Human Computer Interaction
UE17CS424

Project Title : E-LEDGER

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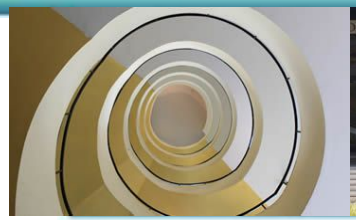
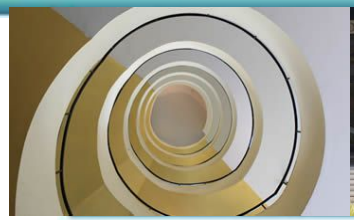


E-LEDGER



Outline

- Concept Video
- Needfinding
- Lo-fi prototyping
- Hi-fi prototyping

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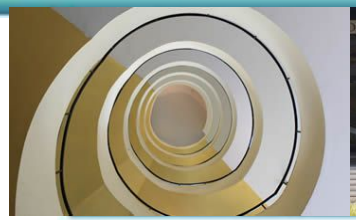

C NCEPT

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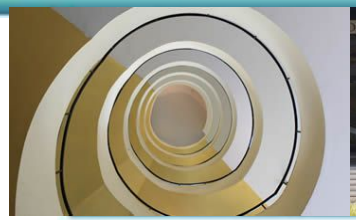

Concept Video

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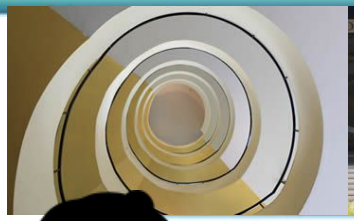

NEEDFINDING

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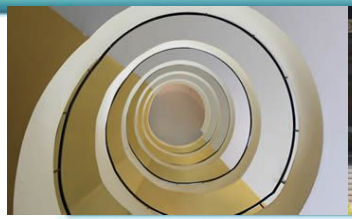


Nowadays lot of local merchants are willing to sell their products to customers by postponing the payments for later sometime, these kind of merchants often feel it difficult to keep track of each and every customer though they have a handwritten general ledger.

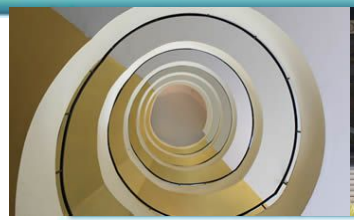
To solve this problem and to simplify the amount of complexity between vendor and customers in transaction we have come up with an E-ledger which will help the small shopkeepers to maintain a digital record of transaction through cash management application.

It provides a permanent and classified record of every element in the business operation.

This also enables the business to look at the accumulated figure of each account/customer.

The E-ledger may be called the collection or storeroom of various transactions.

This E-Ledger acts as master reference Book for all of the accounting information/data in the system.



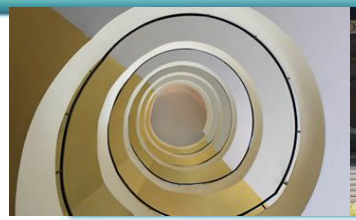
Benefits of using E-ledger over handwritten general ledger:

- Each and every transaction is divided into 2 parts “receiver” and “Giver” such that the transactions are isolated.
- Complete reliable information is available with respect to each and every customer.
- Allows the shopkeeper to send a notification to the customers when a transaction happens.
- Transactions related to two different persons are recoded separately.
- It becomes easy to refer to any particular Customer.
- E-Ledger makes it possible to analyze the total incomes and expenses of a local business for a particular period (Trading and Profit & Loss account).
- By opening separate accounts for various assets and liabilities it is also possible to see the financial position of a shopkeeper.
-

Overall it helps the shopkeeper by providing important information, which helps in running the business smoothly.

- The statistical information present in E-ledger accounts actually helps the Shopkeeper in making financial decisions to cut of expenses and generate more profit.
- Helps to find out to which customer it is good to allow to shop with making payments by seeing their trust level of the pending transactions.

NOTE:
It is important to check the accuracy of entries made in ledger accounts at regular intervals as failing to debit a customer's account for goods bought on credit, for instance, could result in not sending out a reminder for payment.



Empathy Map

Says

1. Wants Convenience.
2. Likes to use Smart phones.
3. Is Aware of the Technology.
4. Few of the customers are not trustworthy.

Thinks

1. Maintenance of transaction is cumbersome task.
2. Managing a hand written general ledger is not Easy.
3. Imbalance in the business.

