Challenge Brief

Design a basic mobile app that allows users to buy and manage a FASTag for their vehicle. Conduct your study to gather how the FASTag product works and its nuances.

Design the UI of user flows for the following journeys:
1. Buy a FASTag for your vehicle.
2. See your FASTag account balance and past transactions.
3. Top-up your FASTag balance.

Other Expectations from this Task

1. A detailed presentation (PDF) that showcases your strategy, UX principles applied, UI style, typography, and the actual UI user flows.
2. Tappable XD prototype link.
3. Source XD file.

Notes:
1. Screen art-board size: 360px width.
2. You are free to create your own colour palette, just make sure it is aesthetically pleasing.
3. Research online to find the correct fields and flows for each of these journeys.
4. Bonus points for suggesting new features.

Background Context

FASTag is an electronic toll collection system, operated by the NHAI. Based on radio frequency identification (RFID) technology, FASTag is affixed on the windscreen of vehicles. In other words, FASTags are prepaid rechargeable tags for toll collection. FASTags do not have any expiry date, hence, they can be used as long as they are not tampered with and are readable at the toll plazas.
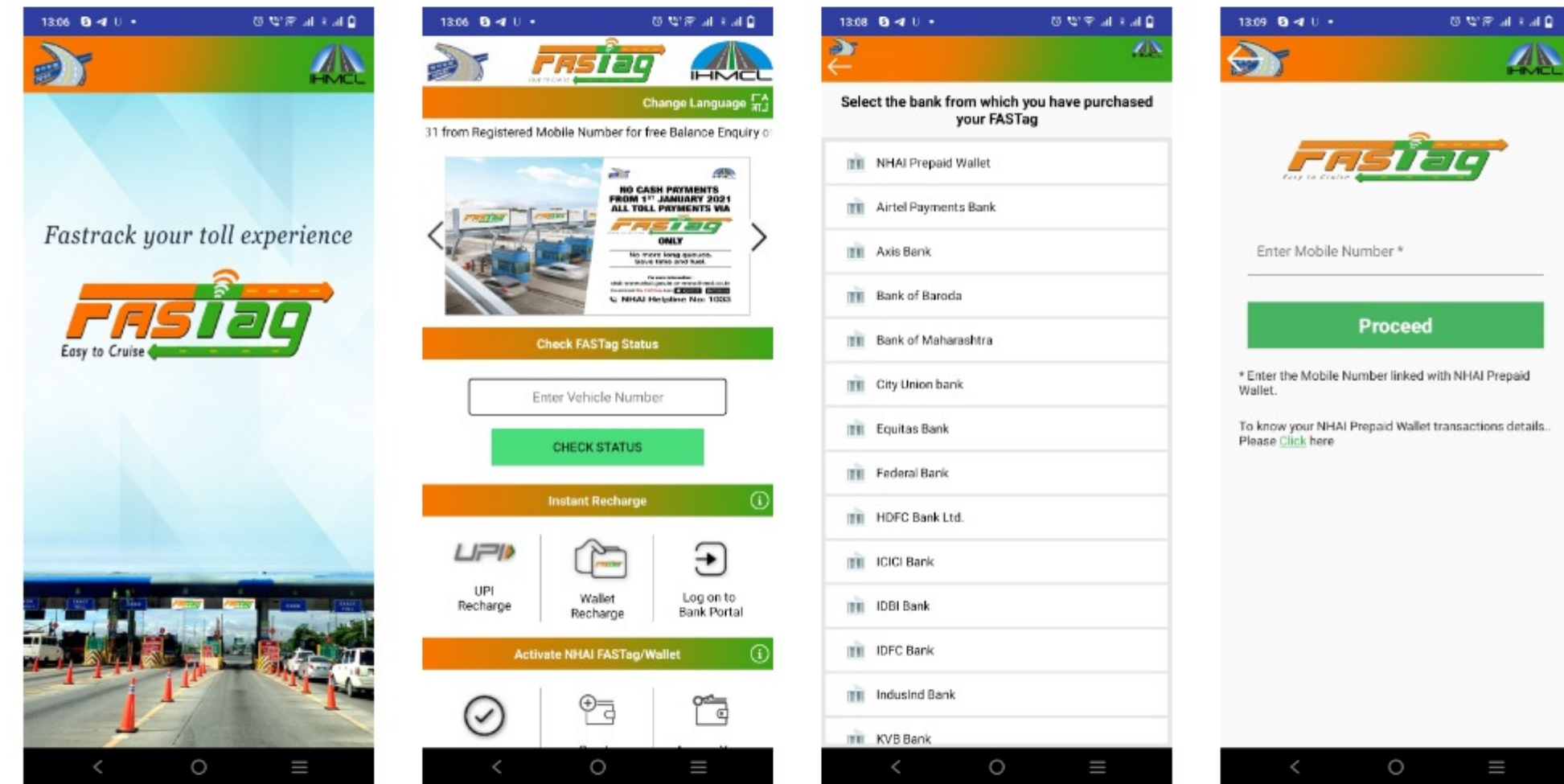
What is the approach I took

Research . Analyse . Ideate . Design

miro

Available Insights

The tag can be purchased from official Tag issuers or participating Banks and if it is linked to a prepaid account, then recharging or top-up can be as per requirement. Some banks have online forms that can be filled up by interested customers. Once enquiry forms are filled, and query is generated, the customer can visit the office to fill up a required form and submit necessary documents to create a FASTag account.

Source- https://www.indiatoday.in/information/story/what-is-fasttag-all-you-need-to-know-1615824-2019-11-05

Target group/persona

- Large vehicle drivers who moved across borders
- Literacy level less
- Mandatory to use Fast-tag or else pay double toll amount
- Employee of companies

What is the success matrix

1. Increase usage from by 20% of daily commute usage.
2. Increase learnability of the platform services and features.
3. Improve subscription rate by offering other ancillary services in a seamless user experience.
4. Increase discoverability of new tools, features like bulk vehicle registration, top-ups etc

What is the Goal

Unleash the power of Fast-tag centric experience with new services for our new and old customers and gain a larger share of their use time.

How we can enable and promote all new services?

Showcase the value of the Home and new value added services experience on the platform to be advanced and industry competitive.

miro

What problem are we solving?

A need for ease of vehicle registration to apply for Fast tag, auto-top ups, **apply for bulk company vehicles in one go**, ancillary services related to road journey's, engagement and services discoverability to achieve the desired service utility goals to current and new users.

"I've to scramble around and look for best suitable and easy to use fast tag recharge." Users think of one item at a time. So our platform is a significant opportunity to address their need for a need of services which are in support of fast tag and also other value added ancillary services.

What are the JTBD?

DIRECTION- I need to know how to register my vehicle without me having to fill long forms with email, vehicle details etc, in an affordable way and that's better tailored to user needs.

EFFECTIVENESS & EFFICIENCY- How I can avail the new services like top ups, add new vehicle, order new single/bulk fast tags, in the the most effective and easier way.

ENGAGEMENT- I need an engaging and motivating way suited to how I use the other ancillary services.

Competitive Benchmarking

A competitive benchmarking to attain a basic idea of what the other Fast tag service provider apps offers and features. I did an in-depth reviews of each of these providers to make an informed decision.

I analysed the primary user journey points, feature sets, and whether or not the app is better for business or personal use.

