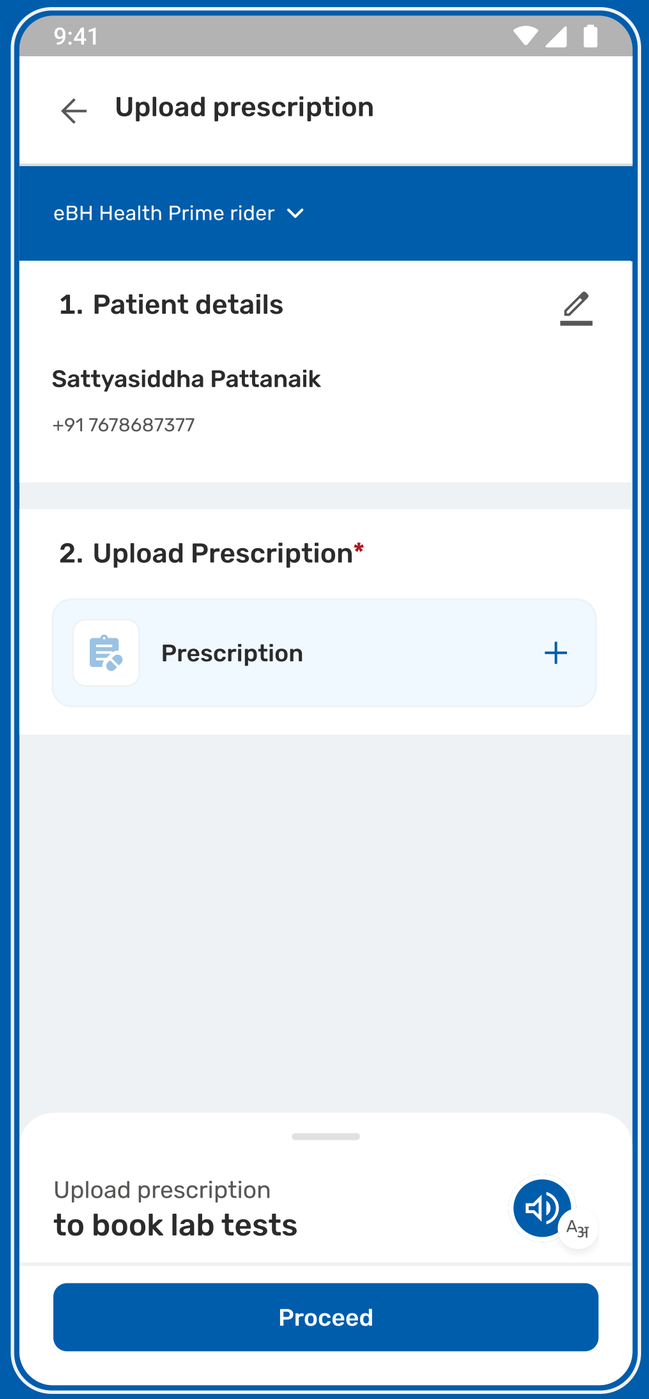
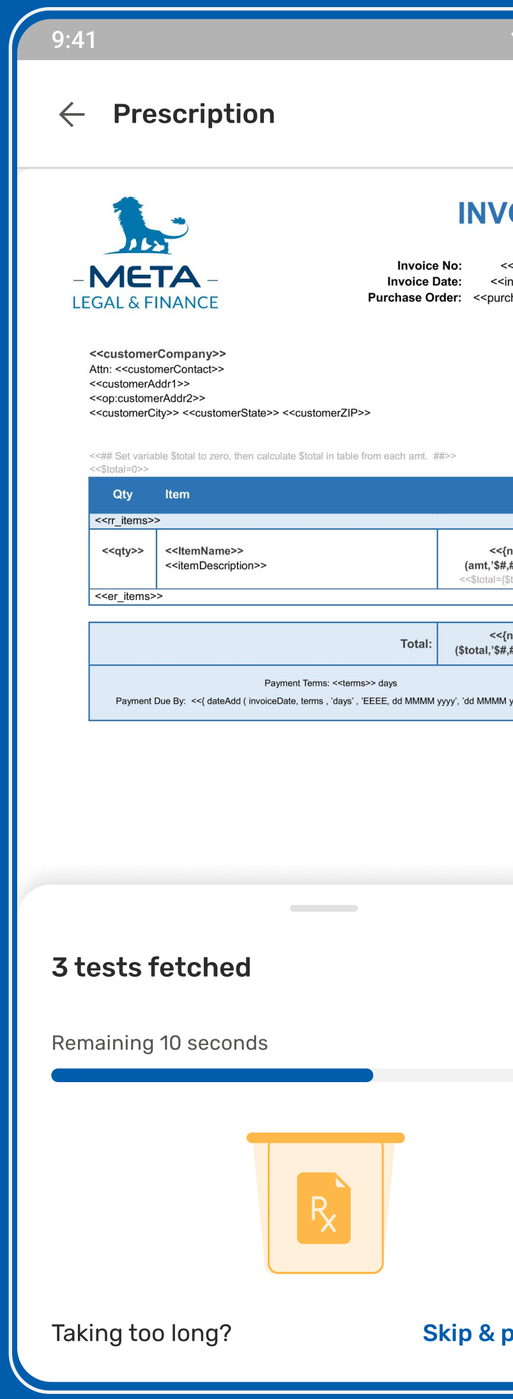
Smart booking for lab tests

Upload prescription & book your test





My role

I have played the role of **Lead UX Designer** in this project. Worked along with lead product manager, data science associate, team of software development associates.

As a Lead UX Designer in this project I was responsible for all UX decisions to be made, wire framing & prototyping, user testing, Interaction design.

Once the UX flow and design was approved, the UI designer was onboarded to help with possible interactions and visual design correction.

The project was frequently reviewed and finally approved by Chief Business Officer

Collaboration team

1 Lead Product manager, 1 Associate product, 1 Associate data scientist, Associate Ui designer

Project Timeline

3 Months

Project Status

Live on Prod

PTO

Introduction

Our lab test booking experience allows customers to conveniently book lab tests, either independently (DIY) or through an assisted booking process. While the DIY option provides control, it has been challenging for those with prescriptions, as they must manually search for and match tests, often leading to errors. Customers get confused on among numerous test options, resulting in dropouts. To address this, **nearly 40% of customers opt for the Agent Assisted booking experience**, where they upload a prescription and receive a callback from lab experts who help accurately book the necessary tests.

Challenges in Assisted booking service

- High costs associated with setting up and training agents
- Operational expenses were balancing out the revenue from bookings.
- Loss of customers due to extended wait times for callbacks.
- Average callback time of agents, ranged from 20 to 30 minutes, result in customer lead drops
- The agent-assisted booking model was unsustainable in the long term.
- Losing on customers during non-business hours

What Problem to solve

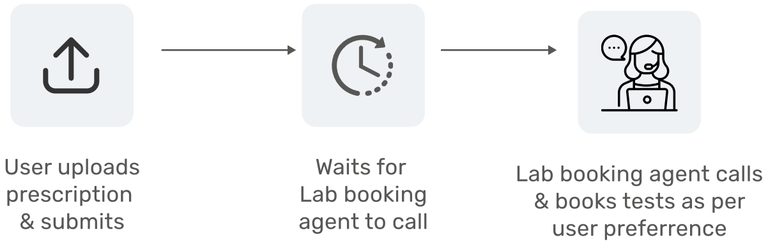
- Removing Customer Dependency on lab booking agents
- Maintain Convenience: Improving user convenience, ability to book on their own via DIY even during off business Hours
- Empower users to book their own test without agent assistance
- Reduce reimbursement for lab tests

Key UX metrics to measure

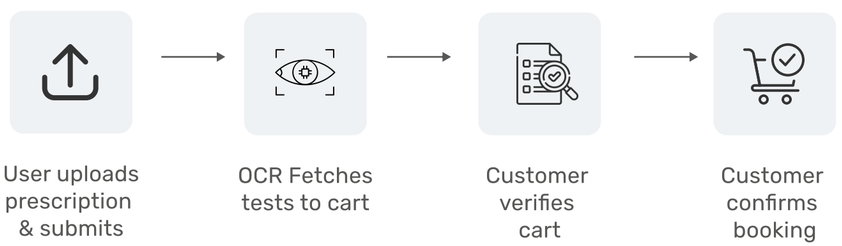
- Funnel: **Target 80% conversion** (From Test Verification page to Booked Successfully)

5-9 Number of Clicks	Avg. time of booking	Increase in upsell & cross sell %
Reduced % User Droping off from the journey	Reduced % of users opting agent assistance	Increase in Booking completion rate

Current agent assisted booking process journey:



NEW DESIGNED FLOW



DETAILED JOURNEY 1 AFTER PRESCRIPTION UPLOAD

Step1:
Customer uploads Doctor prescription

Raised a request

Step 2 :

Lab Booking Agent receives the prescription

Step 3 :
Agent calls the customer to book the test after 20-30 mins (Agent TAT)

Step 4 :
Agent finds customers phone not reachable or customer forgets to pickup

Step 5 :
By the time agent is able to speak to the customer, customer books the lab tests with other labs

Step 6 :
Lead and customer drops for us

Pain

Step 7 :
We receives lab test bill reimbursement request from customer.