Local Merchant

Feels

1. Impatient.
2. Frustrated.
3. Overwhelmed.
4. Business is Becoming Complex

Does

1. Keeps Lending Money to customers.
2. Allows Customers to shop without making Instant payments.
3. Uses a Smart Phone.

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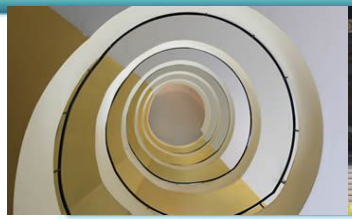
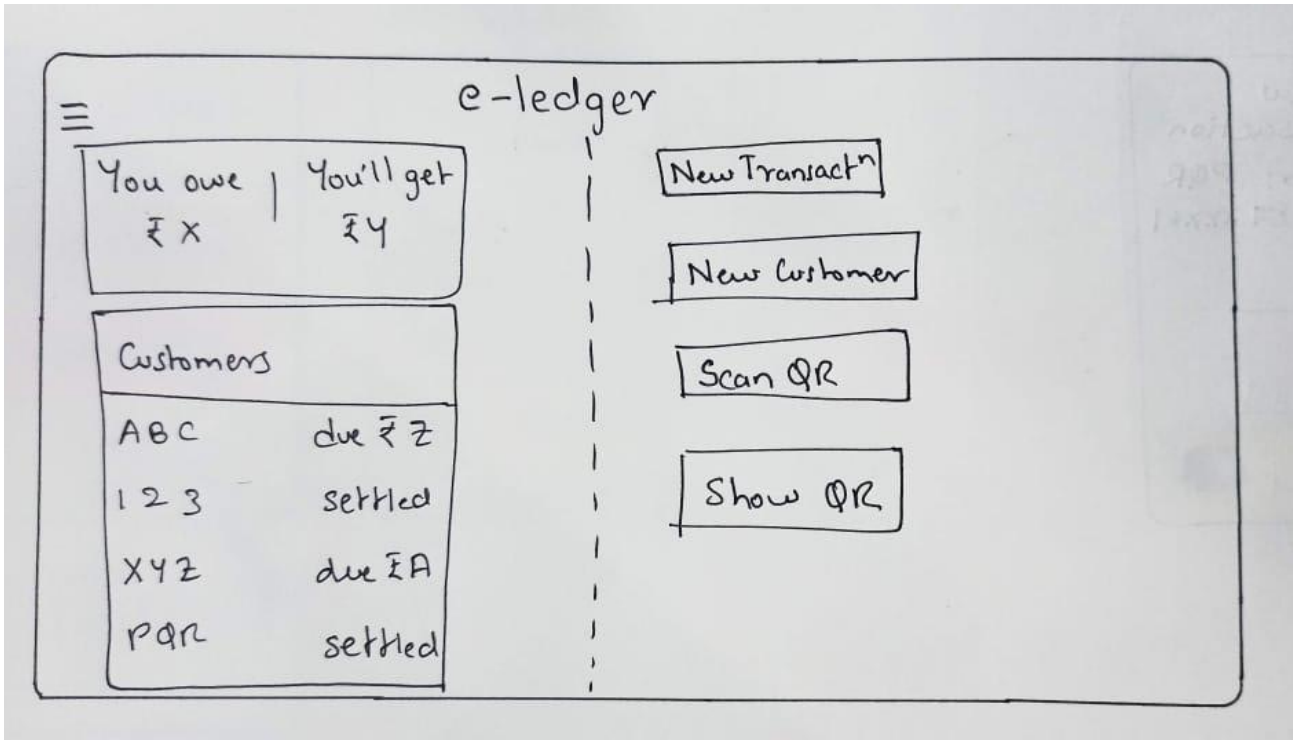
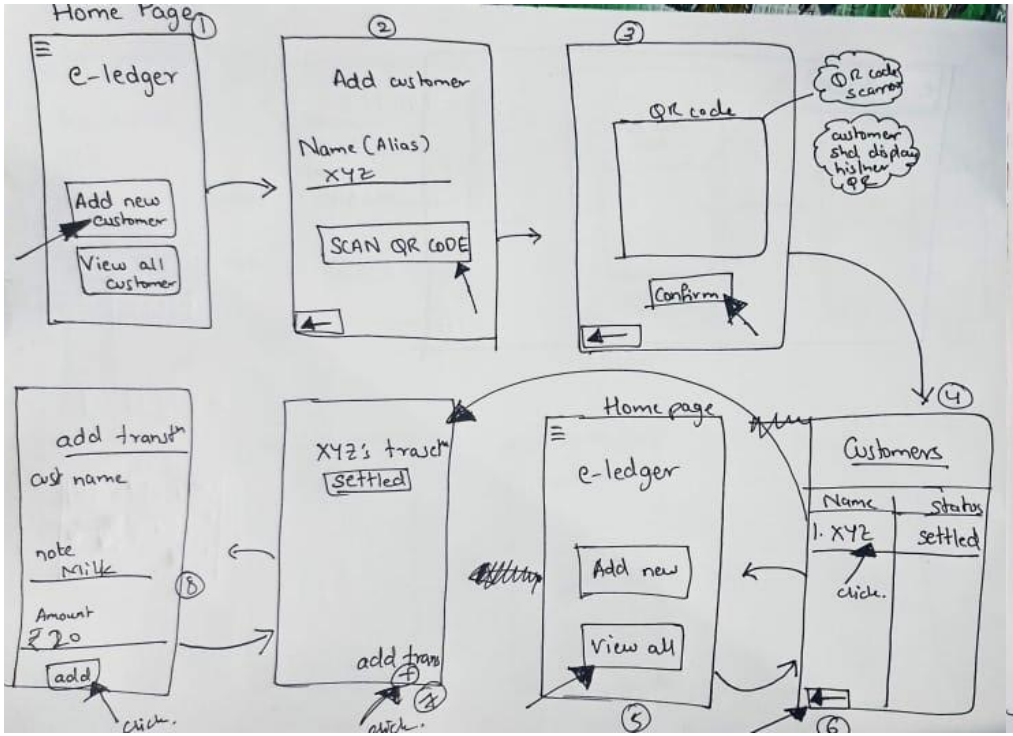


