LMD (Last Mile Delivery)

Project Deliverables

User Interface (Mobile)
User Research
Hifidelity Mockups

My Role

User Research
UI/UX Design
Product Management

Timeline

One month

Status

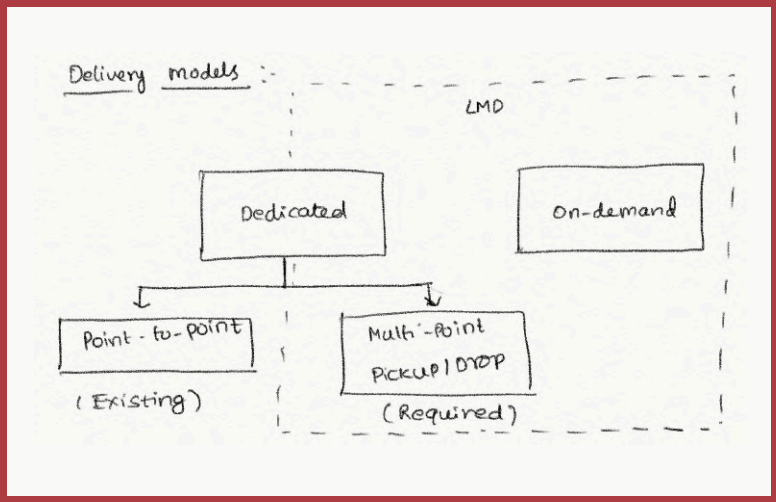
Released (Phase 1)

What

Last mile delivery(LMD) is movement of goods(Picking) from a transportation hub to the final delivery destination (Deliver)in a faster and efficient way.

To support the above the LMD system should have the following

- Better Experience
- Different types of fleet & Delivery models
- Intelligence (Delivery job & Route management)
- Tracking & Analytics



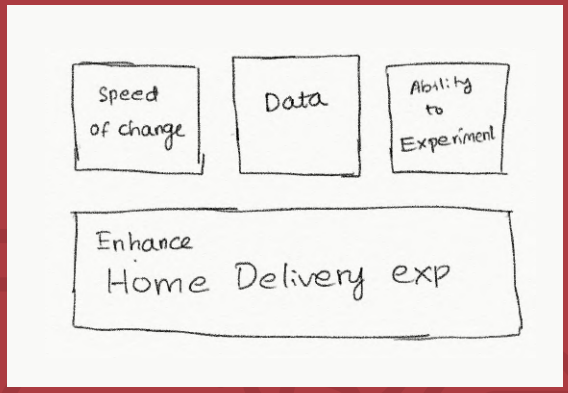
Why

- More efficient processes for job,time and cost management
- Support Different types of fleet and Delivery models for a cluster of stores
- Integration with third party logistics providers
- User Experience of Existing rider app is sub-optimal
- Existing LMD system has too many Limitations to support different Delivery Models

Other Strategic Considerations

(Current third party app does not enable below to constantly fine tune & optimize home delivery experience)

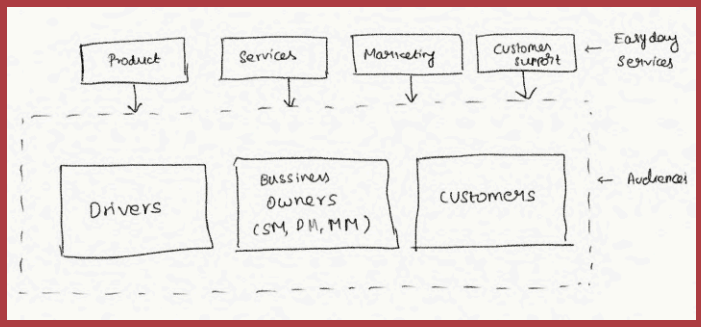
- Speed of Change
- Sharing of Data
- Home Delivery as a core experience
- Ability to Experiment



Who

Drivers

Drivers, partners of Easyday are huge part of daily operations and work with the company to provide best services to customers. Therefore in order to serve the customers with highest satisfaction and quality, we empowers them with tools and services that enable them to do their job effectively with great customer experience



Business Owners

Business owners (delivery job creators and monitors), who are Store managers, District managers and Market managers responsible to enable the services and monitor the activities time to time.

