

The background of the slide features several hand-drawn sketches of a food delivery app interface. At the top left, a box titled 'WHAT SHOULD I EAT TODAY?' contains circles labeled 'SPECIAL DEALS', 'FAVORITES', and 'NOVELTY'. To its right, a box contains several blue speech bubble icons. Below these, a large sketch shows a central blue square with a grid of food icons (burger, pizza, etc.) around it, with a '2 Food / Novice' label. To the right of this is a 'Tray' section with a 'drag & drop in' label. Further right, a 'Favorites' section shows a grid of food icons. At the bottom right, a section titled 'I WANT DELIVERY', 'I WILL DECIDE LATER', and 'I WANT PICKUP' is visible. The sketches are drawn in black ink on a light-colored background.

PROJECT 2

Food Home Delivery System

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Declaration

The research work embodied in the written submission titled “Food Home Delivery System” has been carried out as Project 2 by the undersigned as part of the post graduate program in the Industrial Design Centre, IIT Bombay, India under the supervision of Prof. Ravi Poovaiah.

The undersigned hereby declares that this is an original work and has not been plagiarized in part or full from any source. Appropriate reference information or links have been provided wherever due. Furthermore, this work has not been submitted for any degree in this or any other University.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action if need arises.

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Approval Sheet

This interaction design project entitled "Food Home Delivery System" by Astha Kabra, 126330006, is approved in partial fulfilment of the requirements for Master of Design Degree in Interaction Design.

Project Guide

Chair Person

Internal Examiner

External Examiner

Date

Acknowledgement

I would like to express my sincere gratitude to Professor Ravi Poovaiah for his support and guidance. Without his constant efforts of trying to push me to find a purpose for the project, this wouldn't have been the same.

Furthermore, I would like to thank Prof. Anirudha Joshi, Prof. Girish Dalvi, Prof. Pramod Khambate and Prof. Venkatesh Rajamanickam for their valuable ideas and insights during the various stage presentations of the project.

I am obliged to many of my friends who supported me, at various stages during the process of making this happen. The project wouldn't have been same without them. Thank you Chandni and Joash for letting me stay over during the peak of my shooting.

I would also like to thank Industrial Design Centre, IIT Bombay for providing me with all the facilities and necessary materials and an environment that encourage me to work on such a challenging project.

Astha Kabra
24th February 2014

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01

ABSTRACT

According to recent study, the frequency of eating out and ordering in has more than doubled and increased the demand in all for food services in Metro cities. As a result, it has become important to understand this fast-paced user dynamics in terms of demographics and behavioural differences of user while ordering food.

It has been observed that the interaction of human beings with technology increases as the problem they are solving is frequent. Communication is fundamental in the new age, so is Food. We have internal notification for hunger from our body, but don't have a seamless, time saving & beautiful platform to fulfill that demand.

Across the country and majorly in the metros such as Mumbai, customers now demand for good food at the door step, whether at home or in office.

'Zayke' (mobile app) provides solution which fills in the gap between the user's and multiplicity of restaurants. The solution's novelty lies in resolving the major issue of ordering in a group and from multiple places in one transaction. The users no longer need to store paper menus and offer coupons with limited validity. They can also explore the trending dishes, popular dishes, their eating patterns, flavour trails and calorie consumption. Moreover, the users have a platform to put their opinions, suggestions, reviews and recommendations directly.

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INTRODUCTION

Over the years, the continuous developing economic, social and demographic changes have redefined the Indian user's profile, behaviour and spending pattern. This transformation is due to a lot of factors like rise in disposable incomes, rapid urbanization as well as higher exposure to international lifestyle.

This has resulted as a catalyst in eating out behaviour. India is witnessing exponential growth in consumption both in terms of eating out and experimentation with cuisines and concepts. Increasing urbanisation, double-income households, time paucity are some of the factors that are spurring the growth of anti home-friendly schedules, where we end-up spending more time outside then at home.

With the largest young population in the world, there has been a rapid pace of acceptance in field of new media and technology. The consumers behaviour and preferences are underpinned by evolved lifestyles, changing attitudes, openness in mindset, western influences and the increasing need of convenience. Consumers are highly informed with a wide range of choices for newer cuisines and formats and are open to experimentation

This leads to explore and study the connectivity channels between the regional and national food chains, dhabbas, dabba wallas etc. and people who don't have the luxury to be at home or time to cook a daily meal for themselves.

To cope up with fast growing industry, a start-up **"Flutterbee"** identified the need of designing a User centric product to order food using mobile as a media platform.

03

Initial Brief From Client

To get food delivered from local restaurants and food joints in just a few taps. Trying to make a mobile focused platform for Home Delivery which is personal, social & helps user to save their time & take better decisions.

ESSENTIALS

- Changing behaviour of food ordering from phone-call (audio) to mobile application (visual)
- Identify and customising filters according to personalised preferences.
- Reducing decision and ordering time.- Designing for both high speed internet connectivity & low speed internet connectivity.(offline and online)

DESIRABLES

- Addressing the group dynamics of decision making and payment.
- Multiple restaurant ordering.

04

Problem Statement

Information or channels through which planning, choosing, ordering and delivery of food orders is scattered over multiple media which adversely affects the decision making process, be not aware of all the choices available and leads to wastage of time.

5.1 SECONDARY RESEARCH

USER GROUP

The following classification helps in highlighting the key elements that are at work in determining the Indian consumer's eating out behaviour. [1]

14-17 YEARS

ASPIRING ADOLESCENTS

This segment comprises consumers who are financially dependant on their parents.

18-21 YEARS

MIMIC BEGINNERS

Comprising college students which is highly aware of the latest options and trends.

22-25 YEARS

NEWBIE SHOPAHOLICS

Made up of people who are either enrolled in post-graduation studies or just have embarked upon their professional careers.

26-30 YEARS

RESPONSIBILITY SPENDTHRIFT

They have a high focus on professional growth and may have recently married.

30-40 YEARS

CAUTIOUS SPENDERS

This segment is characterized by financial and social commitments, usually towards their growing children or ageing parents.

40-45 YEARS

RELAXED INDULGER

Consumer who have by large fulfilled their financial social responsibility like family commitments.

Aspiring Adolescents	Mimic Beginners	Newbie Shopaholics	Responsibly Spendthrift	Cautious Spenders	Relaxed Indulger
14-17yrs	18-21yrs	22-25yrs	26-30yrs	30-40yrs	40-45yrs
Financially depend on their parents	Highly aware of the options and trends	Either enrolled in PG studies or just entered their professional careers.	High focus on professional growth and may have recently married	Have financial and social commitments, usually towards their growing children and ageing parents	Full-filled their financial and social responsibilities
	College students				

Target users are between the age group of 18-30 years as they are the trend setters when it comes to using new application/online services. They are forming purchasing habits and they will continue to follow in the future This segment is ready to explore and experiment with new things. And the further age group follows the popular trend.

5.2 EXISTING SOLUTION

SEAMLESS

Seamless is an application which enables to get food delivery from local restaurants in just a few taps. It's easy and convenient and the service is free of cost.

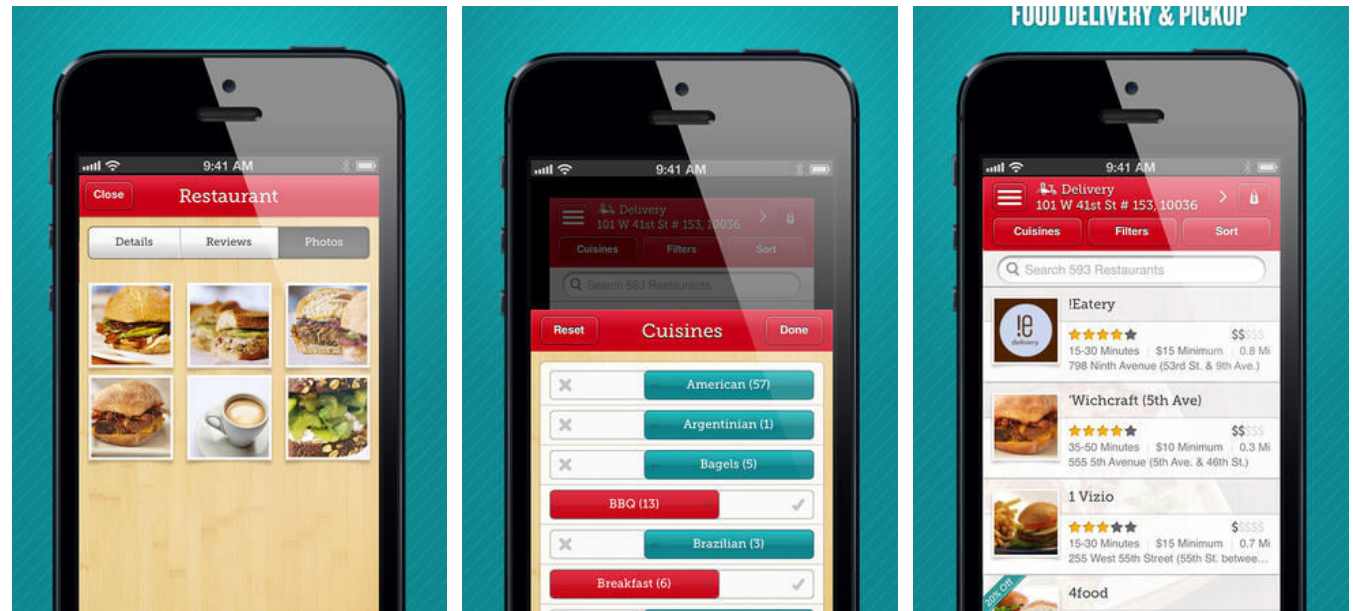
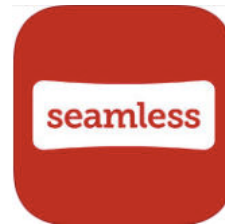
It removes the element of calling and wasting time repeating themselves over and over again.

They have got more than 12,000 restaurants with menus that are always up to date for ordering satisfaction. Plus, new ones are added daily.

User's can explore food on the basis of cuisine. Order sushi, pizza, thai, or any one of their 100 different cuisine types in a snap, a tap, or a click.

In the unlikely event a snafu happens, they have got a team of helpers ready 24x7 to make it right.

Ordering is simple. You decide where you want to eat, what you want to eat and when you want it. Seamless transfers your order to the restaurant, and the restaurant sends you a confirmation email.



5.2 EXISTING SOLUTION

DELIVERY HERO

Delivery Hero is a hassle free online food delivery system. User's can order from a lot of restaurants which offers 40 cuisines nationwide with just a few taps. Pre-order your dinner or order on the go is made possible through this app.

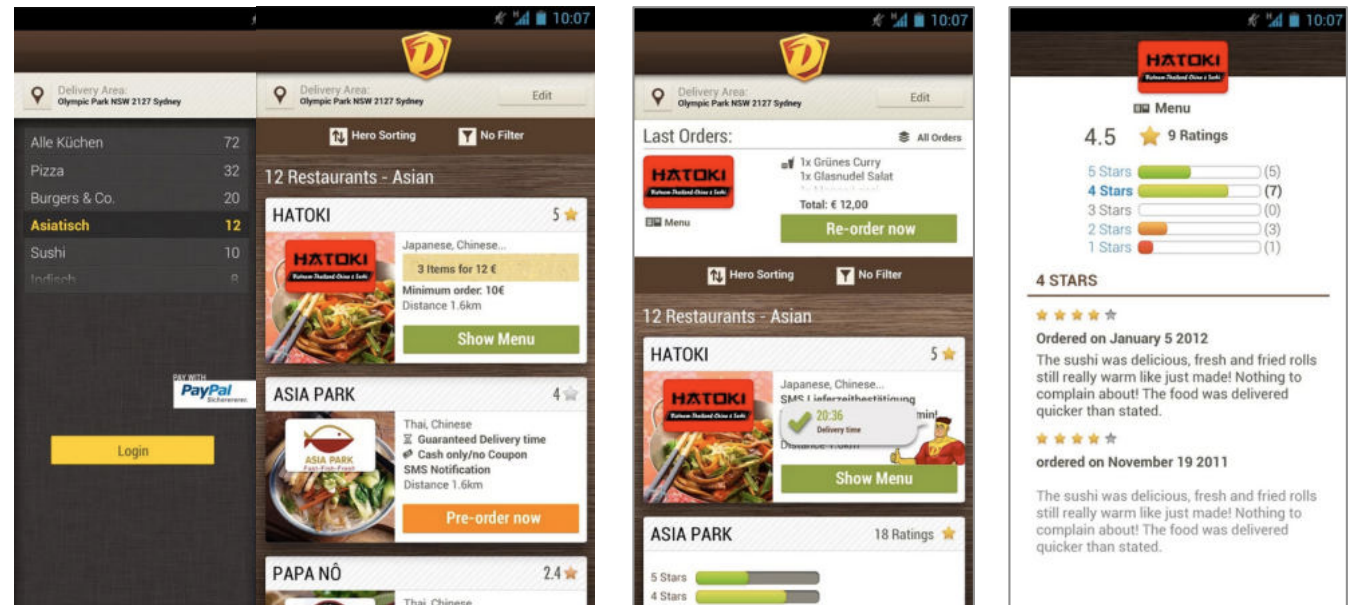


With this application, user can order takeaway from their favourite local restaurant or discover the best rated restaurants around them on the go or without leaving the comfort of their home.

Ordering is done by entering the postcode, then selecting a restaurant and meal, and paying securely online. Restaurant menus feature customer reviews and star ratings to help you choose

It has account features saving the details and past orders for a quick and easy ordering experience.

The Delivery Hero app reaches top one in the Food & Drinks app category regularly. Available in Australia only.



5.2 EXISTING SOLUTION

FOODPANDA

Food Delivery & Takeaway app is a simple and the most used platform to order the food online.

Quickly, you can order from the different cuisines available from many restaurants around the location. Food panda guarantees that your meal will be delivered fast, hot and tasty.

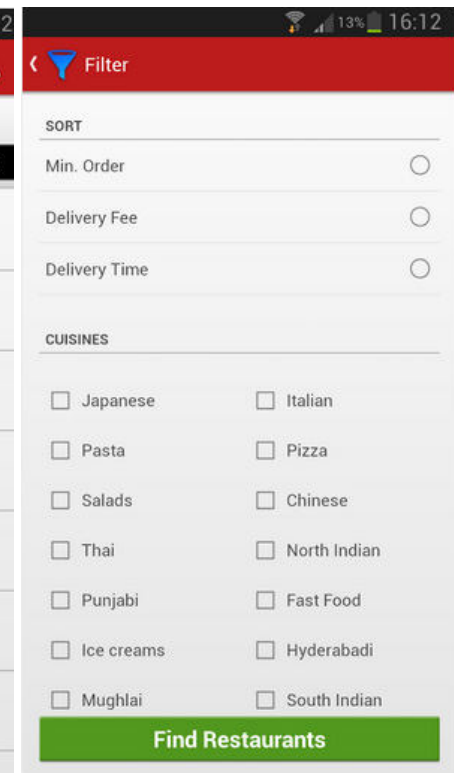
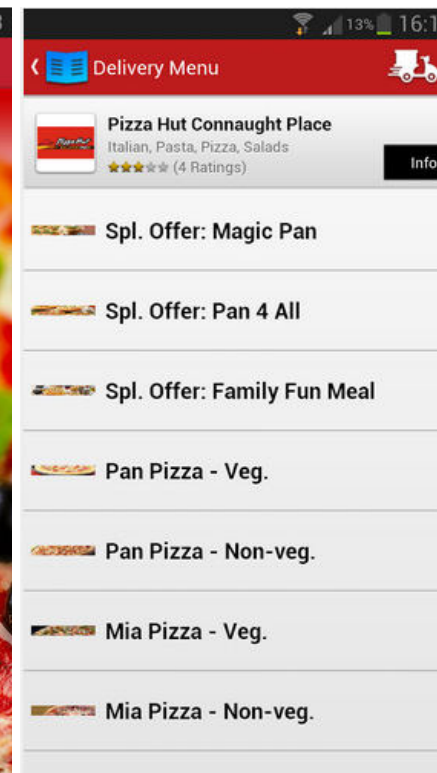
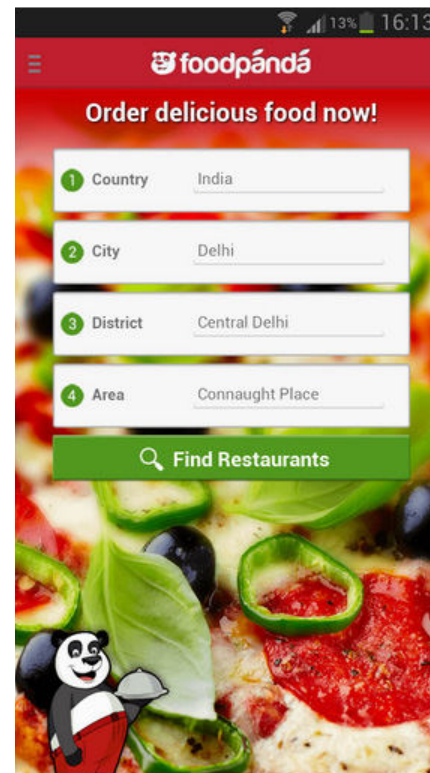
Easy search from wherever you are and foodpanda will display all the restaurants available around you and pay in cash on delivery. After the order is placed user will receive a text message on their mobile with the details of order and the expected time of delivery.

According to user, there are glitches in current system which results in bad experience.

- Ordered multiple times and in all instances user was informed that the restaurant will not be able to deliver.

- Having selected the city, user can't find the area in the list. If they pick a nearby area, they can't find the street in the list. Allow user's to suggest their area/street & manually screen such requests.

- Order not processed a multiple times. There is no feedback system to track the order.



6.1 PRIMARY RESEARCH

USER STUDIES

Conducted contextual enquiry interview with the following groups to understand the eating behaviour and there ordering habits. The open ended discussion made it possible to understand the process and get detailed information about ordering food.

PRIMARY USERS [1]

18-21yrs (Mimic Beginners)..... 04 Users
College Students

22-25yrs (Newbie Shopaholics)..... 05 Users
PG studies/Newbies entered in professional career

26-30yrs (Responsibly Spendthrift)..... 03 Users
High focus on profession/career

SECONDARY USERS

Restaurants/Standalone Outlets..... 01

Franchisee..... 01

Delivery Boy..... 01

Gathered all the data and analysed it to understand the problem area more clearly. Identified key factors determining repeat orders, motivation and reasons for ordering in to get meaningful insights which resulted in number of design ideas and concepts.

6.1 PRIMARY RESEARCH

EXISTING WAY OF ORDERING

Through this we understand the existing way of ordering. The entire process is divided in three phases.