Pain

Wait time 20-80 mins Pain

Customer chooses other provider after long wait

Customer uses the lab test done by other provider to apply for rimbursement

Pains for the buisness: Data study

Total Leads generated
(in 3 months)

Out of total leads generated, **only 32% got converted** successful booking through assisted booking

Final_Journey	Leads Count	Bookings Count	% Conversion
RX Upload	10989	3579	32.57%
RCB	8545	1833	21.45%
CST	2211	597	27.00%
Other	1888	1868	98.94%
DRX	922	157	17.03%
Drop Off	342	19	5.56%
Total	**24933**	**8116**	**32.55%**

Booking Cancellation Reasons (in 3 months)

Booking cancellations due to customer not reachable on phone when Agent tries to call back is a prominent issue, which could be solved through our OCR based lab booking

Total cancellations	12218/24933
Requested by user	3603
Cashless network NA	1730
Customer not reachable	4142

Booking Cancellation metrics (in 3 months)

40% of calls are returned to customer within 5-30 min, resulting in customer lead loss

Agent Call back time (TAT)

40% of calls are returned to customer within **5-30 min**, resulting in customer lead loss. This metric directly adds to the booking cancellation reason " Customer not answering)

First Completed Call TAT Bucket Wise Cuts

First Call TAT Buckets	Leads	%
0: 0-5 min	964	11.78%
1: 5-15 min	997	12.18%
2: 15-30 min	638	7.79%
3: 30-60 min	633	7.73%
4: 1-2 hr	562	6.87%
5: 2-4 hr	638	7.79%
6: 4-8 hr	238	2.91%
7: 8-12 hr	415	5.07%
8: 12-24 hr	398	4.86%
9: 24+ hrs	566	6.92%
NA	2136	26.10%
Total	8185	100.00%

40%

Agent case closure

37 % conversion

2 cases perday avg.

RX Upload		
Leads	Bookings	Conversion
562	212	37.72%
753	232	30.81%
486	120	24.69%
427	89	20.84%

Off business hrs requests from customers

221 cases/ Month

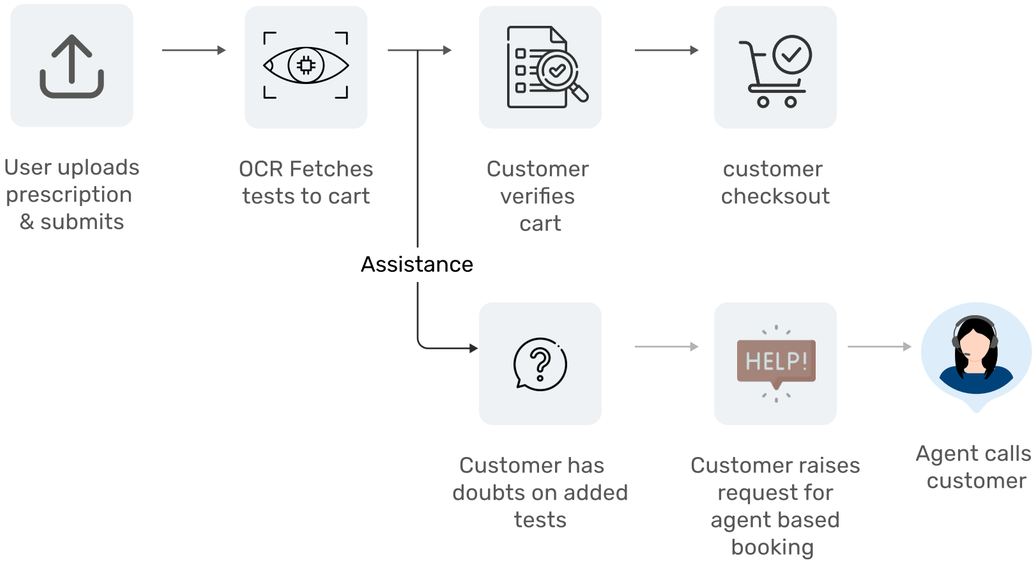
Final_Journey	RX Upload	
T1Cl Hour Buckets	# CaseNumber	%
0: 8AM-9AM	221	55.67%
1: 9AM-10AM	226	50.45%
2: 10AM-11AM	109	59.89%
3: 11AM-12PM	58	61.70%
4: After 12PM	191	52.62%
Total	805	54.25%

Problem statement

Build a capability for user to book lab test via DIY by just uploading a Doctor Prescription without the need of an assistance

Solution

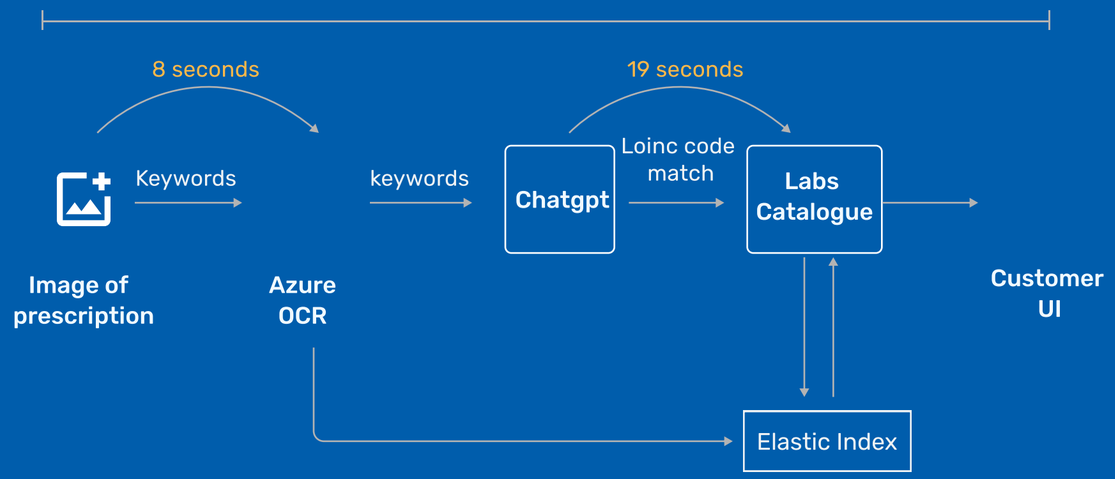
The product and technology team has trained an OCR run model to scan a prescription and fetch the tests accurately for the user.



User experience goal

- Completion of journey without drop-off
- Provide help and assistance wherever required
- Clear understanding of upcoming process
- Less cumbersome journey
- Low cognitive load through light weight design style

Detailed OCR solution flow



Personas

Customers with a doctor prescription and trying to book a lab test.

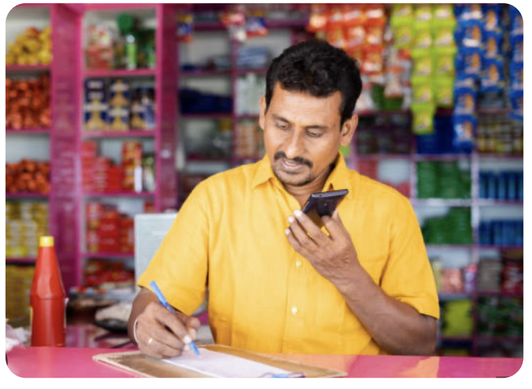
Who are we designing it for ?

