

PRODUCTIVITY APPLICATION FOR FOOD STALLS

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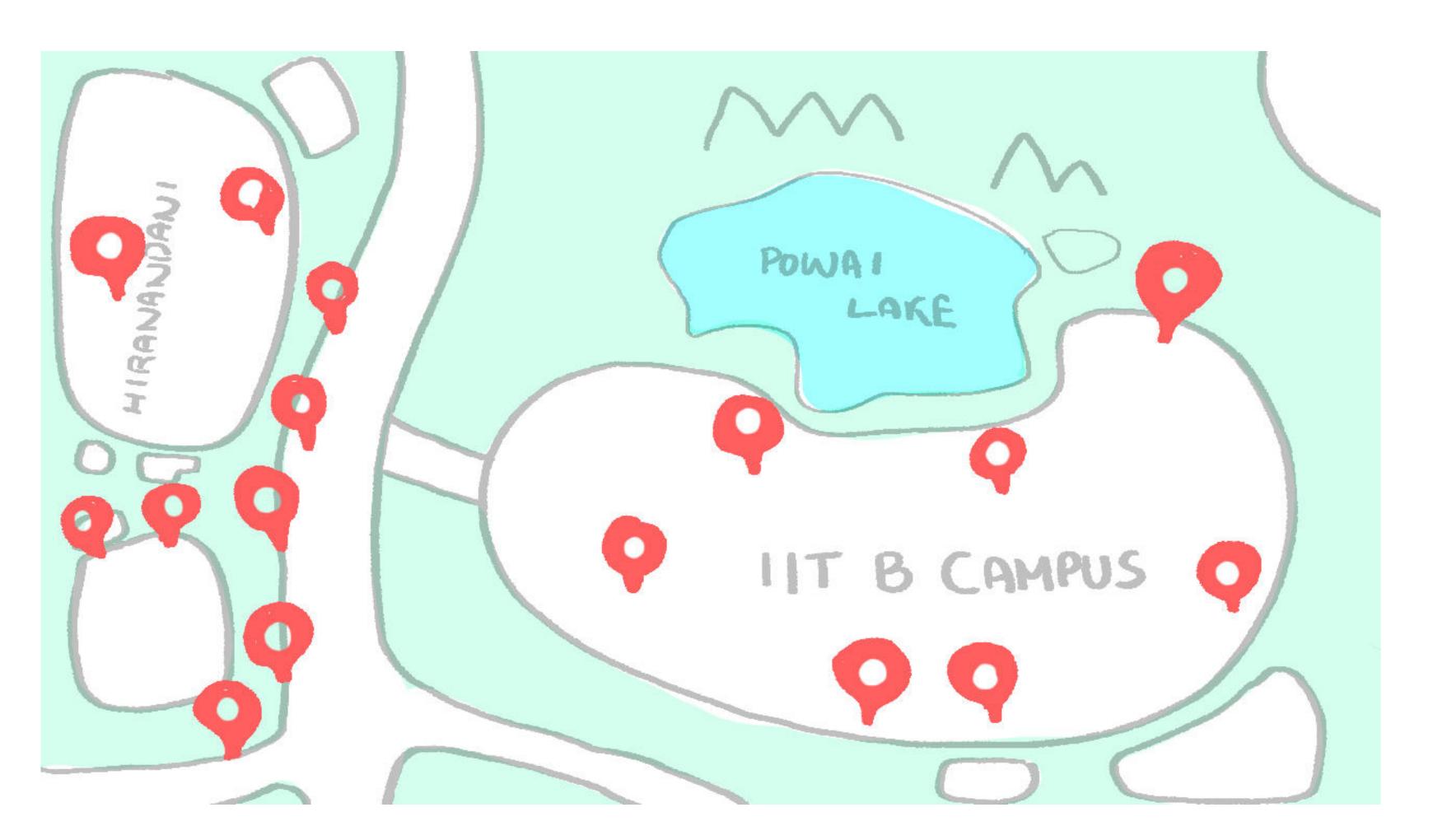
ABOUT THE TOPIC

- · Attempt to understand the problems faced by local food shopkeeper
- To increase the productivity of small medium food stalls
- Technological intervention to overcome their problems

HOW SMALL STALLS ARE DIFFERENT?

- Starts their day with investment
- Their main motto is not to focus on ambience, experience or service.
- Buying raw materials, preparation of food and consumption occur in a defined geographical area
- Fixed customer flow

PRIMARY STUDY



Canteens in IITB

Food stall opposite IITB

Powai Market

Hiranandani

PRIMARY RESEARCH

- "Bhaiya kal ka kuch dena tha kya"
- Every day spends more than two hours to calculate his profits, investment and keeps money aside for next days transaction
- Awkward situation between shopkeeper and customers due to the credit customer has taken
- Multiple encounters by customers





Illustration made by Anagh Saha

To increase the productivity of food stalls

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Credit Accounts (credit given)		Management of Vendors (credit taken)		Tracking of food items	
Awkward scenario for both the customer and shopkeeper	Inventory	Records of challans and bills	Transactions	Amount of items purchased and sold High in demand	Rush & Queue Getting more customers
Delayed payment	Travels to get grocery in cheaper rates everyday	To remember payments due in terms of money &	Daily, Weekly & Monthly payments	items	
Not aware of amount struck for the product which goes on credit	Repeatedly visits market	time	Manually calculates money everyday	Food items not available	
			Summarises investments		

TARGET FOOD STALL

Small food stalls with limited menu

Daily sales - Rs.3000 to Rs.10,000

Daily customers - 70 to 200

Co-workers - 1 to 5

Shop owners should have a smart phone with generic knowledge of calling and instant messaging.