Phase 1 **PLANNING**

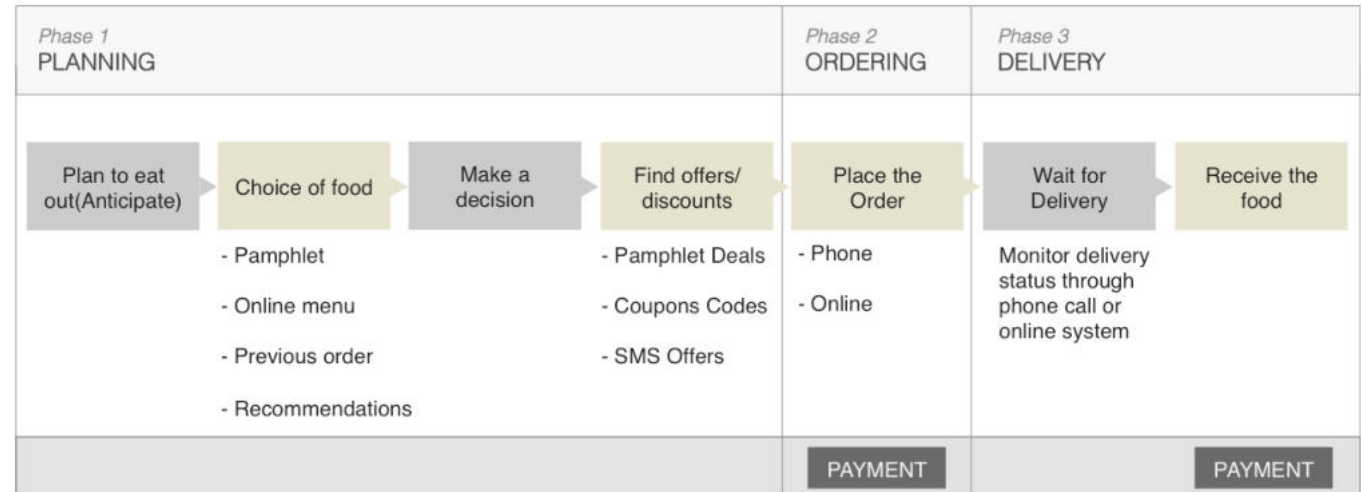
In this phase, user plans to eat out by making choices from pamphlet/brochure/recommendations. He/She then decided from where to order on the basis of the best deals available.

Phase 2 **ORDERING**

Once the user decides what to eat he places the order through phone or online. In case of online ordering, the payment is mostly made through card.

Phase 3 **DELIVERY**

After the order is placed, restaurant receives the order. They prepare the meal while the user is waiting for the delivery. User monitor's the status through phone call or online system. The food gets delivered and the payment is made in cash.



6.1 PRIMARY RESEARCH

ECOSYSTEM OF FOOD DELIVERY

There are a series of steps in which the food is delivered. The ecosystem briefly shows existing way of ordering food and the gadgets supporting the system. Following are the categories in which the process is divided and it also shows technology used at each step by different stakeholders and user's.

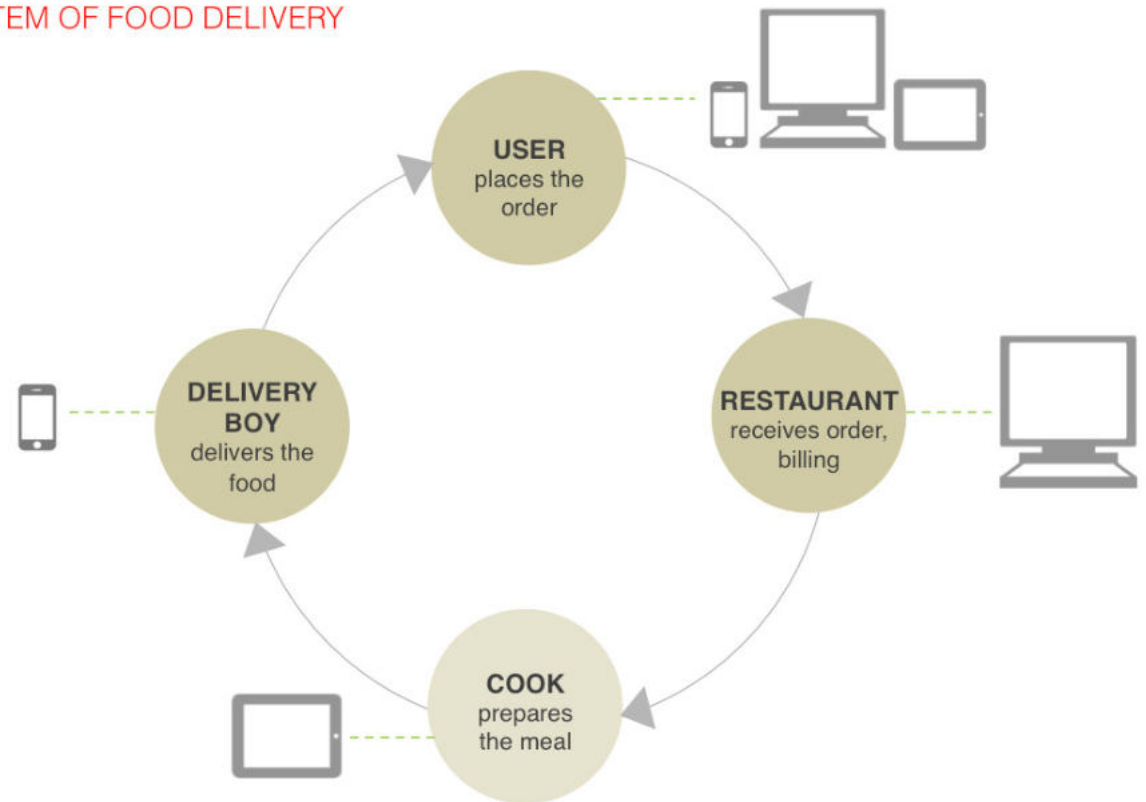
How it works?

User places the order through phone/ computer/tablet. Restaurant receives the order via phone/desktop and the billing of the order is done on the system. In small restaurant it's done manually. Once the order is received by restaurant manager, it is then transferred to the cook who starts preparing the meal.

Delivery boy picks up the food with the location given on the phone or on the bill and the food is delivered to the user.

The system proposed further will be supporting the existing service by enhancing the overall experience. User's front being the main focus.

ECO-SYSTEM OF FOOD DELIVERY



6.1 PRIMARY RESEARCH

EATING OUT BEHAVIOUR

User's behaviour and preferences are influenced by evolved lifestyles, changing attitudes, openness in mindset, western influences and the increasing need for convenience. This is driving the need and demand in food service sector. [1]

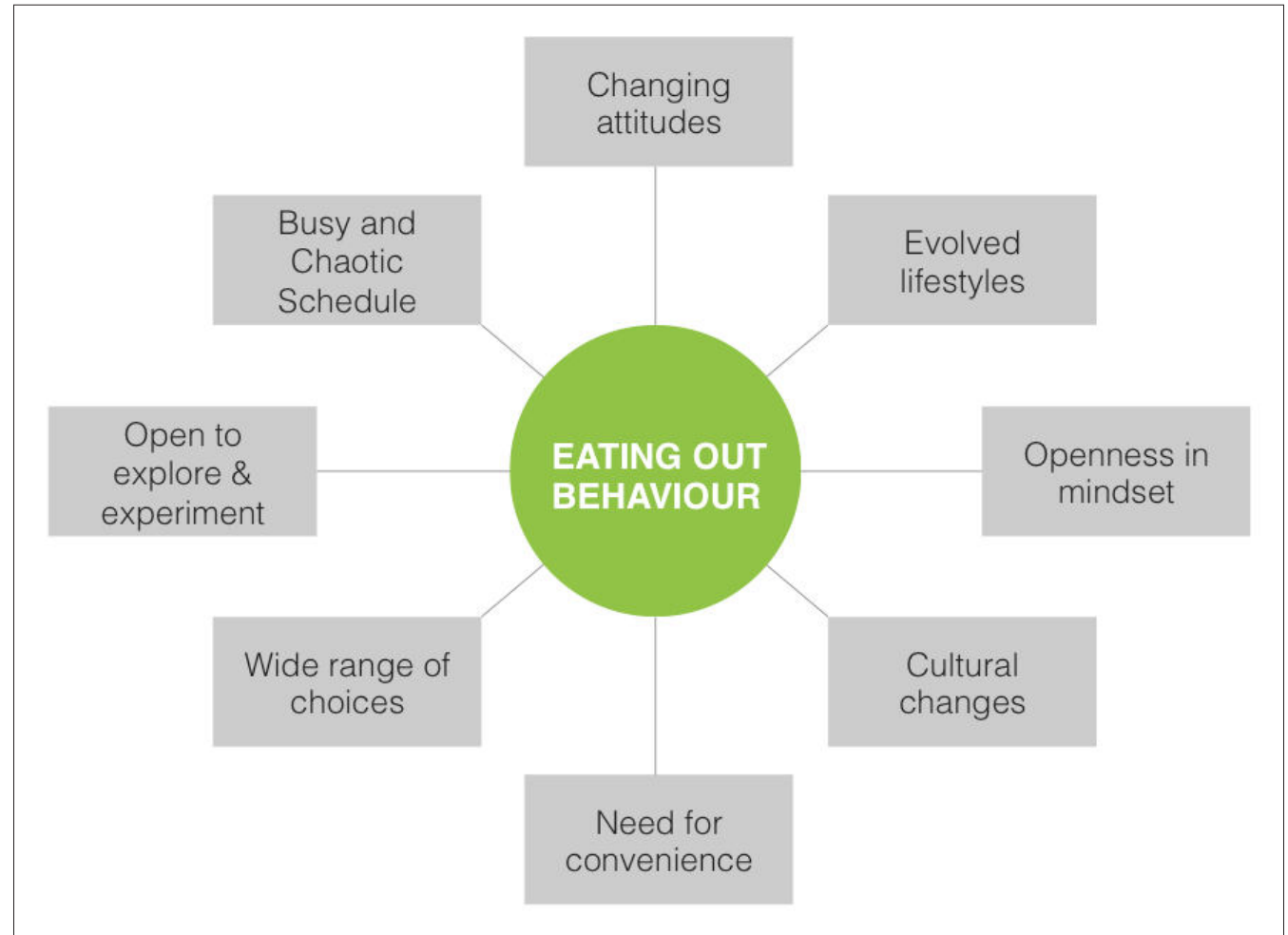
From user study :

- User's are highly informed, with a wide range of choices for newer cuisines and formats and are open to experimentation.

- They have hectic and busy schedules. With long commuting time and distance being a major factor for eating out, it becomes a highly impulsive activity. The average frequency of eating out is high.

- Diverse and Unpredictable demand

Due to diverse ethnic backgrounds, user's have different requirements and ever changing needs. Classifying their preferences, eating behaviour and create offerings accordingly is a challenge.



6.1 USER STUDIES

KEY FACTORS DETERMINING REPEAT ORDER

User's specified the key elements relating to repeat visits are mostly taste, price and location followed by the quality of the food. Following are the specific preferences of the different groups.

18-21 YEARS

Taste and quality are the most important factors followed by the price affordability. This group hangs out near college and believes in making regular visits to the most frequent outlets.

22-25 YEARS

Factors like quality of service, taste and quality of food are ranked preferred the most by this group, as they indulge in more experimental cuisines ordering from the same food service outlets. The menu, price and familiarity are next on the list.

26-30 YEARS

The taste and quality is the most crucial factor determining the choice of this group. Familiarity of the restaurant, promotions and offers and quality of service also remains important



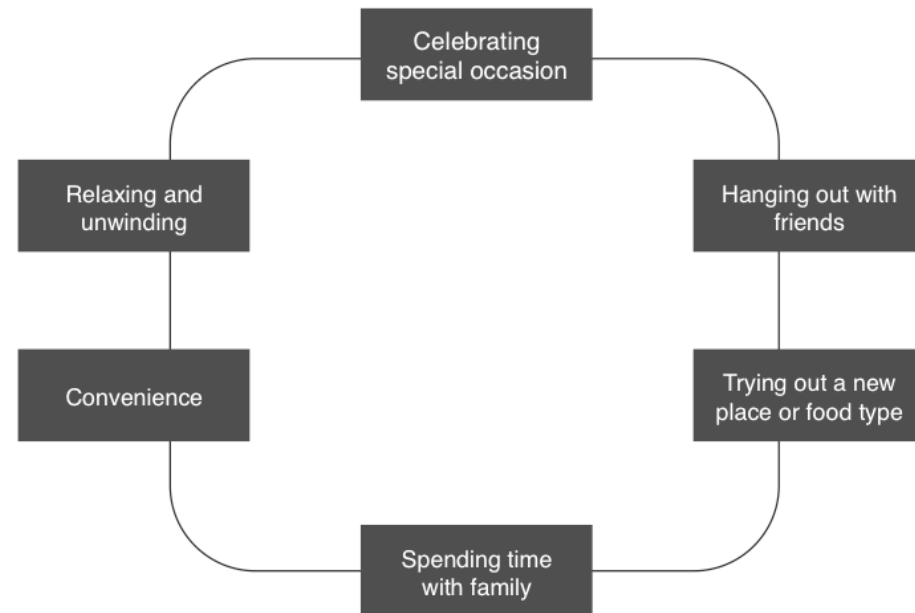
6.1 USER STUDIES

MOTIVATORS & REASONS FOR ORDERING

REASONS FOR ORDERING

In this user group, trend of celebrating each and every occasion is picking up which also includes exploring and experimenting with new cuisines and dishes.

- Occasion to hang out with friends and eat out with families is becoming common.
- User's have this urge to explore newer cuisines and seek a convenient place to relax after college hours and work hours.
- Most of them indulge in eating out with friends/colleagues to celebrate occasions like promotions, birthdays, farewells etc.



MOTIVATORS FOR A FIRST TIME RESTAURANT ENGAGEMENT

From the contextual enquiry I discovered that the major motivators of this group to visit new restaurants are:

- Recommendations from friends and family
- New Cuisine options
- Special offers and discounts
- Location & Approachability



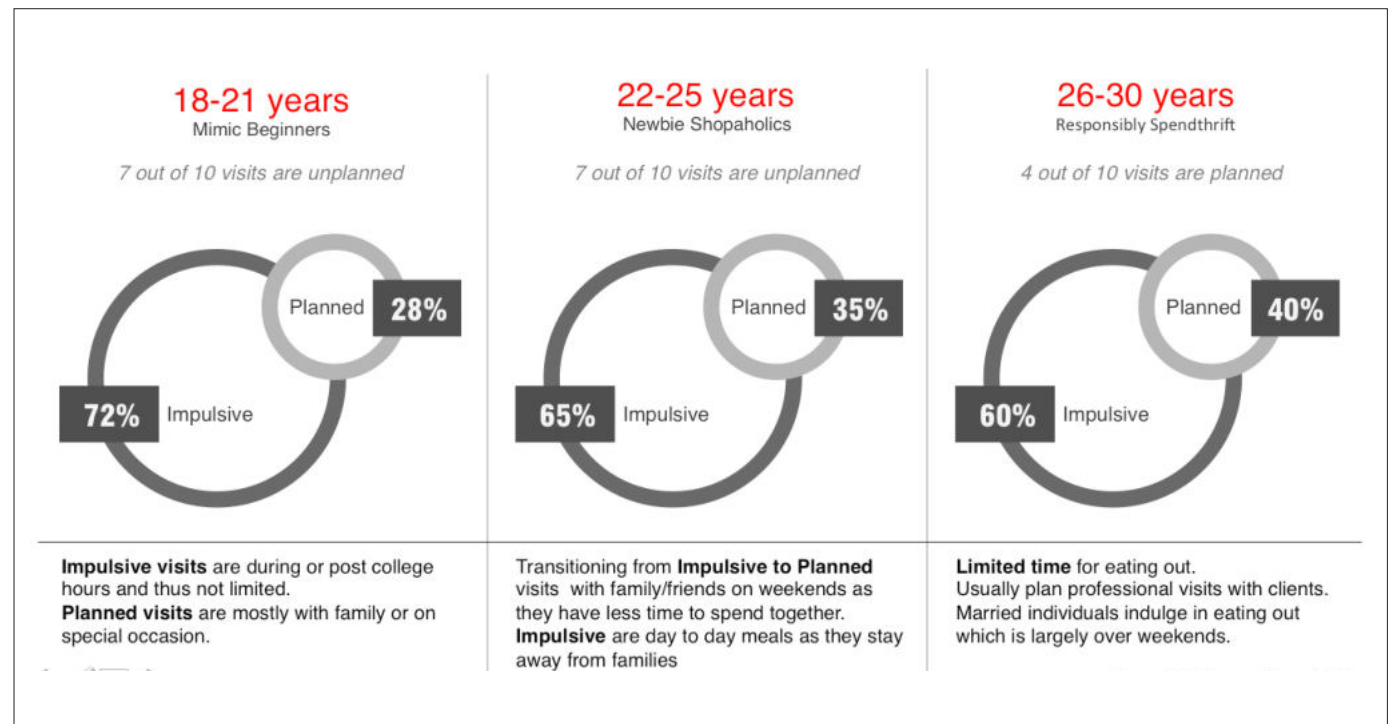
6.1 USER STUDIES

EATING OUT IMPULSIVE VS PLANNED

According to the literature study [1], the nature of eating out in **18-21 years** group is mostly impulse for majority of the people in this group, as most visits are during or post college hours and thus not limited to weekends. Planned visits are mostly with the family or on special occasions.

For the people in **22-25 group**, eating out is transitioning from impulsive to planned visits as the group has recently started eating on weekends and are usually planned with family or friends as they have less time to spend together during week. Impulsive visits are mostly day-to-day meals as many people in the group stay away from families.

The nature of eating out is shifting from impulsive to planned in the age group of **26-30 years** as this group's members have limited time to indulge in eating out. They usually plan professional visits with their clients. Married individuals indulge in eating out with spouse/family, which is largely over weekends.



6.2 USER STUDIES

PROBLEMS

TIME CONSUMING PROCESS

- View the menu card online/pamphlet/memory
- Decide the cuisine
- Choose a Dish
- Search for the number
- Call the restaurant to place the order
- If the restaurant is closed/dish is unavailable, the user has to go through the entire process again.

PERSONALIZATION

- Some of the user's mentioned that they don't like calling because the restaurant gives a lot of alternative options for customization which confuses them and delay the decision making process.
- After user places the order restaurant informs either the meal is not available or the place is closed.

EXTRA SERVICES

- The service provider i.e. the restaurant messages and calls regardless of the order placed for announcing new deals and offers.
- It's very difficult to get and apply the coupon code. User's have to do Google search for the valid and relevant coupon code, then go back to the ordering site and enter the code which is invalid most of the time.