1. My Fast-tag
2. eToll by ICICI bank
3. IDBI- ETC Fastag
4. Park + FASTag
5. IDFC First ank fast tag
6. Equitas
7. Fastag karins
8. FASTag- buy & recharge federa

Heuristic Findings

- Confusing home page

- Complex early registrations

- Long forms to fill to add vehicle

- The apps were hard to understand

- Lack of clarity on Fast-tag purchasing flow

- The TG is not that literate to understand english & technical flow

- No provision to add multiple vehicles

- No provision to add multiple vehicles

- No provision to add multiple vehicles

- No provision to add multiple Fast tags

- No provision to get emergency top-up

- No provision to get emergency top-up

- The user uses basic phone and cant use a heavy app

- Most of the times the tag scanner doest work, which leads to multiple deduction, no refunds etc

- Most of the times no msg or notification is received of the deduction
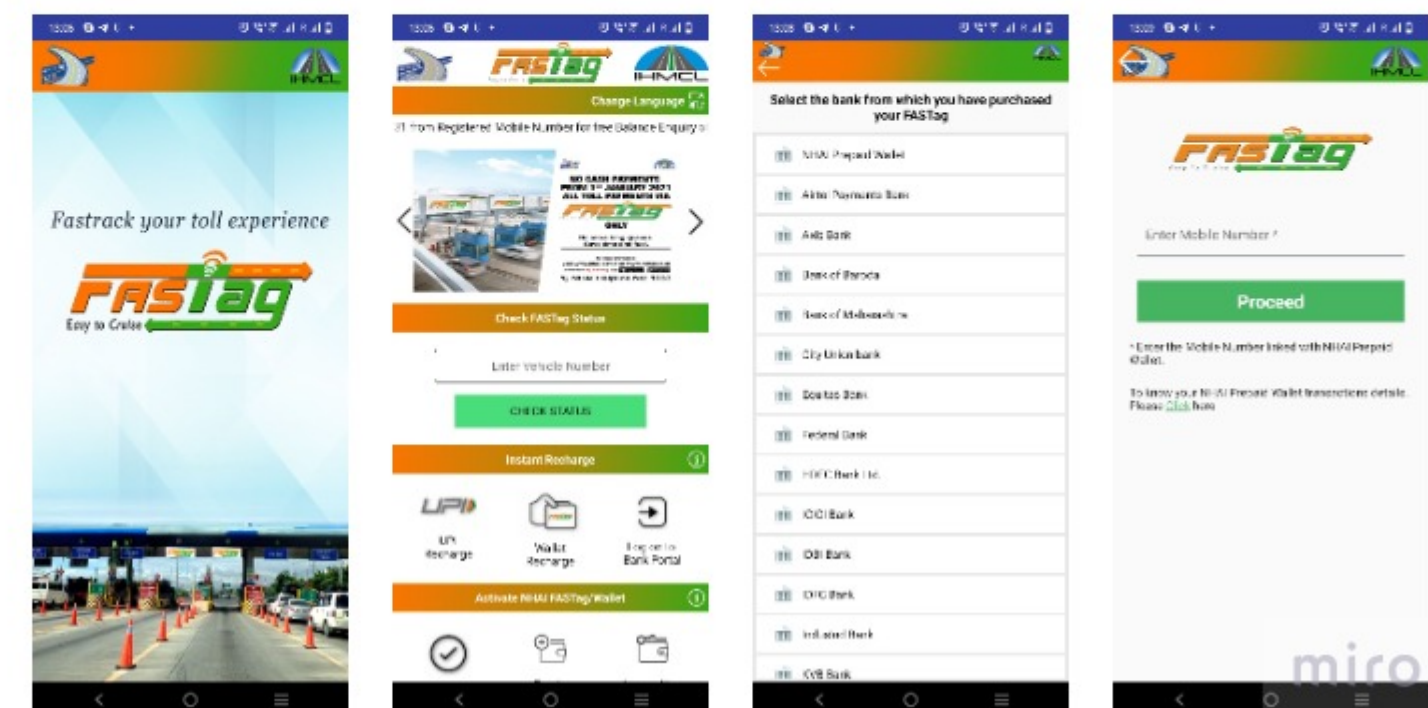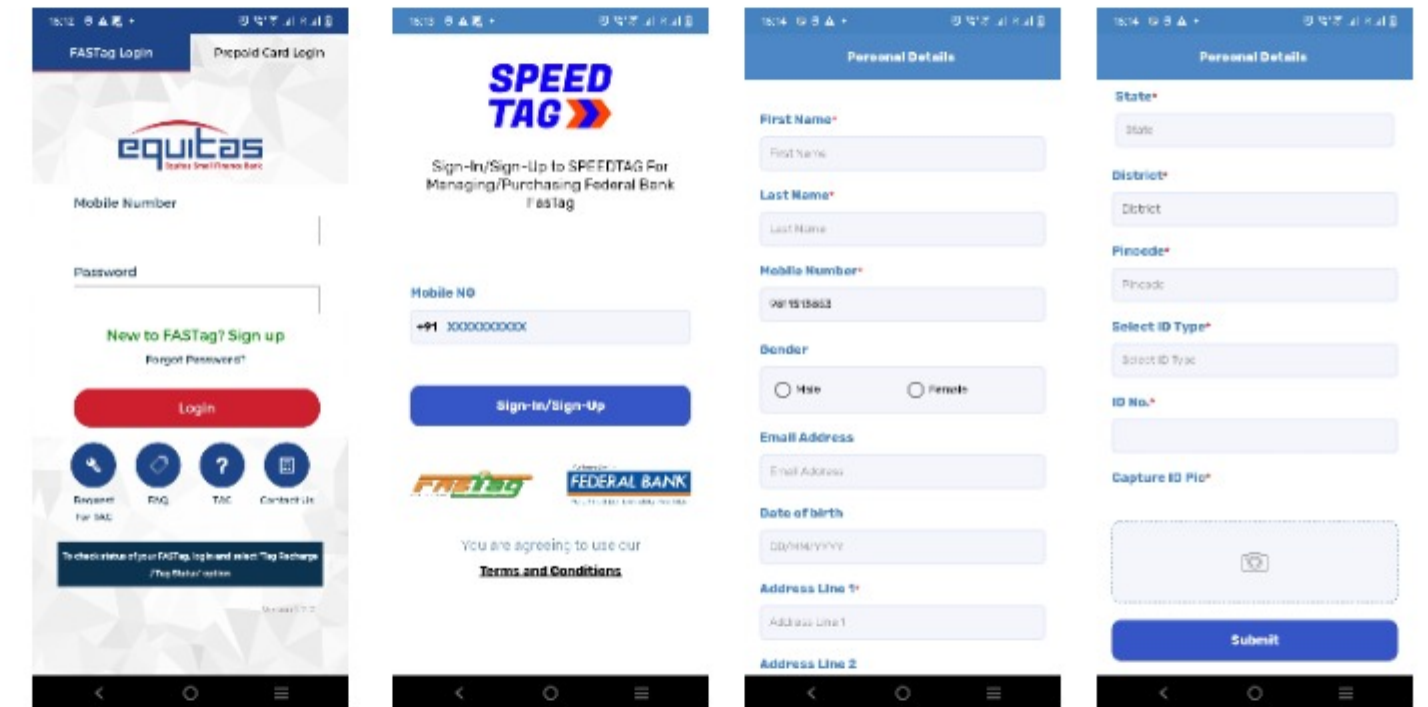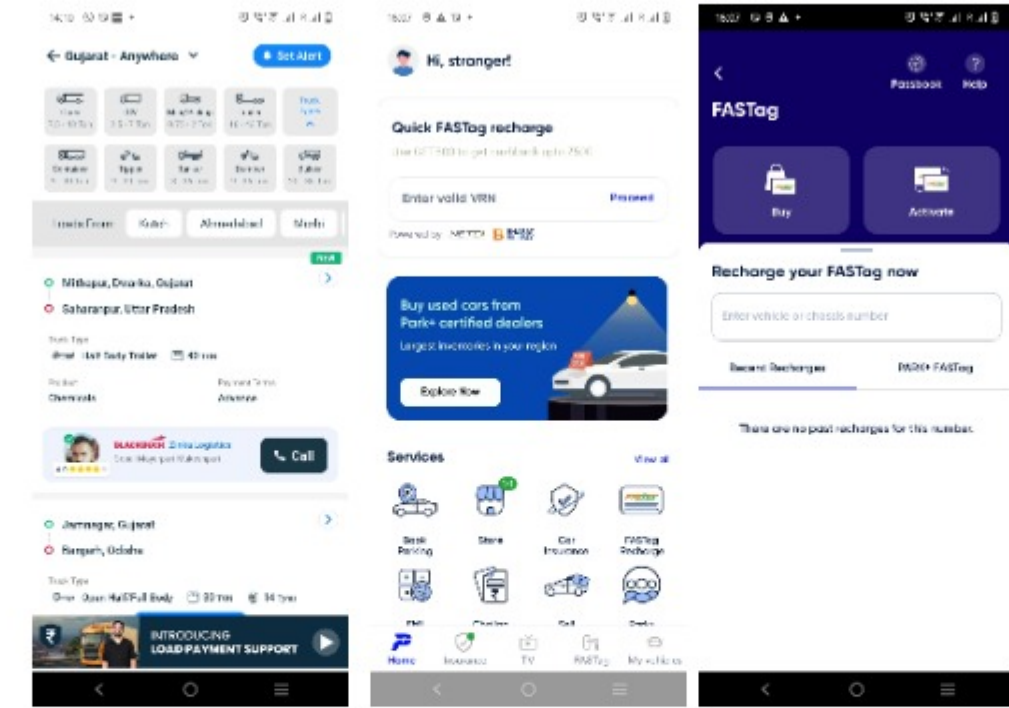
What are the assumptions/hypothesis?