Corporate employees

IC, Senior management & Executives

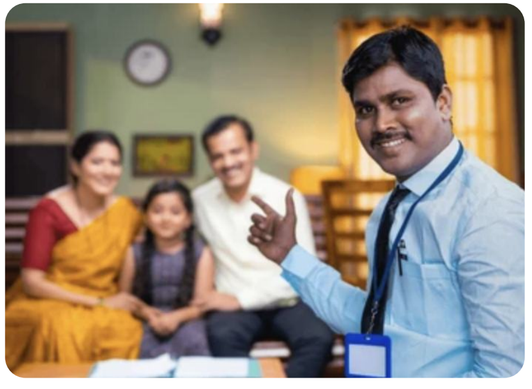
Middle income salaried

Bank employee, Clerks , teacher, auto drivers, cab drivers



Small business owner

Shop owner in II, III tier city



Sales Agent

Insurance agents

single focal for customers

Let’s take Hari’s case

Hari is a middle income aged

Hari’s daughter is going through high fever form last 2 days Hari brought him to a local General physician. he doctor prescribe 6 tests for Hari’s daughter.Hari has a Family health care plan from his Employers. Hari’s daughter is covered in the plan.
But before even he been able to book the tests, Hari couldn’t understand the tests and did not have the time and patience to book the

Hari’s Pain points

Low cognitive readiness:
It is difficult to read Doctor prescription & understand the tests

Time consuming to find & book 5-6 tests

Sick and weak to handle a digital journey & book multiple tests

Fear of booking the wrong tests

Hari may not understand english

It may take upto 30 minutes to receive a call for booking assistance from Bajaj Health

How might we help Hari

Smooth self booking experience

Reducing the pain of searching each test amidst a list of many

Removing the need for manual search & finding of test

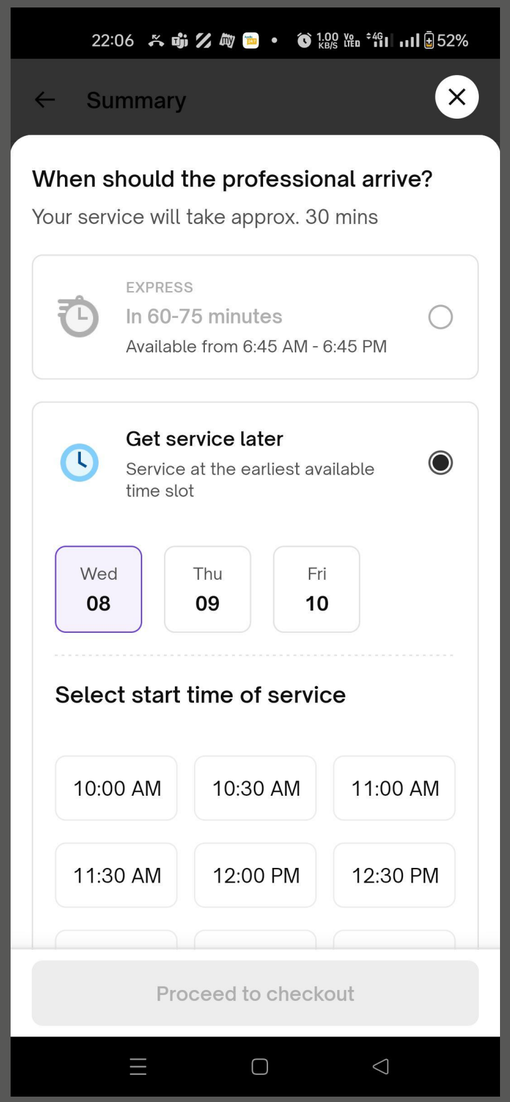
Customer’s flexibility to fall back to assistance mode whenever feel hectic within the journrey