PAYMENT

- When order is placed via phone the mode of payment is cash. Payment can't be made by card. Cash on delivery at times becomes a huge task as the user have to withdraw from the ATM before the food gets delivered. Which is adding a extra task in the whole process.

LOCATION

- Describing the Address(building number, location, landmark etc.) over phone takes a lot of time.

GROUP ORDER

- The biggest bottle neck is paying in a group.
- It's difficult to keep a track on who paid how much. The person who orders has to collect all the money and return the change individually.
- The amount of the bill is usually split equally but sometimes it's divided according to who ordered what.
- Everyone has different choices of cuisine/ combination of food they want to eat. There is no such facility where the food can be ordered from multiple places from a single platform in a group.

REPEAT ORDER

Each individual have a different taste and preference when it comes to eating habits.

- Repeating the same order or similar flavoured food takes time. One user says 'I have to repeat my order every time I order from SUBWAY '
- Too lazy to order something new or explore.

HEALTHY FOOD

Healthy food is an important factor for people who order on regular basis. There is a growing preference among users for healthier food, a choice made necessary by their hectic lifestyles, lack of time for exercise and for cooking a meal at home.

- Young adults lack the knowledge and skills necessary to manage a nutritious eating pattern.
- They already have vague nutrition goals, such as being healthy. What they lack is the comprehensive picture of whether their current habits are fulfilling those goals.

GROWING PROMINENCE OF TAKEAWAY



The **shift in habits of user's and changing lifestyle trends**, with **increasing disposable incomes** combined with work and hectic schedules.

Also there is this **increasing congestion levels and longer waiting times** at many restaurants have made a major chunk of user's going for the convenience of ordering-in at home/office rather than eating out.

Additional, **access to the internet and mobile communication has increased** the demand, as the user's have easy way to get the food delivered at the desired place.

Office goers staying away from their home-towns prefers home delivery instead if dine-in and cooking as they **don't get time to prepare their own meal** and they get tired by the time they come back from work.

To sum up, **busy and chaotic lifestyle** has majorly increased the demand of home delivery systems which is more simple and convenient.

Ordering-in gives an option of going away with the chaos of preparing and cooking food at home and is much demanded by the increasing number of working class professionals.

SECONDARY RESEARCH

CUISINES OFFERED

TOP 10 CUISINES OFFERED ACROSS FOOD SERVICE SEGMENT

Cuisine options are evolving from being a combination of simple and familiar to being diverse in taste, style and origin. The increasing mix of ethnicities around the nation and increasing acceptability of cross regional cuisines has promoted newer options.

To sum up, while North Indian remains available option across the city types, Chinese is the next in line in terms of popularity.

MOST PREFERRED CUISINE

18-21 YEARS In this group, Italian emerges as the favourite cuisines, with chinese the next most preferred.

22-25 YEARS This group is focussed on enhancing its lifestyle by trying new places. Their preference is for international cuisine as they are open to exploration and spending more on trying new cuisines across different formats.

26-30 YEARS This group does not have much time to experiment but has already explored various options. Thus, they order from the same outlets, the decision for which is based on cuisines. International cuisines are preferred when eating out professionally or with spouse.

TOP 10 CUISINES OFFERED ACROSS FOOD SERVICE SEGMENTS



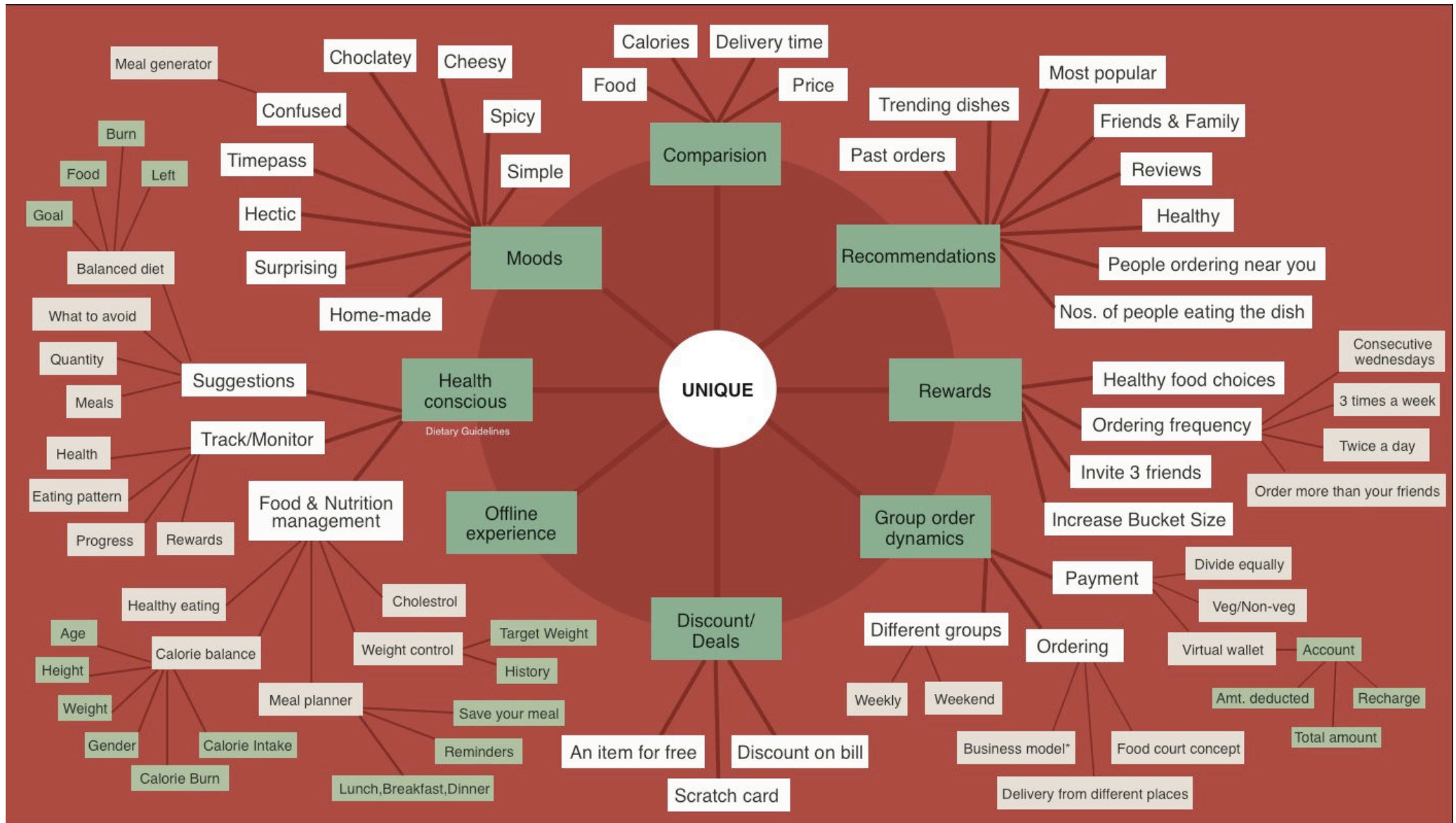
Source: Zomato, Data for 13 cities

Metros: Delhi, Mumbai; Mini Metros: Bangalore, Kolkata, Chennai, Hyderabad, Ahmedabad;

Cities: Ludhiana, Indore, Lukhnow, Jaipur, Chandigarh

UNIQUE FEATURES

Identified features which can make the system unique and explored a couple of design ideas under each category.



MOOD/FLAVOUR

If the system can show tiny slices and details of food according to the flavours they prefer or the mood there are in, it will become personalized to the given user.[5]

There is big data available on food which is not fully used. With the recommendations, tags, preferences and ratings if the system can generate a menu for users according to the mood or the flavour.

User's can tag the food from the given categories like hot&spicy, cheesy, green, sweet, mild etc. which can create more data about that particular dish and can further help the user's to make right choice and quick decisions. Also the food can be categorized on the basis of moods like hectic, quick, home-made, confused etc.

For instance, if the user is confused and can't make decide on the food, system can generate a combinations of dishes available on the basis of the likes and past orders.



Moods

Confused/Hectic/Home-made/Surprising/Timepass/Spicy/Cheesy/Choclatey/Simple

MENU GENERATOR

STARTERS



MAIN COURSE



SIDES



COMBO MEALS



Order

Generate new!

RECOMMENDATIONS

Recommendation is a suggestion to take the best course of action, especially if it's by someone you follow or know.

If the system can give personalized recommendation by mentioning who is eating what near you or what are the trending dishes currently in your locality or what are your friends and family eating, it might trigger user to order the same dish and make the decision process quick and easy.

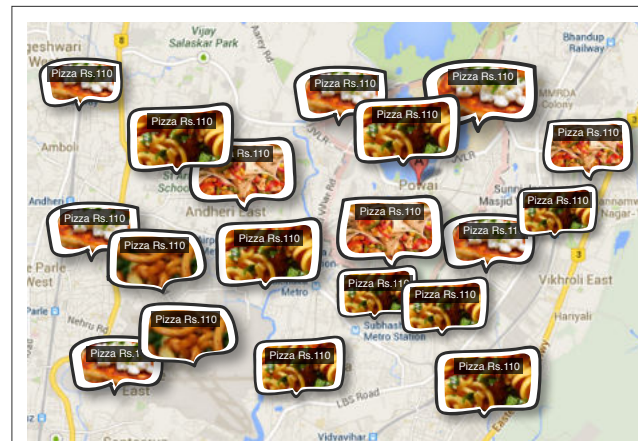
Personalized food recommendation system will take into account user's existing food habits and food discovery to suggest meals that are likely to please user's taste buds. It saves time and gives simple and easier experience.

Recommendation can also be given by following the eating pattern of the user from past orders, ratings and reviews.

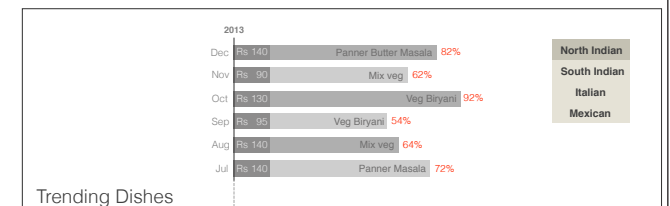
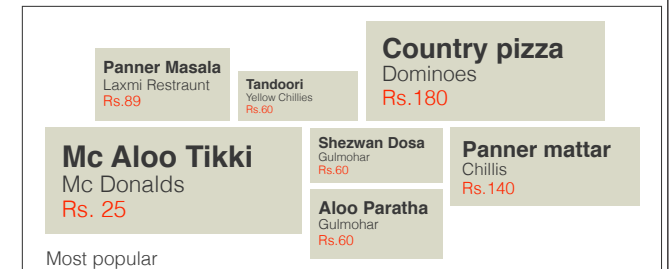


Recommendations

People ordering near you/Past Orders/Trending Dishes/Most popular/Friends&Family/Reviews/Healthy/Nos. of people eating the similar dish



People ordering near you



FOODPANDA

Comparing food on the basis of calories, price, delivery time, delivery charges, offers and recommendations can help user make an informed choice.

Food comparison tool can help user who are health conscious compare the nutritional data of two or more food items in detail.

Search the food you want to eat, choose the food you want to compare it with, compare the items to get the result and see the data at once to make better decision and get an accurate idea of what you are ordering. Similar dishes on right side gives wider options to choose from.



Comparision

Calories/Price/Delivery time/Delivery charges/Offer/Recommendation

	Country Special Pizza Hut			Farm House Dominoes			Big Mac Mc Donalds		
Nutrient	Cal	Fat	Protein	Cal	Fat	Protein	Cal	Fat	Protein
	540	19g	18g	440	20g	16g	680	24g	21g
Price	120.00			160.00			120.00		
Delivery time	40 mins			30 mins			35 mins		
Delivery Cost	-			-			25.00		
Ingredients	Crunchy onions, crisp capsicum and fresh juicy tomatoes			Sear-sizzled 100% beef mingled crisp lettuce, minced onions and tangy pickles.			Grilled chicken breast filet, crisp cucumber slices, spring greens, shredded lettuce.		

SIMILAR DISHES



07 DESIGN IDEAS

HEALTH CONSCIOUS

As user's are getting exposed to wider options and adopt a lifestyle which enhances trends like ordering-in, shifting towards a healthier alternatives have begun to be adopted.

This feature is specifically for group who orders on daily basis and are health conscious. Food and nutrition management tool can help you maintain calorie balance by keeping a track of the calories consumed per meal.

It enables users to see there eating pattern and make better and healthy choices without any efforts.

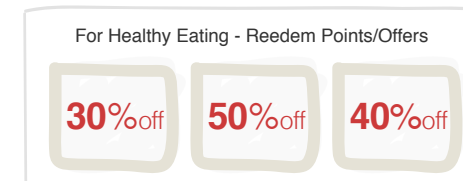
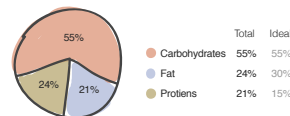
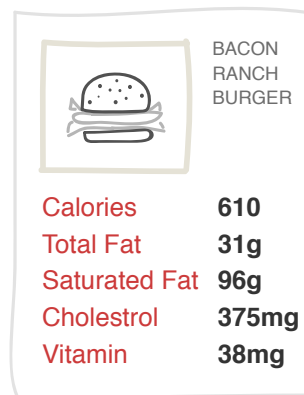
Rewards or points awarded for eating healthy food in form of motivation.

The tool can also offer recommendations or a comparison of similar or low calorie count food items with similar taste for more options to choose from.



Health conscious

Track and monitor your health/Food and nutrition management/Calorie balance/Plan your meal/ Eating pattern



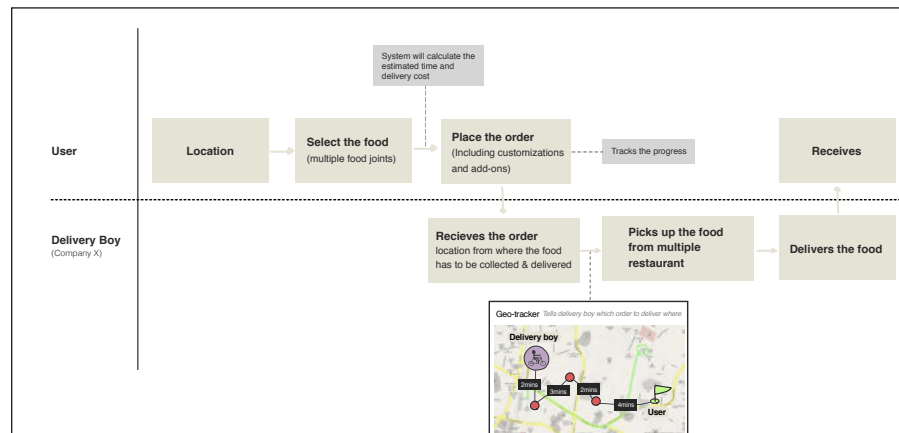
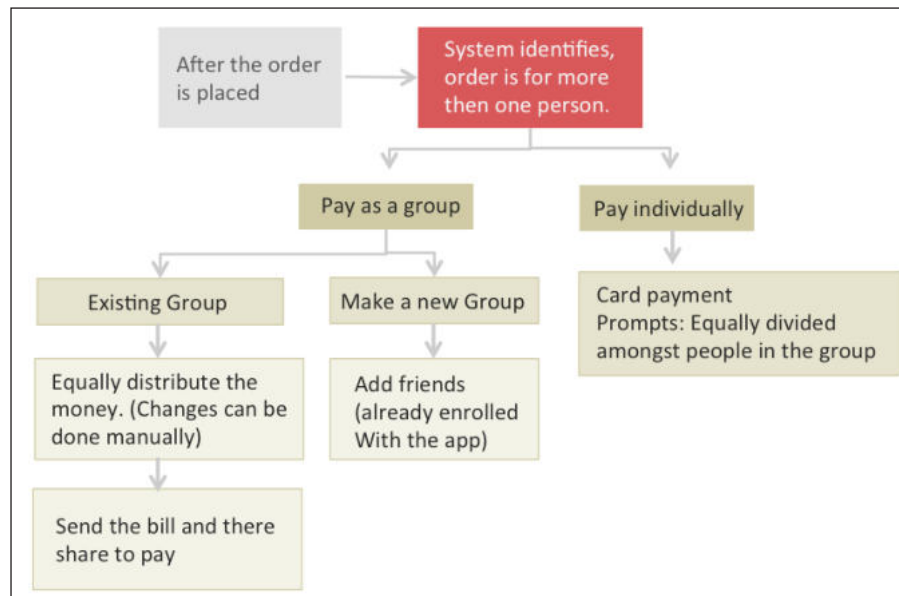
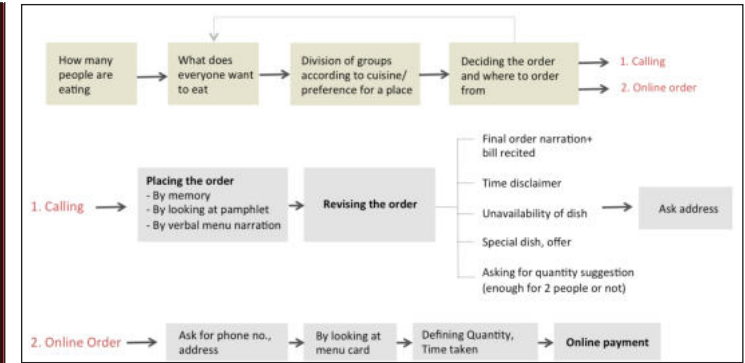
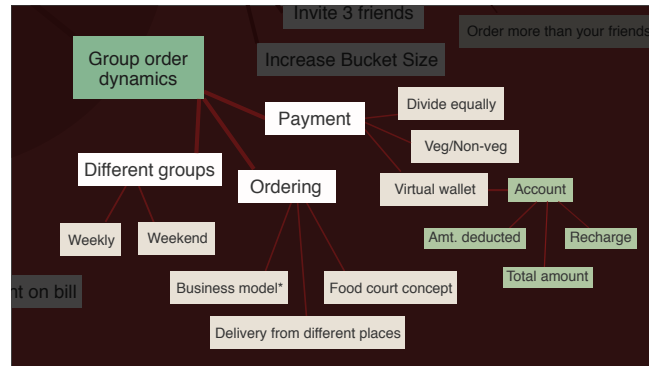
O7 DESIGN IDEAS

GROUP DYNAMICS

Group ordering can be made a lot easier with this feature. Usually, when the order is placed in a group payment becomes a big task. Either once person pays for everyone by card/cash or the money is divided equally or everyone pays for their own meal. Due to which calculating, splitting and collecting the amount becomes a huge task.

For the people who order almost everyday from outside and like to order from different places can have a system which enables them to order from multiple places at one common platform.