The platform should enable drivers with a tailored experience, offer competitive services, and plenty of contextual helpful features. While registration, top-up, applying for new fast-tag, there should be a way where they receive alert by setting up auto top-up without disrupting their experience with easy registration process. The user can setup limit with auto top up amount.

In that case, users are more likely to engage with old and new services and return for future visits, thus **increasing activation, retention, engagement, better performance and decreasing attrition and frustration.**

Where are we now?

The platform's value could be more evident to the users because there are no prominent levels of hierarchy.

Why are we doing this?

The new Fast-tag services engagement and retention is key to the success of the platform's goals. As a UX designer, I want the experience of visiting the forum to be as clear, clean, and valuable as possible.

There is also a solid need to be **mindful and economical** of the space utilization with a refined flow of information architecture across the sections offered by the platform.

There is also a need to surface relevant content and allow them to instantly understand the connection between Fast tag/subscription/money transfers/utilities/walkthrough/search, etc.

I am revising the information architecture to offer improved/enhanced discoverability and recommendations for each user.

High Level Use cases/Milestones

- Focussing on Useful Actions- Helping users to prioritise where to start and ensure they are aware of the how to register vehicle, avail fast-tag services and new service features available to them which are contextual to the road journey
- Curated access paths- To create an adaptive and personalised discoverability path.
- Personalised to user focussed starting point- Inform personalised recommendations on the platform.
- Organize all content for users to allow for one-stop access.
- Customize expectations/experience for users using old and new features have resources, tools and relevant actions.

Next steps to test and validations

UX Process & Methodology: Measuring success
- Qualitative Data Analysis.
- UX Research
- Usability Tests
- Guerrilla Testing for faster iterative cycle

Quantitative Data Analysis
- UX surveys
- A/B tests- A/B testing, describe the variants being tested, traffic allocations to each variant, and the KPIs being measured in the experiment.

miro

User journey flow

User downloads app → Onboarding → User is only asked to enter mobile number with OTP verification

Camera opens for Vehicle number plate scanning

or enter vehicle number manually

Auto-fetch of data related to vehicle is generated.
If information correct- Confirm
Also can add new or multiple vehicles

Vehicle owner name, phone number (provision to change if bank otp will e sent), company details, photo, etc

Homepage

Check total toll for start to end destinations with selection of vehicle size/type

Buy to place order for new Single/multiple fast-tags

Set-up for auto top when balance goes low

Simple mode of payment via QR code generated which can be scanned from any other app as well and payment gets updated

Recommendations widgets - New services offered

Notification Banner Alerts

Data analytical infographics

Deals & offers related to calling

Ancillary services

Search

Cashacks earned post paying toll which can be redeemed with restaurants & hotel stays