Fear of booking the wrong tests

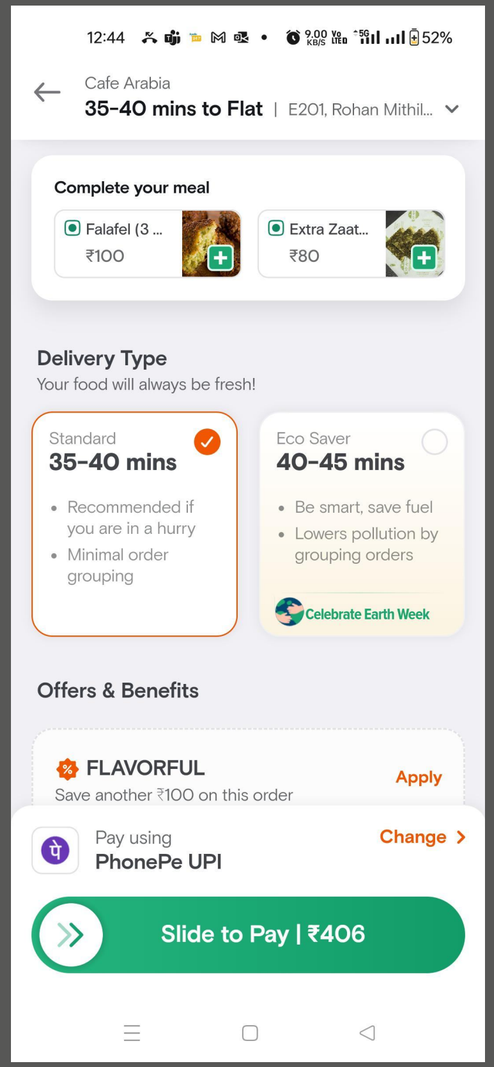
Hari may not understand english

Bench Marks

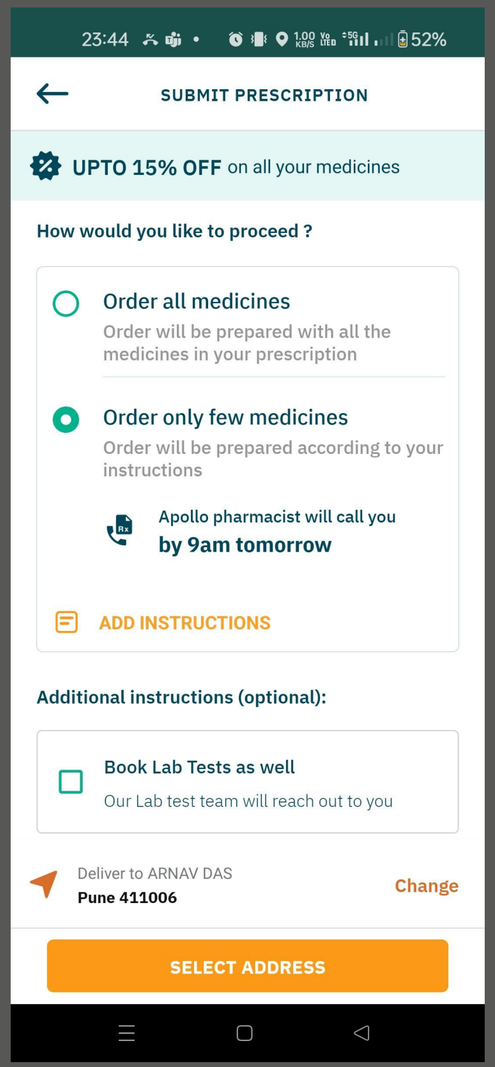
Urban Company



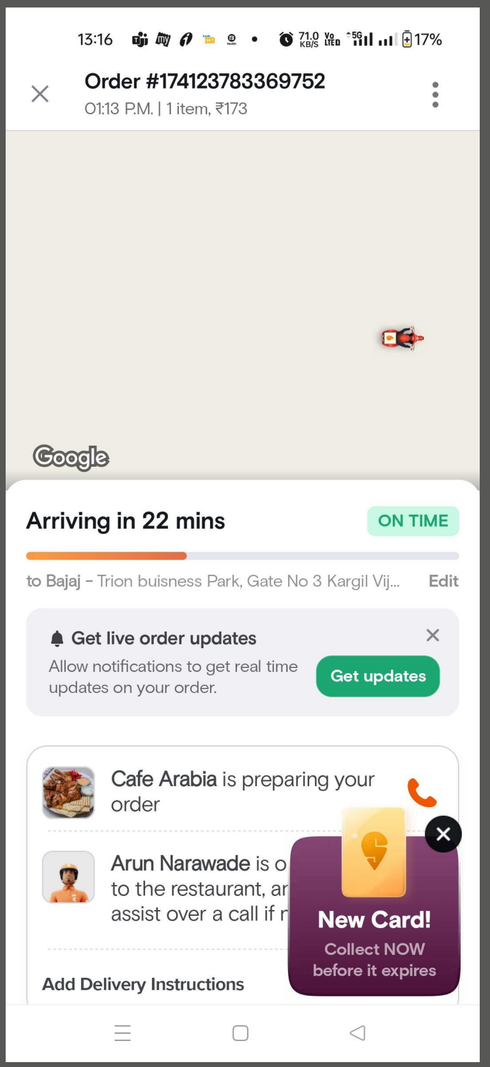
Swiggy



Apollo pharmacy



Swiggy



Design principles

Data driven

Proactive

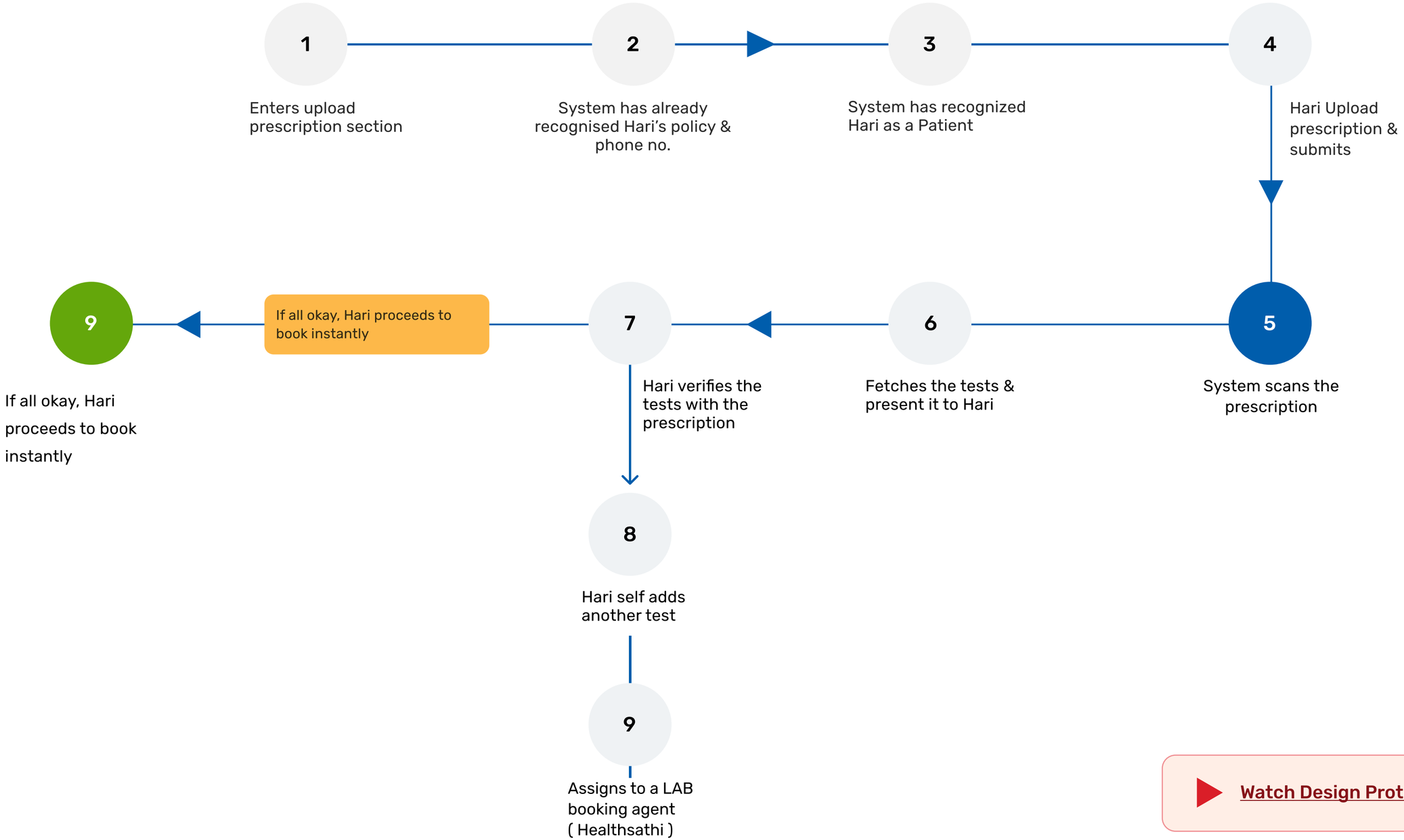
Smart

Guided

resilient

Intuitive

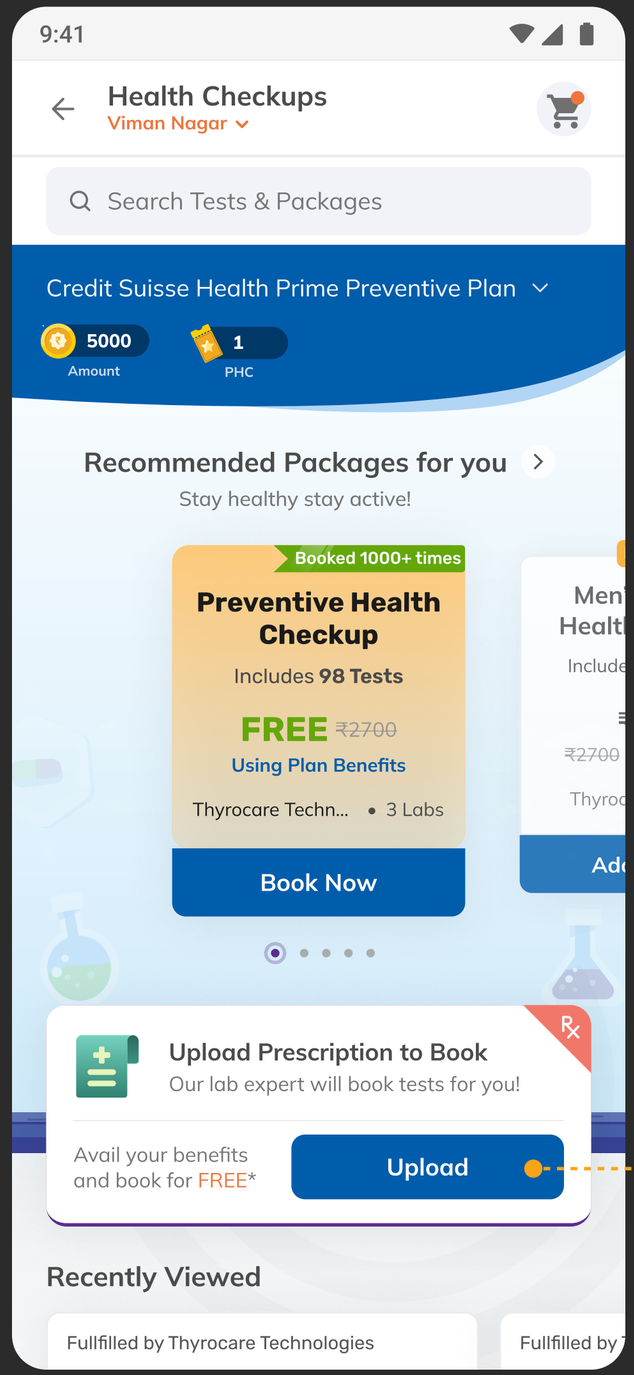