Proposed system makes ordering and paying in a group a lot easier. Each user will have their profile with some amount in it which can be recharged online and the amount of the order placed can be deducted from their respective accounts.

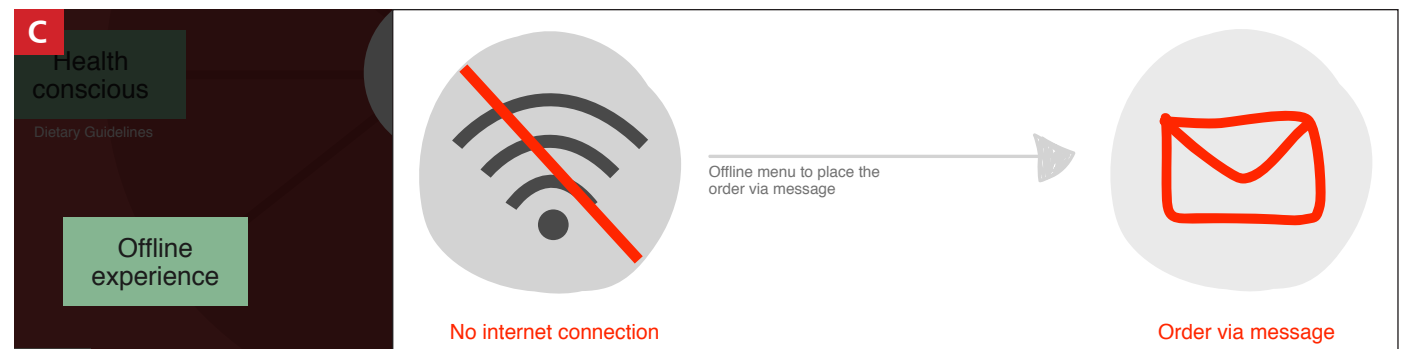
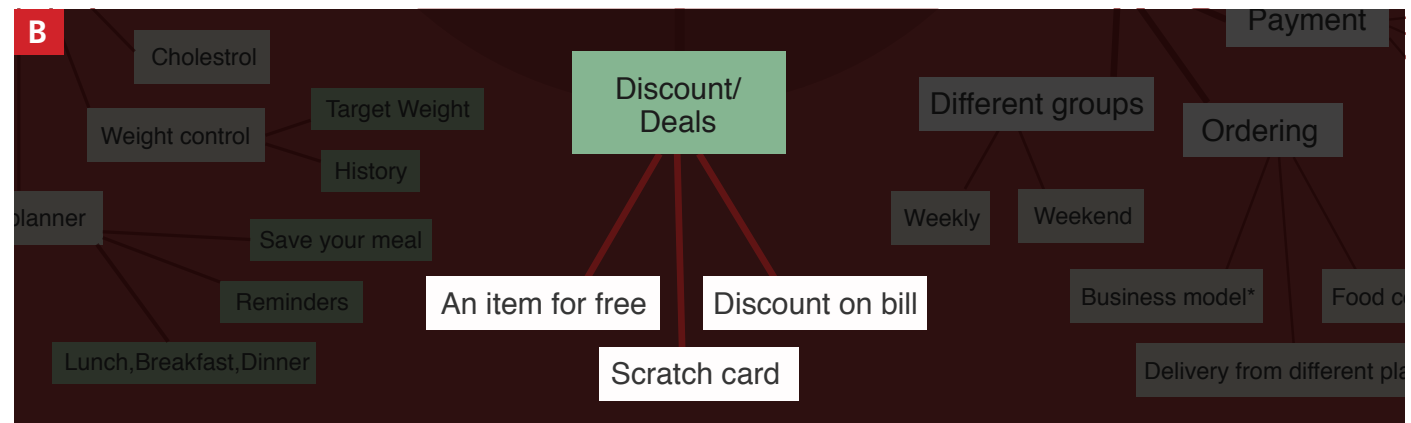
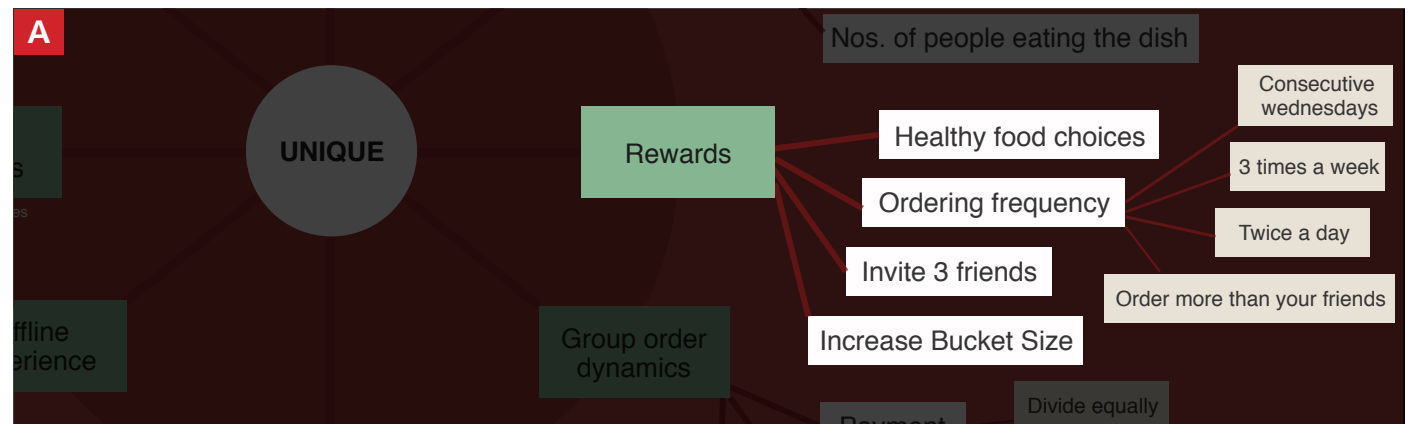


DISCOUNT & REWARDS

A. Rewards in form of discounts can be given in form of motivation. For making healthy food choices, ordering frequently like twice in a week or ordering more than your friend, inviting friends to use the app can be rewarded.

B. For all the rewards or points earned for fulfilling the above tasks, users can be given some sort of **discount** like free meal, deals/ offers on the meal or a scratch card which brings in the surprise element.

C. This features assures that the app functions without internet connection also. Menu will be saved on the device. User chooses the meal he/she wants to order and can place the **order via message**. This feature can give a seamless experience to the user and also ensures the functionality of the app without any external glitches.




OTHER FEATURES

A. The food can be filtered and customized according to the cuisine, recommendations of that restaurant, nearby places, discount/deals, veg/non-veg/egg or by entering the amount user is willing to pay for that meal. With all the filters the system can be personalized.


B. Box feature enables to add recommended dishes suggested by the restaurant and add it to the meal/box. If the user is too busy to prepare their own meal or if they are really hungry they can quickly order the lunch box which is a full meal. However, the user can skip the sides and add a new one from the same menu in approximately the same price

C. For many of the user's, cooking food everyday is a frustrating, time-consuming process, even if they know their way around kitchen. This tool can be very useful for office managers who want to schedule team lunches, board meetings, breakfast etc. in advance. It includes feature to set reminders for the unplanned meal. Daily meals can also be quickly planned in advance. User can rearrange the meal and email this meal plan if required. Simply plan breakfasts, lunches, dinners, snacks and more. Edit the meal and dishes, modify the meal plans in advance.

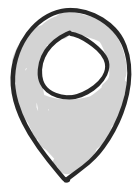
A



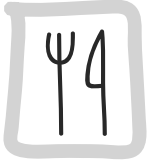
Enter the cost of your meal




Veg/Non-veg/Egg



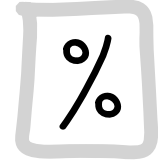
Nearby Restaurants



Cuisines



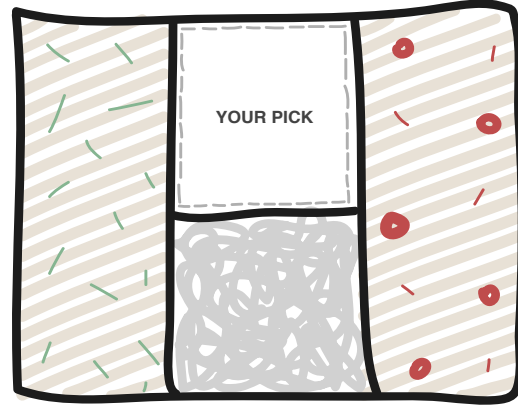
Recommendations




Discount/Deals

B


Make your lunch box/dinner box






Coke

or



Dessert

or



French Fries

C

Plan and Schedule your orders

< Jan 2014 >

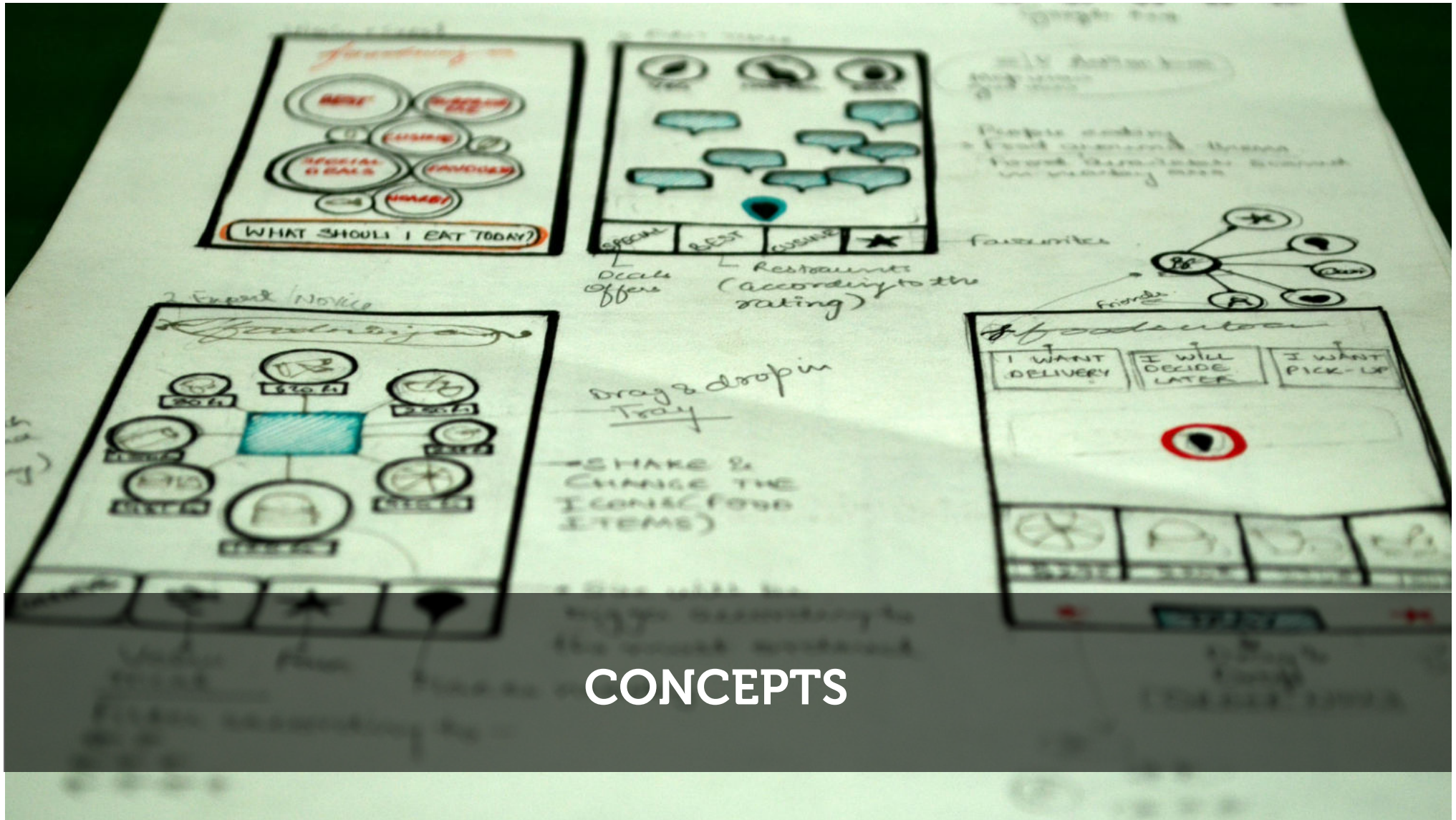
Confirm
Unconfirmed
Cancelled
Delivered
Failed

01 Jan	02 Jan	03 Jan	04 Jan	05 Jan
+	+	+	+	+
06 Jan	07 Jan	08 Jan	09 Jan	10 Jan
+	+	+	+	+
11 Jan	12 Jan	13 Jan	14 Jan	15 Jan
+	+	11:00 am Mc Donalds Rs 2425.00	+	+
16 Jan	17 Jan	18 Jan	19 Jan	20 Jan
+	+	+	+	+

Useful for office managers who want to schedule team lunches, board meeting breakfasts, Friday happy hour snacks in advance etc.

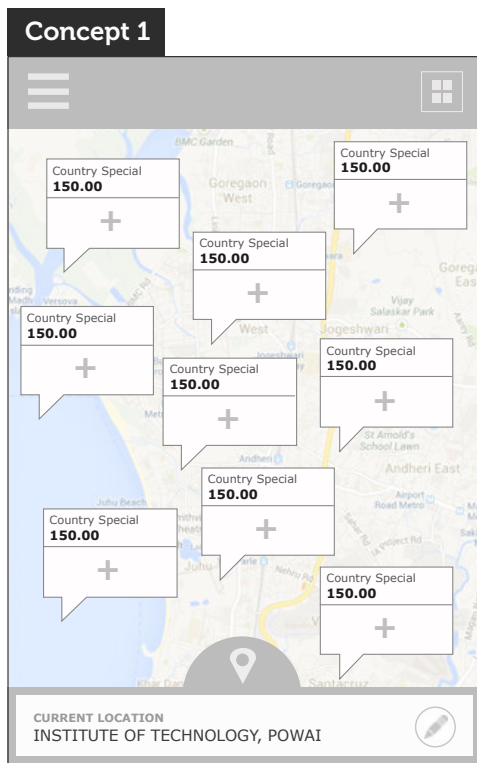
CONCEPTS

Concepts are combinations of different design ideas and thoughts. It's a general idea about a thing or group of things, derived from primary and secondary studies. Designing concepts can change the situations by shaping and deploying artefacts. Before final design a number of concepts are generated to explore, experiment and use the most feasible one.

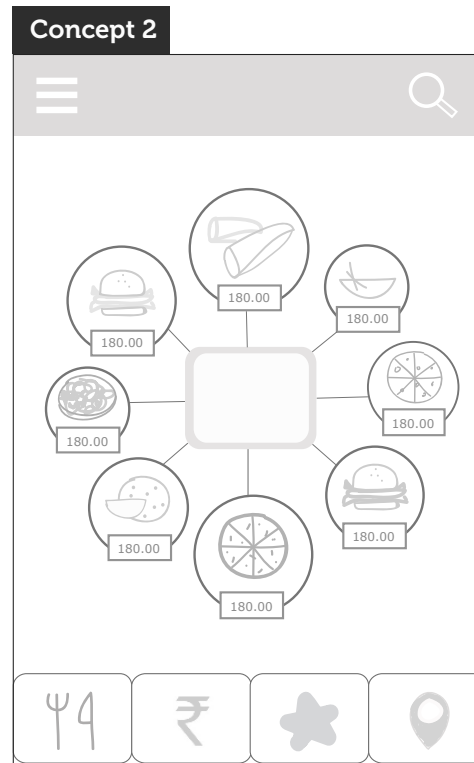


CONCEPTS

CONCEPTS

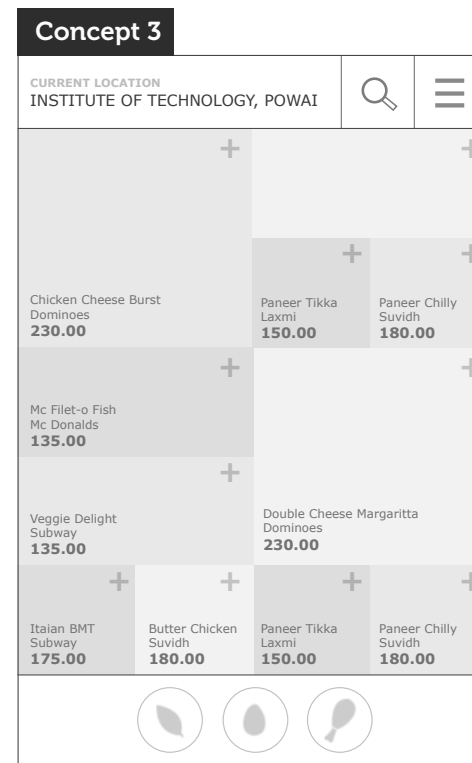


Concept 1 enables user to view the **trending dishes** in the nearby area or what people are ordering near them. In one tap, user can add the dish shown and make the payment. The app also detects the location automatically which can be changed if required. It's a quick and easy way to place order.



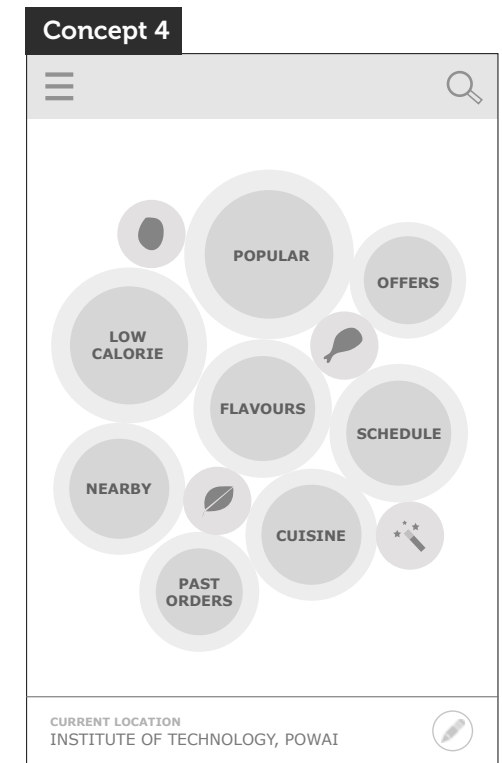
This concept shows **past ten orders** on the home screen which can be dragged and dropped in the tray to order the food.

Filters like cuisine, amount, ratings and nearby are upfront to get desired results. It makes the app personalized as the user can filter according to their choice and needs.



Highest rated dishes is in the biggest box followed by other sizes of boxes which is based on ratings of the special dishes in nearby restaurants.

Food can be simply filtered on the basis of veg/non-veg/egg. One can filter the information further by tapping on top right corner. There is a big search on the top to get quick and better results.

