



DESIGN: CARPOOL

Manjit Mohan, UX Designer

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- Users
- Scenarios & tasks
- User's mental model
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DESIGN OPPORTUNITY

- Design a carpooling/ride-sharing web mobile application that helps in;
 - Splitting fuel prices
 - Reducing pollution & protecting environment
 - Saving time spend waiting for bus or train
 - Connecting with new people
 - Reducing traffic
- Design must address the following traveller/user concerns;
 - Safety of traveling with strangers
 - Timings of pickup, drop and unexpected changes in daily commute
 - Cost changes due to traffic or repairs



BUSINESS INSIGHTS

INSIGHTS

Business Goals

- Increase app usage & app store rating
- Create an app usable & easily found by search
- Engage & retain users
- Create carpool app with lower investments than native apps

User Goals

- Save money & environment
- Travel safely & on-time

INSIGHTS

Product Goals

- Help user find/offer a ride
- Provide options to cross check co-travellers
- Provide a 'Help' alarm
- Avail option to be-friend and connect with co-travellers

Design Goals

- Create a seamless carpooling experience
- Educate first time users and handhold regular users



USERS

USER SEGMENTS



Commuter

Wants to carpool to and from office at fixed timings for lower costs



Backpacker

Seeks safety while travelling and exploring



Buddy

A people person who enjoys making new friends and connections

COMMUTER



Raghu Rajput

41, Project Manager

Raghu is a project manager in an MNC. He commutes in his car through heavy city traffic daily. Married with two kids he wants to save enough for their future education. He often offers rides to his colleagues in return for splitting the fuel costs. Recently, he heard that there are apps for carpooling.

Needs

- Lower expense by splitting fuel bill with travellers
- Decent and clean travellers
- Enroute pick up and drop of travellers
- Find other rides to work

Challenges

- Lack of knowledge regarding carpooling apps
- Finding committed regular commuters
- Substitute travellers when regular commuters skip

Goals

- Reduce expenses and save money
- Maintain car hygiene for family trips
- Comfortably reach office on time

BAG-PACKER



Maria Hector

28, Travel Photographer

Maria is a photographer working for a travel magazine exploring places, capturing moments and gathering stories. She prefers cheaper travel options such as train, bus or carpooling as she would also get to experience new people. As an enthusiastic bag-packer she has had plenty of good and bad experiences in her journeys.

Needs

- Capture moments
- Experience stories
- Meet new people
- Study new places
- Trustworthy travel companions

Challenges

- Not knowing people in her journeys
- Lack of committed travel buddies
- Unwanted attention received being a women
- Unsafe night travels

Goals

- Explore new places
- Amazing experiences
- Be safe

BUDDY



Peter Naveen

24, Accounting Intern

Peter recently graduated and joined an accounting firm as an intern. He believes in ‘work hard - play hard’. New to corporate world of professional and formal colleagues, Peter misses days spend in college with his best friends. They used to travel partying and enjoying life. As a tech savvy travel enthusiast Peter even uses digital applications for planning and travelling.

Needs

- Quick ad hoc travel planning
- Enthusiastic travel companions
- Split bills and cost sharing
- Meet new people

Challenges

- Earning strangers trust and respect
- Maintaining friendship found by travel afterwards
- Matching travel timings with friends

Goals

- Enjoy life
- Make friends
- Make travel fun



SCENARIOS & TASKS

JOINING A RIDE



OFFERING A RIDE



USER TASKS

USERS

Commuter

Raghu Rajput

TASKS

- Offer a ride
- Set date & time for the ride
- Find companions
- Split fuel costs

SCENARIOS

Raghu wants to to save fuel costs by offering rides to commuters and splitting bills.

Bag-packer

Maria Hector

- Join a ride
- Verify companions
- See costs
- Seek urgent help if needed
- Rate companions to help others

Maria wants to hop in and travel securely with strangers saving much money and time. She hopes to have new and amazing experiences in each of her journeys.

Buddy

Peter Naveen

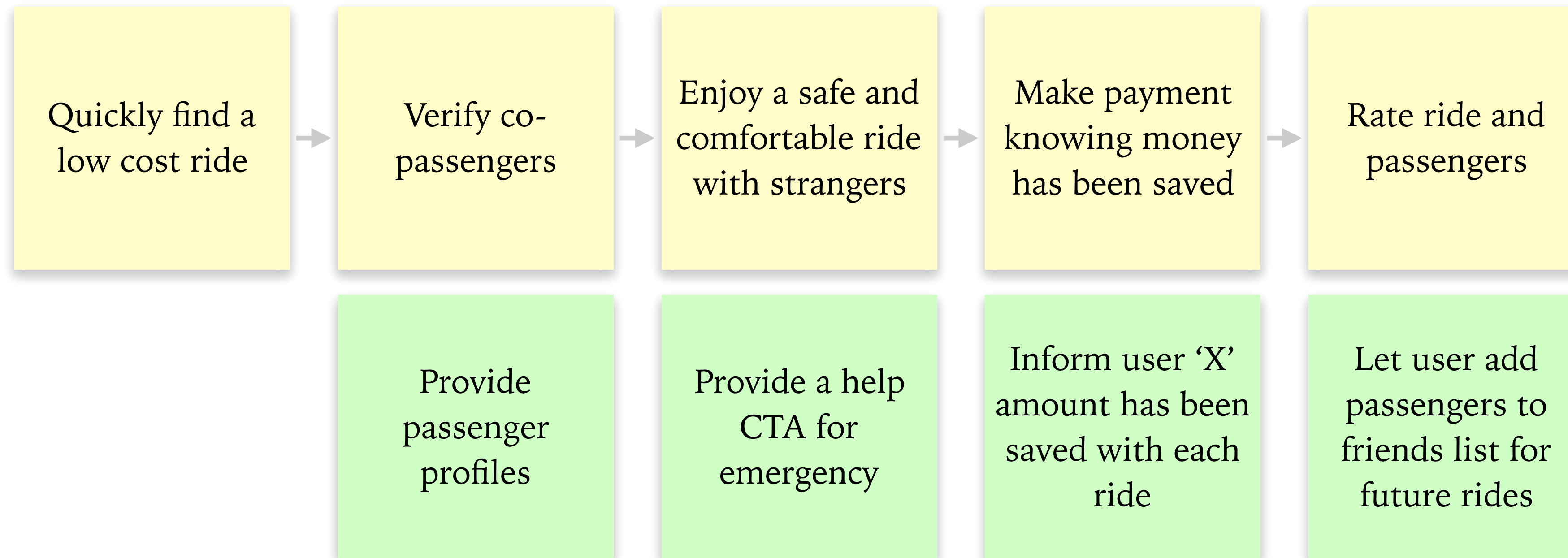
- Join a ride
- Find companions of similar interest
- Go for long rides

Peter wants to meet new people who might become his new best friends and wants the ride to his office to be interesting.