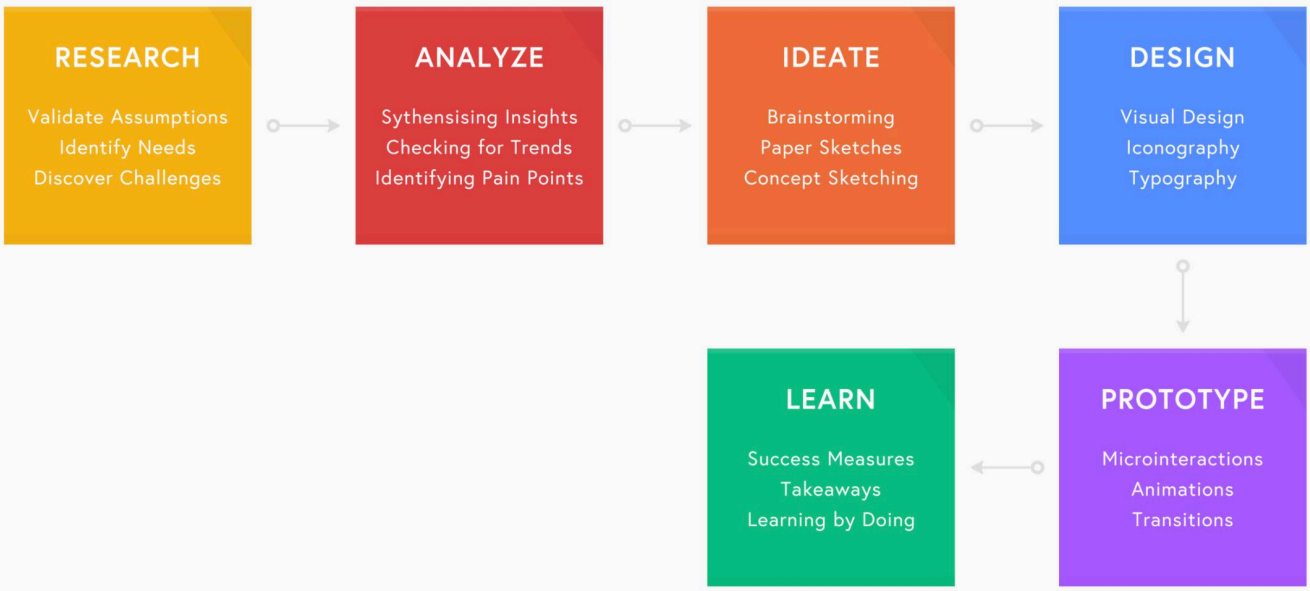
Consumers

Consumers, who are the end users of the delivery ecosystem should be benefited from these tools and services (communication and timely updates) in order to make their experience as frictionless as possible.

For Phase 1 deliverable, I will be focusing on the Drivers aspect of the ecosystem.