Proposed design flow



Watch Design Protoype

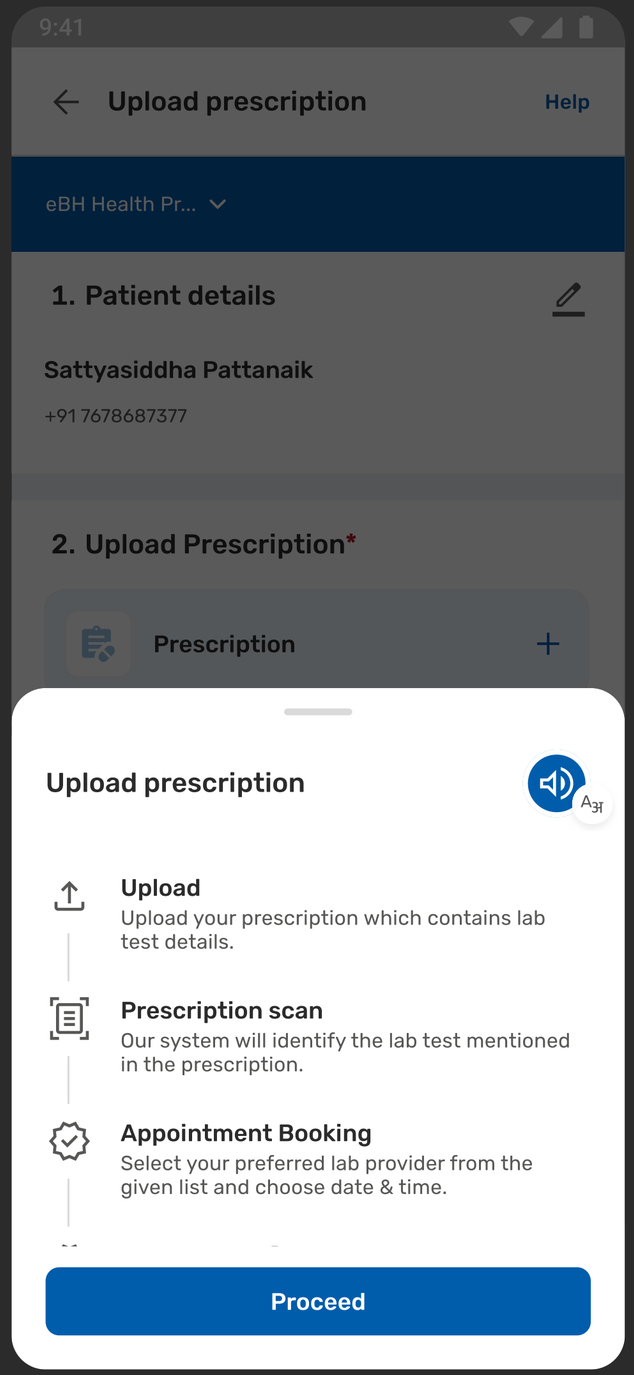
Design flow

1. Upload prescription



Upload prescription from here

2. Before the process begins, Step by step guide for user to be aware of what will happen next

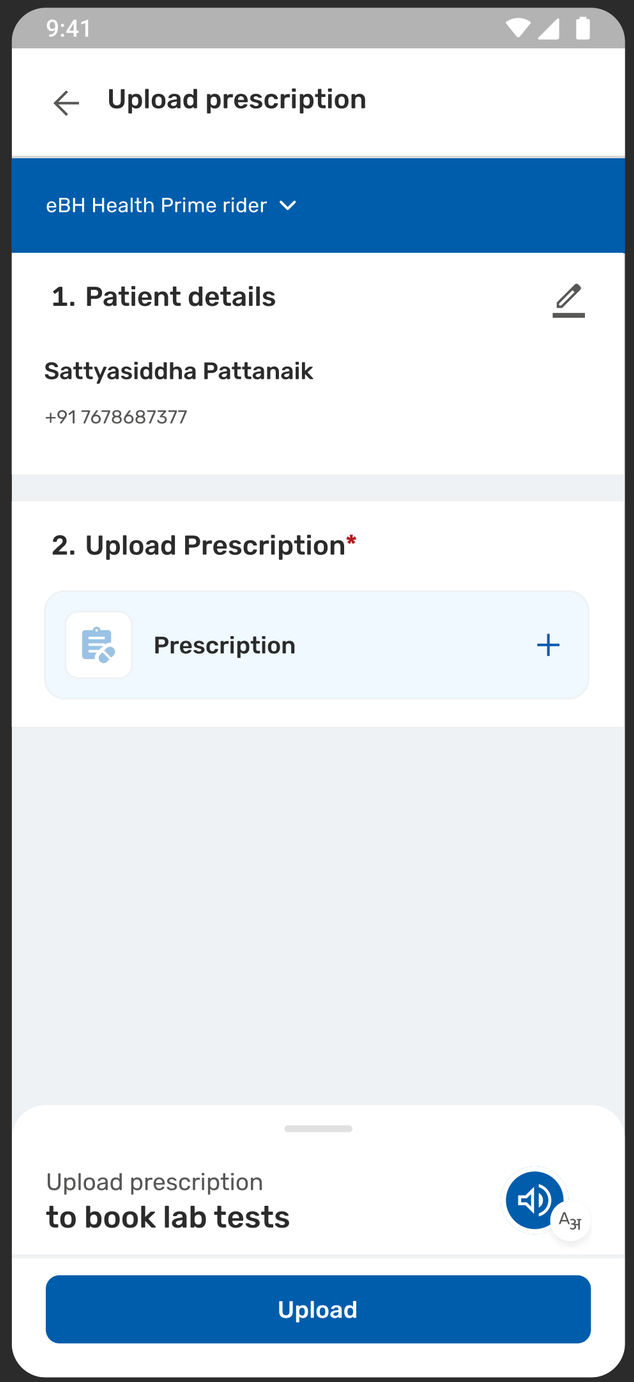


Vernacular language

For our users who have difficulty in reading english, can hear the steps to take in Hindi or Vernacular language