USER'S MENTAL MODEL

JOINING A RIDE

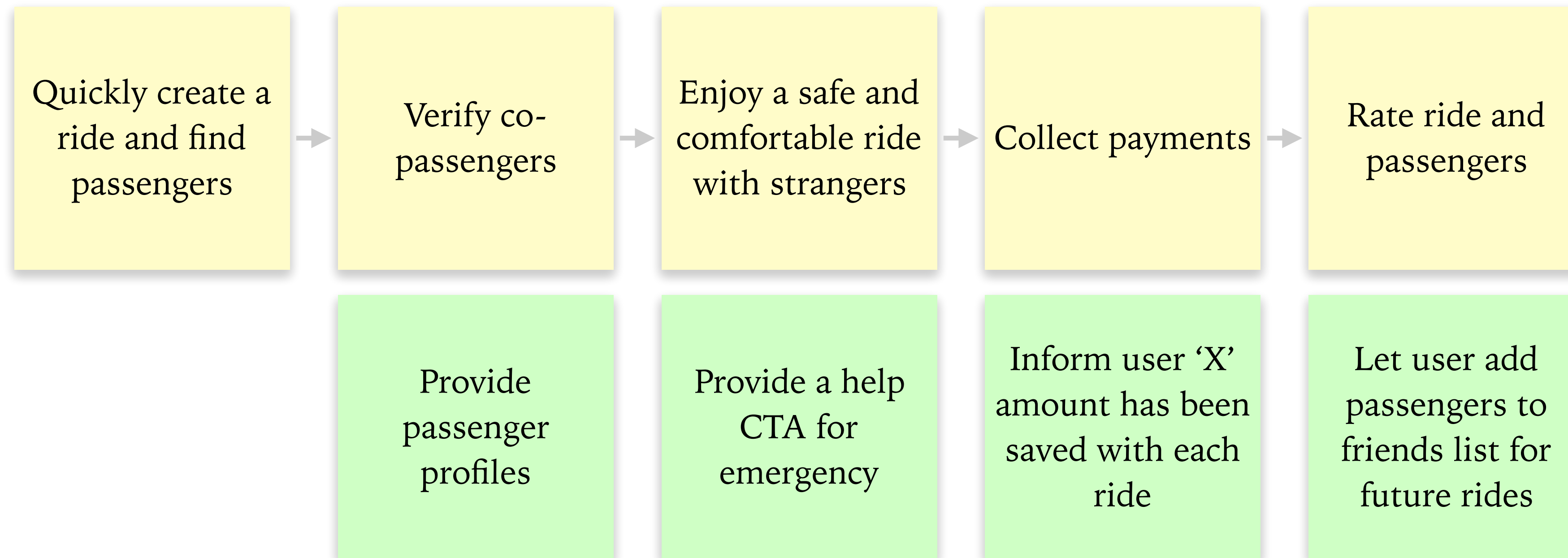


LEGEND

 Step

 Idea

OFFERING A RIDE



LEGEND

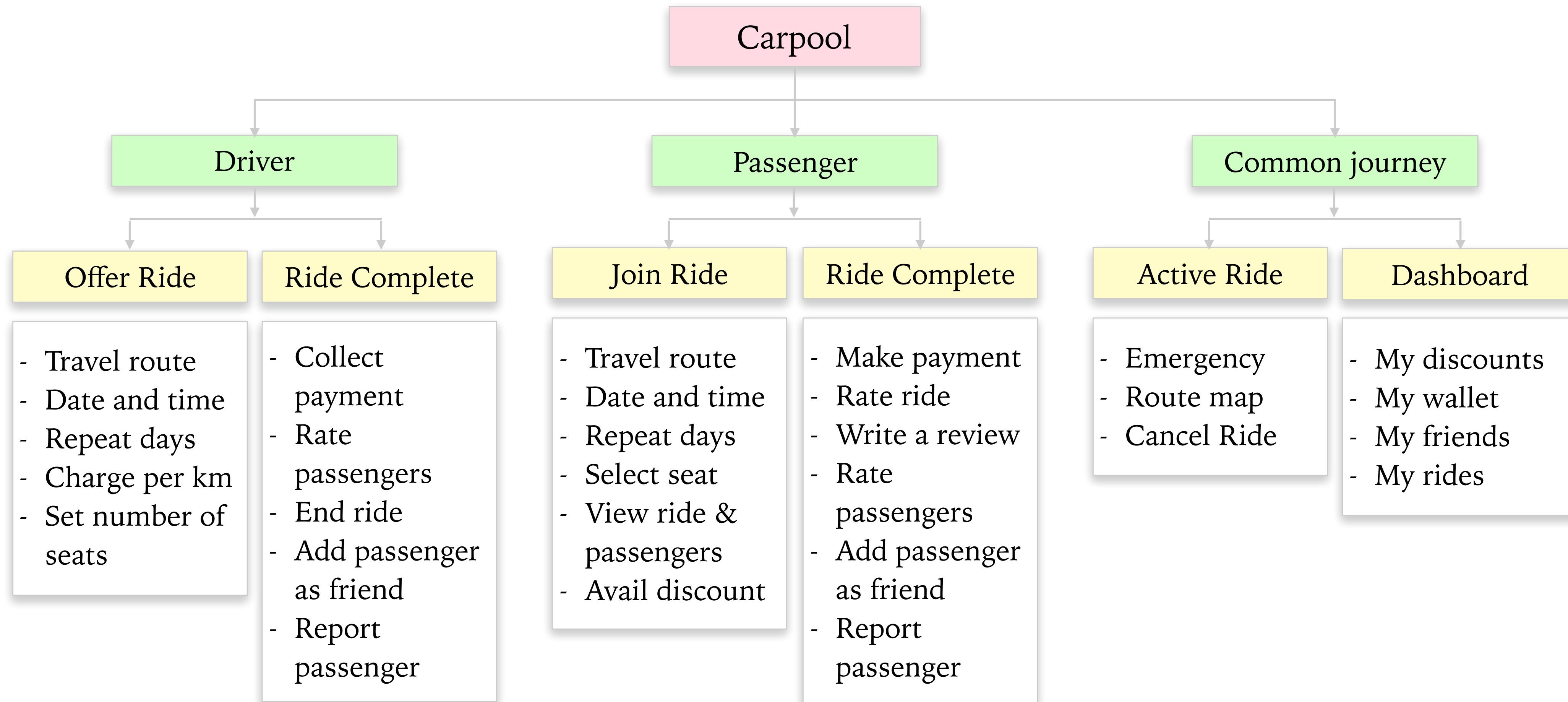
 Step

 Idea