Medical help support services

Toll related updates

miro

Mood board

I managed to develop a recurring color theme and use supporting imagery that reinforced the adjectives "effective" and "lighter". The mood board is designed in a way to not make the interface boring and corporate look-like. Use of basic neutral colors with easy navigation of Information architecture
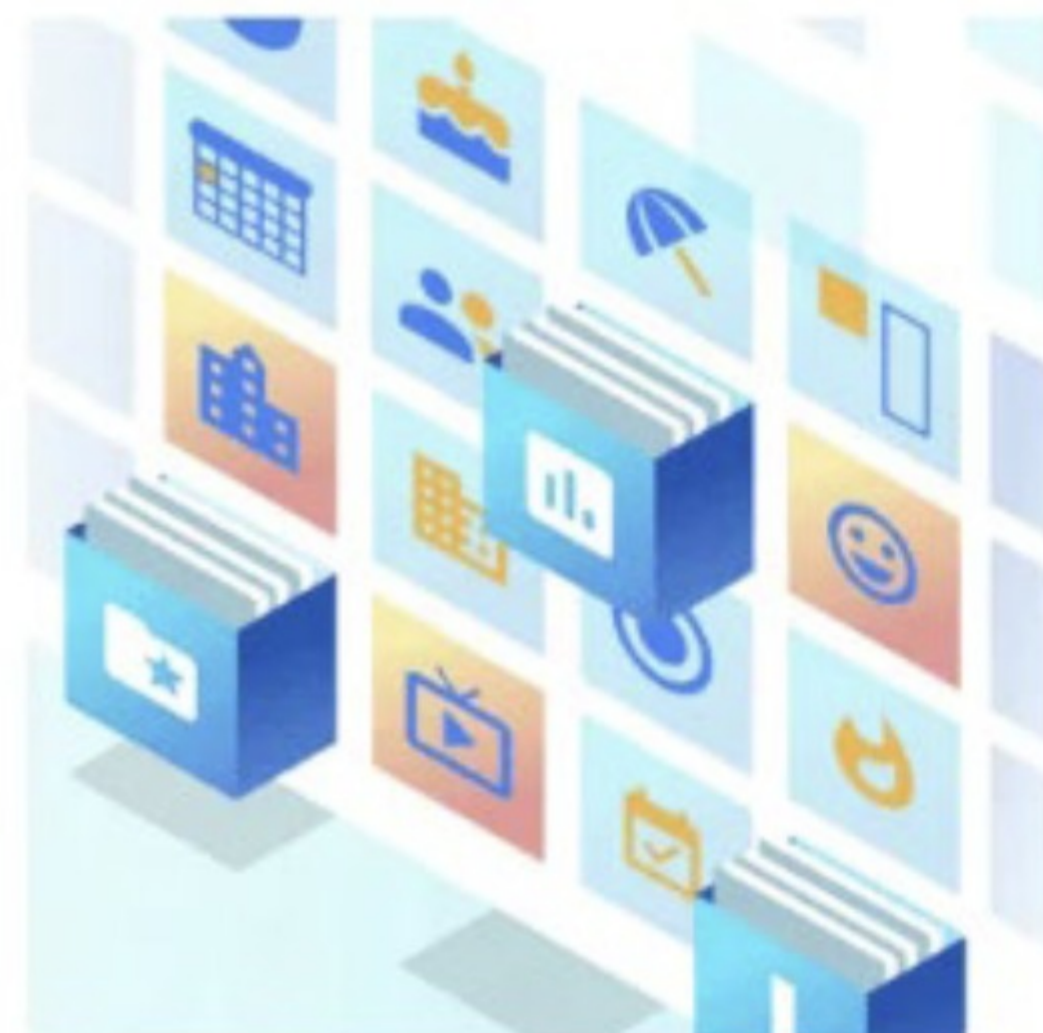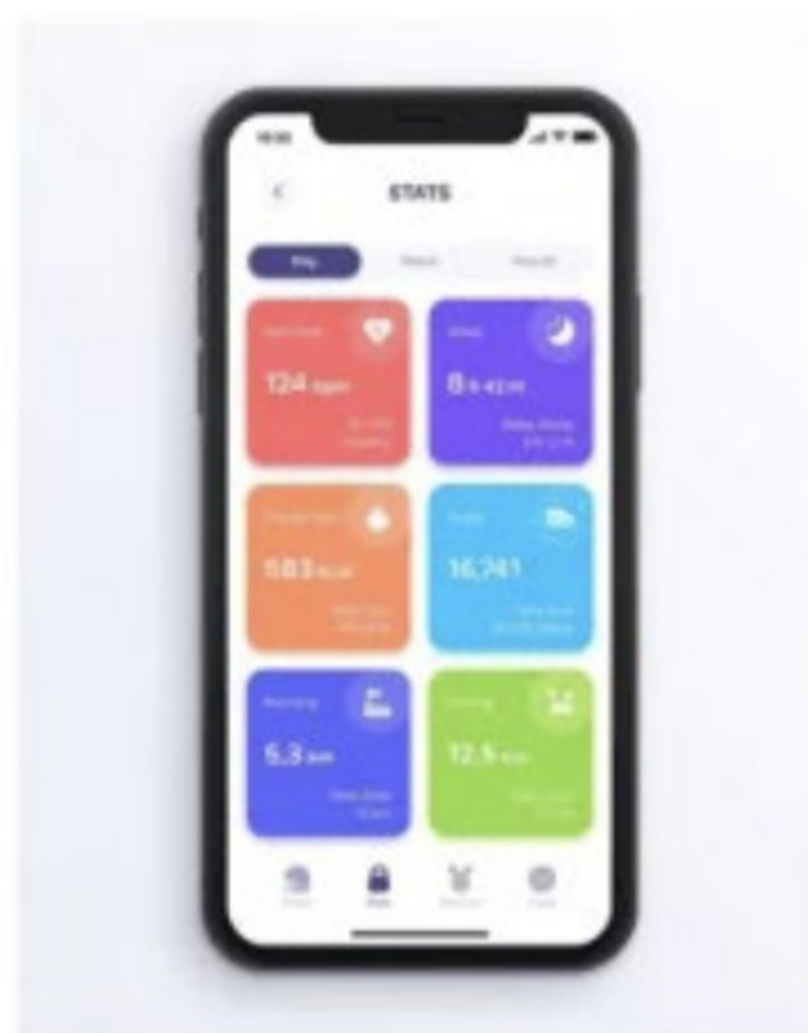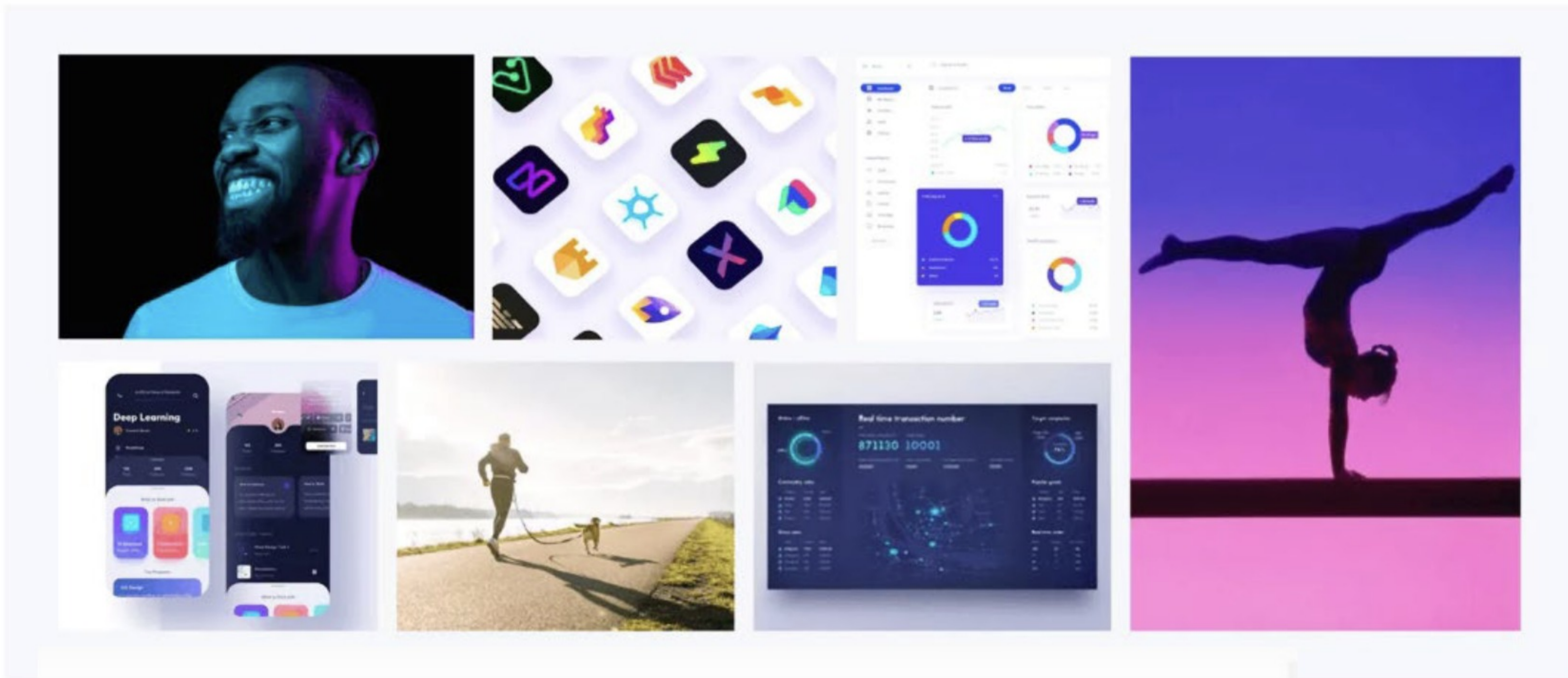
Colors

Brand Colors
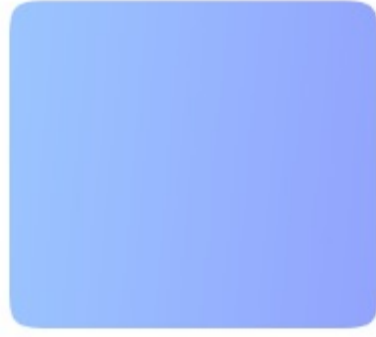
#92A3FD
#9DCEFF

Secondary Color

#C58BF2
#EEA4CE

Black Color

#1D1617   #FFFFFF

Gray Color

#7B6F72   #ADA4A5   #DDDADA

Border Color

Border-color
#F7F8F8

Grid System

Frame

Iphone 11 pro / X
(375x812)

Margin Left Right

22px

Margin Top

40px

Frame Radius

40px

40px

Text

15px

22px

15px

30px

Text

22px   22px

20,1

Button

Sun   Mon   Tue   Wed   Thu   Fri   Sat

Simplified onboarding and Phone number registration

Vehicle registration in just two steps - either via number plate scan or manual entry.