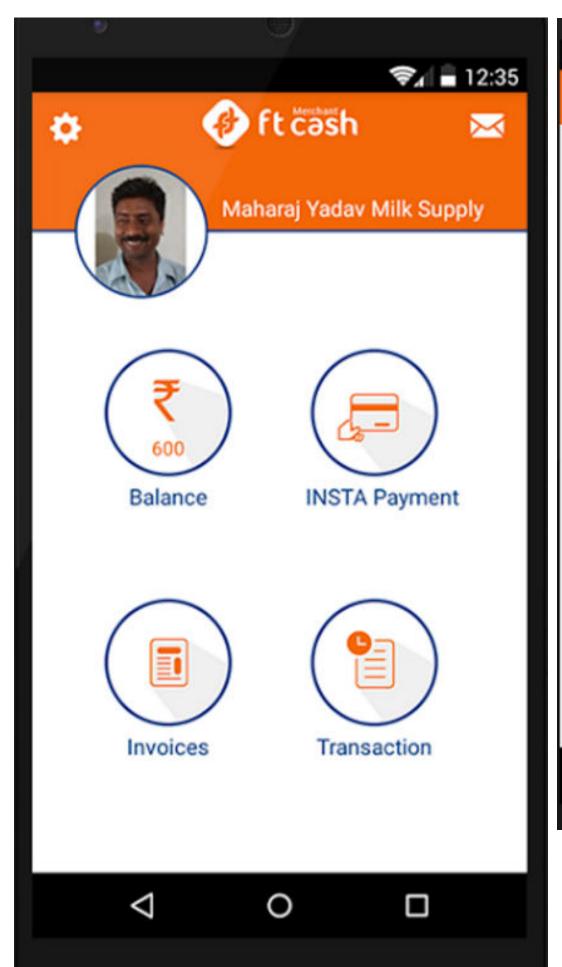


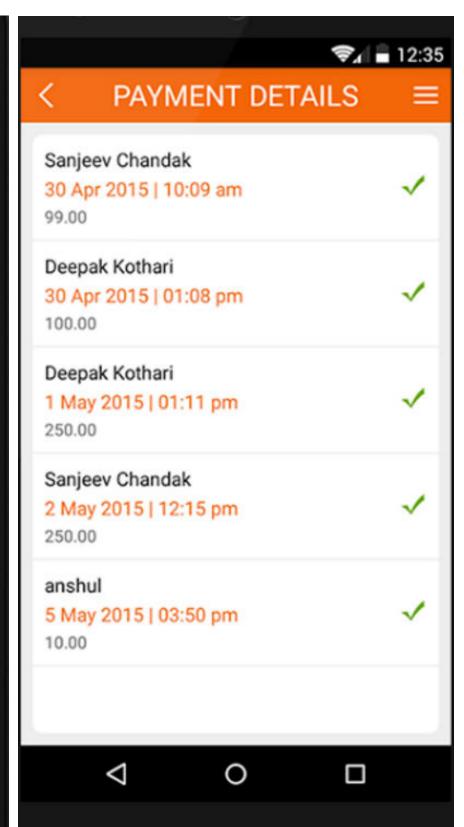
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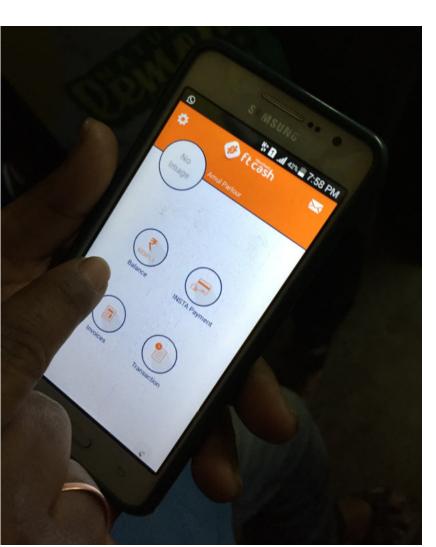
EXISTING PRODUCTS

ft cash & ft cash merchant

- Canteen owners to receive invoices and initiate payments via credit and debit card
- The intention of the app was to make payments which changed for customers as they started using it to finding nearby small food stalls