Next Step

3. Landing page



Policy details flap

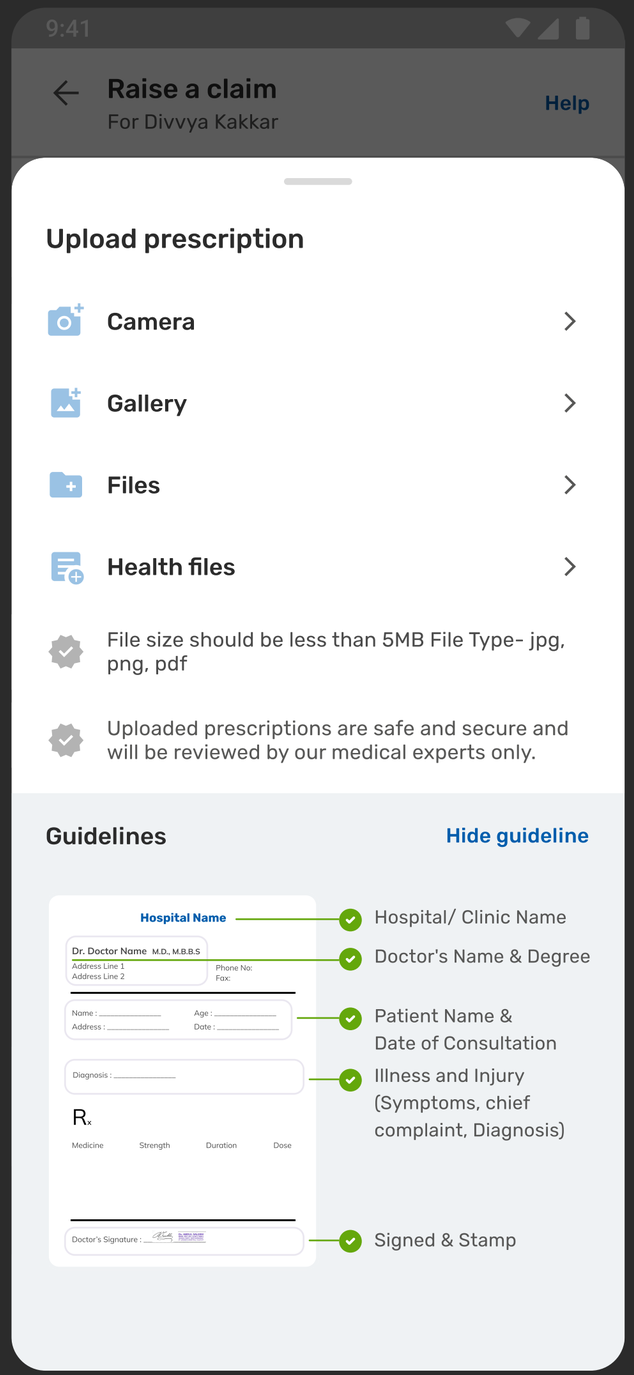
Change patient details

Upload prescription from here

Information flap

Upload prescription from here

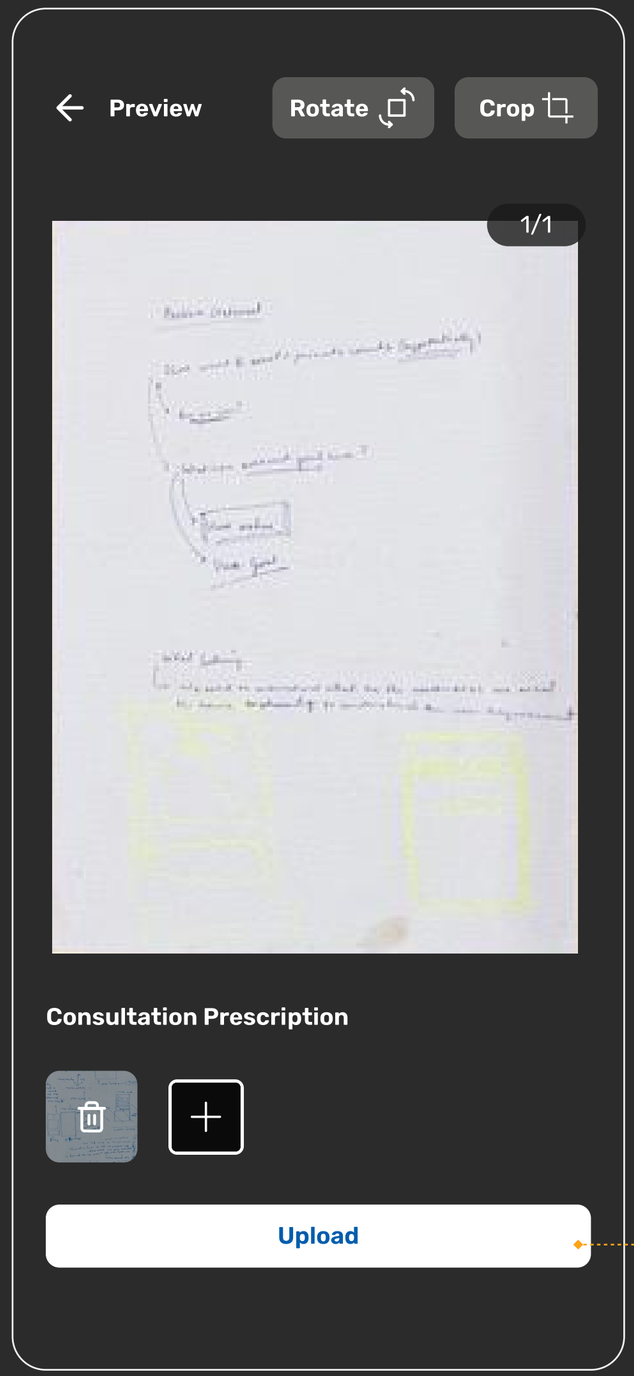
4. Upload document bottom sheet



Provision for upload prescription from our in-App Health vault

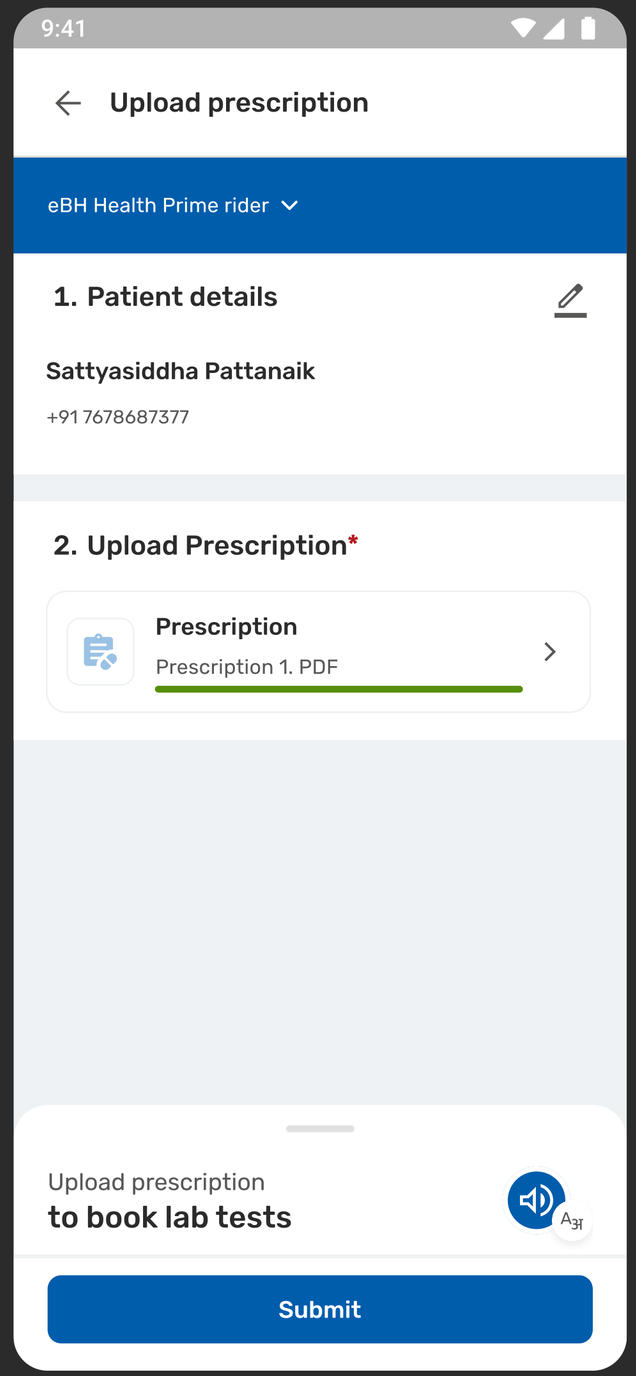
Guidelines for the document for acceptance