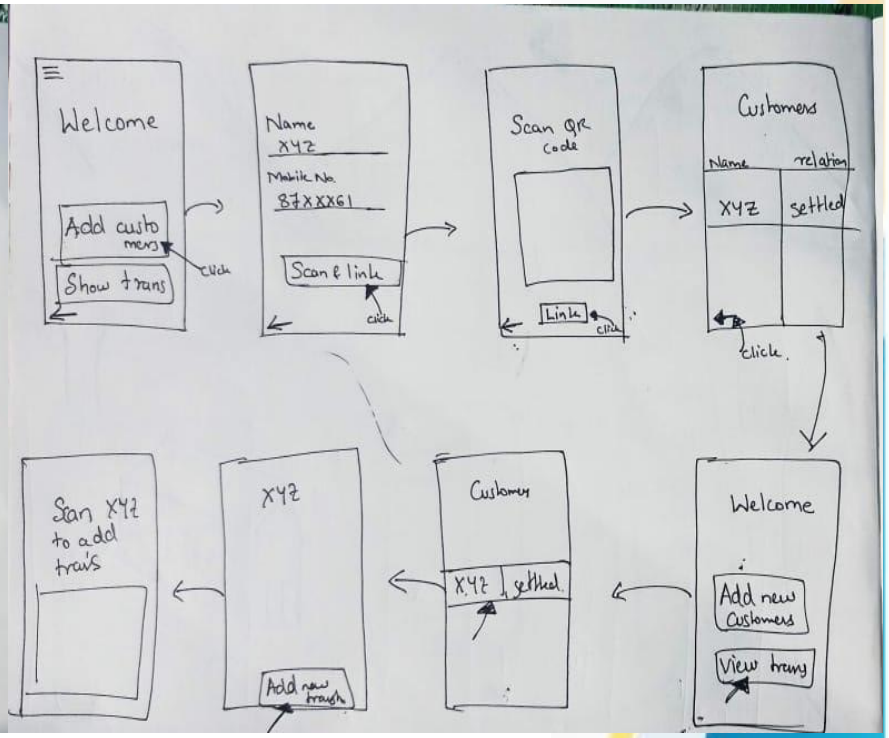
Lo-fidelity prototype

Sketches:1.web application



Sketches:2.Mobile application





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Selected design interface

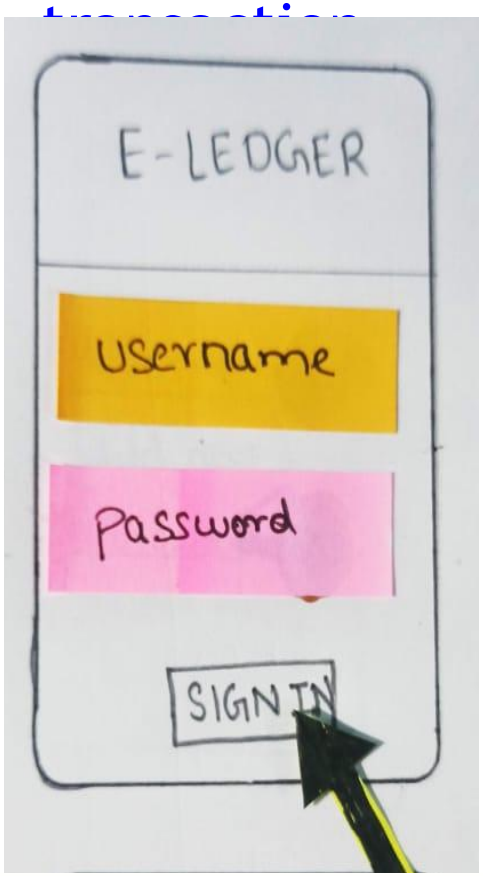
After comparing the two UI sketches the mobile application seemed feasible as most of the local vendors can afford a smartphone over a laptop or a PC.