INFORMATION ARCHITECTURE

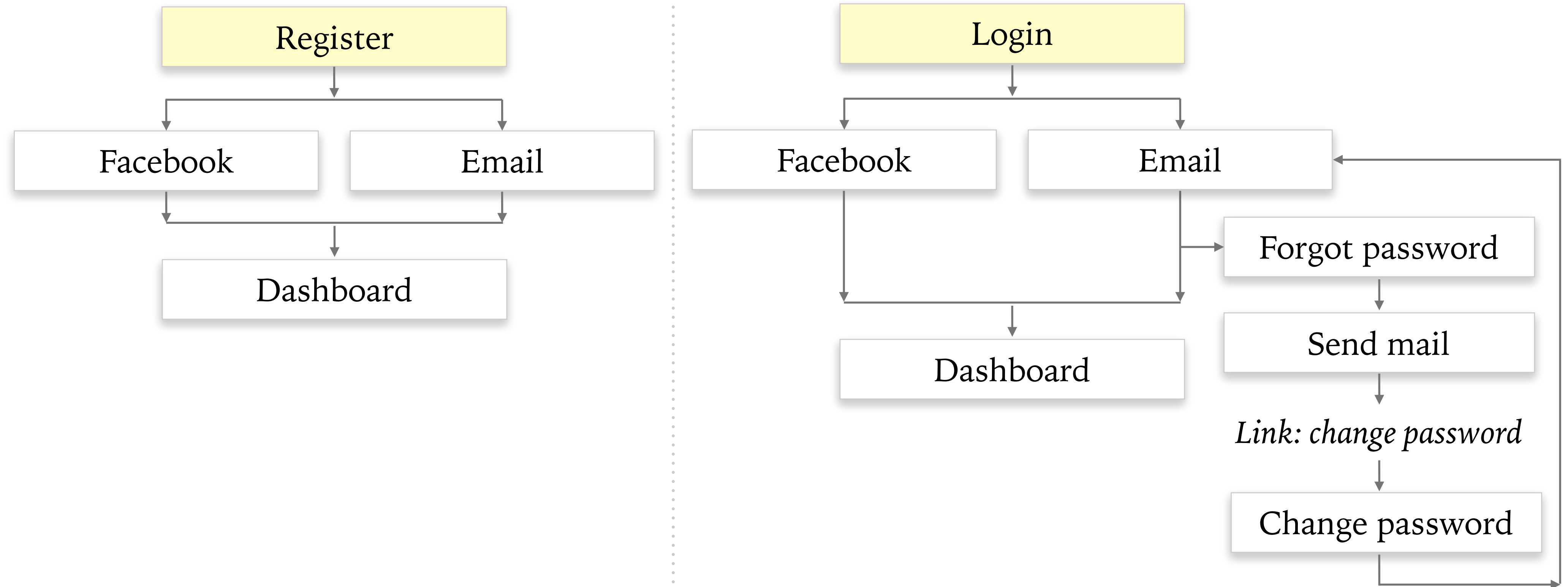
INFORMATION ARCHITECTURE



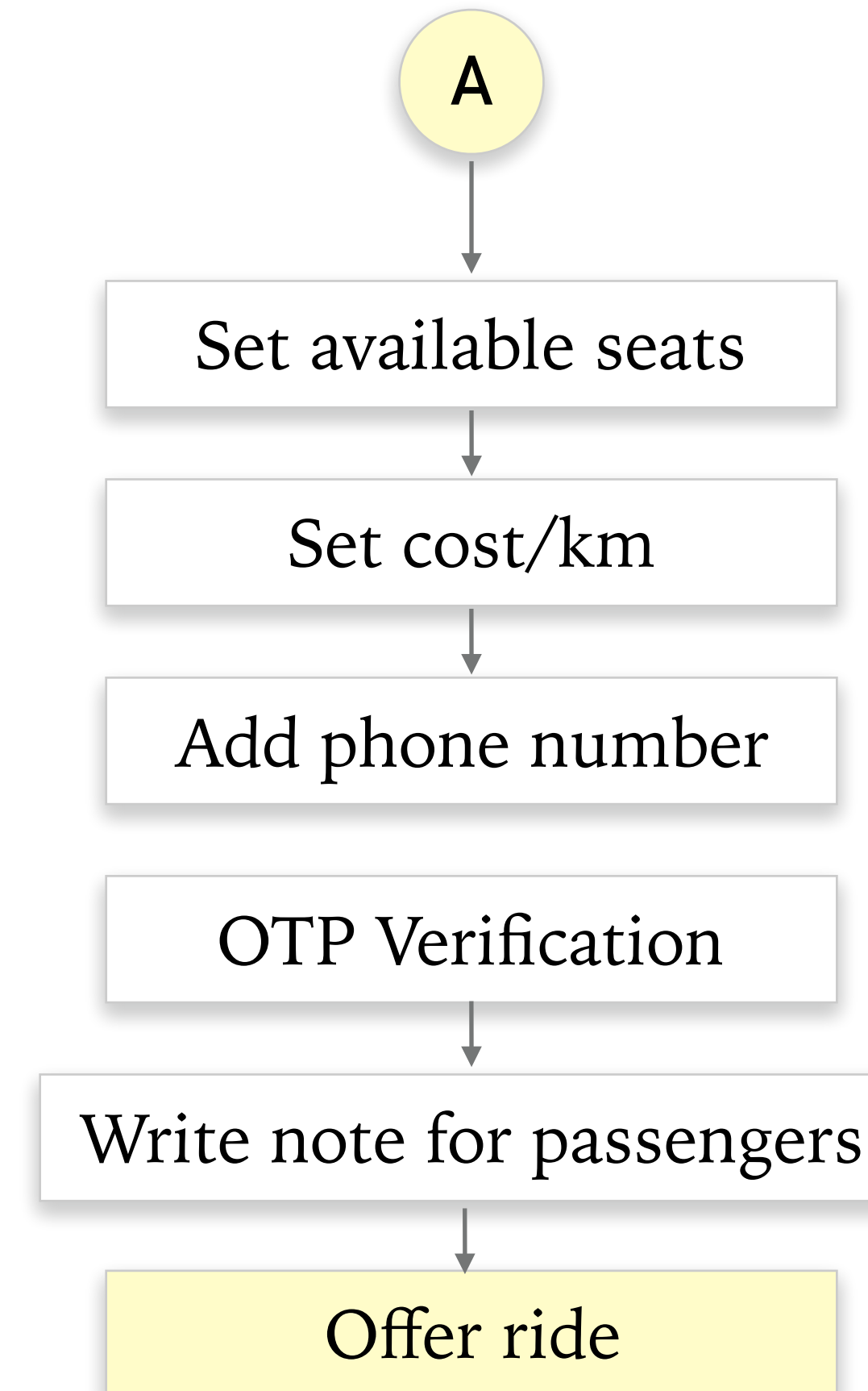
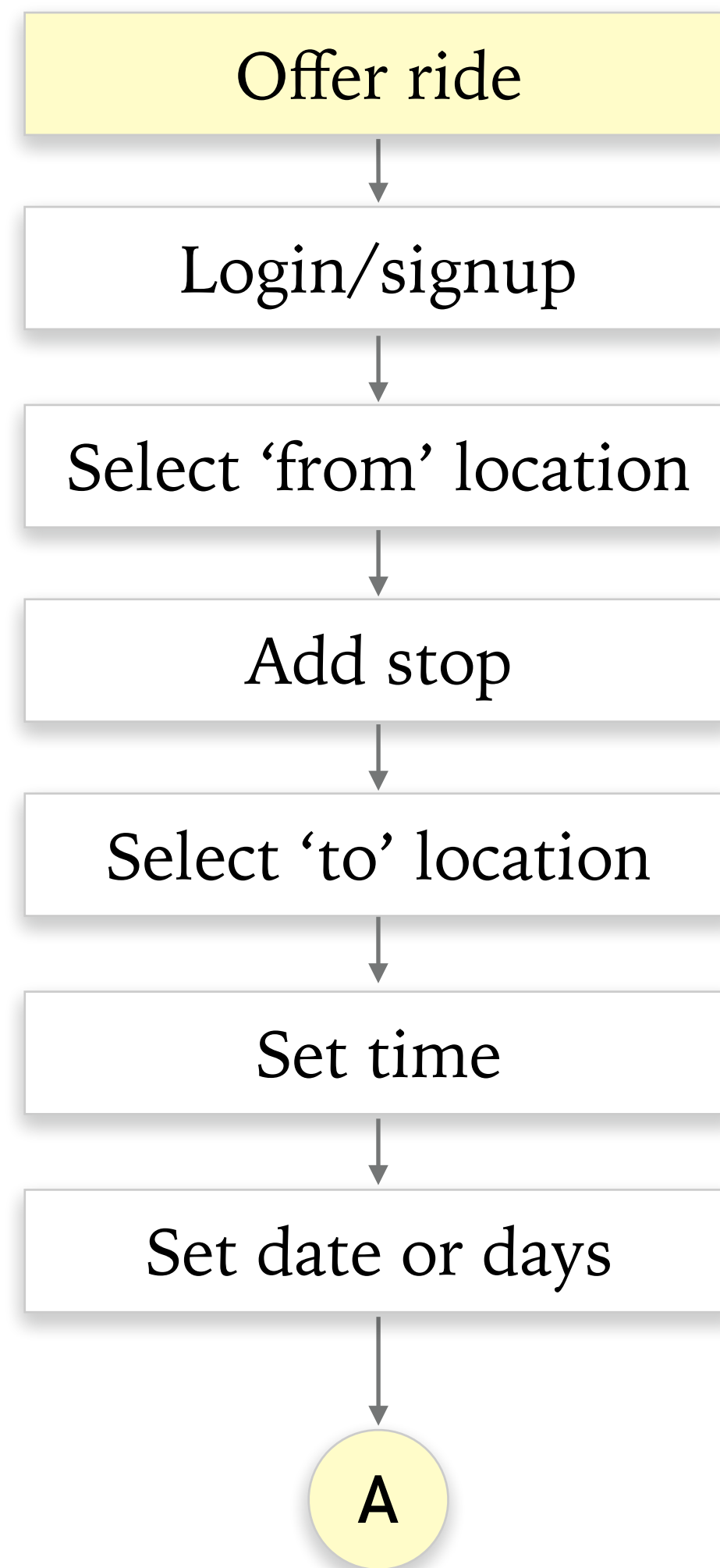