How

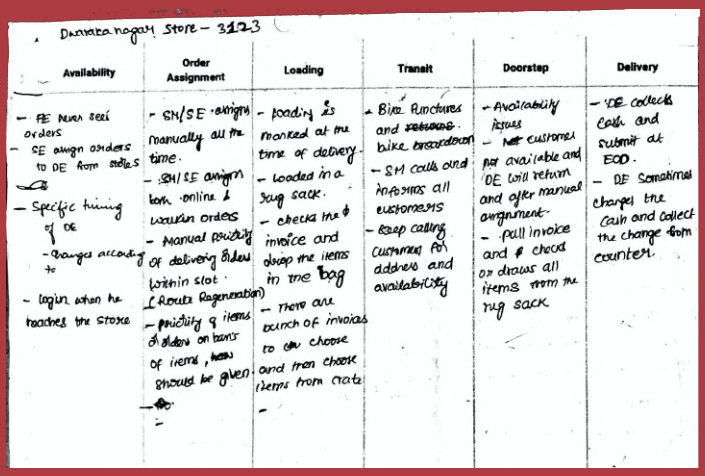
Process

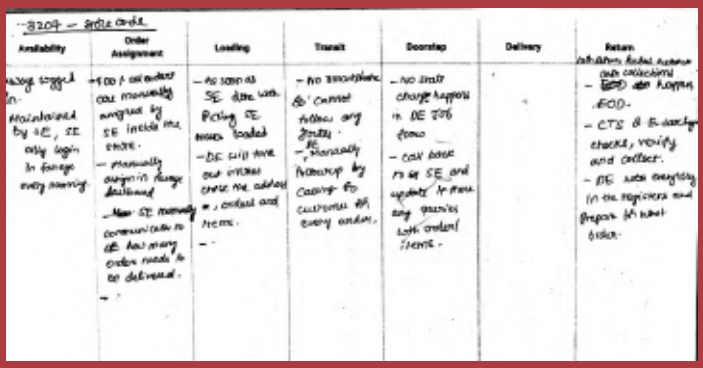


Research

Myself and our product manager were gone to New Delhi where the current process is live. Selected 14 stores on the basis of high order traffic to low. I spoke to our Delivery executives and Store managers and took notes and documented all our observations. I even joined with our DE(Delivery Executive) and done home deliveries to understand and observe the following:

- the existing Delivery process
- User type and behavior
- Pain points in the existing process
- Identify the opportunities to enhance the current experience





Analysis

I documented all the observations and noted all the important points which made it easier for us to structure and assign priorities. I was now able to identify some solid trends of needs, pain points, challenges, and experiences.

While there were a few trends that helped me validate some of my assumptions, there were a lot of new points. To list some of the popular ones at the core:

Challenges faced by Delivery Executives:

- Hard to mark attendance or confirming their shift every day
- Hard to navigate to the customer location
- Hard to identify right shipments in the stores
- Manual creation of Delivery jobs from the system
- No visibility of the Delivery jobs in the Delivery app
- From Delivery job generation, details to the identification of the orders, all are controlled manually through a paper invoice

DE struggles using an existing Delivery app:

- Marking Delivery status on time
- Very slow app
- Very complicated UX to report or remove a customer rejected item in the app
- Customer and order details are not shown in the app

Details and process observations that consider important:

- All DE's login after they reach the store
- DE takes a picture and sends a pic that DE reached store in WhatsApp within time, out time, etc in WhatsApp (existing process)Recommendations (based on attendance history)
- Date, Time, Location, Directions
- Rewards and incentivization is important for motivation
- All orders are manually assigned by Store executive (time taking process)
- Manual communication to the DE regarding the order, items, and customer location
- The ontime delivery tracking is not accurate or not marked accurate
- DE checks manually in the invoice to load items in the shipment

Keeping these things in mind, I knew what I wanted to achieve through the user interface and decided to move onto the ideation phase.