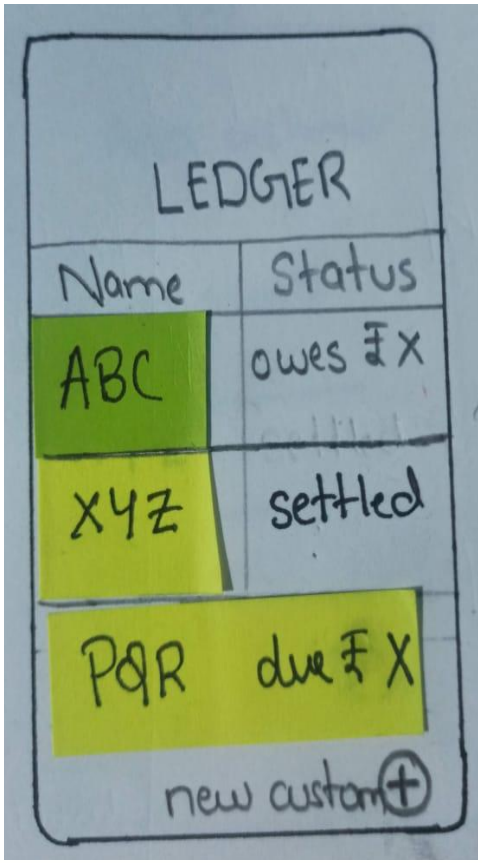
Since in our later design we needed the customers to install the app as well. Hence a mobile application would be most suitable for this particular application.

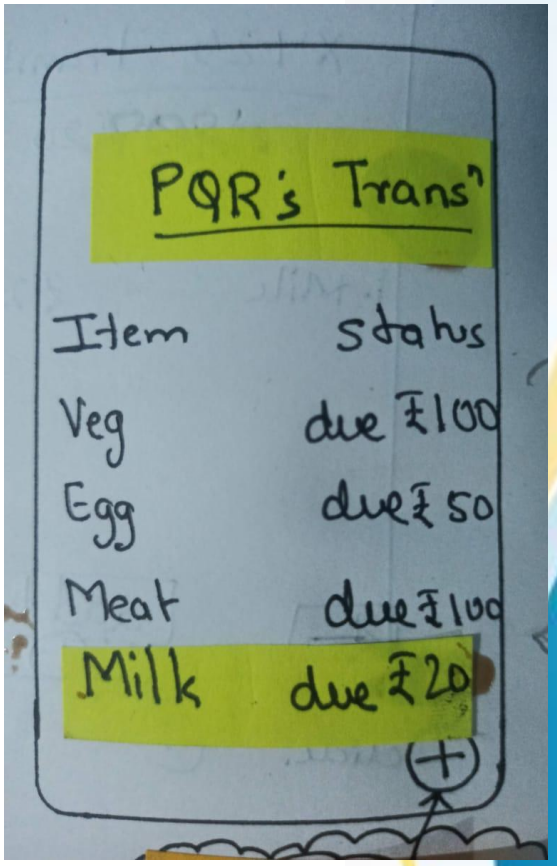
Prototype Descriptions

Our low fidelity prototype had three major screens:

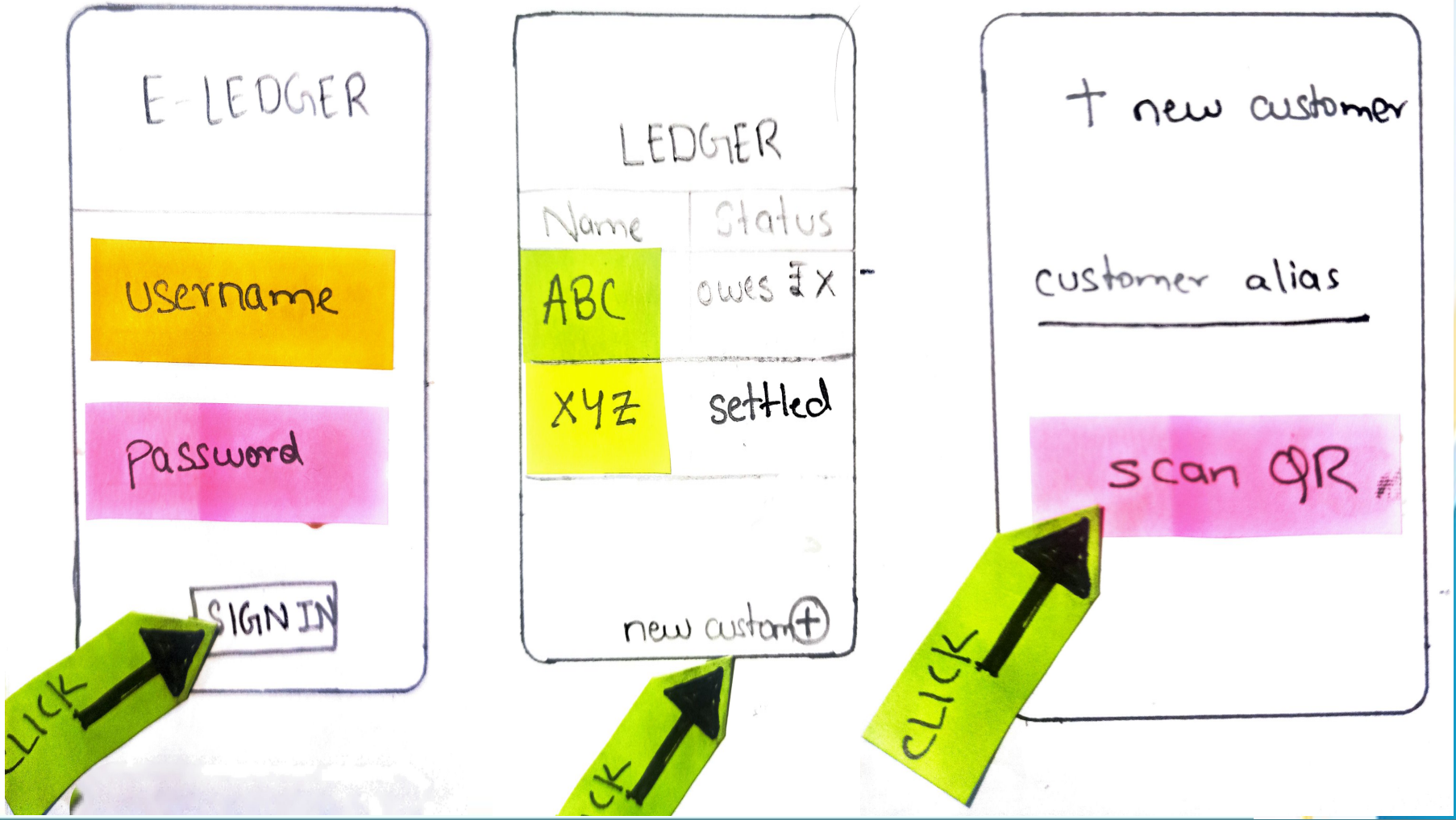
1.Home screen 2.Customer's List 3.Customer transaction





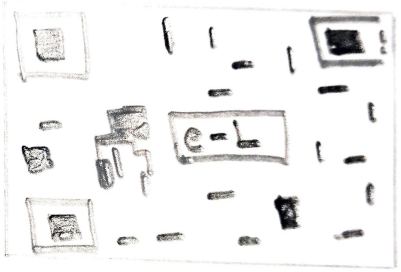


Work flow:Task 1-Adding a customer



Work flow:Task 2-Adding new transaction

E - LEDGER



Link

PQR's Trans^{n}

Item	status
Veg	due ₹100
Egg	due ₹50
Meat	due ₹100

CLICK

new transaction

New Transaction

Customer: PQR

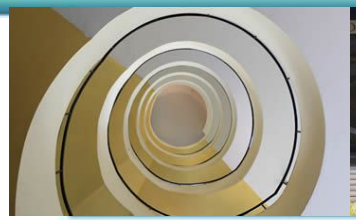
Mobile: 87XXX61

Title

₹ amount

add transact^{n}

CLICK



PQR's Trans'