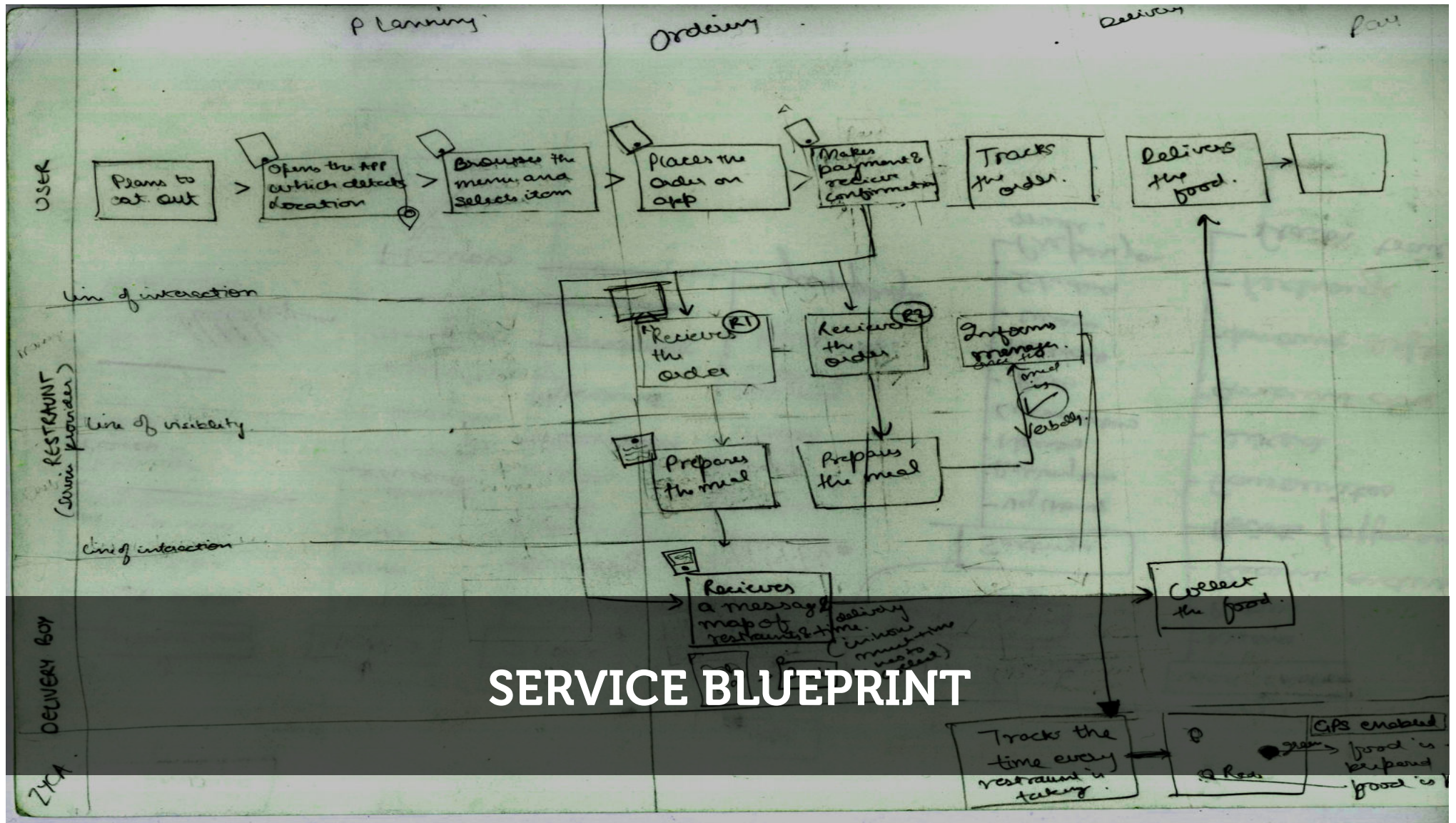


The fourth concept is implementing all the **filters** on home screen. Health conscious people can directly go to low calorie food without having to spend time at other places. It gives personalized information to some extent. Filters are upfront and given maximum emphasis for accurate and better results.

9.1 STRUCTURE

SERVICE BLUEPRINT

First identified all the key activities involved in creating and delivering the service in question and then specify the linkages between these activities. Initially, it's best to keep activities relatively aggregated in order to define the big picture. You can refine by drilling down to obtain a higher level of detail - Christopher Lovelock



9.1 STRUCTURE

SERVICE BLUEPRINT

The service blue-print indicates the basic service design flow on how the existing online food delivery service works. Pivoting at possible design interventions in the service structure, Zayke intervenes at specific service points and try to improve the overall experience from a service design perspective.

There are 5 major service player entities which includes the user, the restaurant, chefs and back-end system of the restaurants, delivery module and Zayke front-end as well as back-end. Zayke front-end application acts as the first touch-point of the service with the user. This touch-point acts as the line-of-interaction between the service receiver and the service provider. Zayke send update directly to the restaurants as orders arrive. The chef and the delivery system are secondary back-end service provision entities. The whole experience is thus improved with the coupling back-end enhancement of the service by Zayke.

In the service blue-print, service structure has been divided into 3 stages based on the service handling.

PHASE 1: PLANNING

In planning, as a user plans to eat out, Zayke front-end app plays an important role in helping the user browse through and make an order decision.

PHASE 2: ORDERING

In the ordering stage, Zayke acts as the middle man to ordering food items from the participating restaurants.

Zayke's ordering system intervenes the traditional ordering system of making orders from a single outlet; rather allows users to make a single order from multiple outlets or restaurants of their choice. Orders and payments are made directly from the app. The orders are then updated in the Zayke backend system to carry out appropriate service related activities. Once the order payment is made, the restaurant receives the order request and thus executes at different levels of service players.

To handle failure (recovery from failures), Zayke also provides a regularly (almost real time) updated order status to ease user expectation.

PHASE 3: DELIVERY

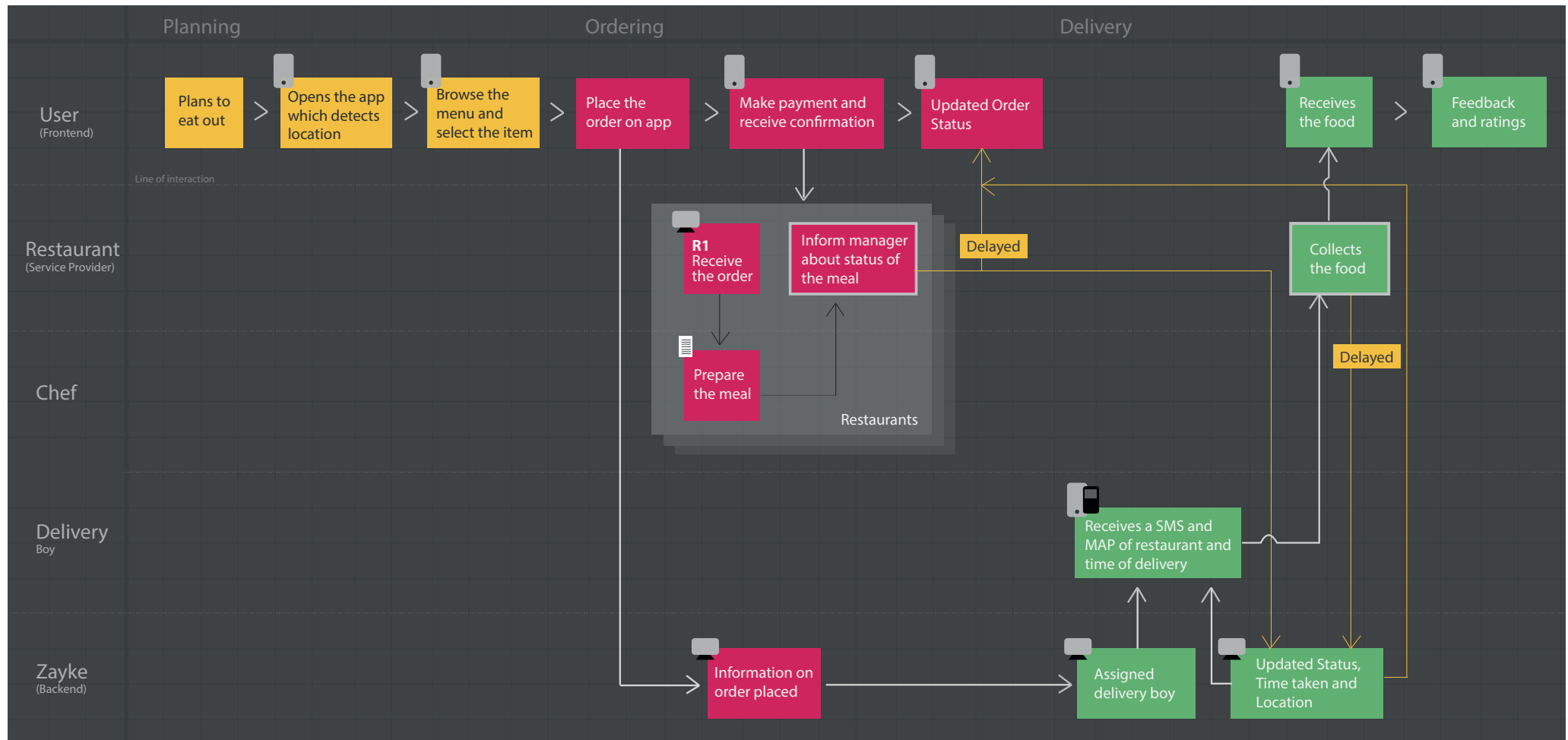
Zayke intelligently assigns the delivery personnel based on their location and status. The delivery person constantly is updated with the status of the food from the restaurants from where the food is being delivered.

This lessens the gap between the service failure and user satisfaction. As soon there is a failure in the service structure, Zayke tracks the updates and notifies users with appropriate messages.

In case of service failures, these may include personalised message, or a discount coupon or a complementary side dishes etc. The back-end failure service flow are represented with yellow arrowheads in the service blue-print diagram.

9.1 STRUCTURE

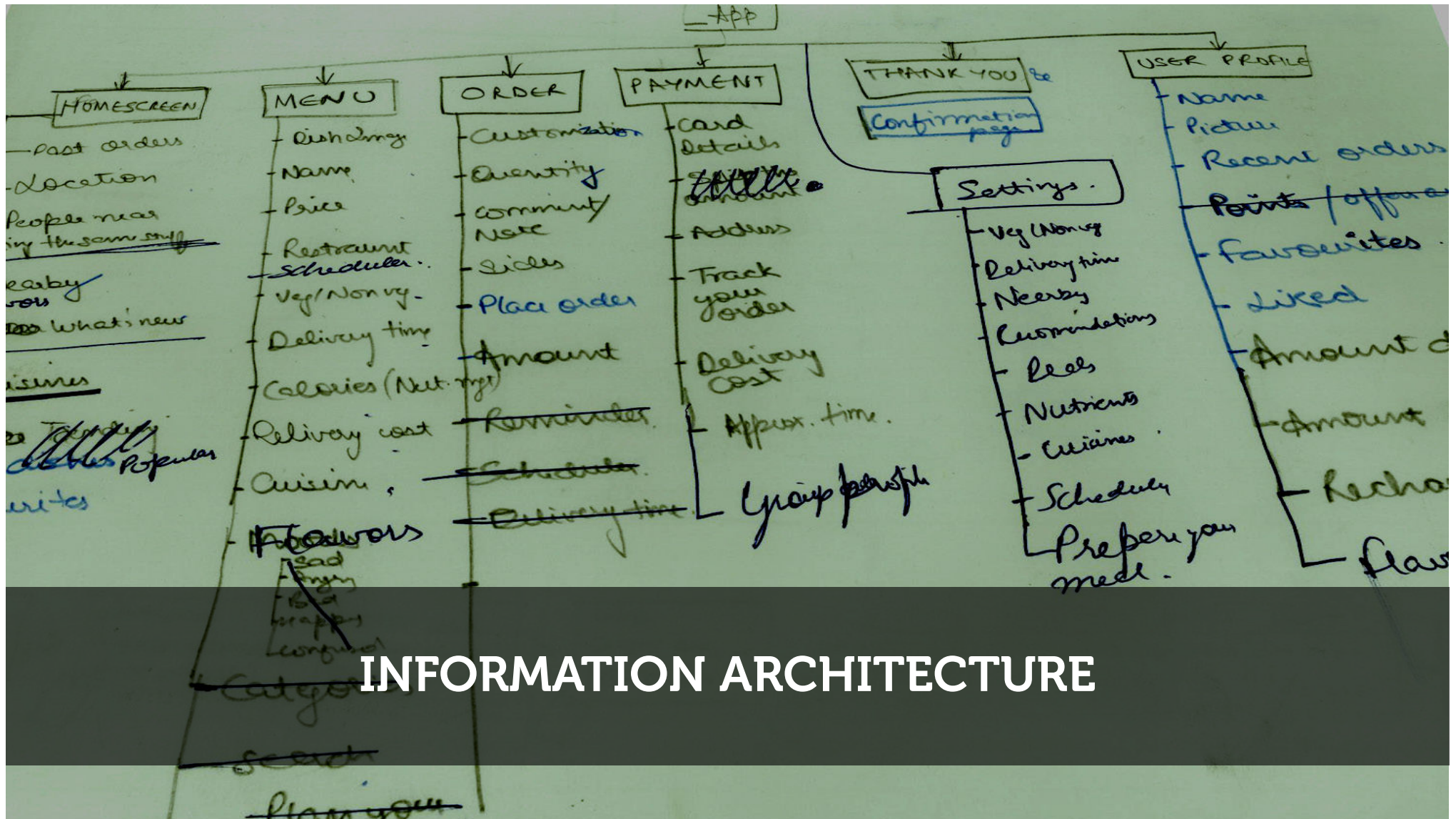
SERVICE BLUEPRINT



9.2 STRUCTURE

IA

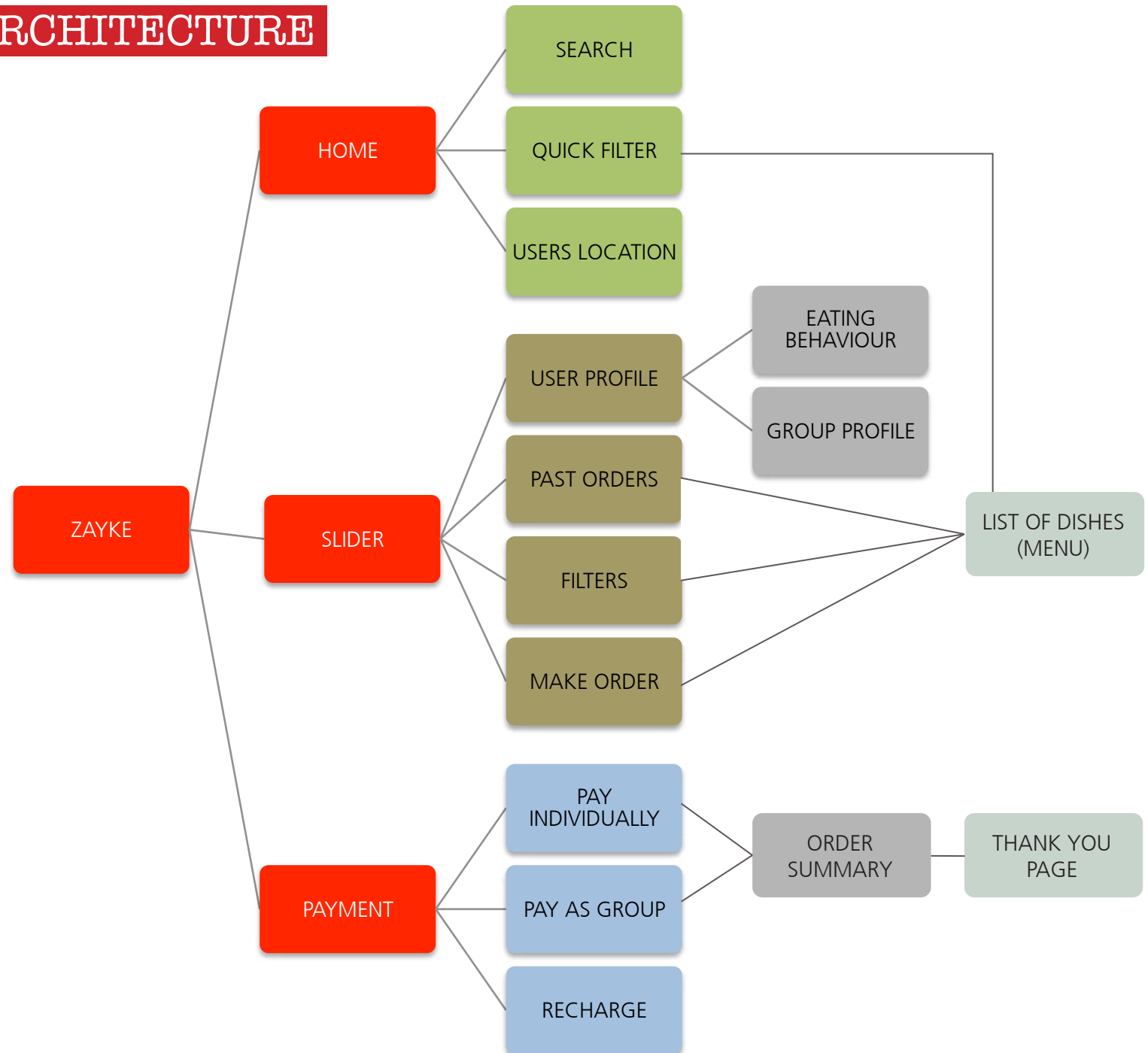
Information Architecture focuses on macrostructure, providing just enough detail to enable the team to get the “big picture”. The task is to determine the appropriate level of detail to meet this objective. The system presents the user with paths. The user moves along these paths through actions. These actions then cause the system to generate results.