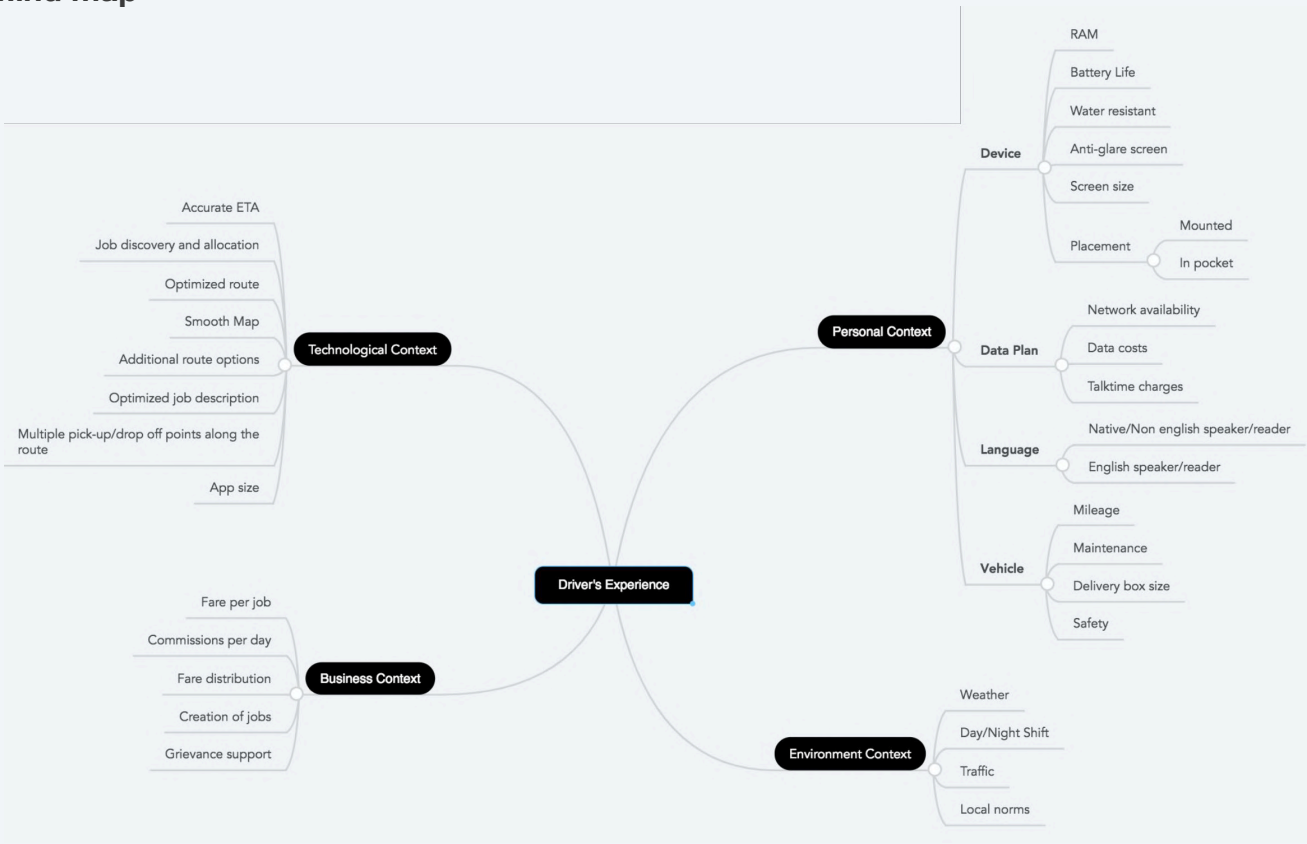
Defining Audience

Before jumping off to solutions, it is better to understand current contexts on when/where the app will be used and what the current challenges faced currently by the users.

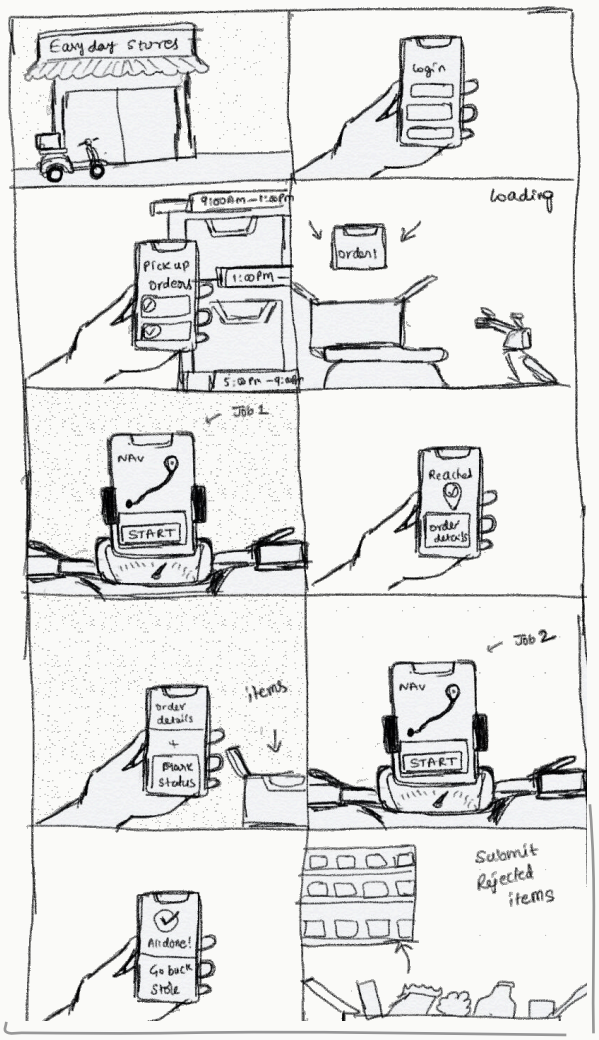
When. I assume the drivers will use the app during working hours. The working shift may differ, some may use it during the day, while others may use it during night.

Where. Drivers will mostly use this app probably while riding to different pick-up and delivery locations on their motorbikes in order to get accurate instructions.