TASK FLOWS

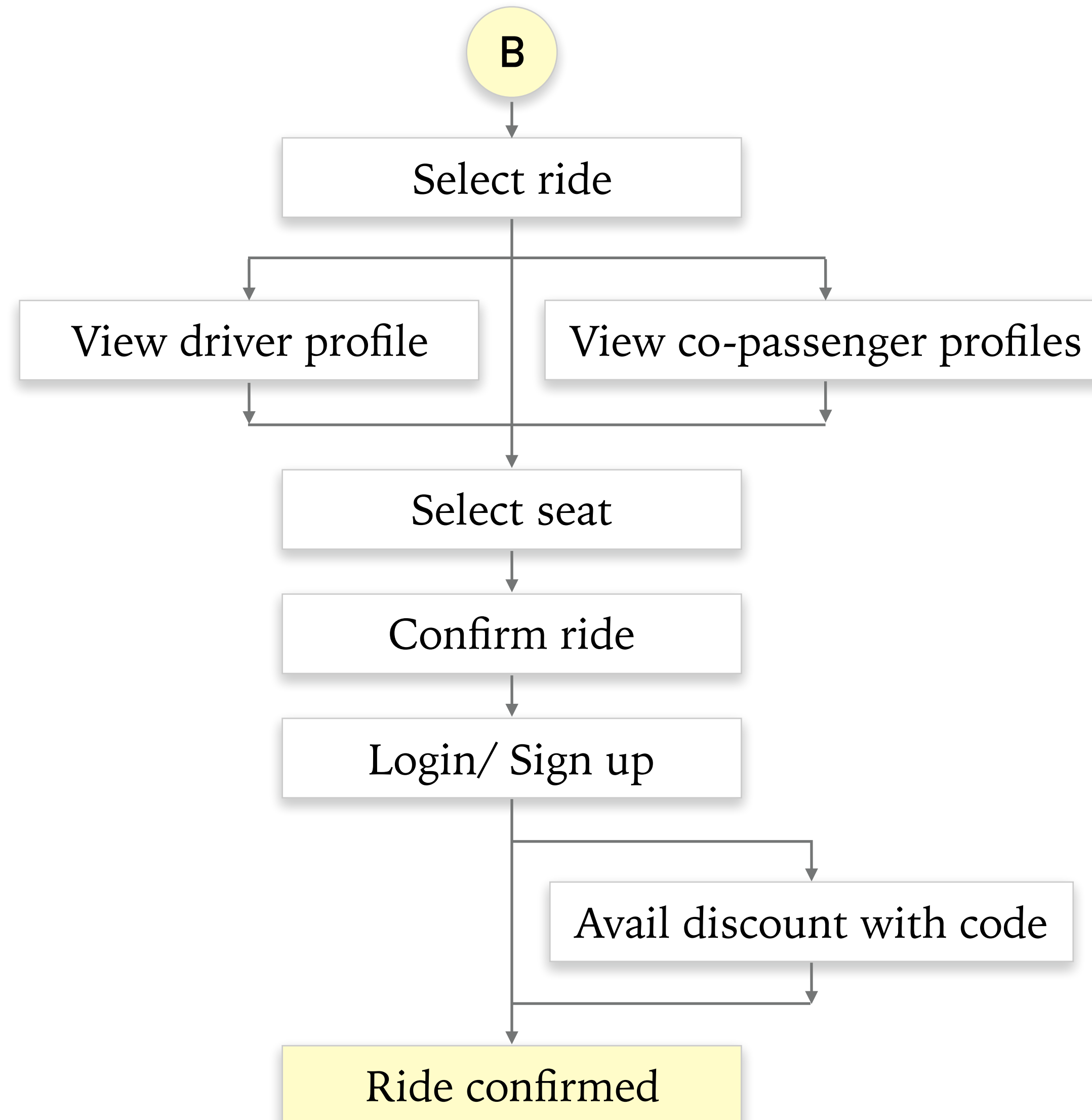
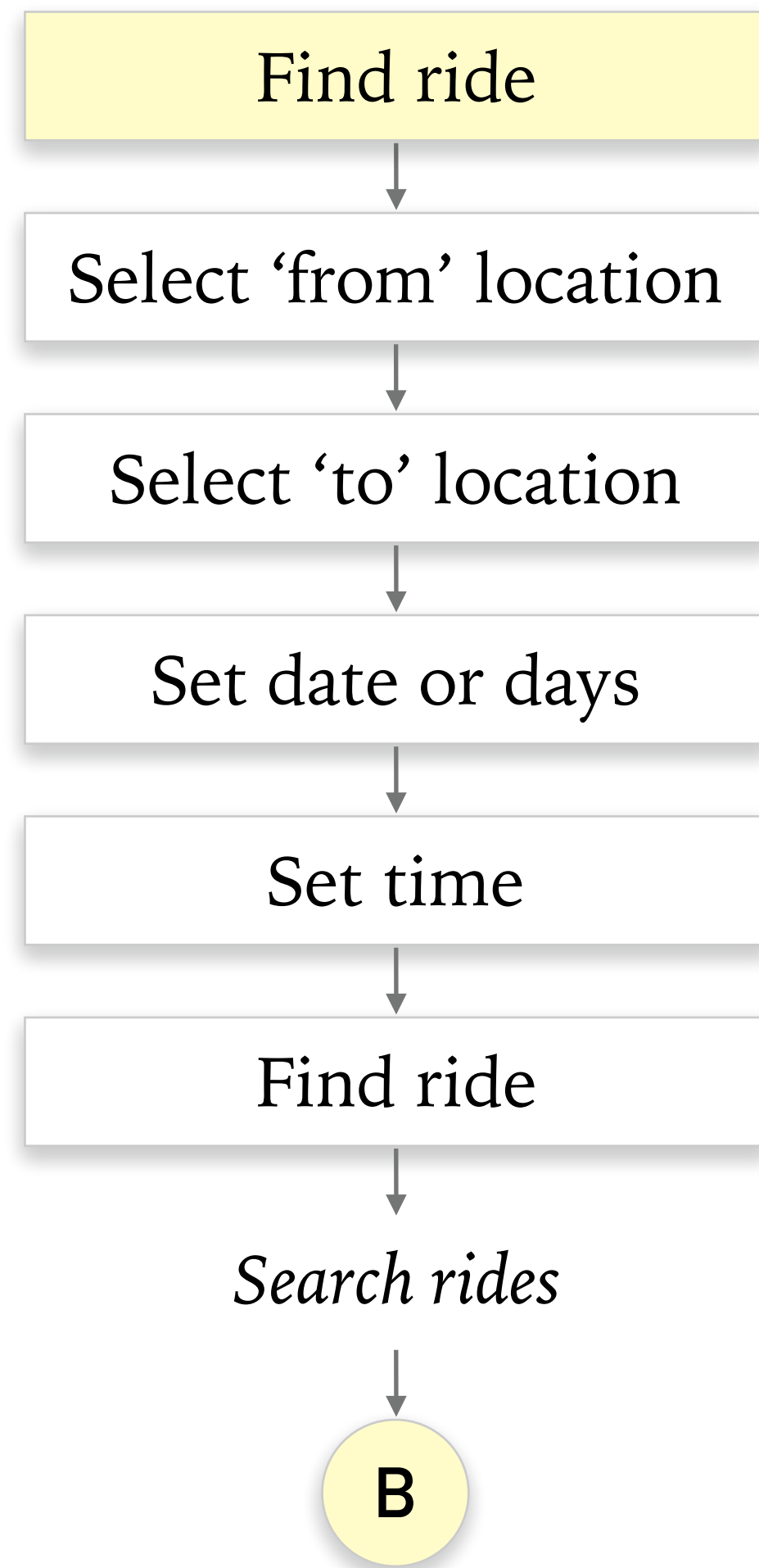
REGISTER / LOGIN