4. Once the prescription picture is clicked,
It is uploaded on platform for editing & submission



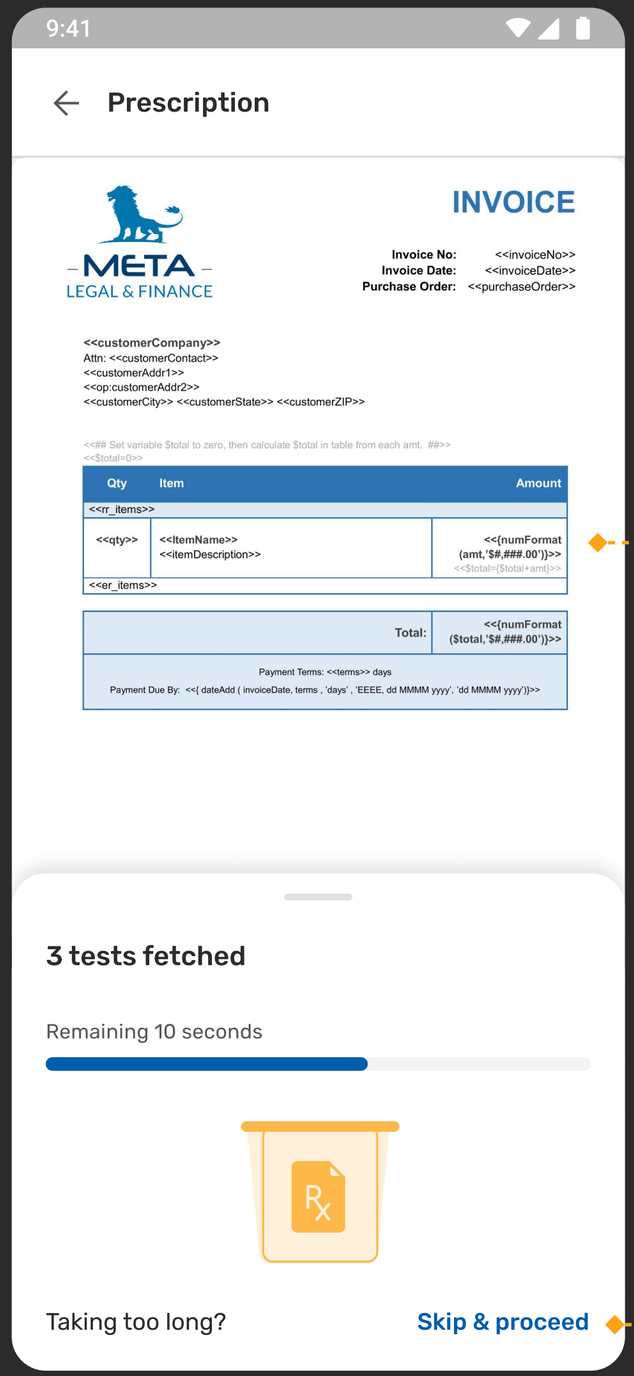
Click

5. Prescription uploading



Submit the uploaded prescription for OCR Scan

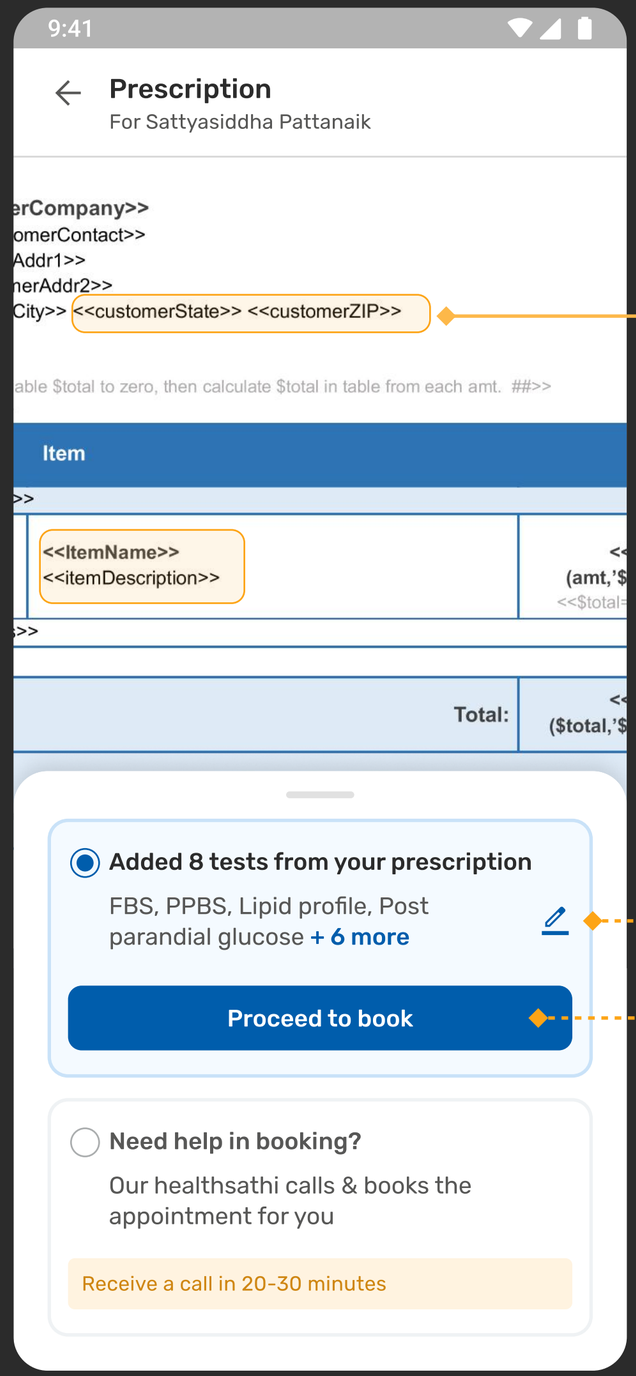
6. OCR Scanning



Prescription in the background for relativity

Skip & proceed
It may take upto 26secs max due to API response for the scan to complete. Skip and proceed let users assign the entire case to Lab assistant

7. Fetched tests from prescription

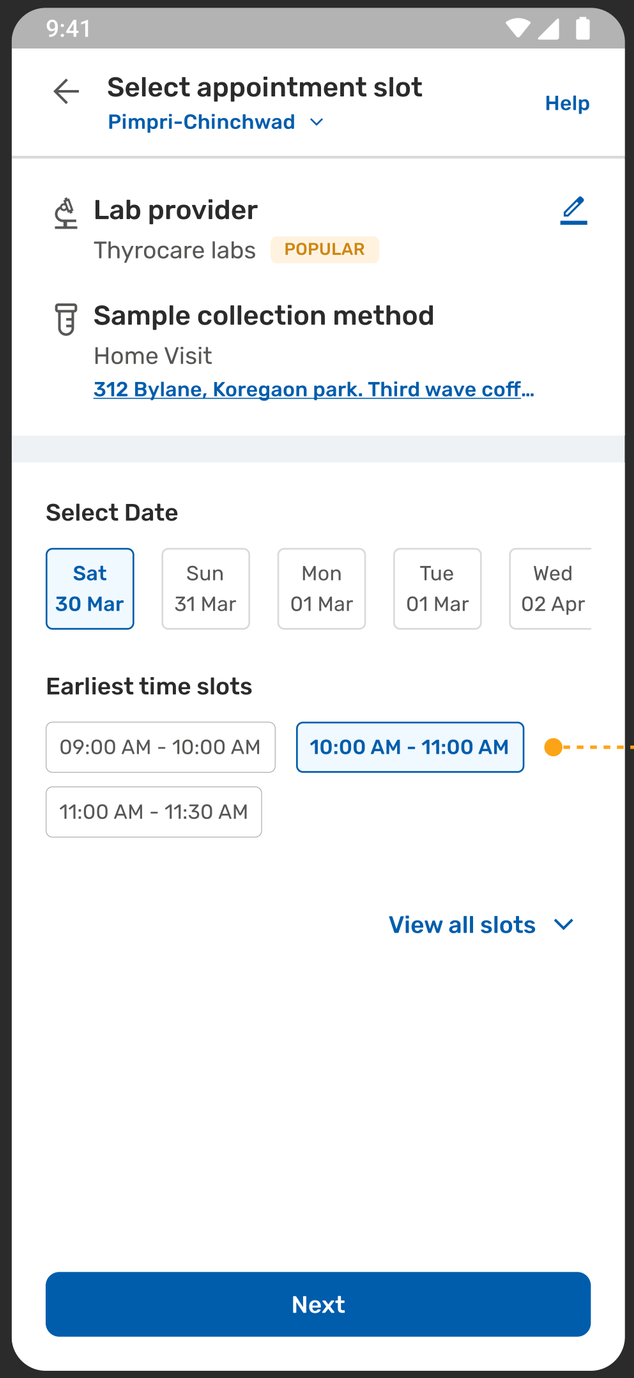


Highlighted
Once the scan is complete, Identified tests are received Users can proceed to book them

Edit
Edit will take users to test lists where users can add new tests from self search & remove tests aswell

Proceed to book
Once the scan is complete, Identified tests are received Users can proceed to book them

8. Auto assigning of lab, date and slot



When the users proceed to book the fetched tests, The system recommends the best Lab provider and time slot for the sample collection

The Lab provider recommendations are based on the below parameters in priority

1. Nearby labs for user location
2. Labs with low cancellation rate
3. Labs booked mostly in past history

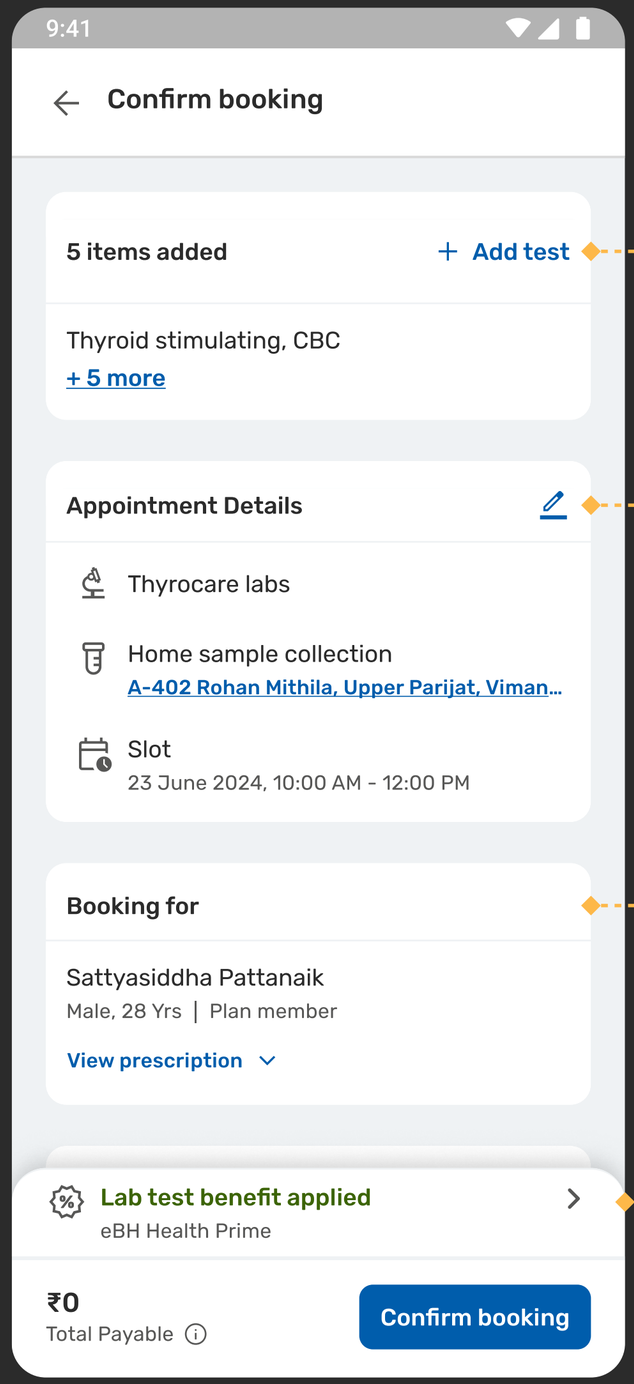
Data driven slot preferrence

We looked at our user data and found that most of the tests and packages are booked during the time of **7-9am**.
Below table shows the data and the patten of booking time

order_metadata.agentId	(Multiple Items)
created_at_date	(Multiple Items)
entity_type	(All)