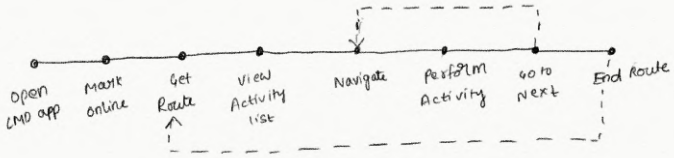
Mind map



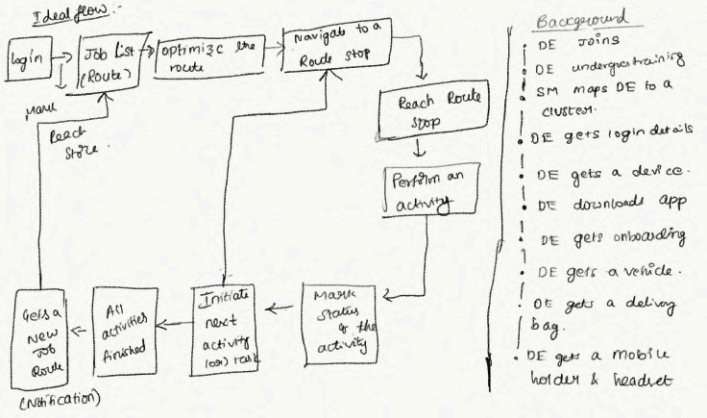
Story Board



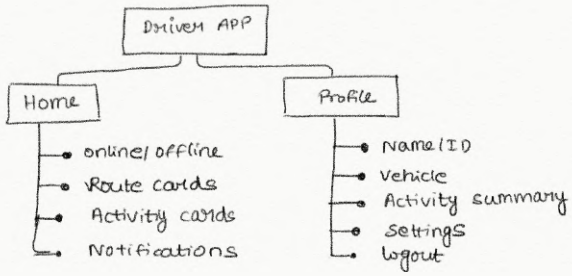
The Map



Ideal Flow



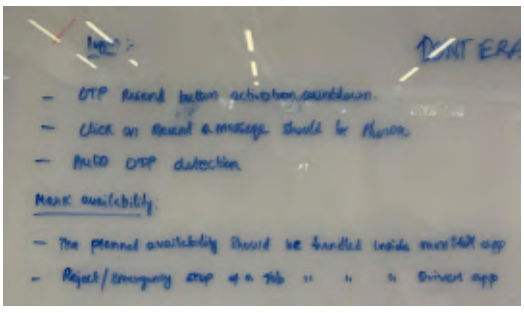
Information Architecture

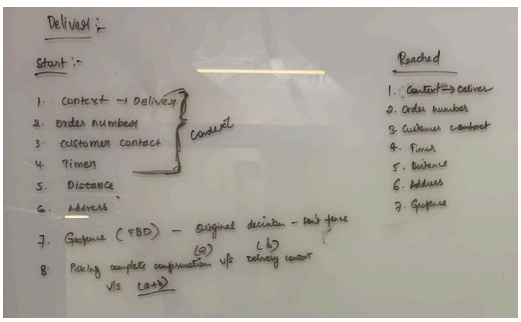


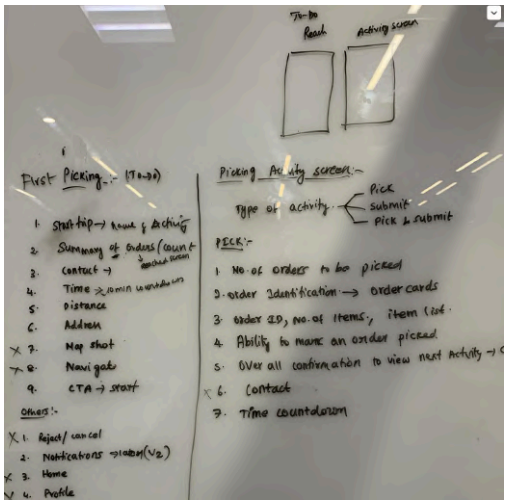
Ideation

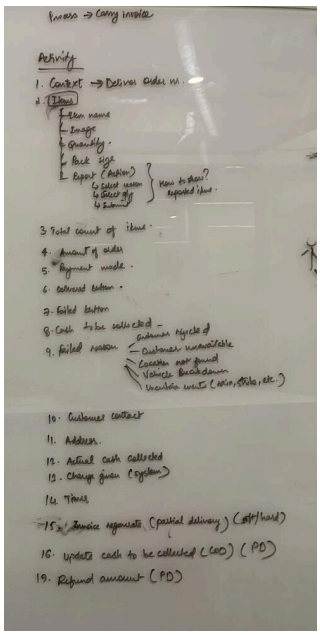
The needed features, actions and pieces of information were already pretty clear after the phases above, so I could jump straight into a quick sketch to map out the user flow.

