: Attendance recorded/removed verdict
Description: Mark the attendance of employee if already marked then
unmark it

R.5.4 Show attendance Record
Input: Employee Name
Output: Attendance report of employee
Description: Show the attendance record of employee

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