Count of mobile_number	Column Labels	AM 02	AM 04	AM 05	AM 06	AM 07	AM 08	AM 09	AM 10	AM 11	PM 12	PM 13	PM 14	PM 15	PM 16	PM 17	PM 18	PM 19	PM 20	PM 21	PM 22	Grand Total
16											1											1
17															1							1
1			2	21	346	919	1028	727	462	302	120	93	25	22	8	16	6	7	4	1	1	4110
0					1	4	1	2		2		1		1								12
1						1		4		1												6
6							1	1		1												3
7					6	9	3	1	1	2		1										23
8					16	46	55	29	27	12	5	5		1		1	1					198
9				1	18	81	49	34	33	18	7	6	1	1	2		1					252
10				1	31	63	83	48	35	21	4	12	1	1		1		1			1	303
11				2	20	83	108	63	32	29	10	7	3	2		2		1	1			363
12				3	42	94	95	53	51	24	12	8	4	2	1	4		1	1			395
13				3	23	67	79	57	30	22	14	7	3	1	1	1	1		2			311
14				4	27	53	93	58	41	24	16	9		3		2				1		331
15				2	38	96	97	61	50	15	8	3	3	3	1	2						379
16				2	22	92	98	68	43	29	12	12	2									380
17			2	1	33	69	84	48	23	21	4	9		2		1	1	1				299
18					23	56	61	49	22	17	8	4	1	1		1	1	1				245
19					17	36	39	62	24	21	4	1	1	3	2	1		1				212
20				2	13	37	46	40	20	17	4	8	2									189
21					13	21	20	33	19	12	7		2	1	1		1	1				131
22					3	10	16	14	11	9	5		2									70
23						1		2		5												8
2		1	1	1	3	94	328	243	148	107	74	46	19	8	4	3	2		2			1084

9. Cart Page



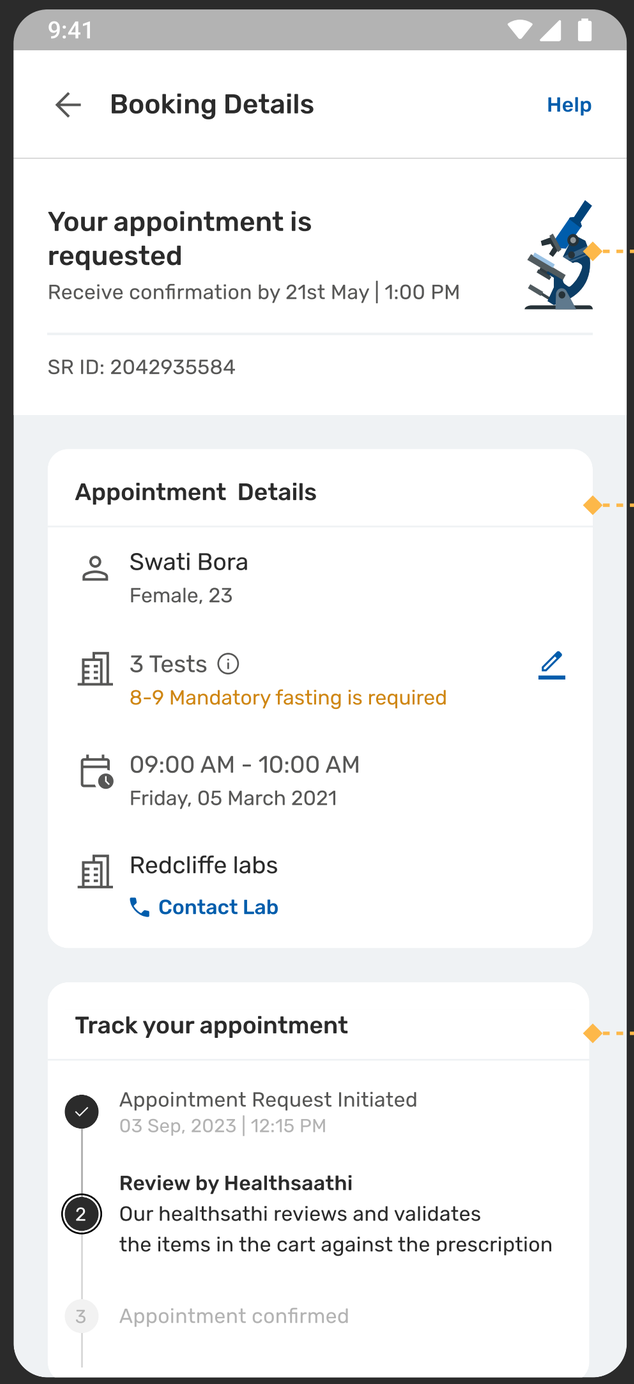
Added Tests
Once the scan is complete,
Identified tests are received
Users can proceed to book them

Edit
Edit will take users to test
lists where users can
add new tests from self search
& remove tests aswell

Proceed to book
Once the scan is complete,
Identified tests are received
Users can proceed to book them

Proceed to book
Once the scan is complete,
Identified tests are received
Users can proceed to book them

10. Post booking details



Active Status section

Edit
Edit will take users to test
lists where users can
add new tests from self search
& remove tests aswell

Process Stepper
Once the scan is complete,
Identified tests are received
Users can proceed to book them

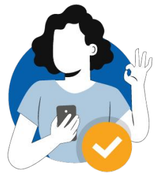
10. Post booking Details

9:41

Appointment Details Help

Your appointment is confirmed

Lab technician will be assigned by Wed, 23 May 2023 at 1:00 PM



Booking ID : 20424935584 HOME COLLECTION

Appointment details Modify

Prerna Bajaj + 2 More
Female, 23 | Plan Member

HbA1c + 3 Tests
8-12 hours of mandatory fasting is required

Home collection
142, B-22, Chandivali, Powai, Mumbai 40076

Redcliff labs
Viman Nagar, Pune

09:00 AM - 10:00 AM
Friday, 05 March 2021

Reschedule Booking

Track appointment

Friday, 05 March 2021

Reschedule Booking

Track appointment

- Appointment confirmed
  03 Sep, 2023 | 12:15 PM
- 2 **Lab Technician assigned**
  To be assigned on 23 May, 2023 | 1:00 PM
- 3 Sample collected
- 4 Report generated

Payment details Download

Lab Tests	₹900
Sample Collection Charge	~~₹900~~ ₹0
eBH Health Prime	**-₹900**
Total paid	**₹0**

Customer Support

Anirudh Prasad
Find Immediate assistance in your lab journey

eBH Health Prime	**-₹900**
Total paid	**₹0**

Customer Support

Anirudh Prasad
Find Immediate assistance in your lab journey

Call Agent Chat with Agent

Cancel appointment

Cancellations are allowed only up to 2 hours before the scheduled slot time.

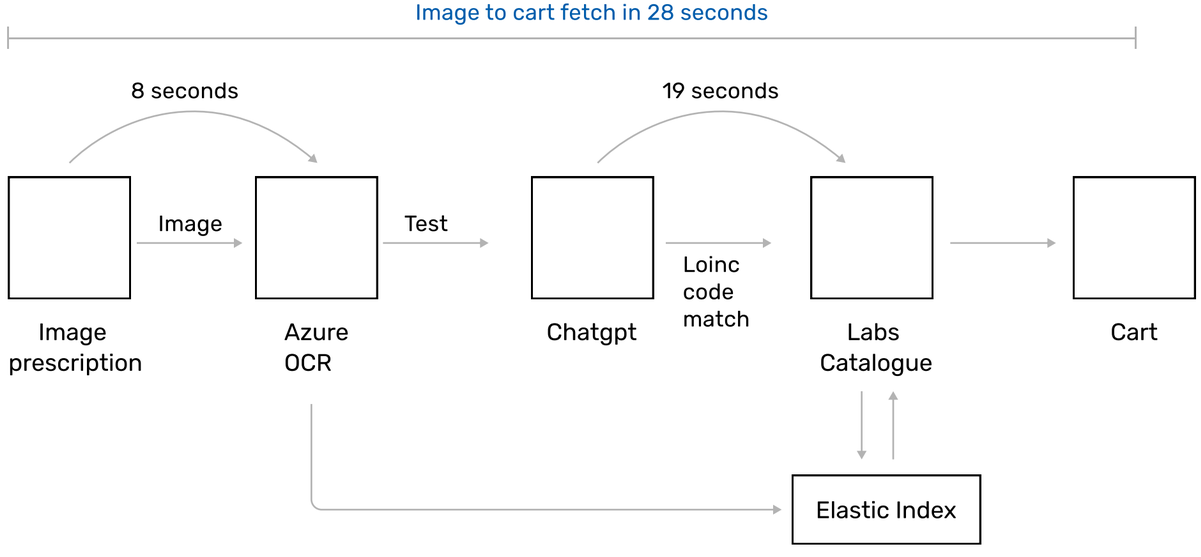
Cancel Booking

Constraints in the Project:

1. UI header cannot be used for information display, due to mweb experience
2. OCR model accuracy
3. Confidence build in customer on the OCR fetched tests
4. How will customers know the prescription and the fetched tests
   are a right match ?
5. Ability to build interpretation and confidence buildup feature for the fetched tests

Project Status :

1. Beta Version Live
2. Usability tested with Internal users done
3. Enhancements sprints

Watch Design Protoype

Detailed OCR solution flow