Stage Analysis



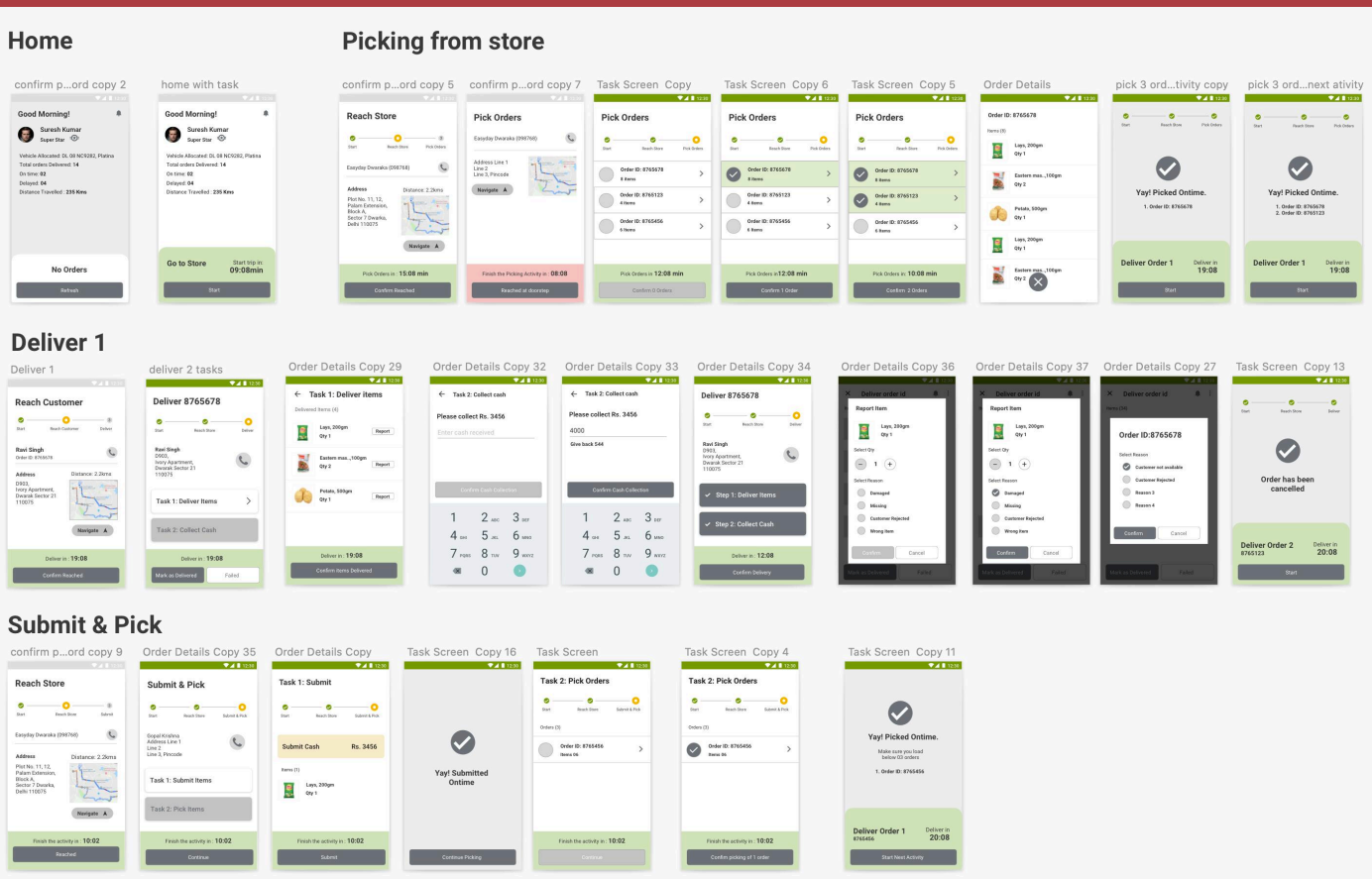




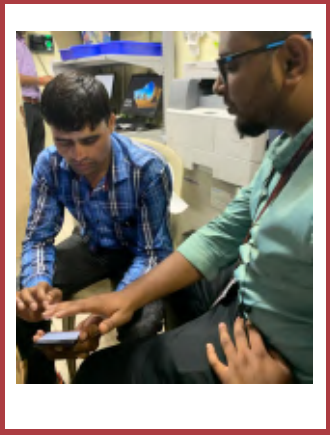


After a couple of paper iterations I had the general idea ready, so I switched to Sketch, where it was easier to move things around.

Wireframes



Prototype Testing



What we wanted to measure?

- Validate the overall process with real-time situations
- Usability
- Information Architecture
- User flows
- Navigation
- Ease of use

Some Observations need to be done :

- When do the DE usually open the app other than in the store or during the job?
- How and when do DE checks the LMD app and why?
- Do other details really matter to DE like on time, jobs completed, etc
- Are they able to understand the time countdown? Ask them how they feel about it?
- Check DE expectations when they get a route?
- Check the Information flow and understanding of each activity and tasks

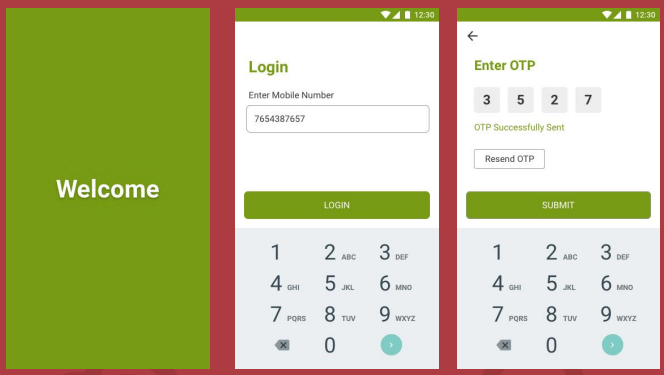
Design

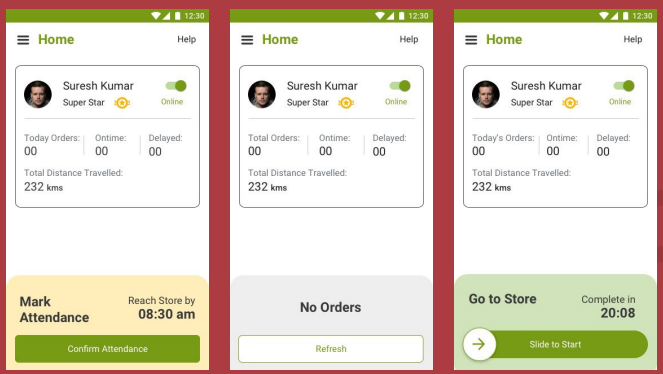