INFORMATION ARCHITECTURE

9.2 STRUCTURE

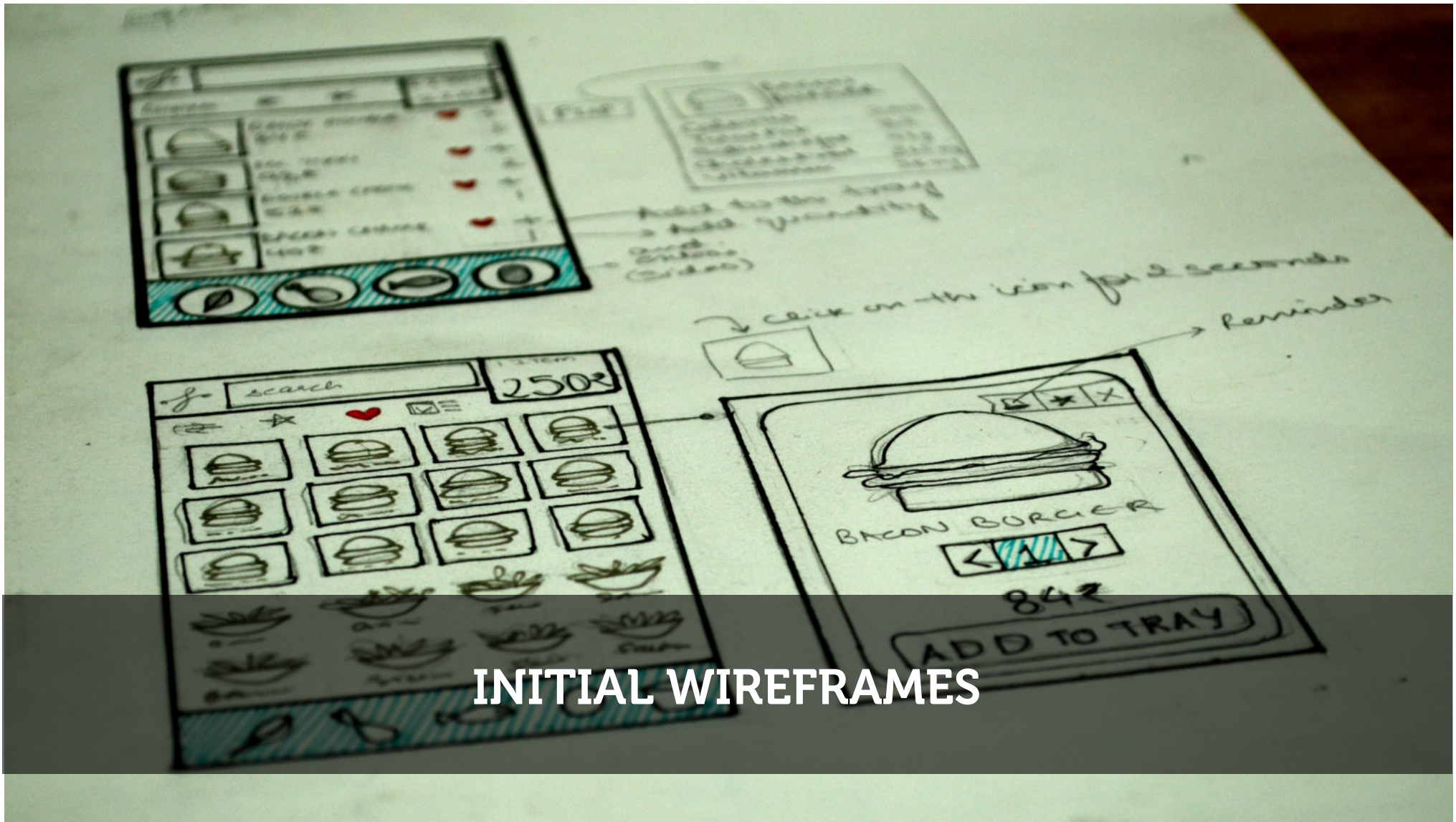
INFORMATION ARCHITECTURE



10

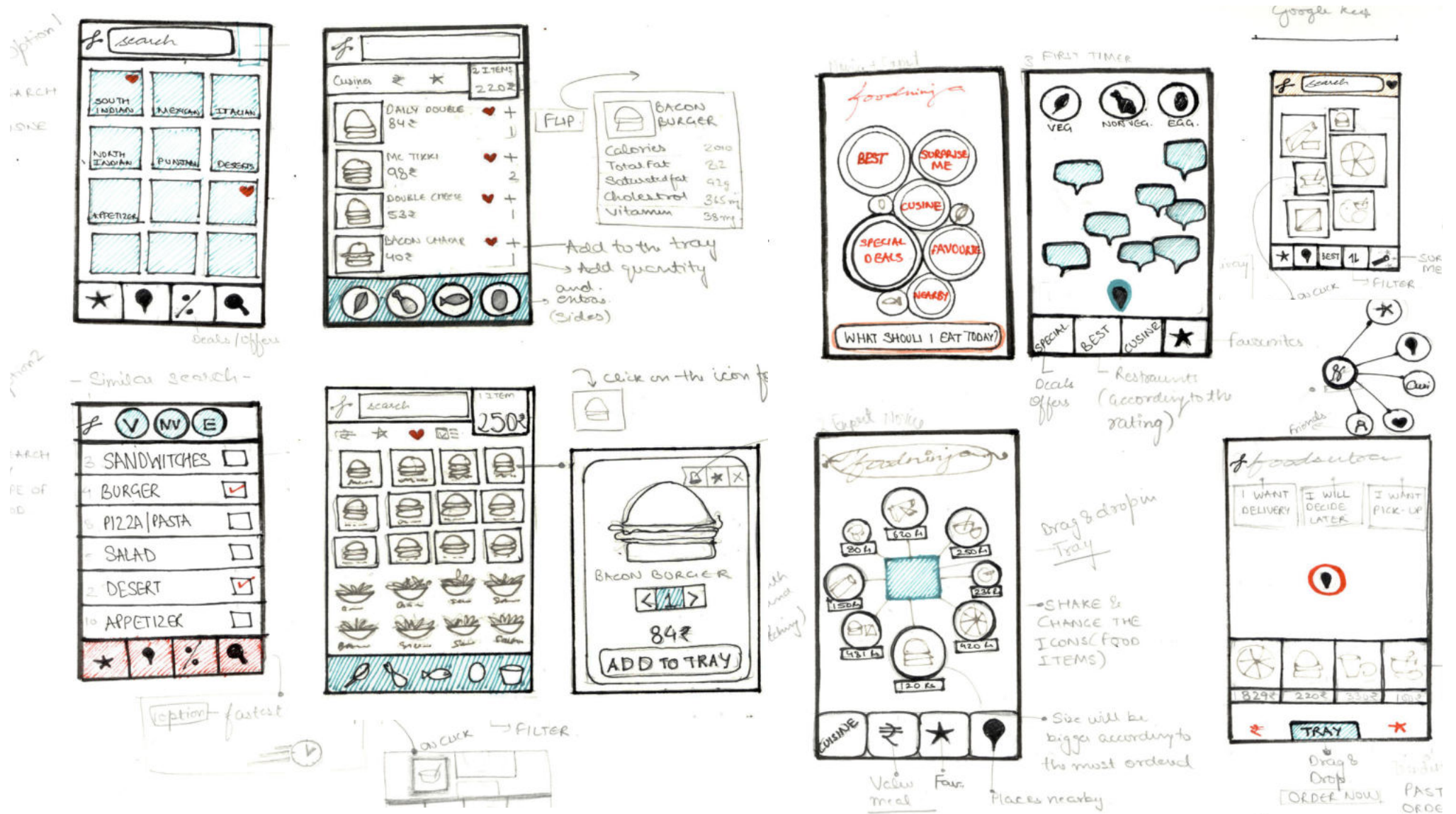
EXPLORATIONS

Wireframes on paper which helped to create system that fulfils user's expectations and need. It's a method to explore multiple solutions for one problem and choose the most effective one. Easy method to understand various possibilities which helps to communicate design idea's in a better way and quickly iterate the design.



INITIAL WIREFRAMES

Following explorations were done on paper as it's simple to create quick interfaces. These low-fidelity prototype gave a clear picture of the interface by representing all the design ideas collated together. These are mainly wire-frames representing the area of screens where content will appear such as images, text and navigation. All the explorations helped in evaluating the idea behind the user interface.



11.1

VISUAL DESIGN DETAILS

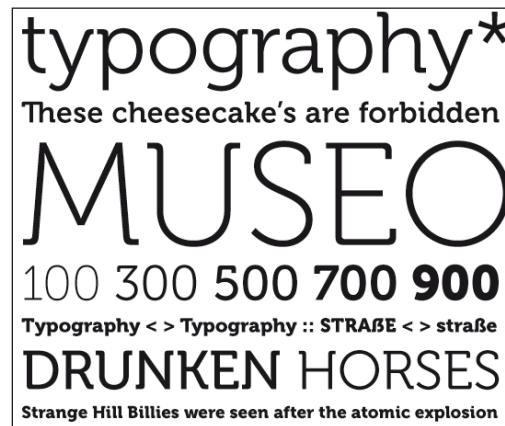
Typeface



Roboto is created specifically for the requirements of UI and high-resolution screens for Android platforms. It is used as body font in the app.

Typographic Scale

Contrast in type sizes used to create visual order and understandable layouts.



Museo 700 is used as heading font in the system. It is a sturdy, low contrast, geometric, highly legible sans serif typeface very well suited for the heading text in app.

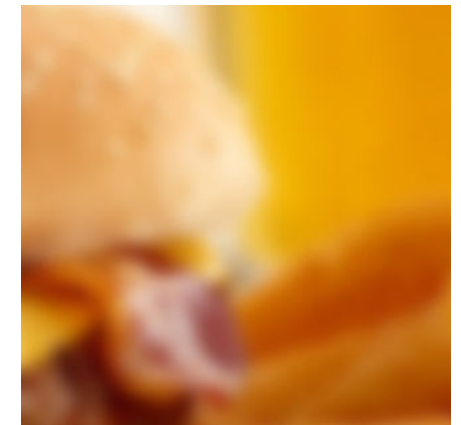
Colour palate



Colour plays a very important role. Red is used throughout the app as it gives sense of excitement and curiosity.

Most of the fast food chains have red as the base colour as it is inviting and it's the colour of power.

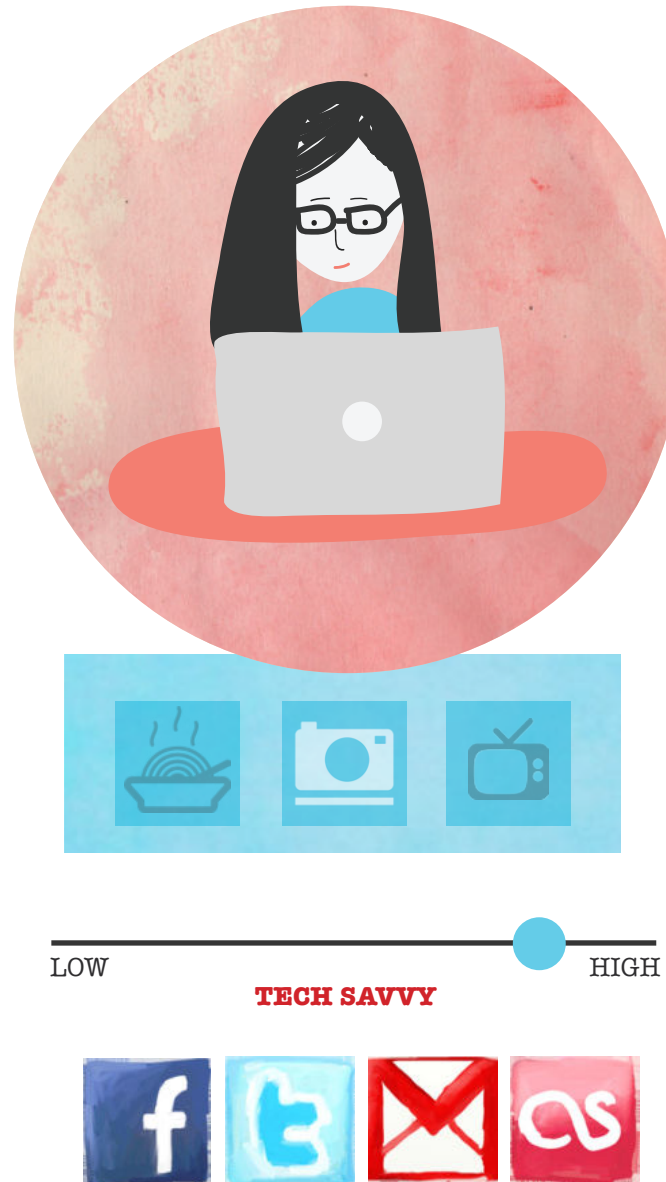
Look and Feel



Using sharp, in-focus images can make the design look very complex, and doesn't always have the desired effect. Blur images of food are used to drastically reduce page loading times as the image resolution are low. Also it gives a style to the design which is maintained through all pages.

11.2

SCENARIO 1



Anita is 25 years old. Her hometown is Bhopal but she stays in Mumbai as she works in a MNC.

She is very outgoing and a social person. Anita loves traveling, eating and watching television after her working hours.

She stays in an apartment with three other girls from different offices. Like others, she is quiet tech savvy and this is her second smart phone. She's fairly active on social platforms like facebook, twitter, instagram.

As the girls have different working hours, instead of keeping maid they decided to cook their own meals. Due to lack of time, they end up ordering from outside every second day. Anita is not as health conscious as her flatmates, who keeps track of what and how much they are consuming on everyday basis.

In office, Anita generally orders food from outside, as she and her colleagues are tired of the same canteen food.

11.2

SCENARIO 1

Anita's day at work with her colleague Kavita from marketing department - **TUESDAY**

Advanced user

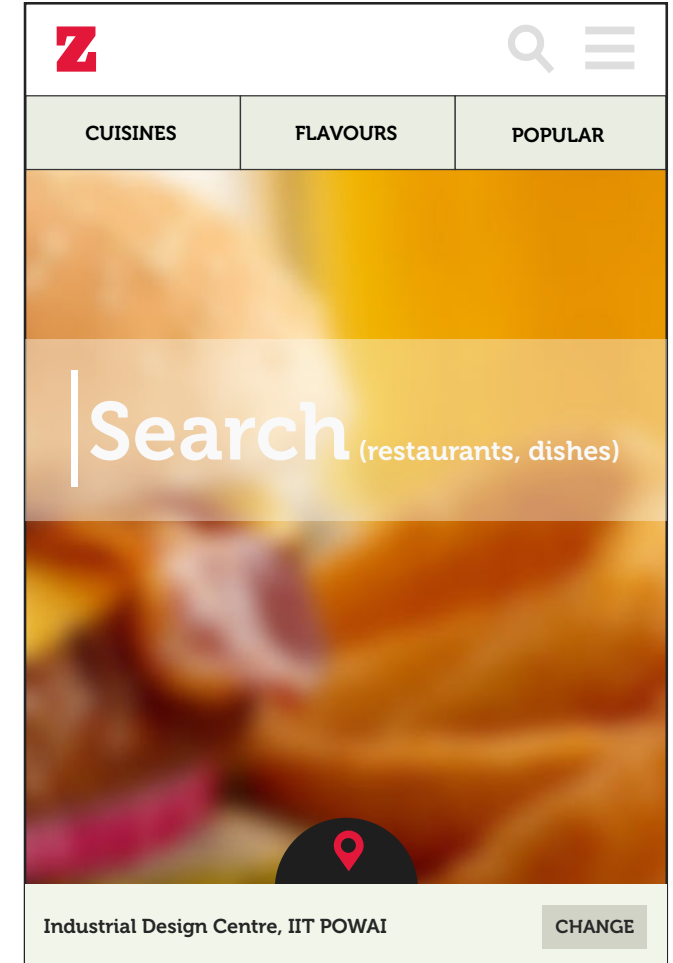


As the team is on sprint, Anita is spending most of her time with the marketing department. On the first day at lunch, the team decides to order food from outside because they were in a meeting at lunch time.

Kavita takes the lead and opens her app **ZAYKE** to order food for her team. They decide the cuisine and let kavita order for everyone.



Zayke Splash Screen

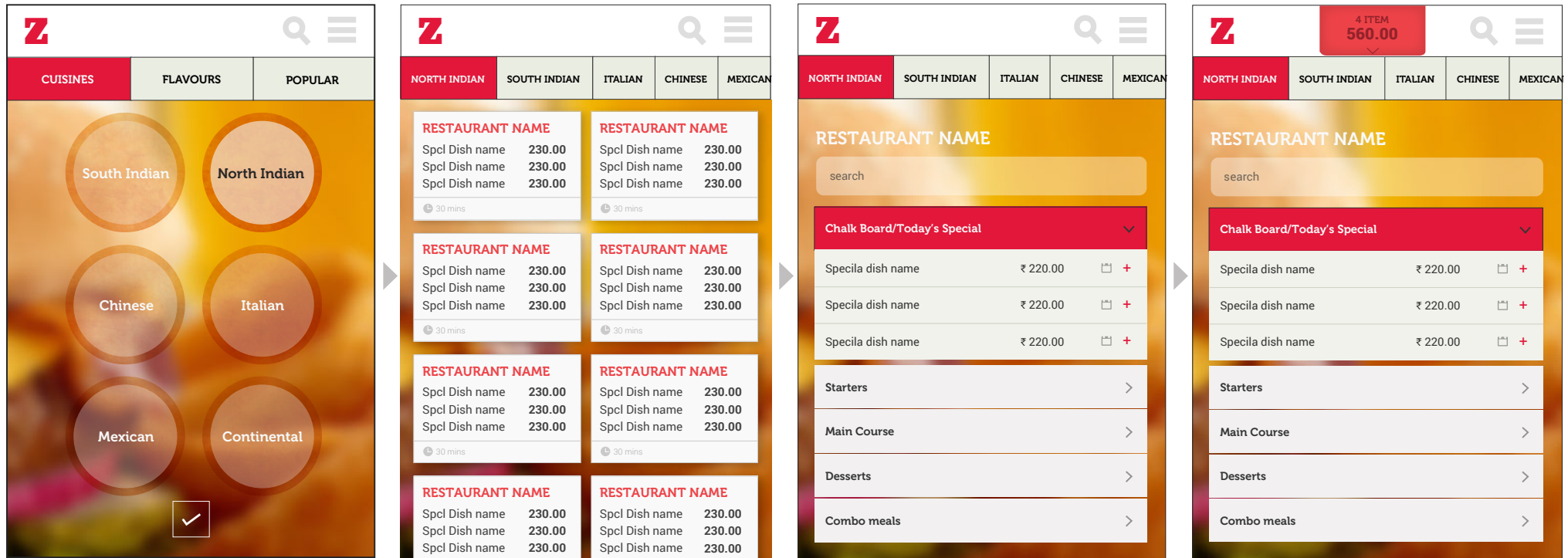


Home-screen

11.2

SCENARIO 1

Kavita places the order for everyone from her phone



The group collectively decide to eat north indian food and let kavita order for everyone.

Kavita taps on the cuisine option and selects north indian food.

After selecting north indian cuisine, the app shows a list of restaurants offering the food which falls under this category. It also shows the time of delivery.