Item	status
Veg	due ₹100
Egg	due ₹50
Meat	due ₹100
Milk	due ₹20

⊕

new transaction

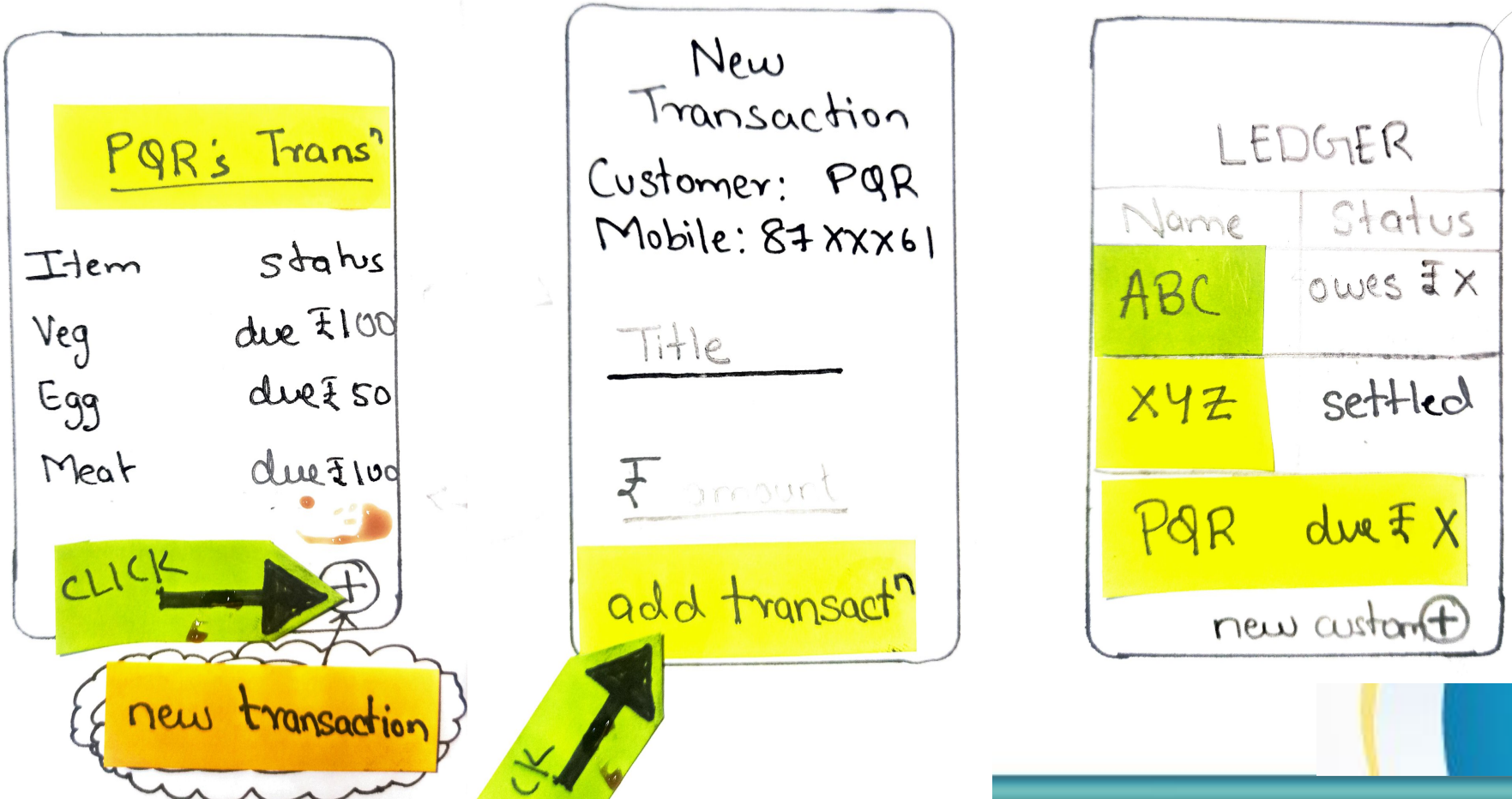
LEDGER

Name	Status
ABC	owes ₹X
XYZ	settled
PQR	due ₹X

new custom ⊕

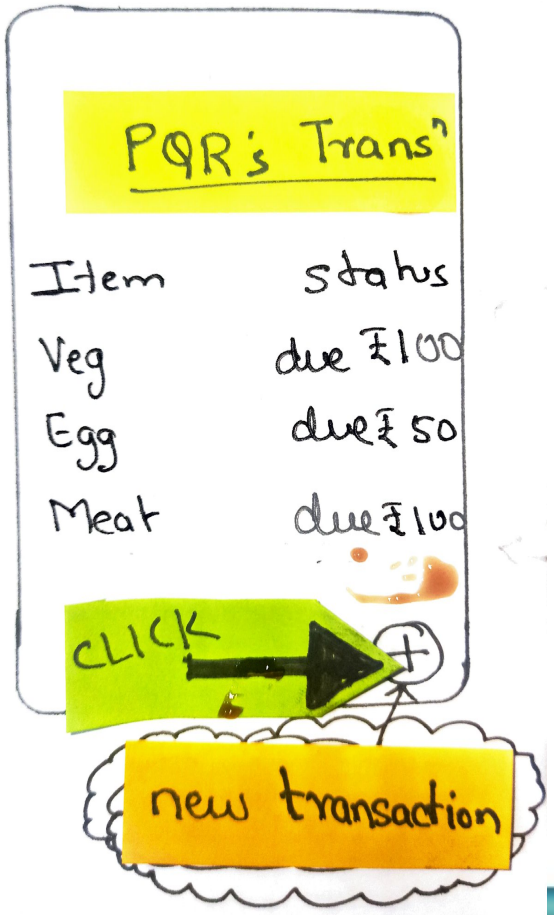
Issue:Task 2-Adding new transaction