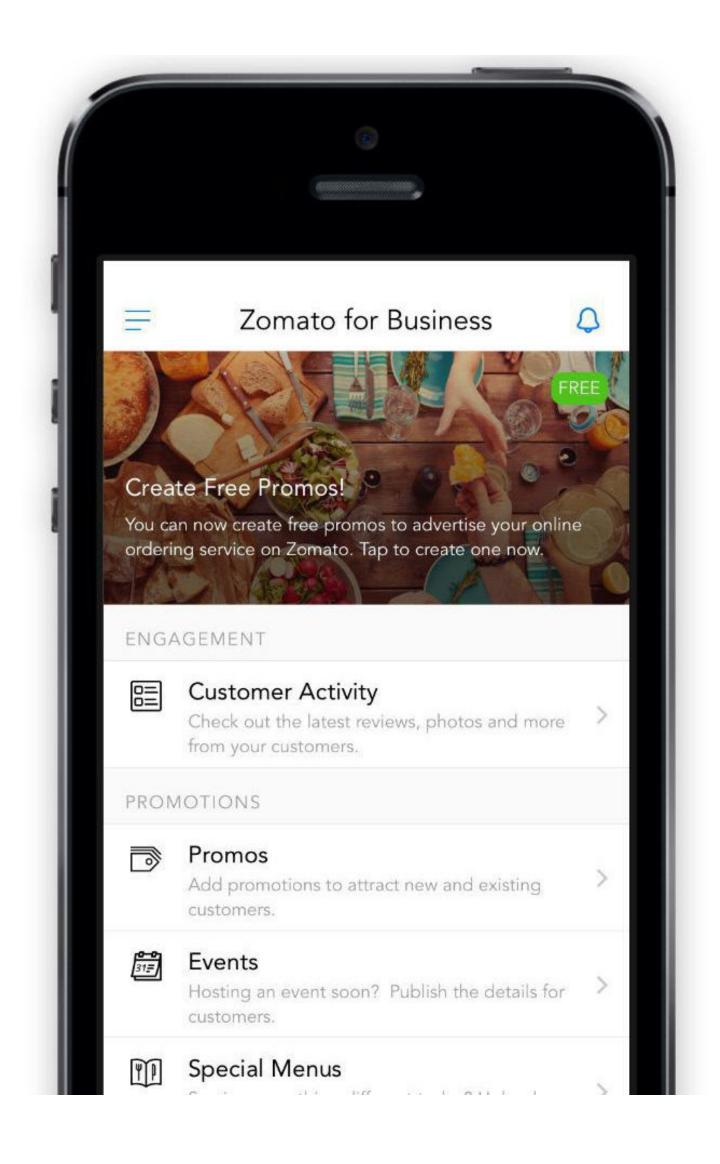






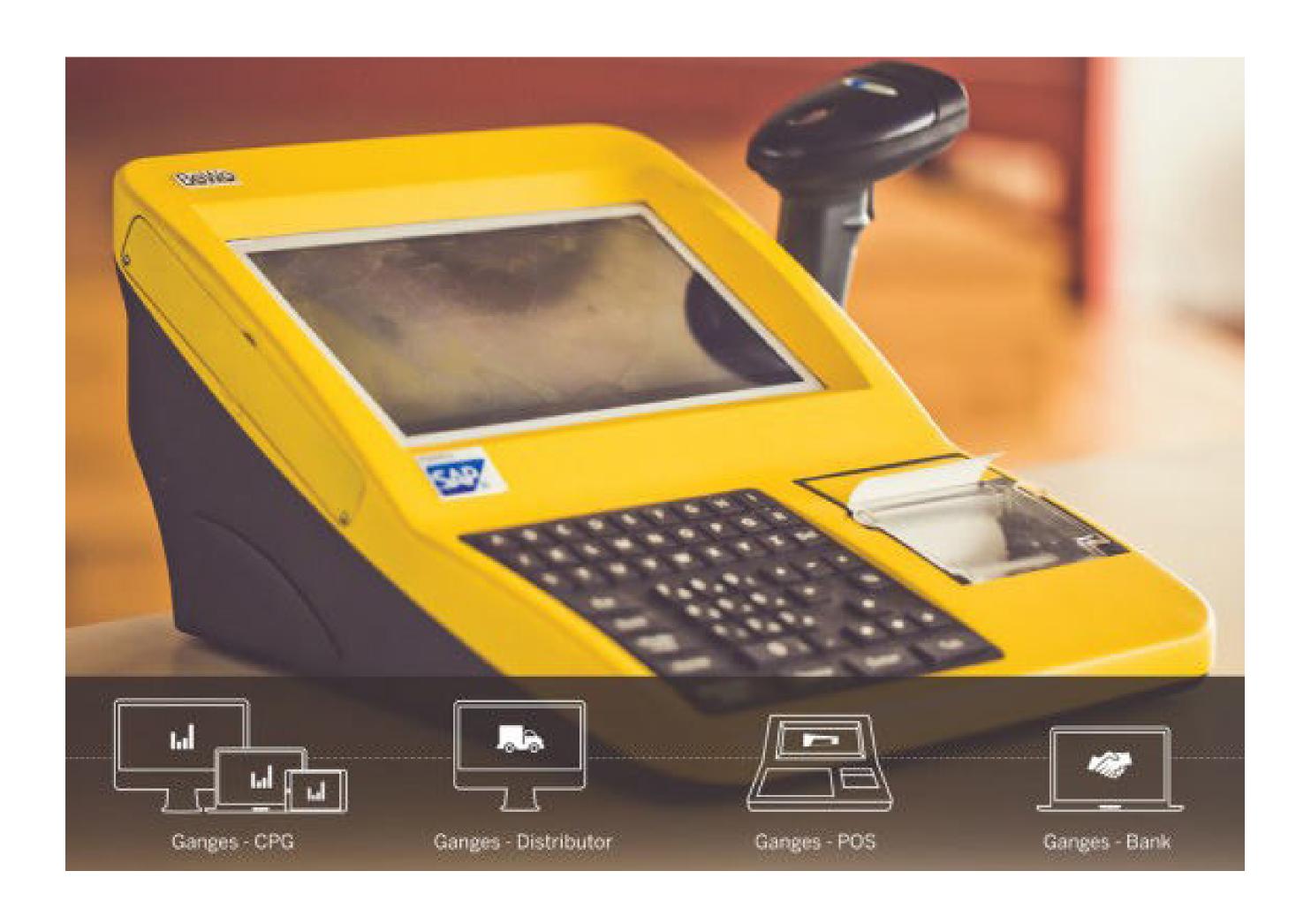
Zomato for Business

- Zomato for Business is used by the shop owners whose shops are registered in zomato.
- The amenity tags are useless for small food stalls. They is no user defined tags.
- Zomato for Business keeps track of his online sale but there is nothing for keeping tracks of customers coming directly to the restaurant.



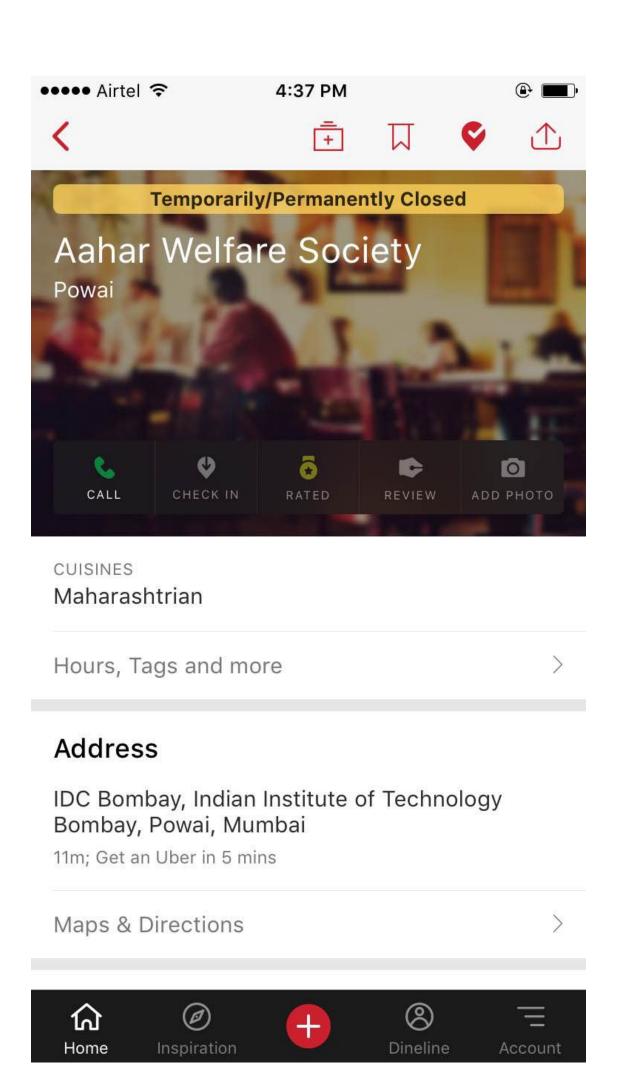
SAP Ganges-Retailer's PoS device

- Connects the consumer product companies with their distributors and retailers
- Customers who take credit.



USING ZOMATO FOR SMALL FOOD STALLS

- User was overwhelmed by information
- Primary language of the application was english
- No user defined tags
- Feature Getting paid before the meal was important
- Mapping the location of the food stall
- Deleted the page after 30 days



PROBLEM STATMENT

To optimise transactions with customers

Simplify accounting and credit management than the current method

Analysis & recommendations from the expenditures

INITIAL DESIGN IDEAS

Business decision based on day wise consumption

- Taking care of the prices that are mapped on menu
- Helps in giving shop owners an idea about consumption patterns across the day
- Business decisions while placing orders to different vendors
- Tracking of food items and cash
- Eliminates calculation errors

Limitations

In rush it may slow down the process.