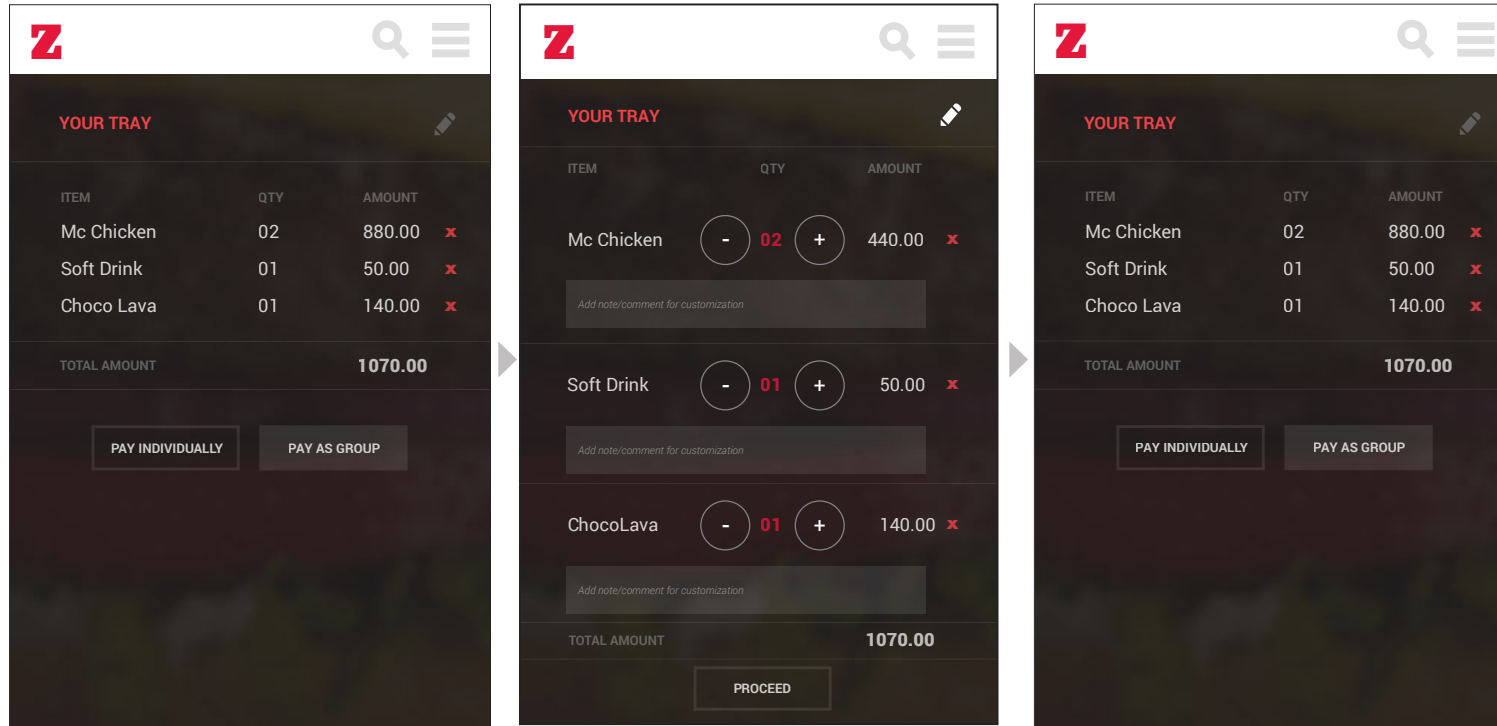
She selects a nearby restaurant and gets a detailed menu with all the dishes available. Search bar for the restaurant is open by default for quicker results.

Kavita starts adding the dishes. A tray from top appears showing the number of items selected and the total amount.

11.2

SCENARIO 1

Customize the food ordered



Once the order is decided, Kavita taps on the tray to view and customize the food items she has ordered.

The tray can be customized by increasing/decreasing the quantity of the food and adding personal notes if needed.

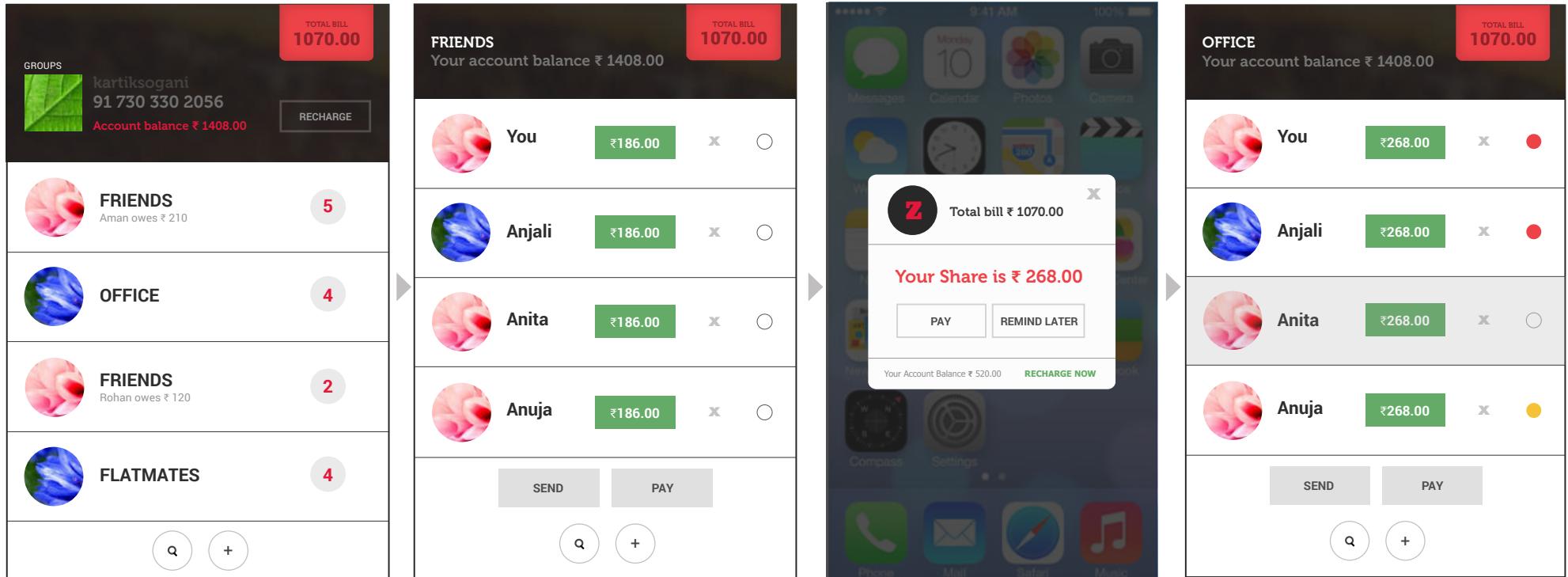
After customization, she taps on PROCEED to go on the previous screen.

The order is fixed and now she proceeds to payment. As its a group order, Kavita taps on PAY AS GROUP.

11.2

SCENARIO 1

Group Dynamics: Total amount is split equally and payment is made.



This screen display's different groups of Kavita. Her current account balance and the total bill amount.

Kavita selects OFFICE. All the member's apart from Anita are already a part of the group.

She then realizes that Anita is new to the app and has not yet opened a wallet with Zayke. She adds Anita to the group and the amount is automatically split equally. The amount can be changed manually if required. Kavita sends the amount to all the people in group.

Anuja and Anjali receives a message on there phone stating there share which they can either pay now or later.

Kavita also suggests Anita to register for the app as they would be ordering almost everyday from outside.

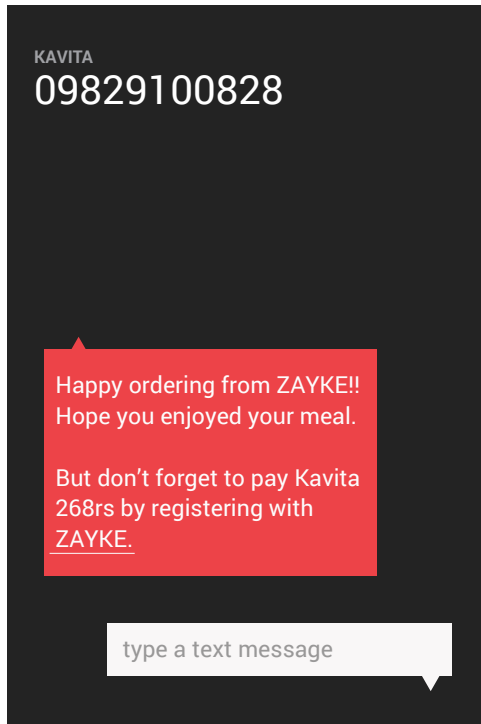
Once the amount is paid by anjali and anuja, kavita gets a notification and the status turns in red.

Kavita invites Anita to join the group and being the admin for today she pays for Anita's meal.

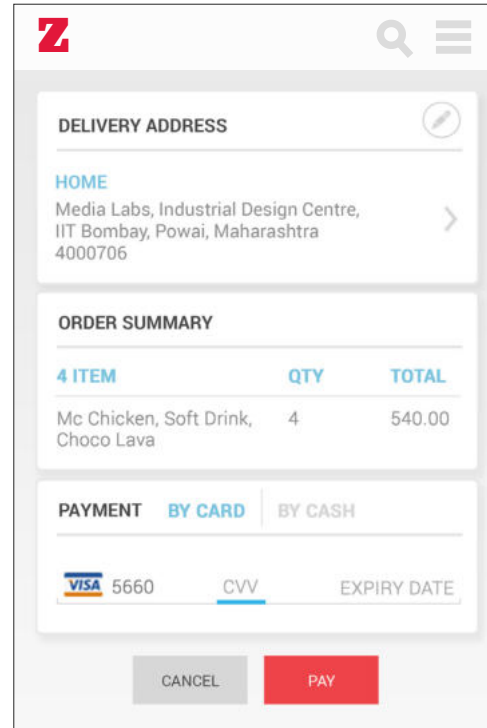
11.2

SCENARIO 1

Payment structure



As soon as Kavita adds Anita to the group, Anita receives a text message on her phone to register with zayke and she owes Kavita 268 Rs.



Payment is made once the order is placed. In meanwhile, kavita receives amount from other group members.

Amount can also be recharged through internet with the card.

11.2

SCENARIO 2

Anita's reaches home after hectic office hours and registers for ZAYKE

New user



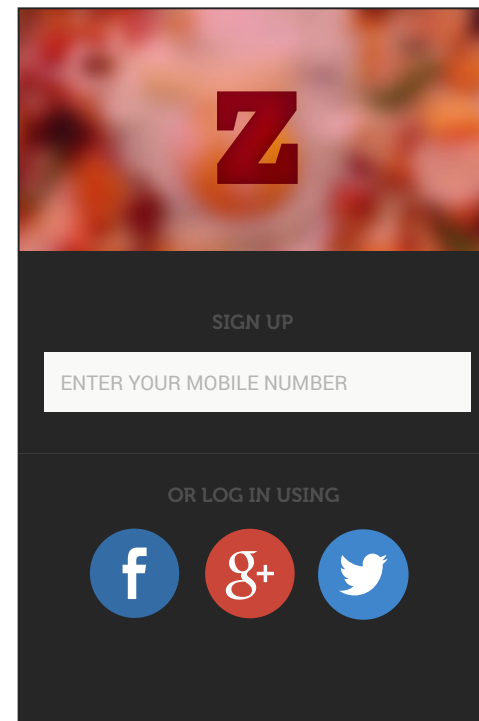
Anita returns home at dinner time. She feels that she has acidity due to her disturbed sleeping cycle.

She decides to order less spicy and healthy food. One of her room mates agrees to order food with her but she wants to order burger and fries.

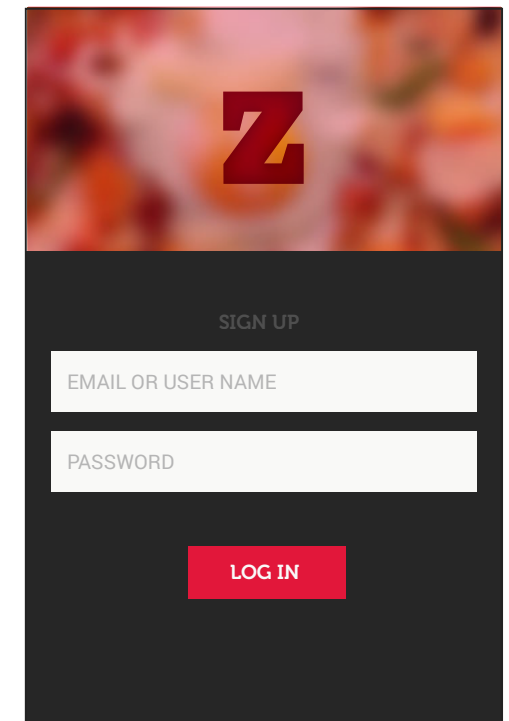
Anita suggests to order food from Zayke as they allow group orders from multiple places. She signs in from the text message.



Anita downloads the app. Zayke.



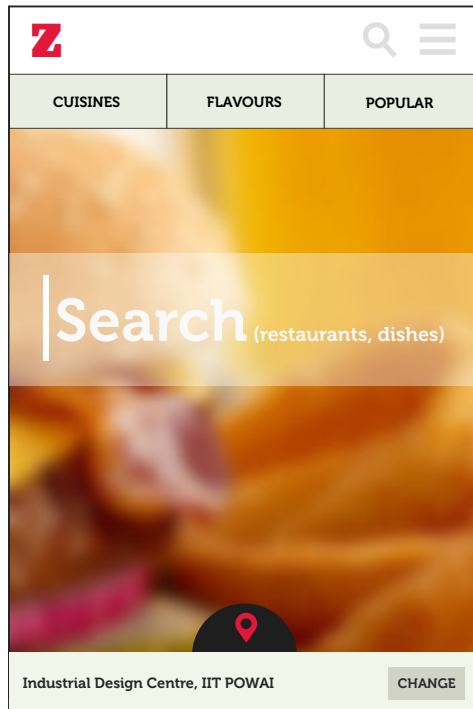
As she is a beginner, she needs to sign up before ordering.



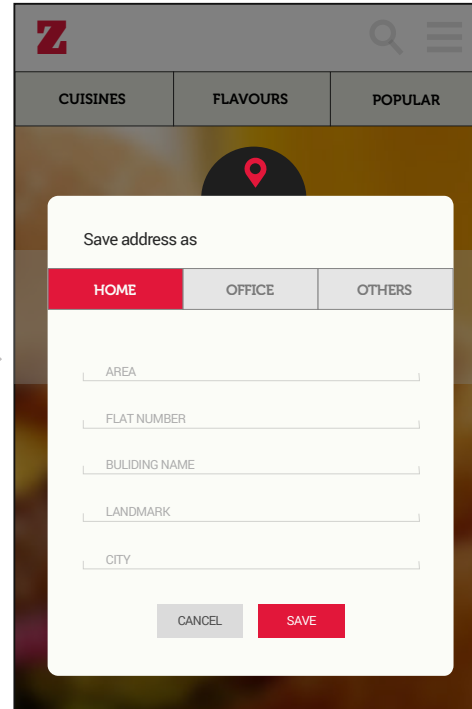
Anita enters her mobile number and signs-up with a user name and password.

11.2

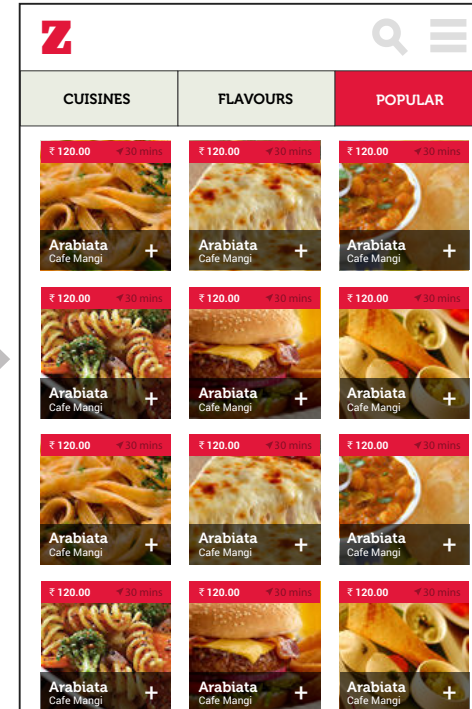
SCENARIO 2



After signing up, Anita comes to the homepage where she views her location which is detected automatically. She taps on CHANGE to edit the location.

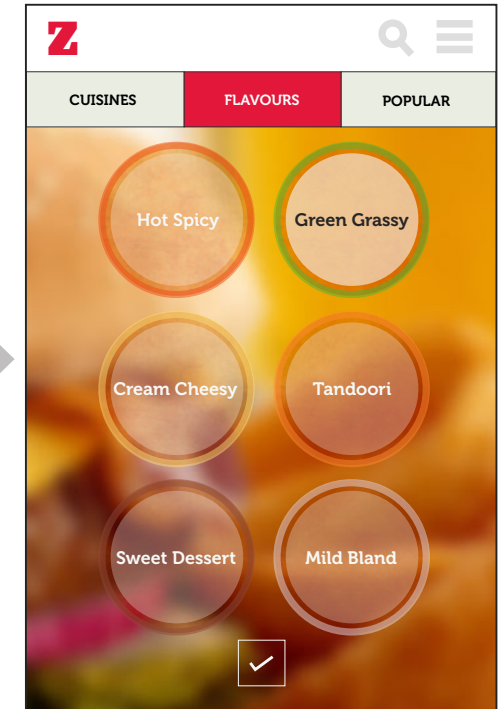


She enters the area, flat number, building name, landmark, city and saves the address for ordering in future.



Anita starts exploring and lands on the screen which shows the most recommended/popular dishes.

She browses through the dishes but doesn't find anything simple.