Given the time constraint for this exercise, I had to first identify the key experiences of this system. From the research I conducted, I established that I have to design an experience for:

1. Able to select and pick orders
2. Able to view order details and deliver
3. Able to mark the order status
4. Able to report/return customer rejected items
5. Able to mark attendance and confirm the shift

Designing Login flow:

To solve the problem of attendance, rostering and tracking each DE will have a unique login ID, his phone number which will be mapped to the store. We want to design this flow simple keeping all the focus on the number and the pin (OTP).





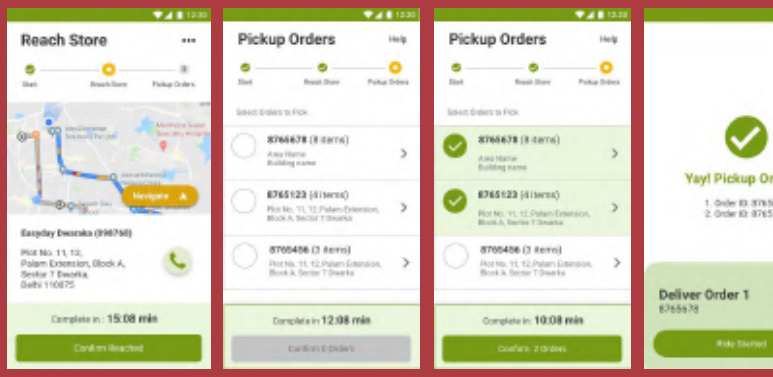
Designing Home:

A place where the user can mark attendance followed by user performance stats and profile. Our goal is that this screen allows Delivery Executive to keep tracking his performance which itself will be the biggest motivating factor. This screen also shows jobs to perform dynamically based on the availability.