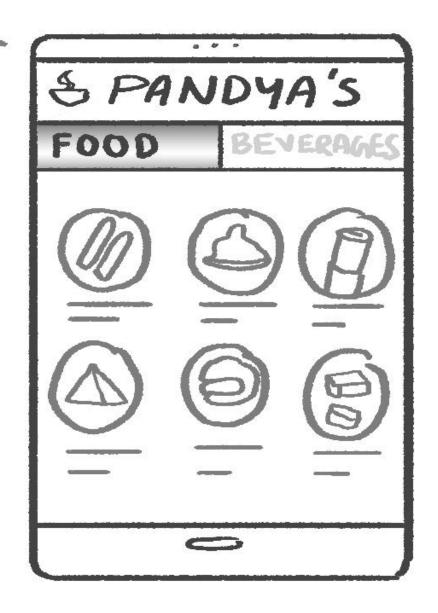






Illustration made by Anagh Saha

Type-in item details for each order

- Customer order from the same group which leads to confusion while payments. The idea is to note down all the orders and keeping track of all the orders within the application
- User will not miss out on anyone. It can also track the food items

Limitations

- It might slow down the process of transactions effecting the productivity
- Group orders can have multiple items, so typing all the item details might be an extra task for the users



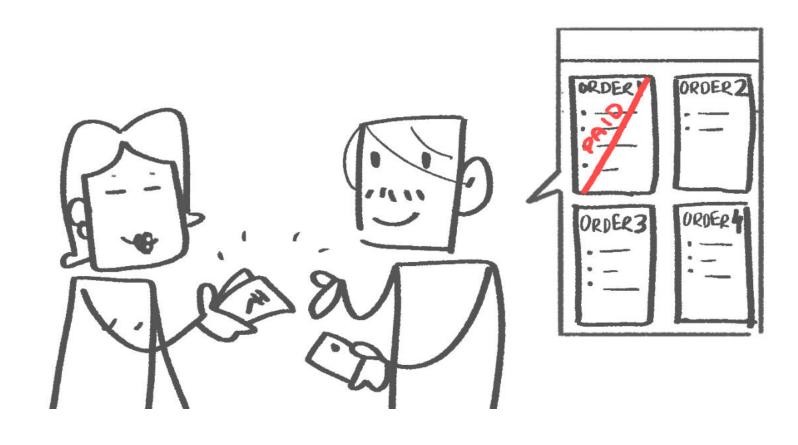
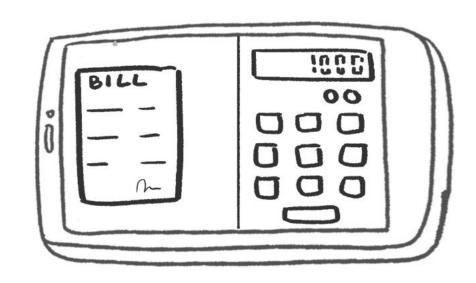


Illustration made by Anagh Saha

Prioritising and planning vendor payments

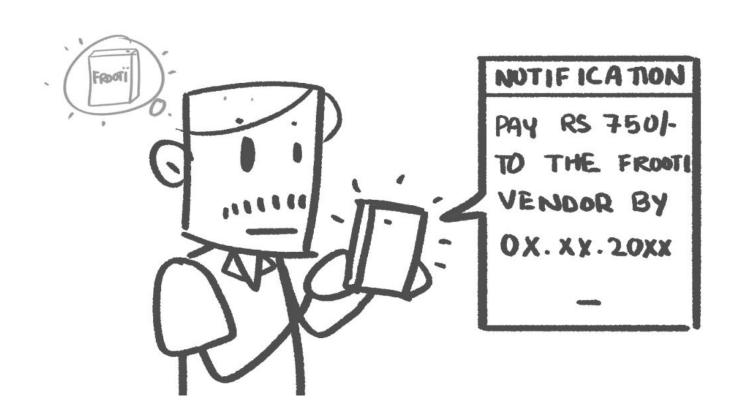
- It prevents the shopkeeper from skipping or forgetting payment deadlines
- Helps in maintaining good relationship of vendors





Limitations

- Problem lies at customers not paying the shopkeeper
- Shopkeeper will not be able to gather the necessary amount in stipulated time



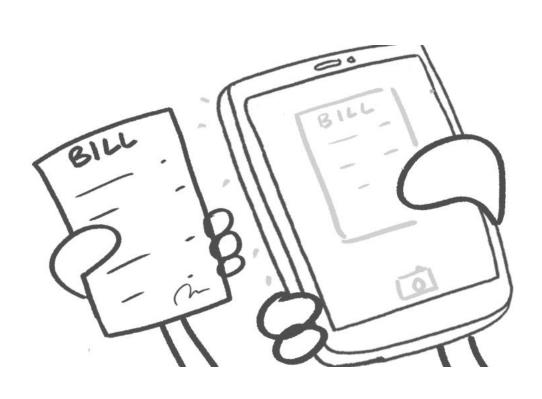


Illustration made by Anagh Saha

Managing customer flow by taking pre orders

- Help in peak hours
- Fast service

Limitations

User may not turn up after ordering food







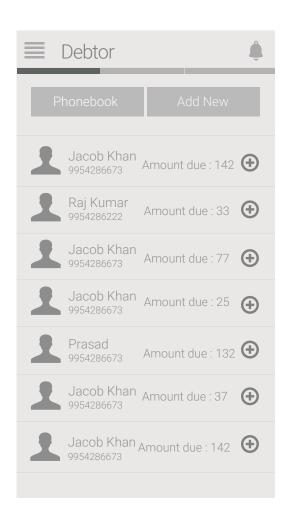


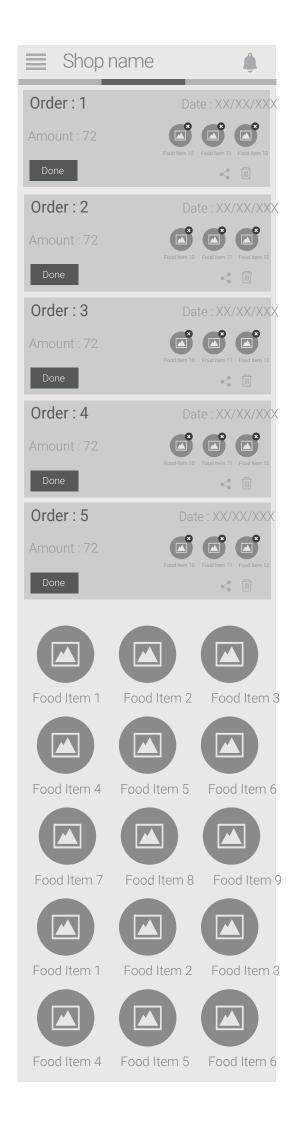


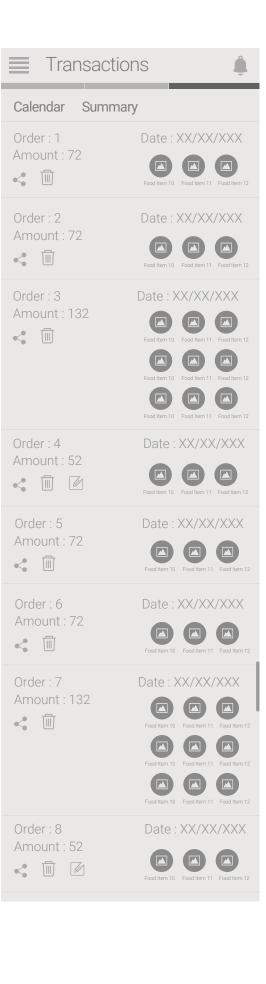
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Smart closure of business for the day

- It shows a summary of the day's transactions.
- It shows details about the credit and debit amounts as well as the most sold/popular items for the day. This helps the shopkeeper to plan for the days to come.