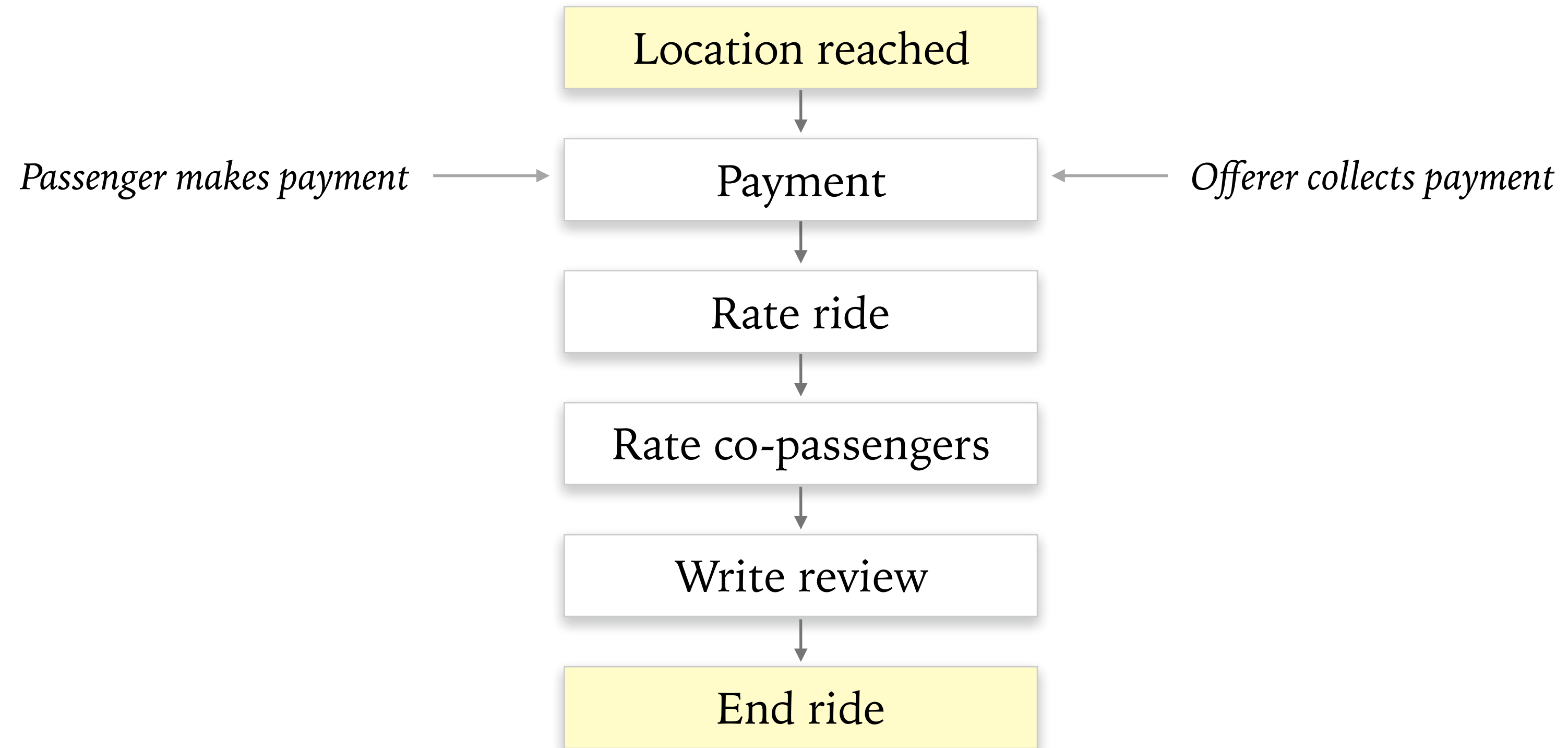
OFFERING A RIDE



JOINING A RIDE