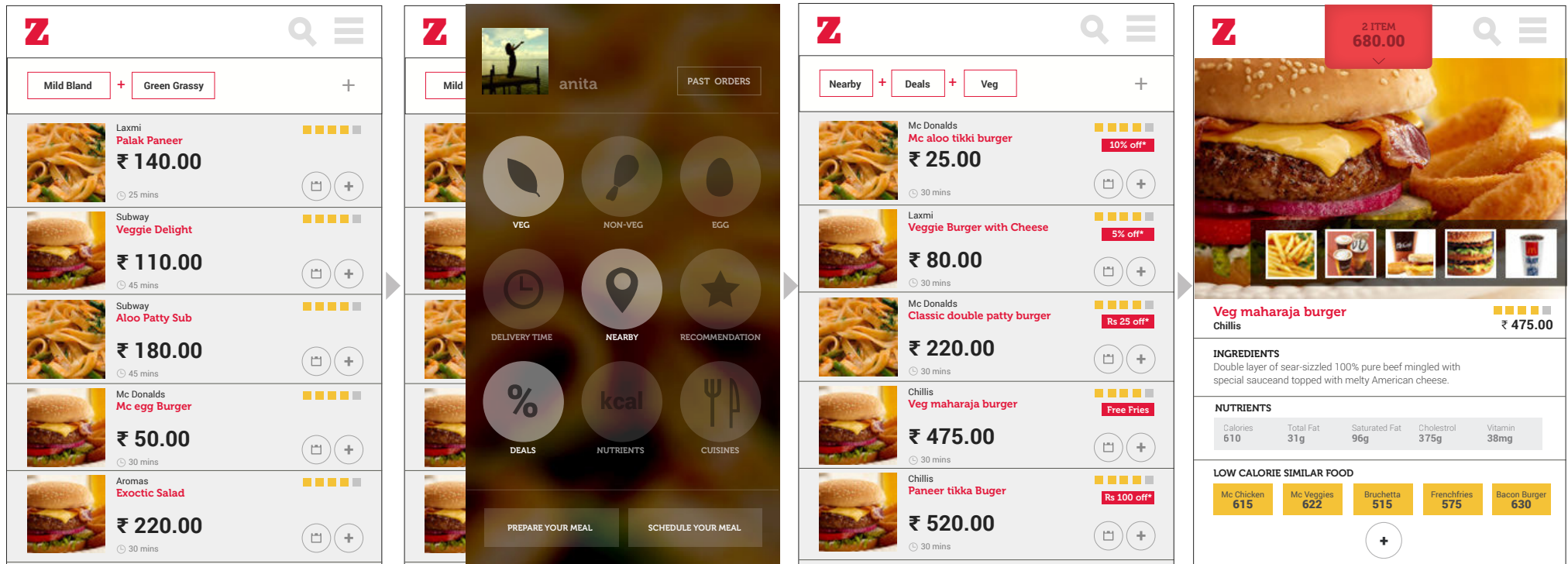
From the top navigation panel, Anita discovers that she can order food according to different flavours.

She then decides to go for green grassy and mild bland flavours as she wants something light and simple.

11.2

SCENARIO 2

Anita's orders from two different places.



Anita gets a list of mild bland and green grassy food available in all the restaurant's menu. She finally decides to order a salad and adds to the tray.

After adding salad to the tray, she selects the filter which is in top right corner as she has to still order a burger for her flat-mate. She selects multiple filters to get the best deal and quick food.

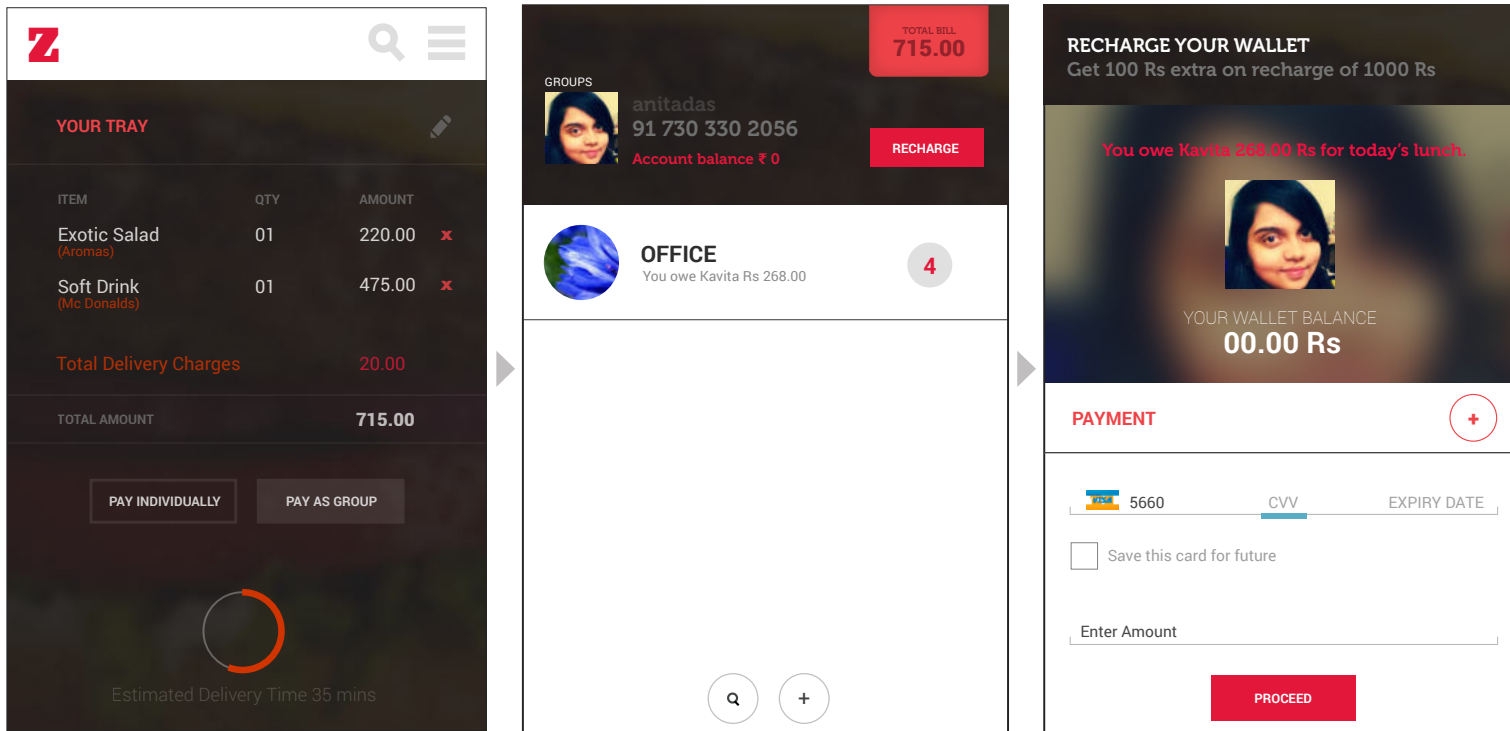
According to the filters chosen, Zayke pulls the dishes which falls under that category. Her flat-mate gets curious and wishes to know ingredients and details of one particular burger.

Anita selects that burger and gets detailed description which includes an image of the burger, nutrient value and similar food with low calories.

11.2

SCENARIO 2

Places the order and recharge the account.



Once food is selected Anita goes to the tray for payment. Tray displays the item, quantity, extra delivery charges for ordering from multiple restaurants and estimated delivery time. Anita then decides to pay as group.

Office group automatically syncs with Anita's profile which shows her current wallet balance and the amount she owes Kavita. She decides to create her virtual wallet in order to save time as she order's food almost everyday.

Anita recharges her account with 1500 Rs. by entering her card details.




She creates a new group of flatmates, sends an invitation to her friend and pays the bill for now. She also sends off the money due to kavita.

11.3 ADDITIONAL FEATURES

SCHEDULE YOUR MEAL

This feature enables to schedule your meal in advance. It mainly caters people who order on daily basis and it's also useful for office managers who wants to schedule team lunches, board meetings, breakfast etc. in advance.

Select date and time for the delivery. Set Location and choose the dish from menu available. App will store the order and user can confirm/unconfirm whenever they want.

SCHEDULE YOUR MEAL

2014

JAN

FEB

MAR



APR


MAY

JUN


Mon	Tue	Wed	Thu	Fri	Sat	Sun
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

17 March, 2014






12:30 pm

 Flat 1105, Palatial Heights Powai, Adi Shankaracharya Marg

Restaurant name

Chicken alfredo

₹ 580.00

SCHEDULE YOUR MEAL

2014

JAN

FEB


MAR

APR


MAY

JUN


Mon	Tue	Wed	Thu	Fri	Sat	Sun
07	08	09	10	11	12	13



12 : 30 pm



Flat 1105, Palatial Heights Powai, Adi Shankaracharya Marg, Powai 400076



Choose dish

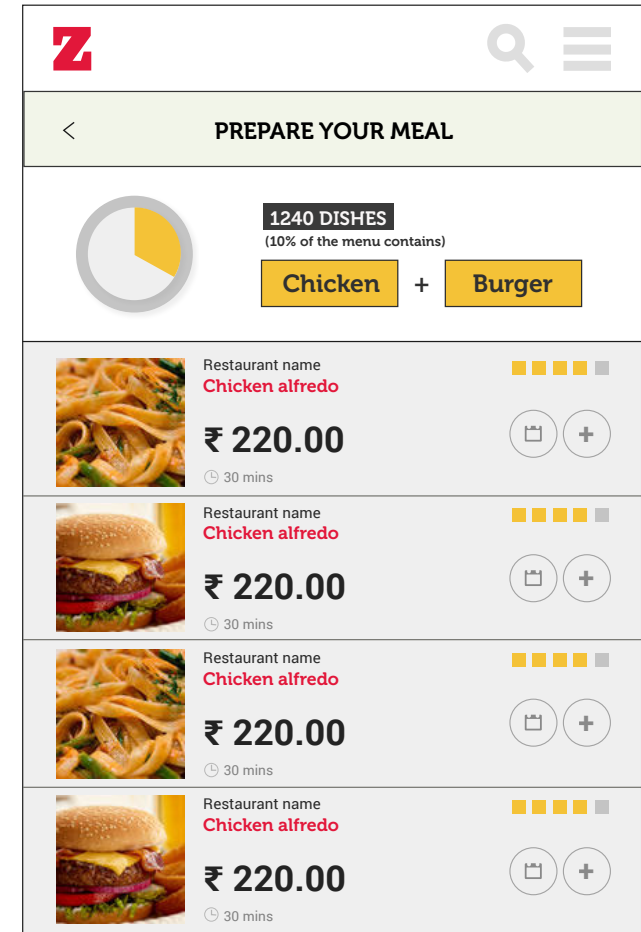
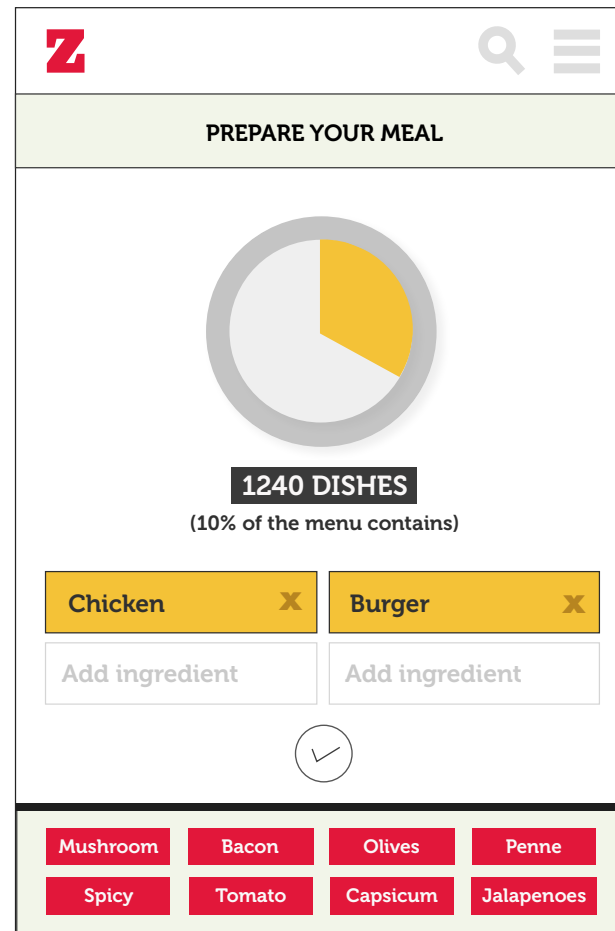
Confirm

Unconfirm

11.3 ADDITIONAL FEATURES

PREPARE YOUR MEAL

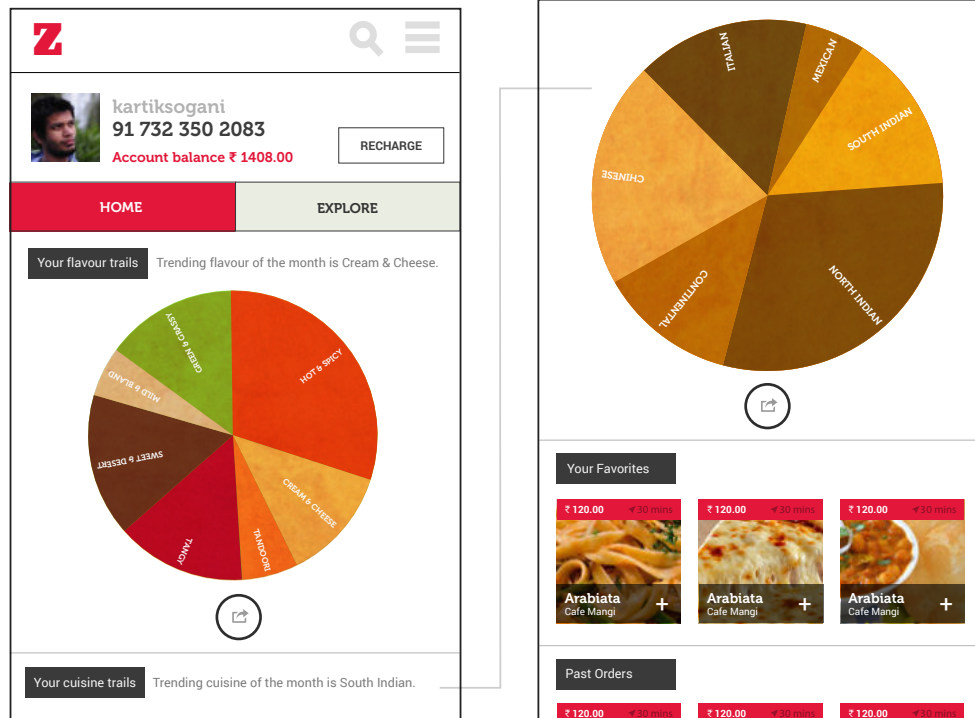
User can prepare and personalize their own meal. If they are not sure about what exact dish they want to eat they can just add ingredients and accordingly system will display the matching ingredients from the menu. It will show all dishes containing the specified ingredients.



11.3 ADDITIONAL FEATURES

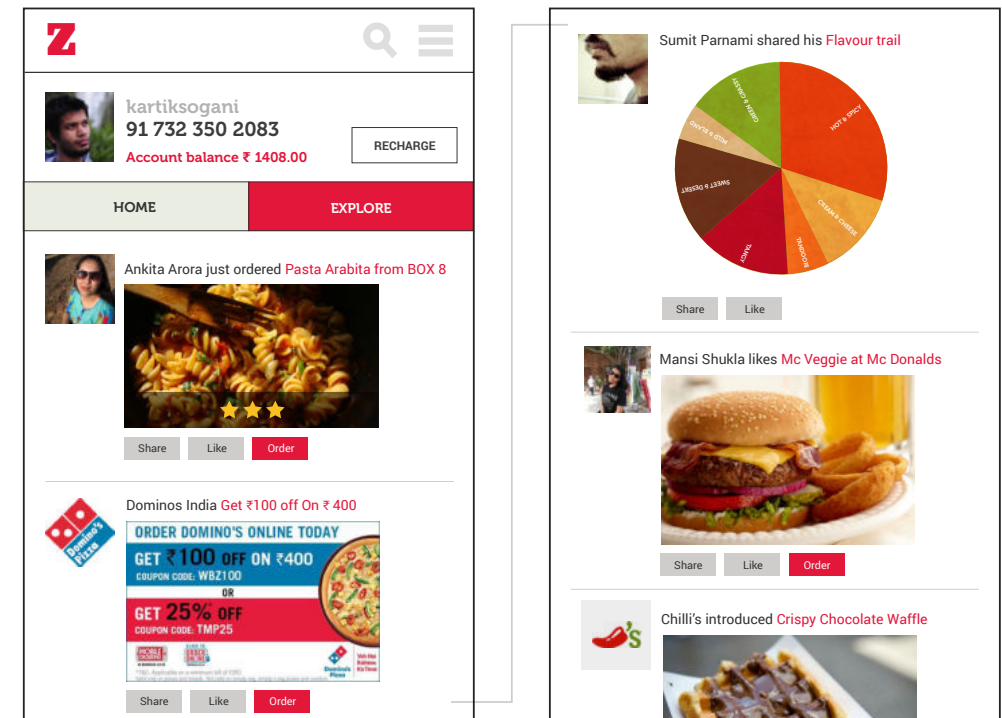
USER'S PROFILE

PROFILE > HOME



Profile is user specific and it shows the eating pattern which comprises of users flavour trails, cuisines he likes or orders the most. Profile also shows his favourite and past orders.

PROFILE > EXPLORE



The system lets you explore new dishes by showing what your friends/ family/people nearby are ordering. It also shows deals/offers, new dishes introduced, ratings and recommendations from friends and family. With big data available, its easier to know the trending flavours and cuisines. This platform is for food lovers who want to explore, experiment and know more about the current trends.

EVALUATION PLAN

The product will be evaluated on the basis of following guidelines. [10]

1. The app should keep user's updated about what is going on and where they are through appropriate feedback in proper time.
2. The framework should be such that the user should not get confused with the series of steps and they should not wonder whether different words and actions mean the same thing.
3. The information architecture of the system should be scalable and flexible so that it caters to both beginners and experts users. Should allow both experienced and inexperienced user's to customize frequent actions. (While making group order for the first time and settling for the payment)
4. Reducing user's memory load by making objects, actions and options visible to user.

CONCLUSION

The basic framework of Zayke is to get the food delivered from multiple restaurants and to introduce the group order dynamics by making payment in group easy and fast. It saves time and gives more opportunities to let people order together, explore and experiment.

The personalised application understand user's eating patterns and remembers there choices and preferences. The filters are created in such a way that the user can personalize it according to there needs. They can choose multiple filters to get the desired results.

Tried to achieve seamless interaction by designing the service blueprint of delivery system which connects multiple restaurant to multiple users efficiently, which increases and keeps the users loyal to the app by building peer to peer dependency and reducing cognitive load of group ordering.

REFERENCE

- [1] Indian Food Services Report 2013 - National Restaurant Association of India NRAI (technopark)
- [2] <https://itunes.apple.com/us/app/seamless-free-food-delivery/id381840917?mt=8>
- [3] <https://play.google.com/store/apps/details?id=aus.deliveryhero.android&hl=en>
- [4] <https://play.google.com/store/apps/details?id=com.global.foodpanda.android&hl=en>
- [5] <http://www.theatlantic.com/technology/archive/2014/01/how-netflix-reverse-engineered-hollywood/282679/>
- [6] <http://www.slideshare.net/ypigneur/service-blueprint-presentation>
- [7] <http://jjg.net/ia/visvocab/>
- [8] http://en.wikipedia.org/wiki/Paper_prototyping
- [9] Celebratory Technology: New Directions for Food Research in HCI
- [10] <http://www.nngroup.com/articles/ten-usability-heuristics/>
- [11] Source: Zomato, Data for 13 cities