Automated messages are better at mitigating social awkwardness

- Awkward scenario for shop owners
- That small amount of money is a huge amount for shop owners.
- Awareness about amount of money struck in credit.
- · Since it will be a system generated message/notification it will not hurt anyone's ego.

Limitations

- Customer may not read the message.
- · Customer may read and then not respond to message.

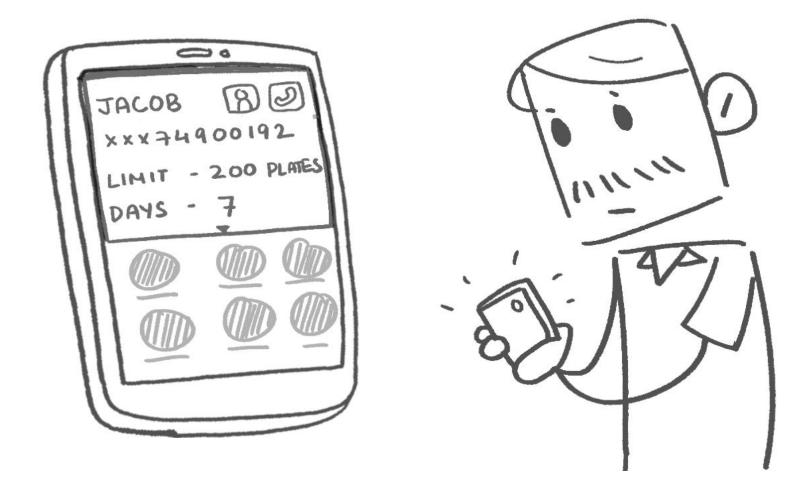


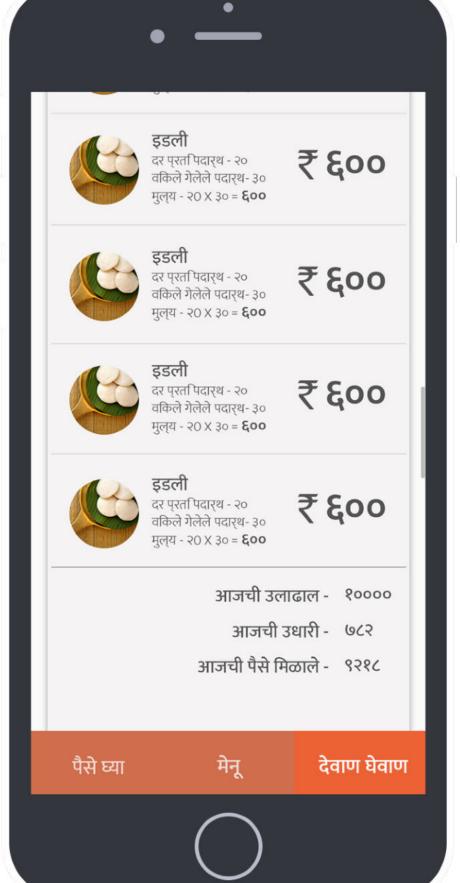


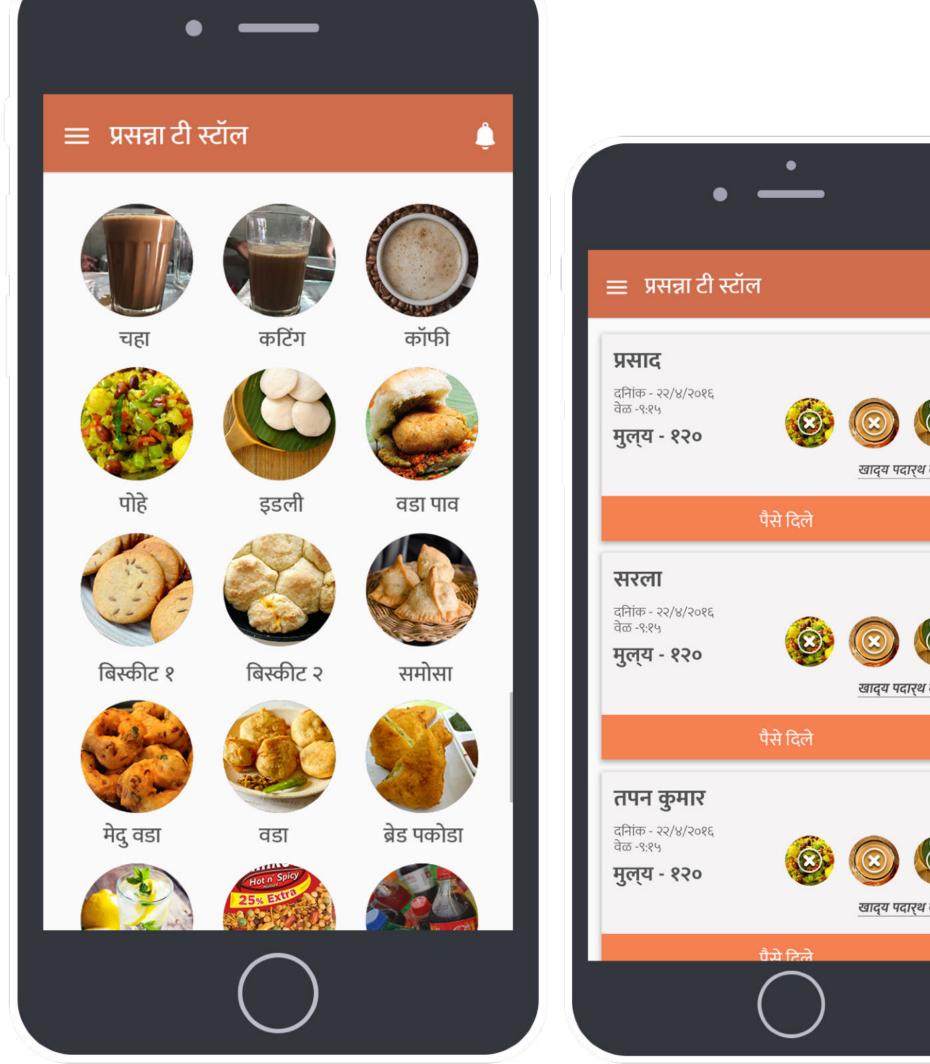
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FINAL CONCEPT