Details of vehicle auto-fetched.

Home-landing page

Buy new fast-tag

Auto-top up page

Screen 1 — Welcome to FastTag Services — X — X — SKIP — Onboarding tutorial for 1st time users

Screen 2 — Deals and offers running using our fast-tag platform, destination wise, top journeys, ancillary services promos — SKIP — Let's Begin

Screen 3 — Welcome to FastTag Services — Register in one single step — Enter Phone — Auto Fetch OTP — [x][x][x][x] — Continue

Scan Vehicle Number Plate — Scanned no. plate directs to fetch vehicle details — OR scanned from vault — Enter vehicle number manually — Recent scans of other vehicle's number plate — UP80H / UP80 / UP80XX / DL8C — Confirm/Continue — Add new vehicle

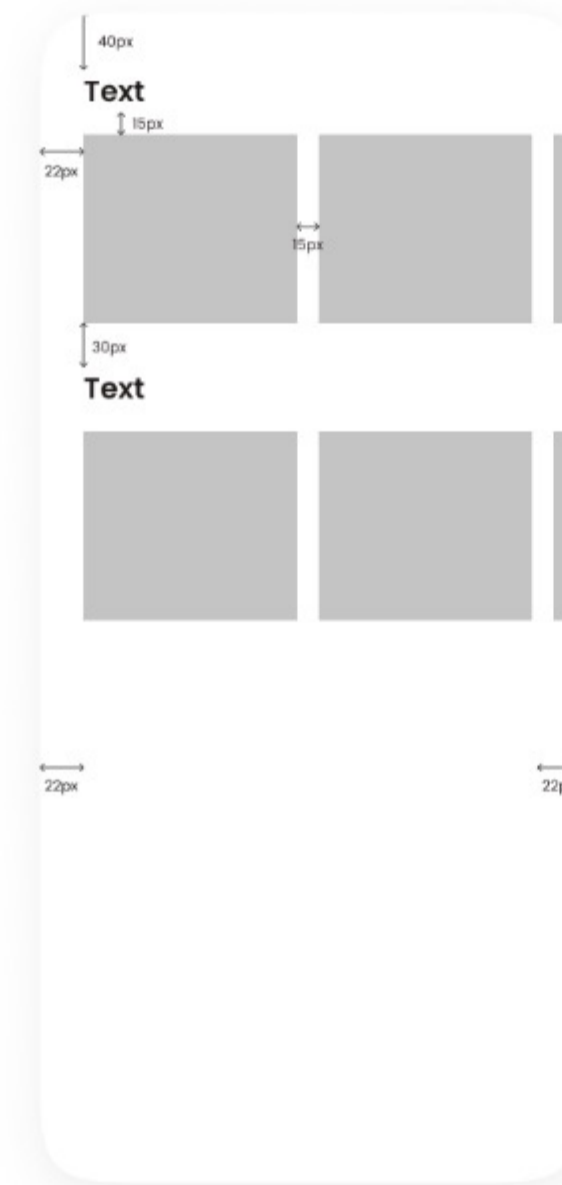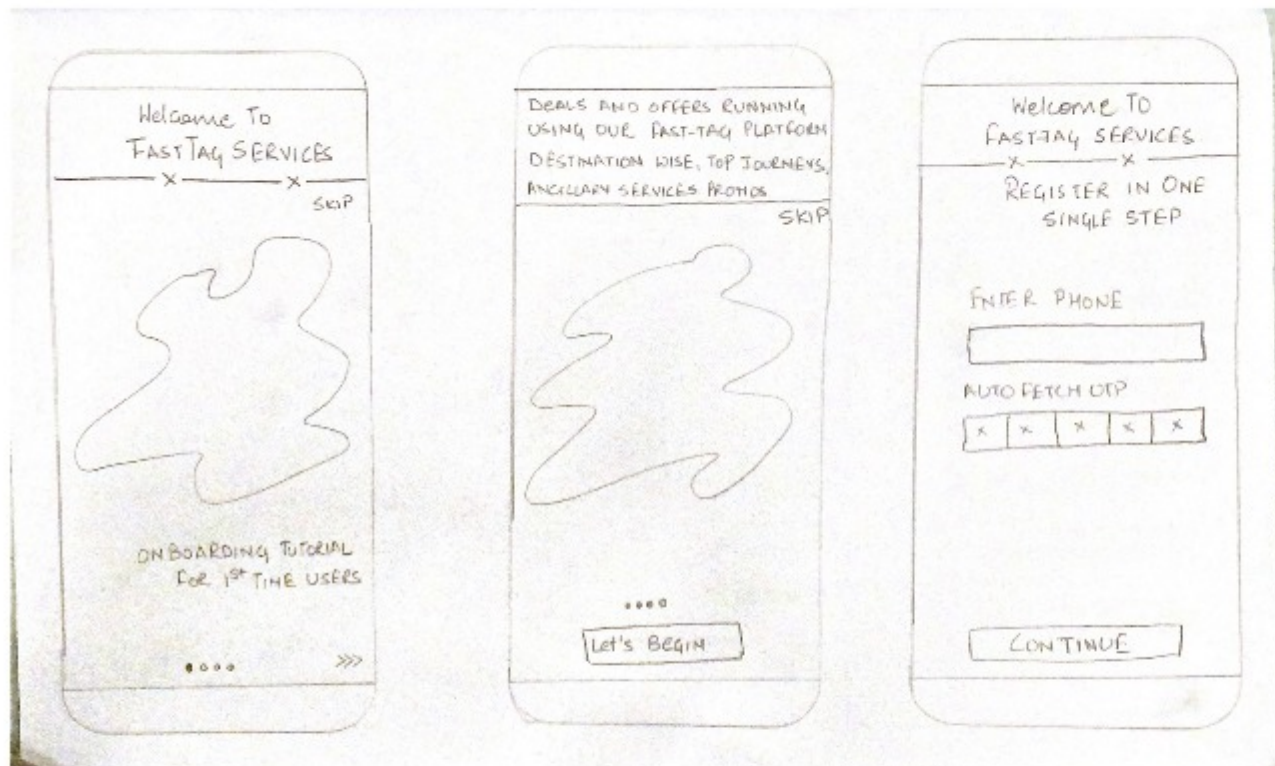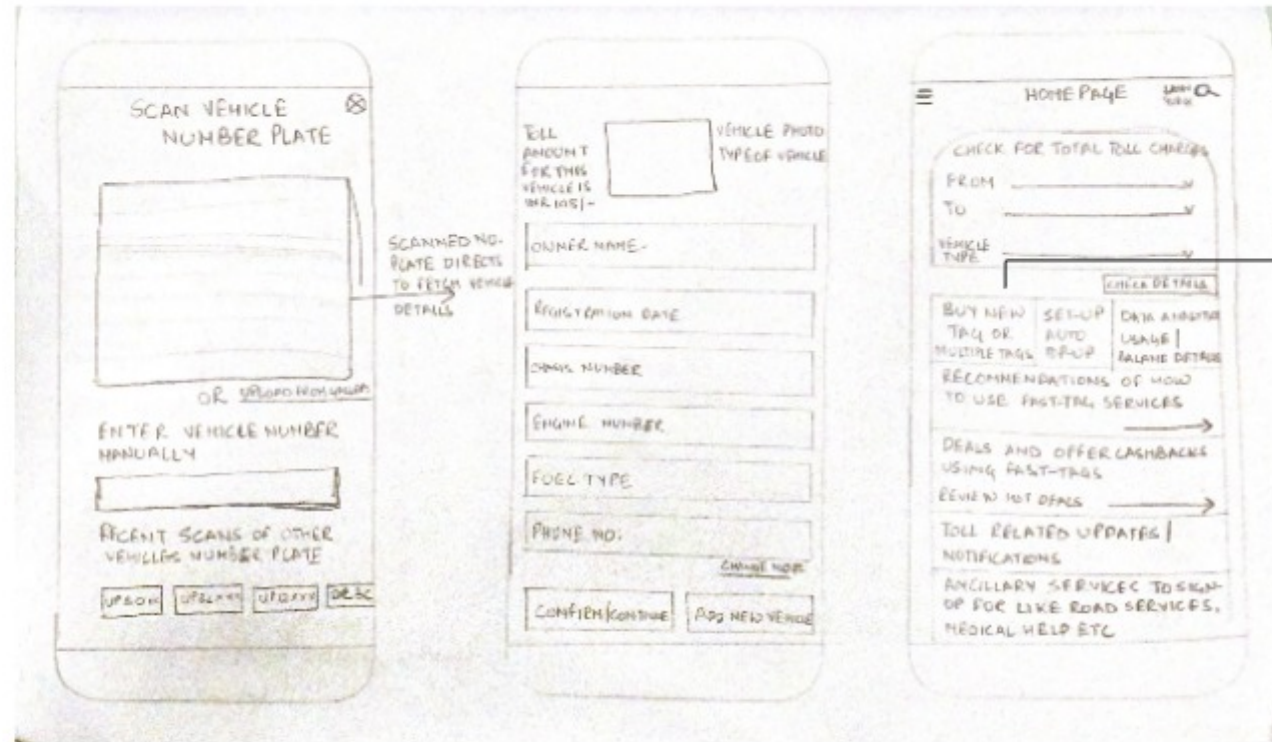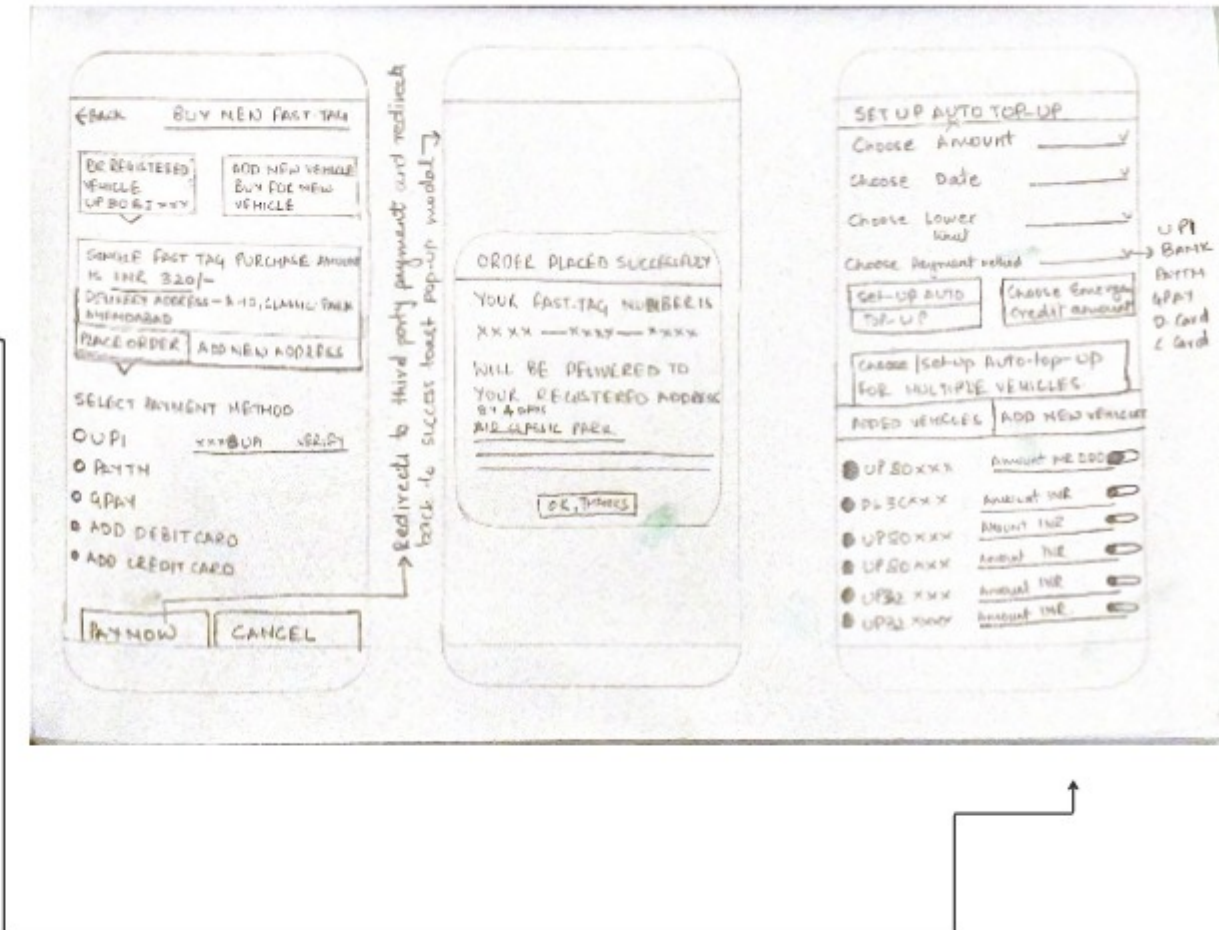Toll amount for this vehicle is INR XX/- — Vehicle photo — Type of vehicle — Owner Name — Registration date — Chasis Number — Engine number — Fuel Type — Phone No. — Change mode — Confirm/Continue — Add new vehicle

Home Page — Check for total toll charges — From — To — Vehicle Type — Check details — Buy new toll or multiple tag recharge — Set-up auto top-up — Data amount usage | balance details — Recommendations of how to use fast-tag services — Deals and offer cashbacks using fast-tags — review hot deals — Toll related updates / notifications — Ancillary services to sign up for like road services, medical help etc

Buy New Fast Tag — Back — Or registered vehicle up80 / dl... — Add new vehicle / buy for new vehicle — Simple fast tag purchase amount is INR 320/- — Delivery address: A-10, clamal park ahmedabad — Place order — Add new address — Purchase amount — Select payment method — UPI — Paytm — GPay — Add debit card — Add credit card — Pay Now — Cancel

Redirects to third party payment card redirects — to success toast pop-up vault?