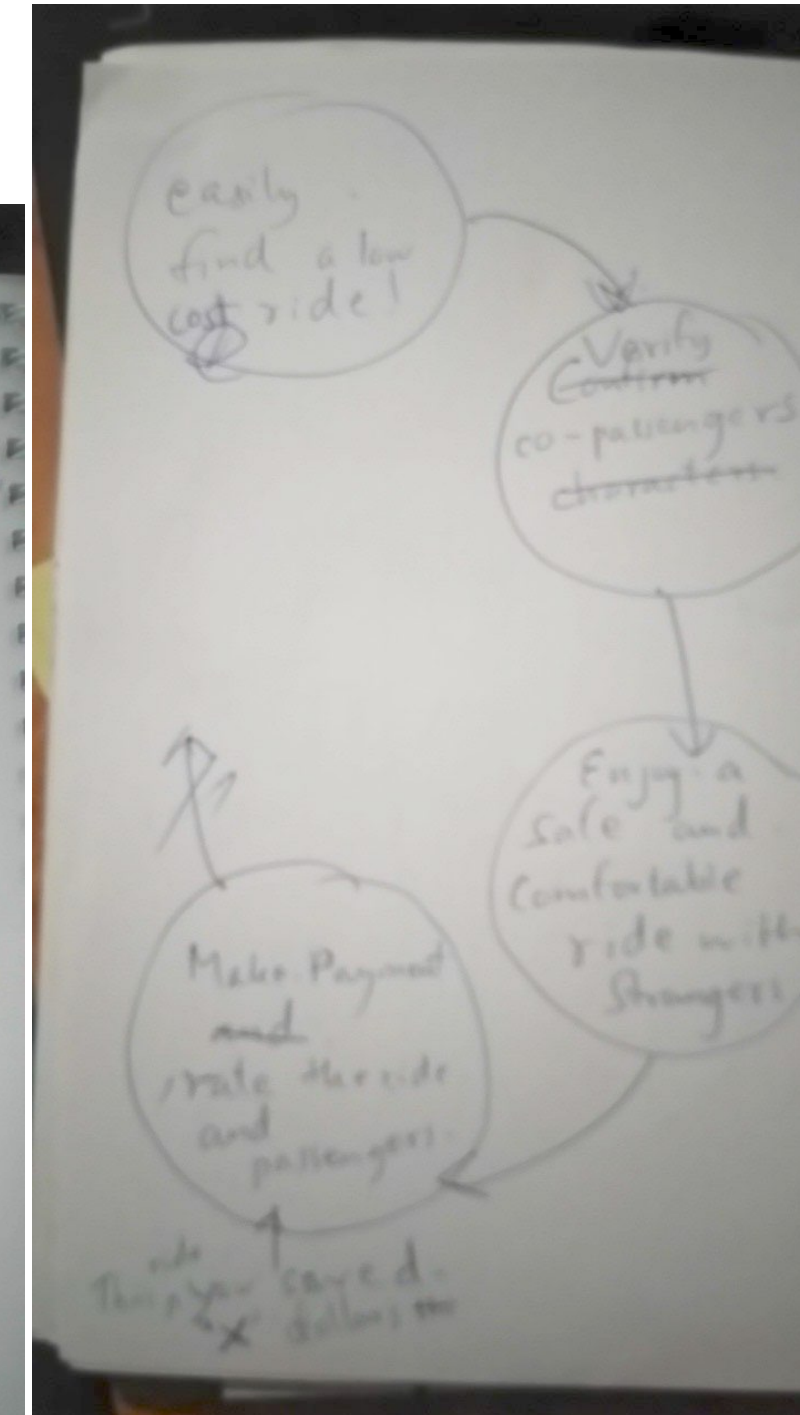
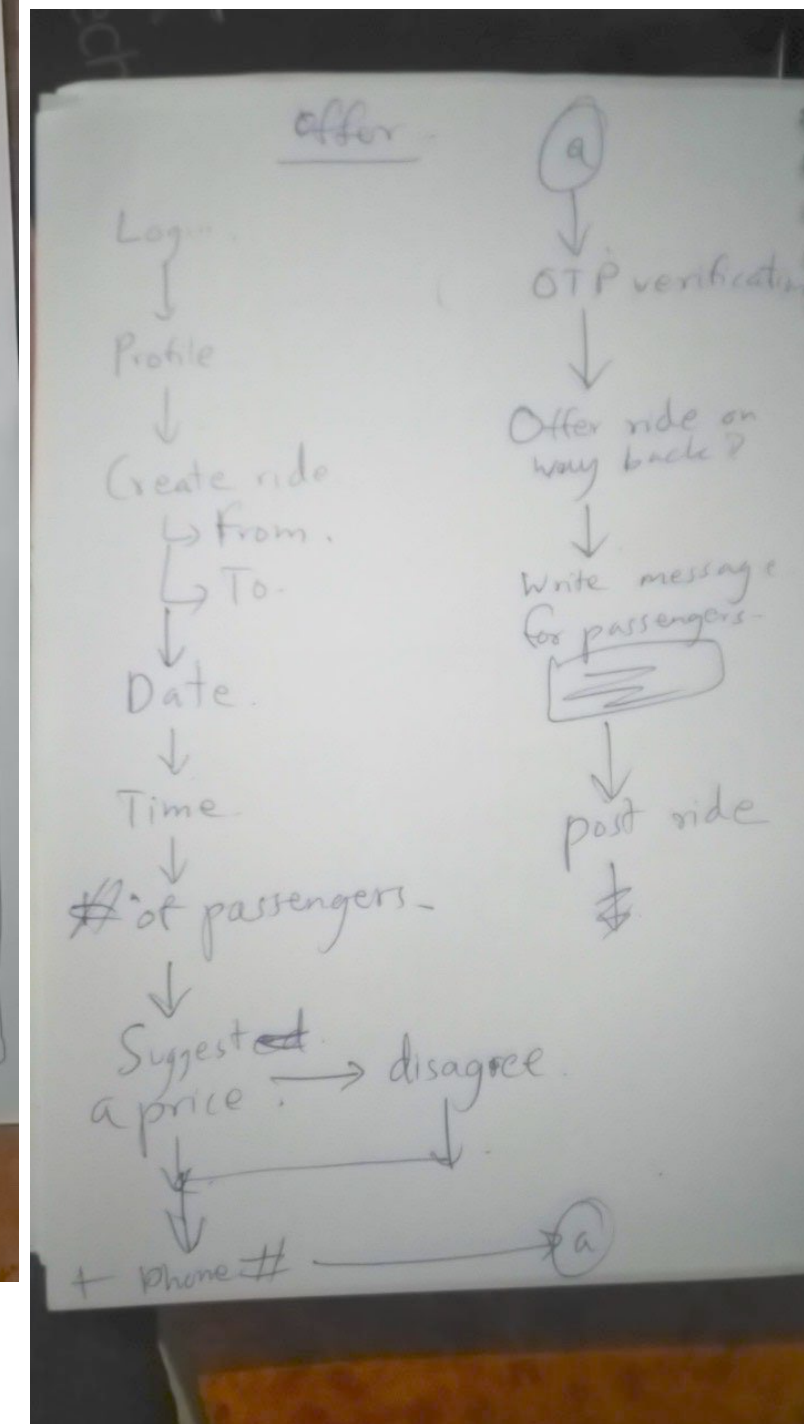