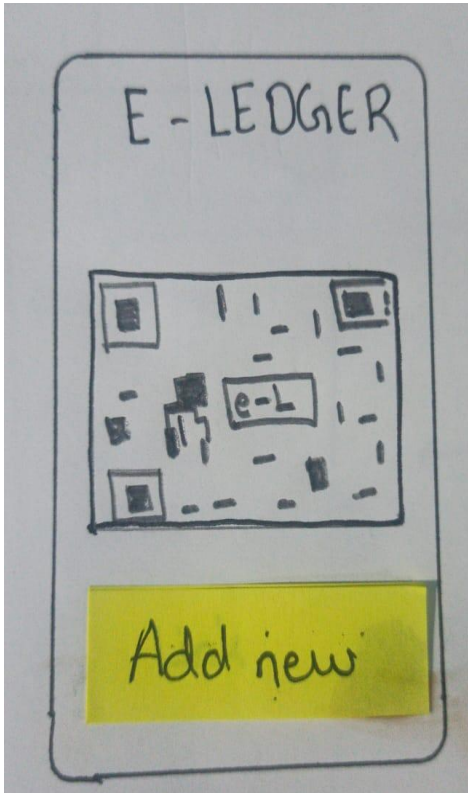
Since in this approach the shopkeeper can add whatever he wants He can scam the customer.

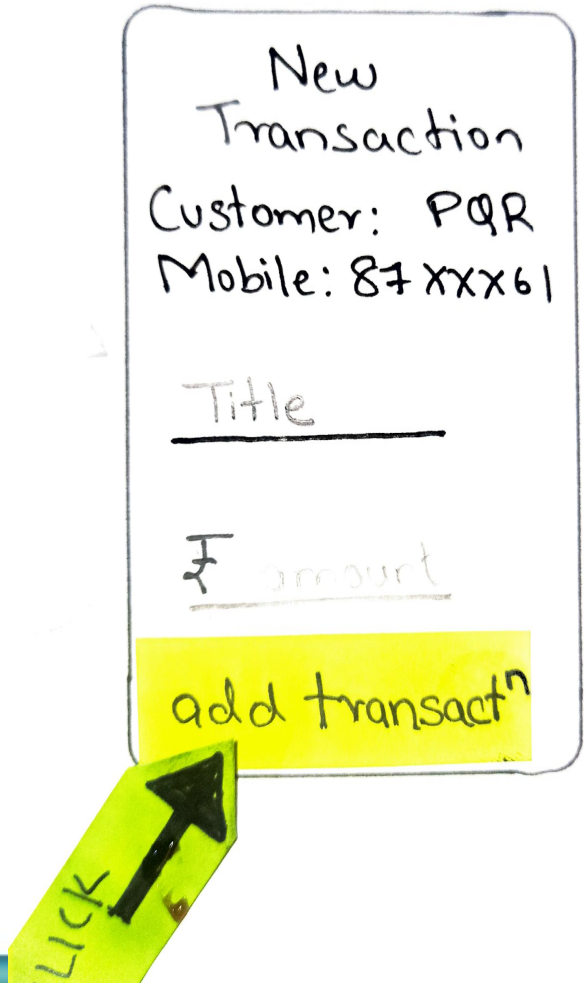


Solution:Task 2-Adding new transaction

So we added a new feature where in the customer must approve before adding a new transaction