Order placed successfully — Your fast-tag number is XXXX — XXXX — XXXX — will be delivered to your registered address by 4:6pm air clamal park — Ok, thanks

Set up auto top-up — Choose amount — Choose date — Choose lower limit — Choose payment method — UPI / Bank / GPay / D-card / C-card — Set-up auto top-up — Choose emergency credit amount — Choose set-up auto-top-up for multiple vehicles — Added vehicles / Add new vehicle — UP80XXX — Amount INR 300 — DL3CXXX — Amount INR — UP80XXX — Amount INR — UP80XXX — Amount INR — UP80XXX — Amount INR — UP80XXX — Amount INR

- Check total toll amount of the journey and pay in advanced with QR code generated to be shown at the tolls
- Set-up for auto top-up
- Balance of Fast-tag details
- Check total toll amount of the journey and pay in advanced with QR code generated to be shown at the tolls
- Widgetised approach for ancillary services
- Language selection

miro

Simplified onboarding and Phone number registration: 1/2 step onboarding
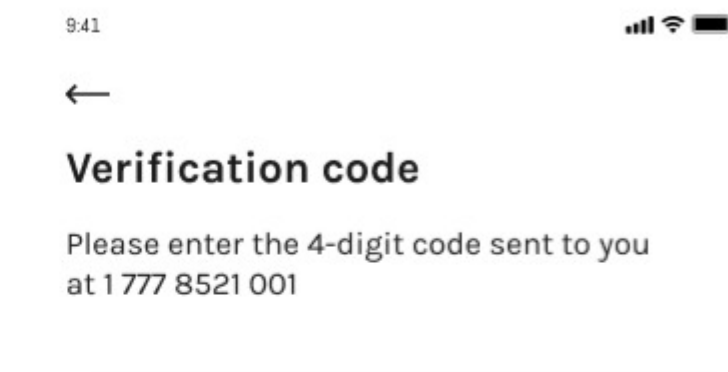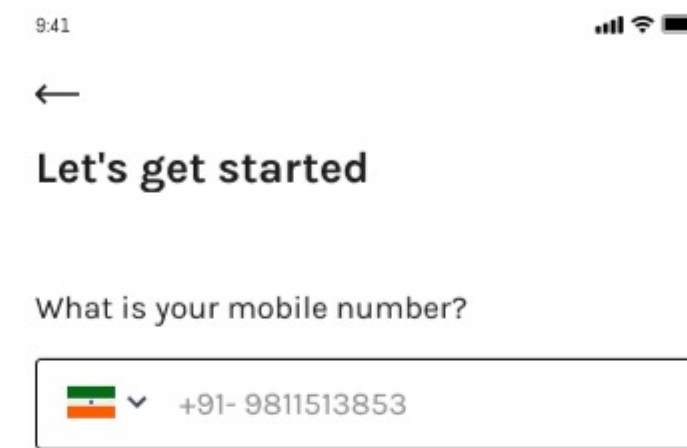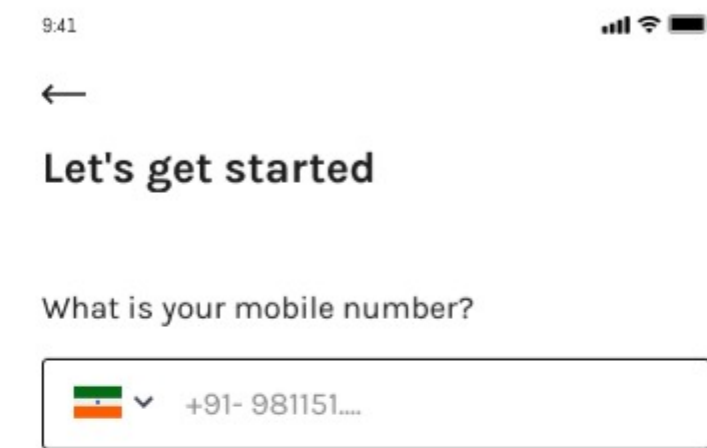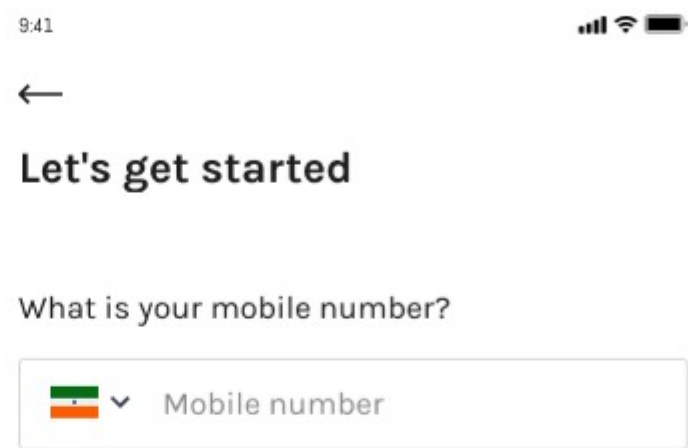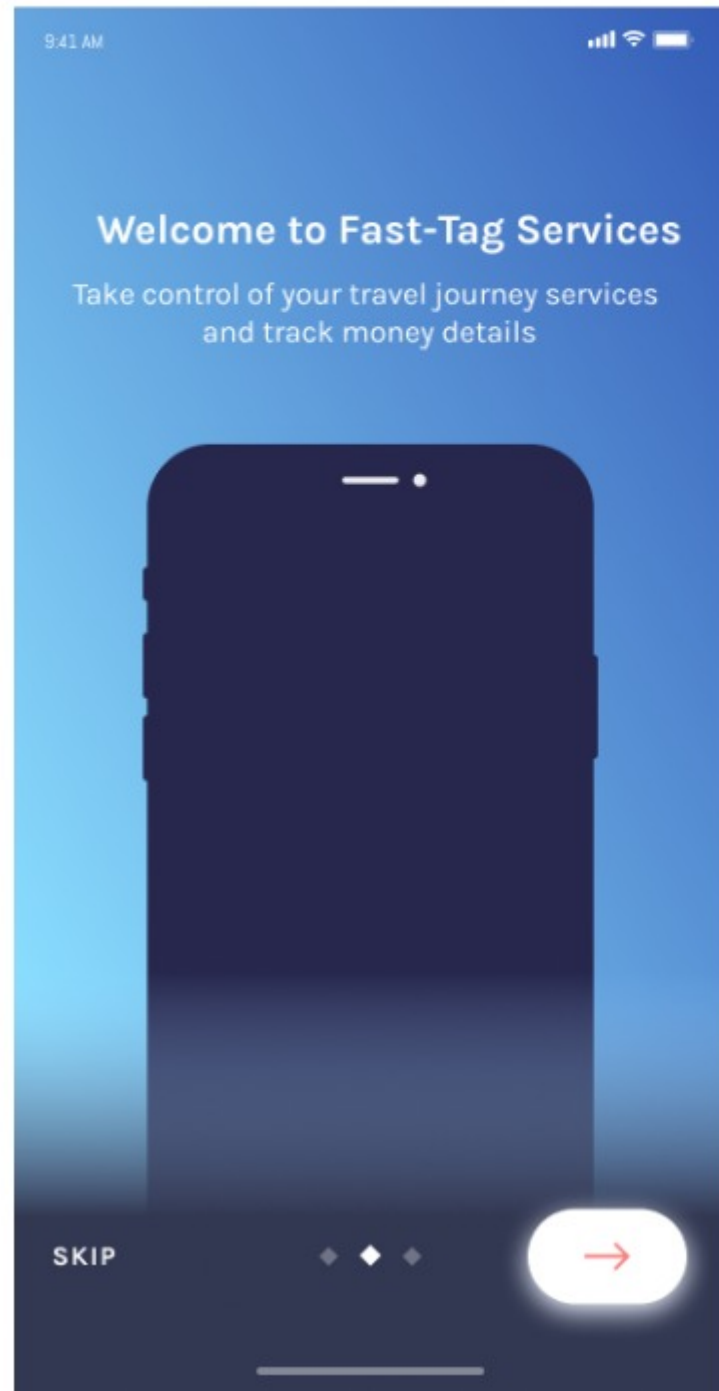
Screen 1
9:41 AM

Welcome to Fast-Tag Services

Take control of your travel journey services and track money details

SKIP

Screen 2
9:41

←

Let's get started

What is your mobile number?