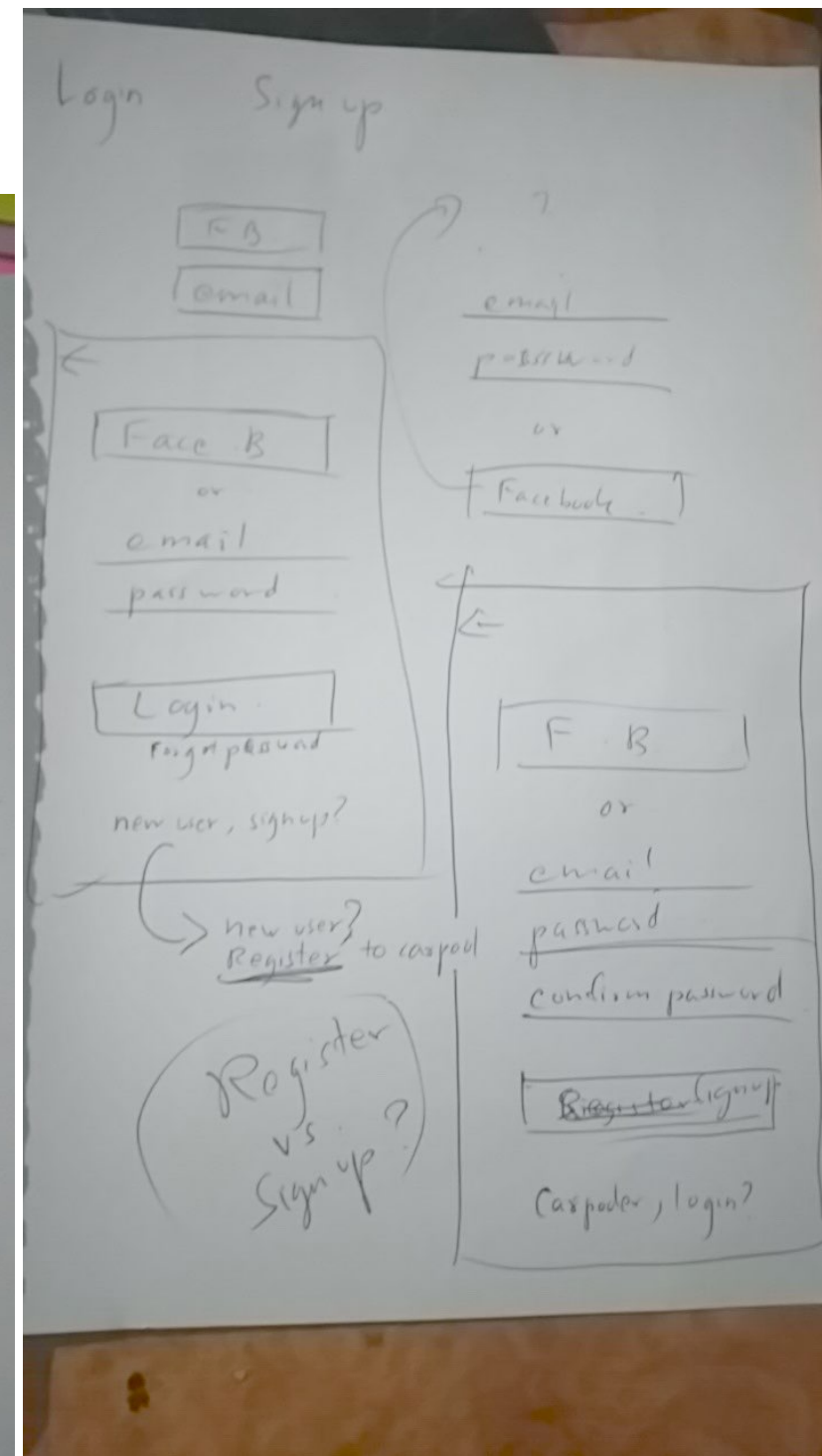
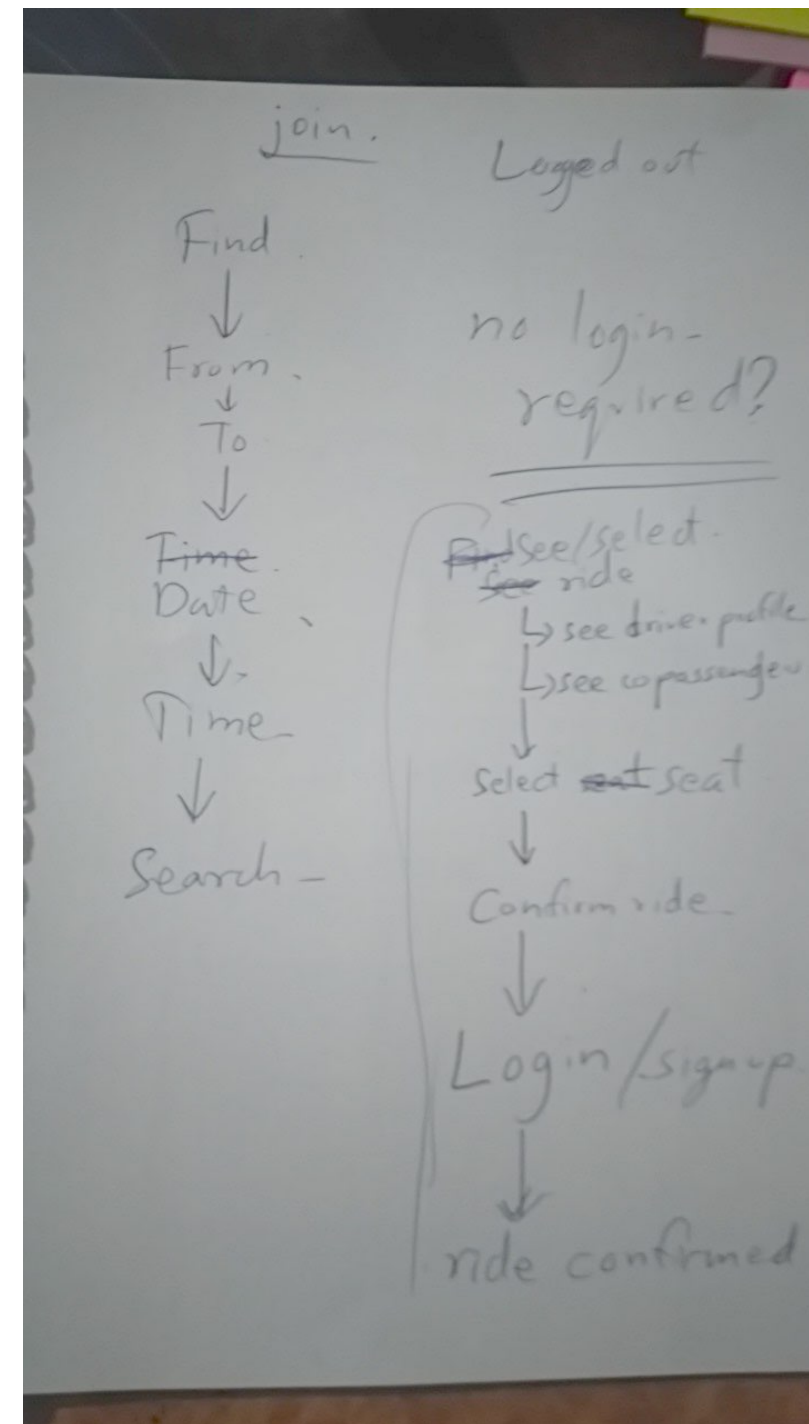
RIDE COMPLETION