Designing Pickup flow:

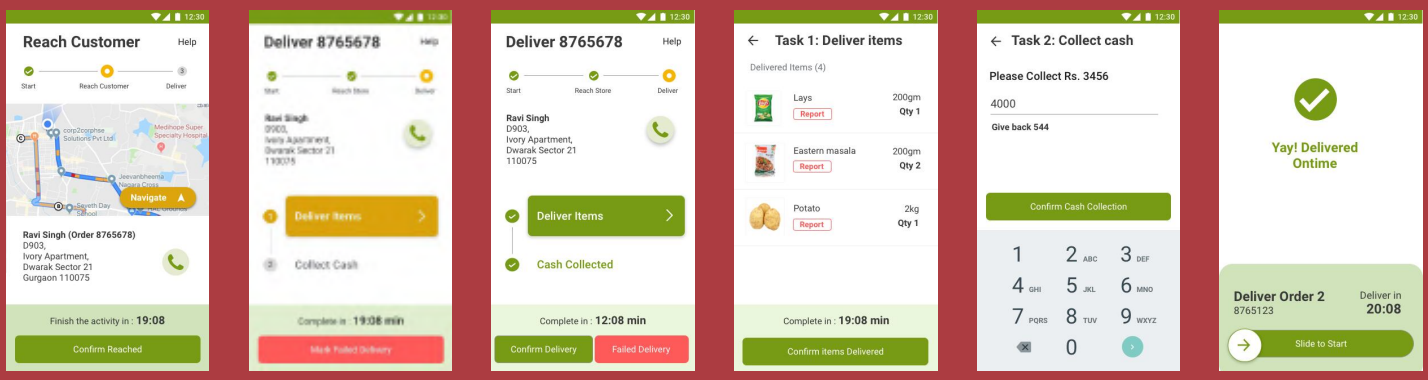
The entire flow goes like a step by step process which will show only To do job and its details. This is to reduce the cognitive load

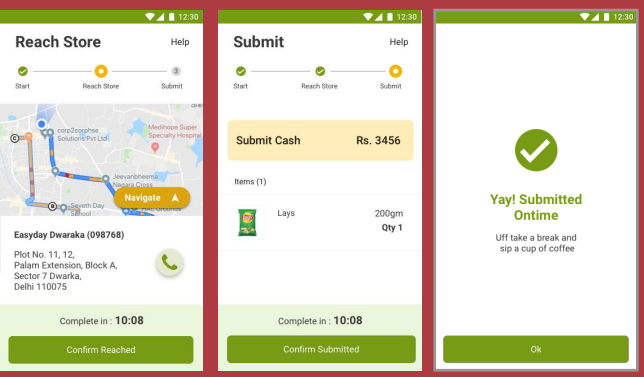
Once the rider starts the trip the flow carries from order picking, deliver and submit back if there are any rejected items and cash. We call them tasks. Here the manual order selection is because of varied basket size and capacity. We will soon automate this by calculating the order size in the system in phase 2. Once DE picks the orders the system automatically creates an optimized route by taking parameters like distance and traffic.



Designing Deliver flow:

To address the pain points of unavailability of item details, navigation and customer details I designed a step by step (navigation screen, order details screen) process with time tracking to create urgency. The time tracking is an experiment to check whether this improves our on-time delivery key metric. Once the user mark reached after he reached location the deliver screen pops up with customer details and tasks to perform like deliver items and collect cash.





Designing Submit and rest flow:

One of the pain points for SM is that there is no validation available for the cash collected and items returned in the system. We solved this by capturing the data inside the app and that links dynamically to the admin app.

Takeaways:

As I look back at my design process, I've had some key takeaways while working on this exercise:

- Data drives UX: Using data from user research to prioritize needs and identify pain points makes the process of visual design a whole lot simplified.
- Research v/s Design: It's extremely important to strike a balance between research and actual visual design. Both are equally important when you're designing for a user.
- Never assume: It's essential to valid assumptions. The problems you think users might have are not always what they truly experience.