Business decision based on day wise consumption

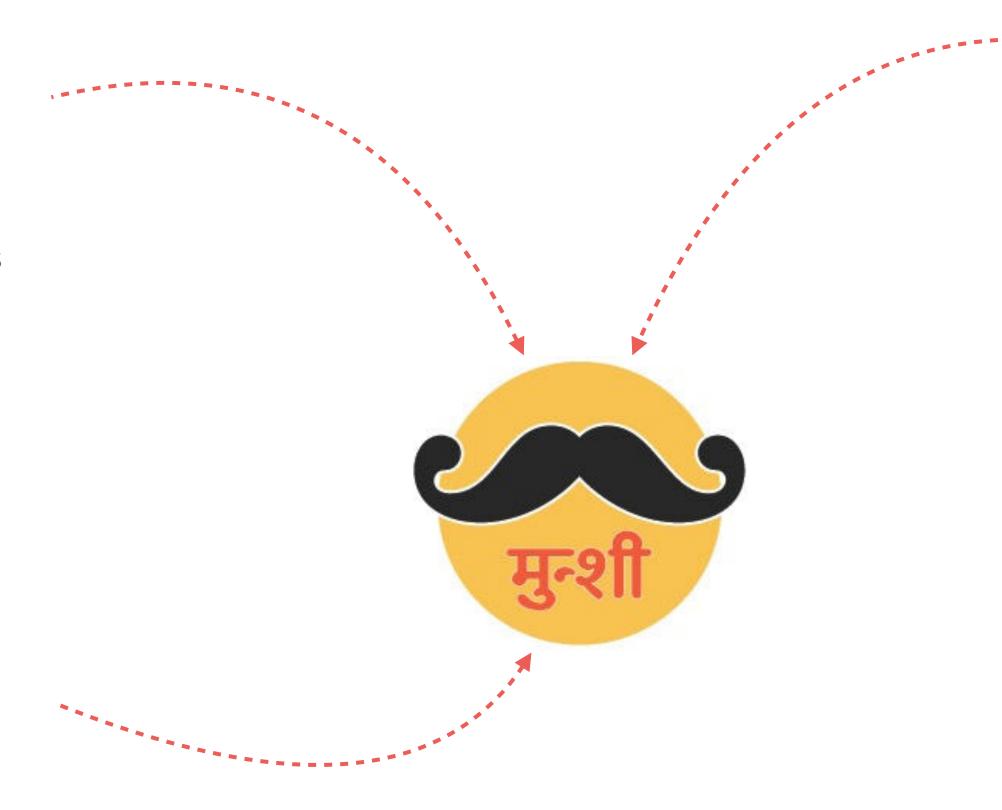
Custom menu
Easy and fast ordering
Reduce the errors of the calculations
Tracking of food items and money
Sharable invoices

Automated messages are better at mitigating social awkwardness

Tracking of credit amount

Maintain credit accounts of customers

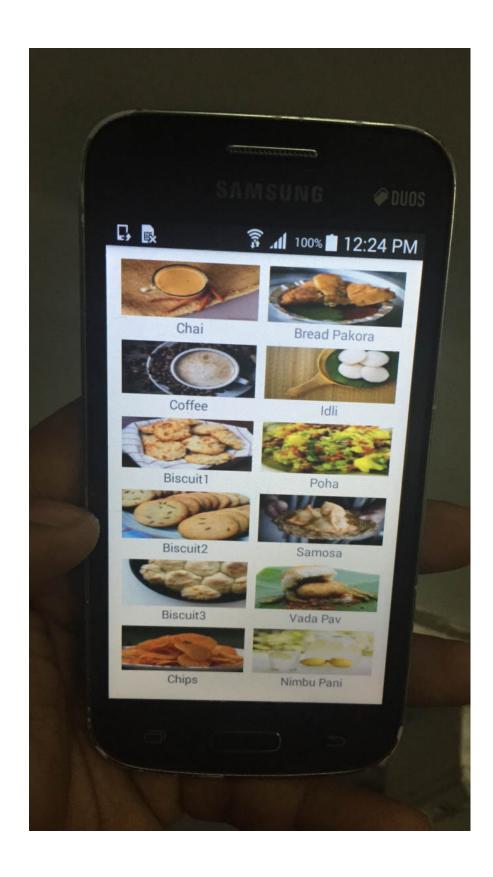
Notifying customers about their dues

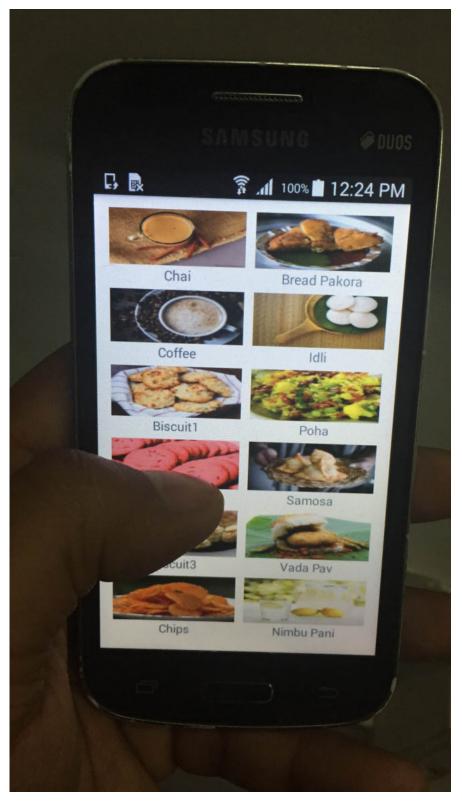


Smart closure of business for the day

Analysis of food items sold in cash and credit
Analysis of daily accounts in terms of paid and
unpaid transactions
Most and least sold food items of the day,
week, month and year.

USABILITY TEST OF PROTOTYPE





The aim of the experiment was to test whether shop owners are comfortable with using a phone for billing and taking orders.

Insights:

Feedback from the application for assurance

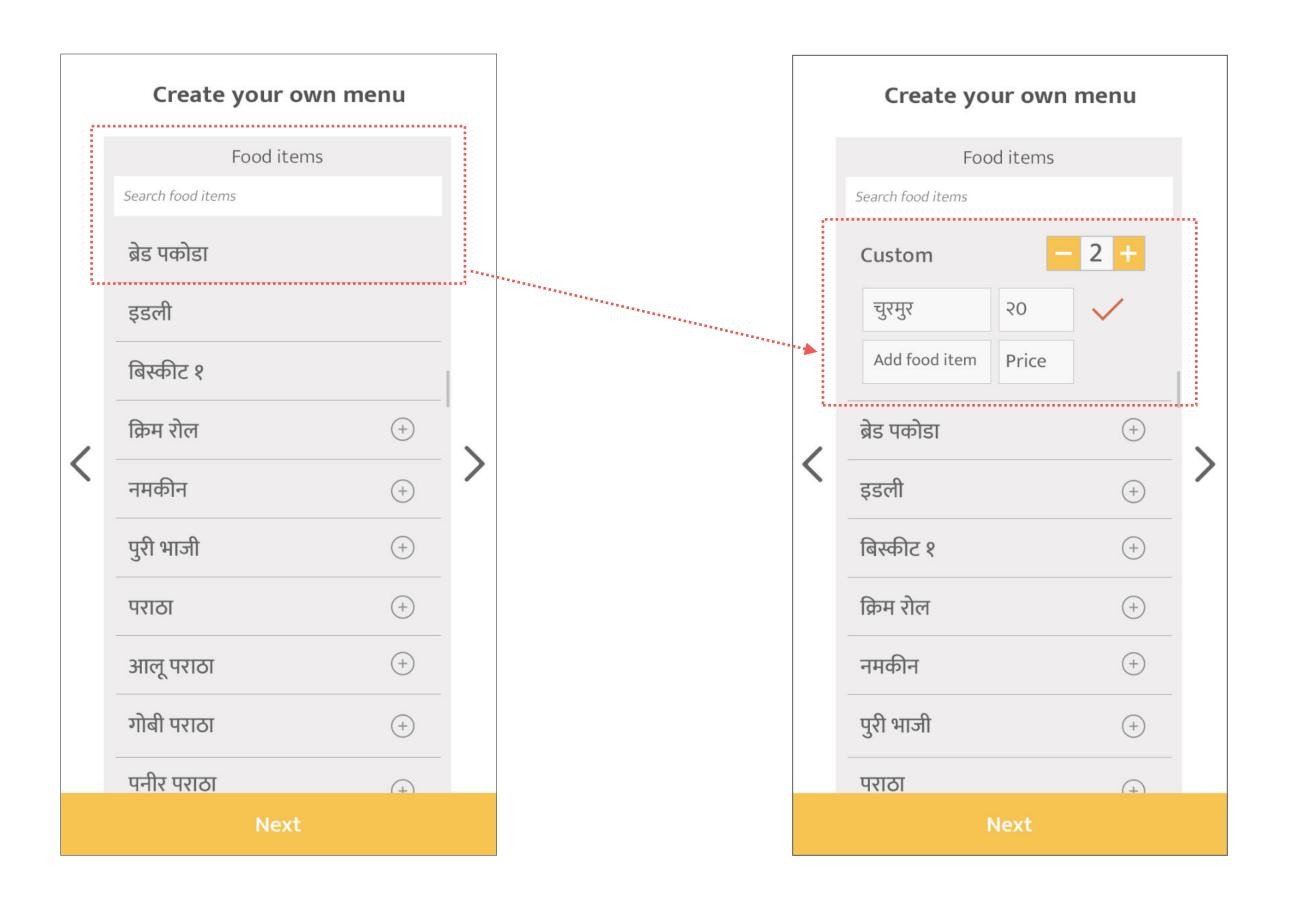
Prices of the items.