Mobile number

Continue

Screen 3
9:41

←

Let's get started

What is your mobile number?

+91- 981151....

1	2	3
4	5	6
7	8	9
	0	⌫

Continue

Screen 4
9:41

←

Let's get started

What is your mobile number?

+91- 9811513853

Continue

Screen 5
9:41

←

Verification code

Please enter the 4-digit code sent to you at 1 777 8521 001

7   3   5

If you don't receive the code in 30 seconds tap bellow to resend it

1	2	3
4	5	6
7	8	9
	0	⌫

Continue

miro
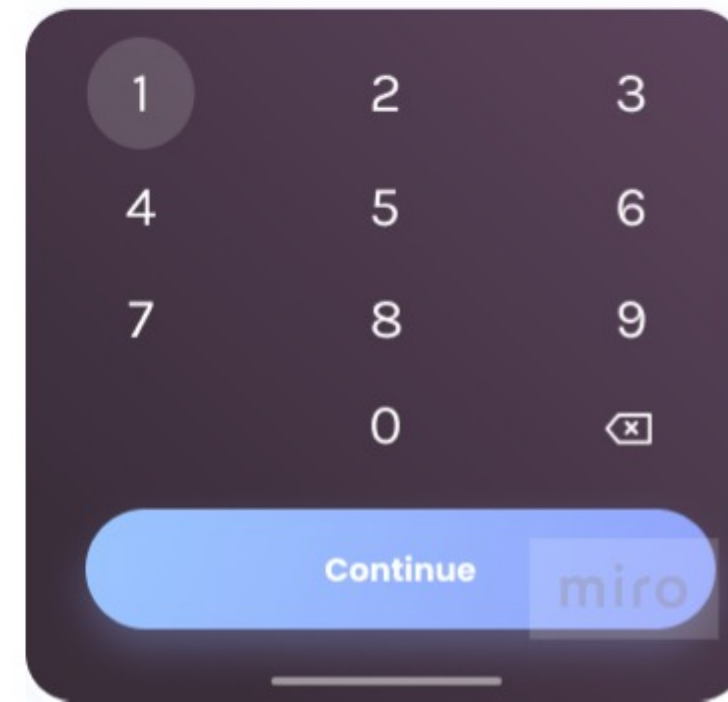
Vehicle registration for profile creation, either via number plate scan or manual entry: 2/2 step profile creation

Screen 1

9:41

Register your vehicle

Scan vehicle number plate to register

Upload from gallery

Or

Enter vehicle number plate manually

Recently added vehicles

| UP 80 xxxx | UP 80 xxxx | UP 80 xxxx | UP 80 xxxx | UP |

Continue

Screen 2

9:41

Register your vehicle

Vehicle details information fetching

Continue

Screen 3

9:41 AM

← **Vehicle details**

Eicher Truck
4x4
6 wheels
Toll amount applicable INR 320/-

Kindly confirm your vehicle details

Owner name

Registration date

Chassis number

Fuel type

Phone number

✎ Edit phone number

Confirm   **Add new vehicle**

miro

Apply for fast-tag flow

Home-landing page

View fast-tag stats

Add top-up prepay flow

Apply for bulk fast tag
Within 3 days your Fast tag will be delivered

Select vehicles + Add new vehicle

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
00:53

UP 80 xxx78xx
02:00

Choose address

Select address for fast tag delivery

Total : INR 350.00
2 vehicles added   Pay Now

Welcome,
Priya
Apply for new fast tag
Within 3 days your Fast tag will be delivered

Apply for single new fast-tag card

Apply for new vehicle

Apply for bulk vehicles

Ancillary services   5 items

Road services   SOS Emergency   Medical

Added vehicles   6 vehicles

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
00:53

UP 80 xxx78xx
02:00

Welcome,
Priya
Apply for new fast tag
Within 3 days your Fast tag will be delivered

Apply for single new fast-tag card

Apply for new vehicle

Apply for bulk vehicles

Ancillary services   5 items

Road services   SOS Emergency   Medical

Added vehicles   6 vehicles

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
Fast tag number 654xxx2345 | INR 200/-

UP 80 xxx78xx
00:53

UP 80 xxx78xx
02:00

Apply for bulk fast tag
Within 3 days your Fast tag will be delivered

Select vehicles + Add new vehicle

UP 80 xxx78xx

✓ YOUR FAST-TAG ORDER PLACED SUCCESSFULLY

Your fast-tag numer XXX-XXXX-000 shall be delivered to your registered address within 3 working days

Address: A10, Classic park, Ahemdaad

Cancel   Ok, Thanks

Choose address

Select address for fast tag delivery

Total : INR 350.00
2 vehicles added   Pay Now

Welcome,
Priya

Your fast-tag balance
You have INR 100/-   20.1
View Stats

Find total toll charges
as per your journey   Check

Activity Status

Total fast-tag money spent
INR 200/-

Toll charges
Delhi to Agra
200 kms
Real time updates

Add Top-up-Prepay
to your fast-tag
Add now

Apply for new
fast-tag card
Redeem cashback
points
Apply

Cashback redemption

Ancillary services   See more

Road accident services
Available for INR 200/m+ only

Emergency alert SOS
Subscribe to avail benefits

Medical help services
Available for INR 200/m+ only

Fast-Tag Stats

Today's Journey
Delhi - Agra | Total Toll Charges INR 1100/-
200 kms distance
• Live location

Activity Progress   Weekly

Sun Mon Tue Wed Thu Fri Sat

Latest Active Fast-Tags   See more

UP 80 xxx78xx
On journey from Delhi-Agra

UP 80 xxx78xx
On journey from Delhi-Lucknow

Add Top-up-Prepay

Thu, 27 May 2021

Check total toll amount charges

From   Delhi
To   Sikandrabad
Vehicle type   4x4 Truck
Check

INR 1100/-
Total Toll Charges

Choose fast tag and vehicle to add top-up

564920xxxx78901   select

xxxxx@upi

100/- to be added every 15 days

Add top up now

Add Top-up-Prepay

Thu, 27 May 2021

Check total toll amount charges

From   Delhi
To   Sikandrabad
Vehicle type   4x4 Truck
Check

INR 1100/-
Total Toll Charges

Choose fast tag and vehicle to add top-up

Choose fast-tag card   select
Card 65789xxxx7990   valid 2/26
Card 65789xxxx7990   valid 2/26
Card 65789xxxx7990   valid 2/26
Card 65789xxxx7990   valid 2/26

Add top up now

Add Top-up-Prepay

Thu, 27 May 2021

Check total toll amount charges

From   Delhi
To   Sikandrabad
Vehicle type   4x4 Truck

× Auto Top Up Done

INR 300 added to your fast tag card
3452xxxx4521xx

Ok, Thank you

xxxxx@upi

100/- to be added every 15 days

Add top up now

Design thinking while working on the ui visual designs: Added a Camera icon to enable users to document or record any video they witness on their journey. This feature will create engagement and build a community of travelers.

miro