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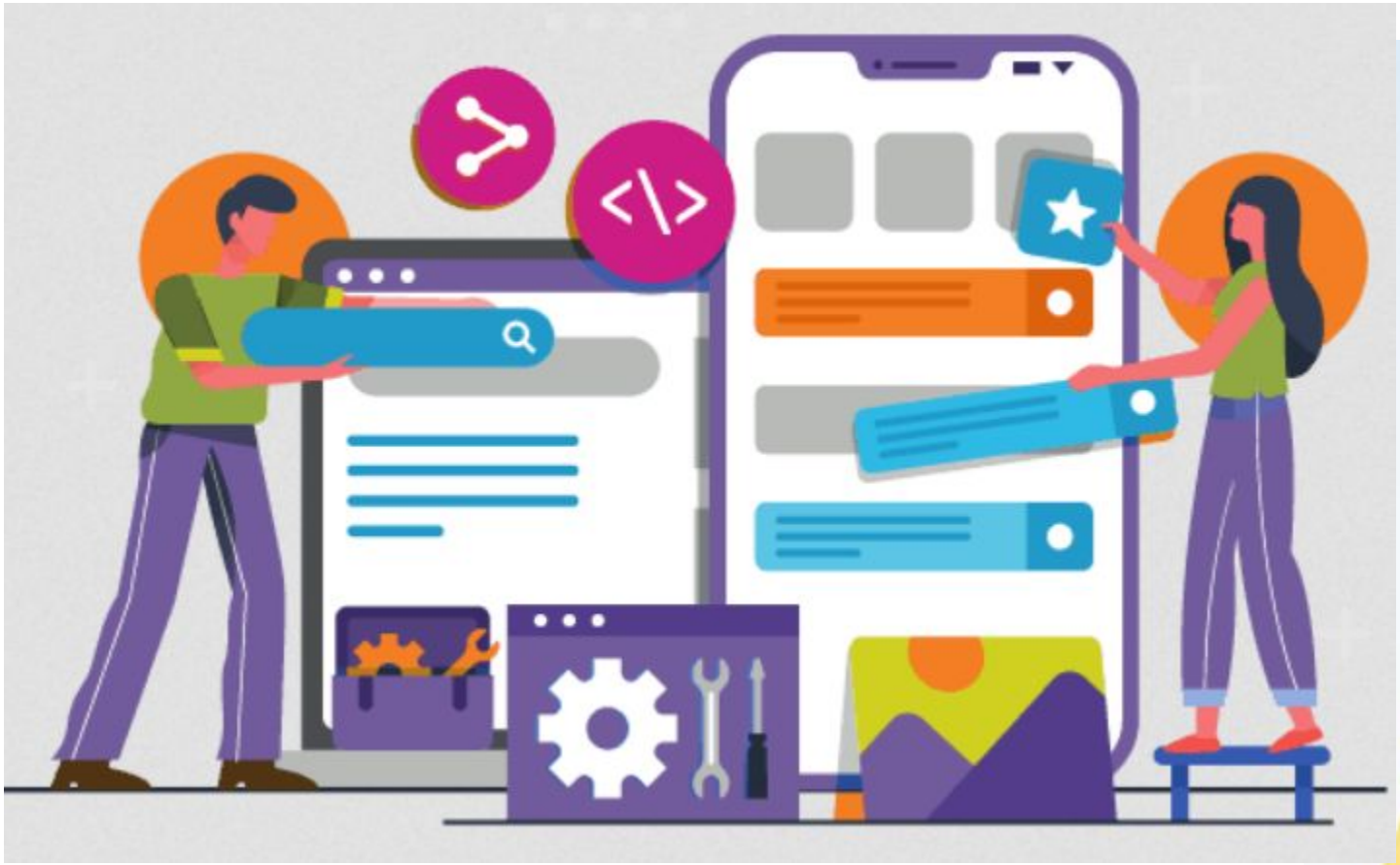

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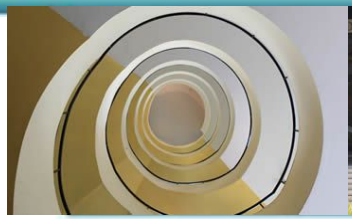
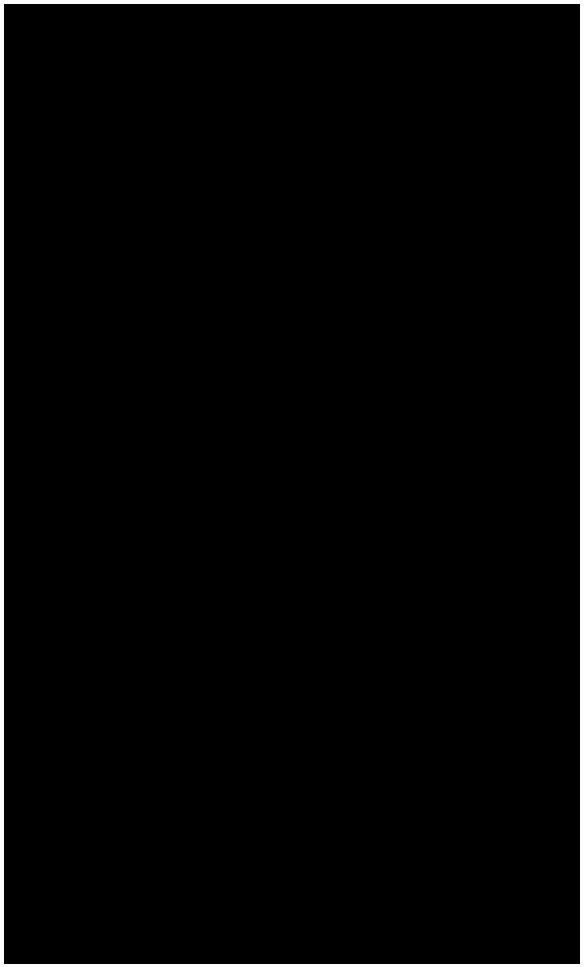


High Fidelity Prototype



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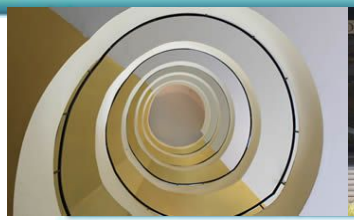

Thank You