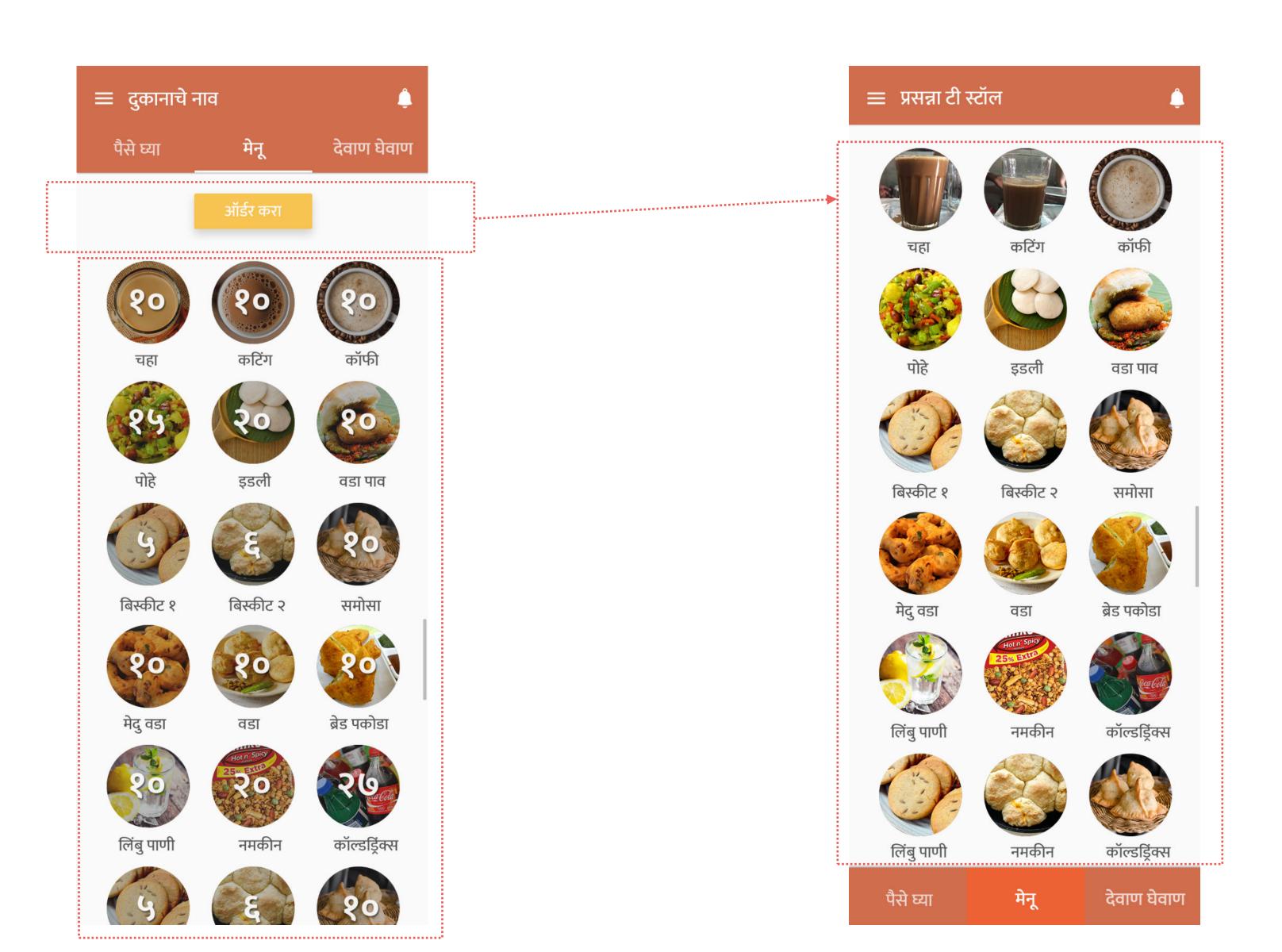
Behavioural change

CLICKABLE PROTOTYPE

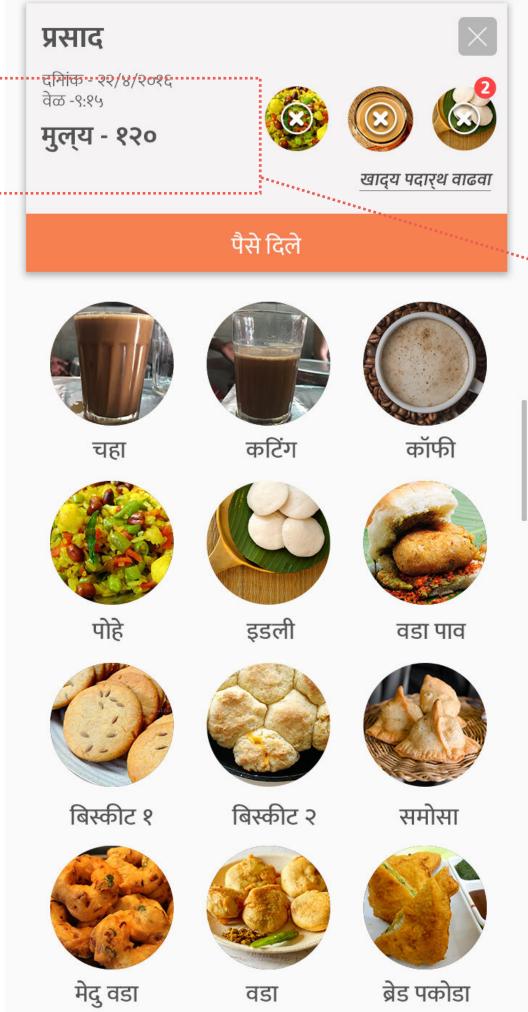
PROTOTYPE

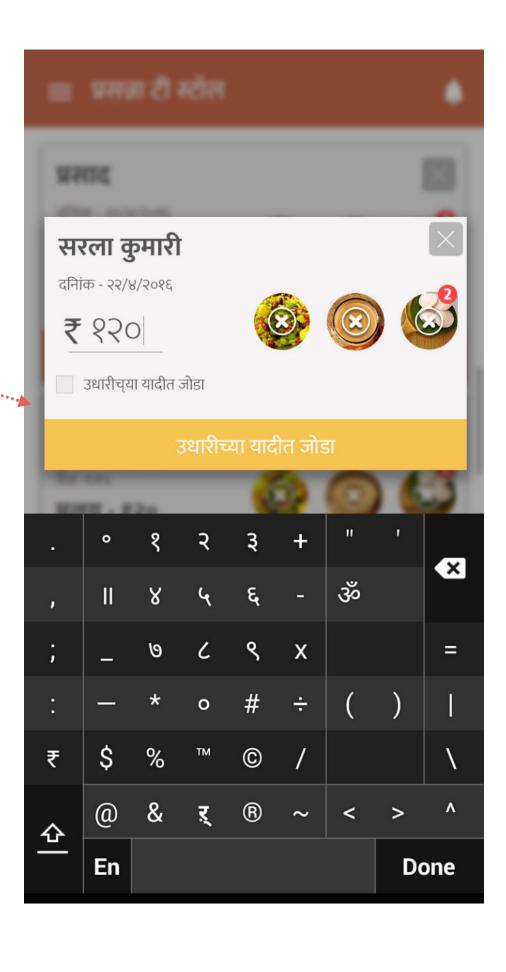
POST FEEDBACK











EVALUATION

Heuristic evaluation conducted with 2 people from 1 shop.

Shadowed the people for 2 days as they used the Application for billing, credit and inventory management.

A series of questions were asked to evaluate the usability of the Application at the end of each day.

The participants were asked to find the total credit for the day, the most selling product and whether the amount shown in the app tallies with the amount in the cashbox. They were able to answer all of the above questions with ease.



EVALUATION - INSIGHTS

- It is awkward for them to ask names of female customers
- · They use their own way to remember a person's identity (using own prefixes like IDC, OFFICE, Chemical Department)
- Keen on seeing a prediction of customer's name
- · Permanent receipt for most sold item, giving the users an option of adding favourites.
- On seeing the shop owners using a digital system, there was a behavioural change in customers. Many started paying before the order / item was received.

- In rush it is not efficient
- Syncing of two phones
- · No credit no name . If someone is paying money before eating then adding the name is not important.
- It is awkward to use a voice input.
- · They use english input to type marathi or hindi words.

DATE	1/06/2016	2/06/2016	3/06/2016
TOTAL SALE	1594	9316	6753
CREDIT	54	659	758
AMOUNT IN CASH BOX	7843	8000	7190

EVALUATION

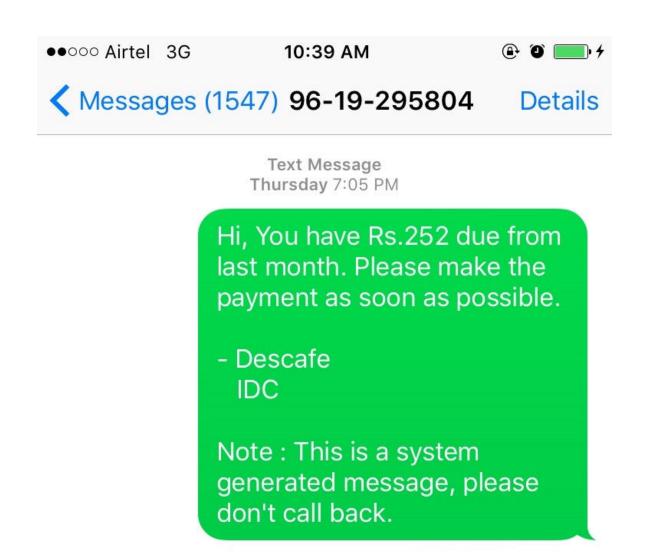
Evaluation of the credit reminder message

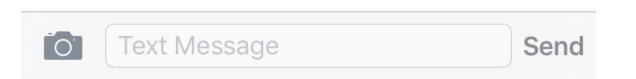
10 randomly selected individuals who had taken credit from the shop were sent a message consecutively for two days reminding them about the credit amount. The message was posed as a system generated message.

Following is the example of the message:

"Hi, you have Rs. 252 due from the last month. Please make the payment as soon as possible.

- DescafeIDC
- Note: This is a system generated message, please don't call back"





EVALUATION - INSIGHTS

- Out of the 10 individuals, 7 visited the shop to ask for the amount. 4 of them paid the balance amount.
- The rest asked for a few days time to pay the amount.

FUTURE SCOPE

- Tutorials for the application
- Syncing of smart phones
- Vendor management
- How the shopkeepers can use the app during rush hours

THANK YOU