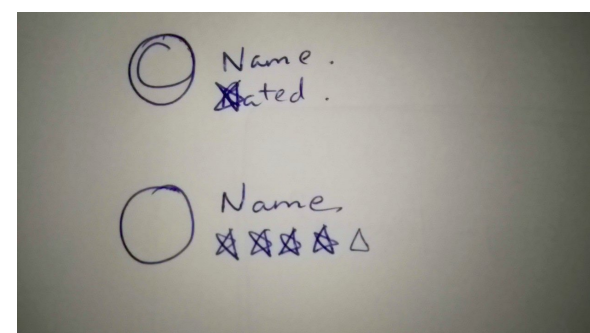
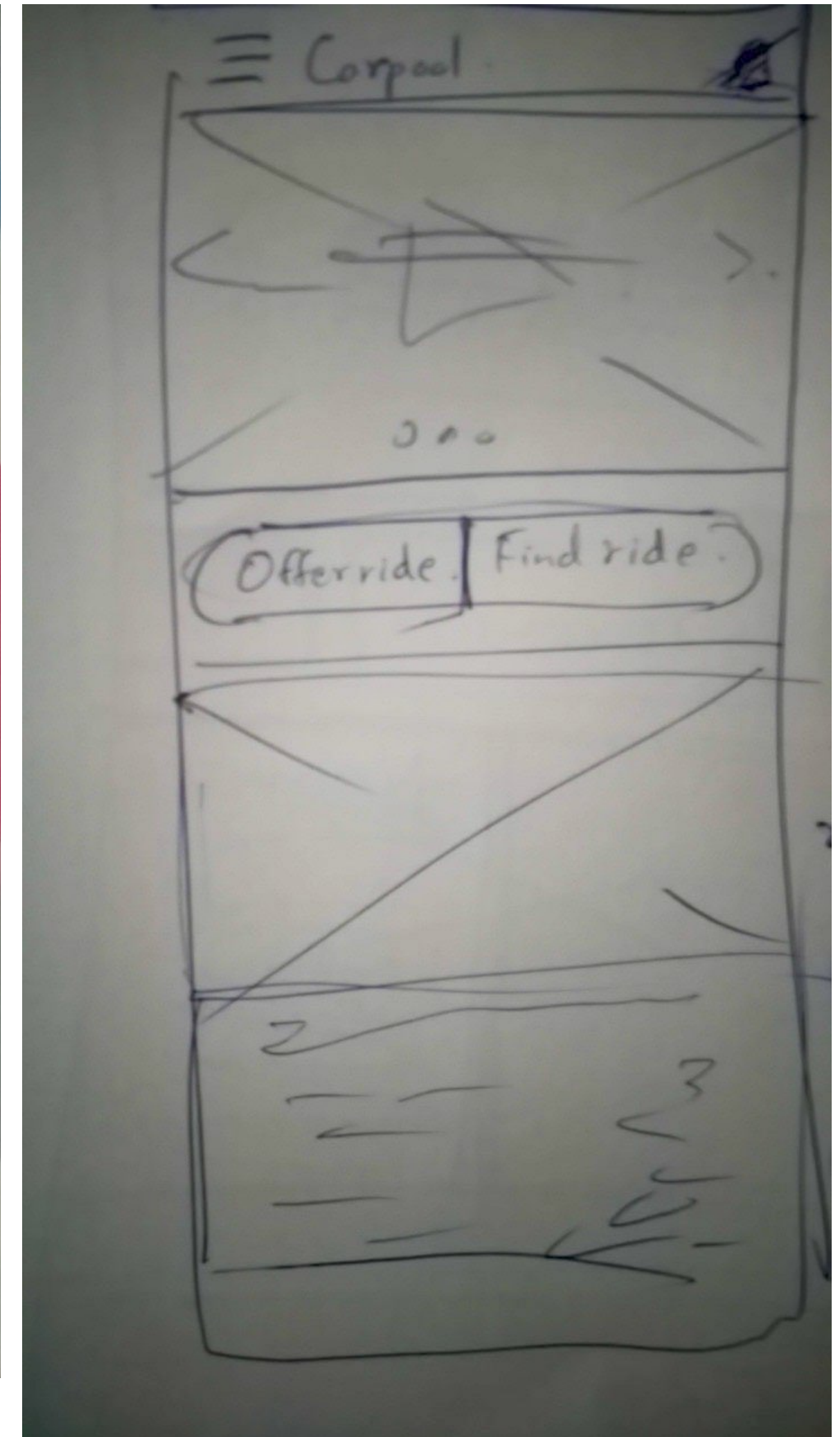
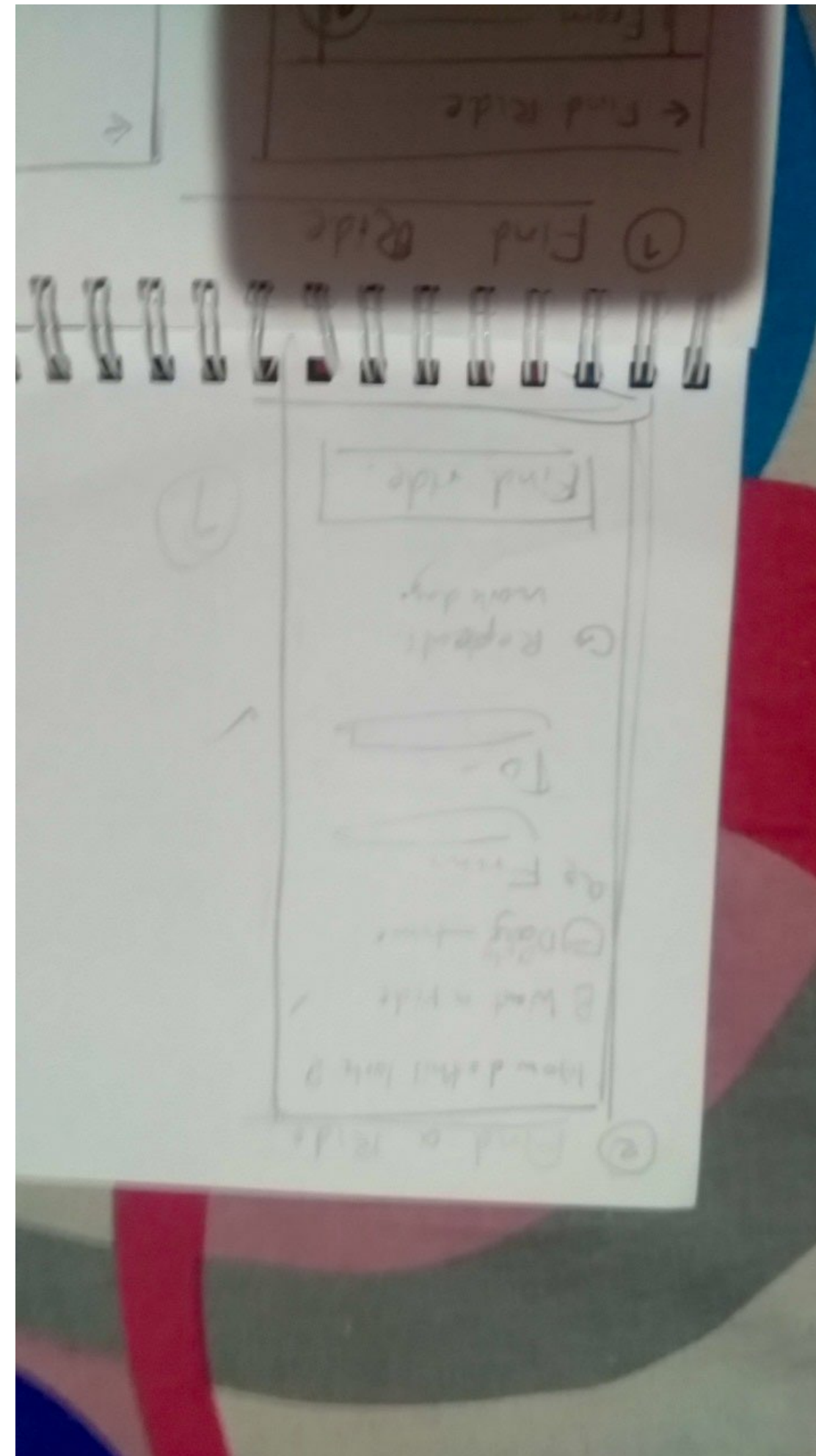
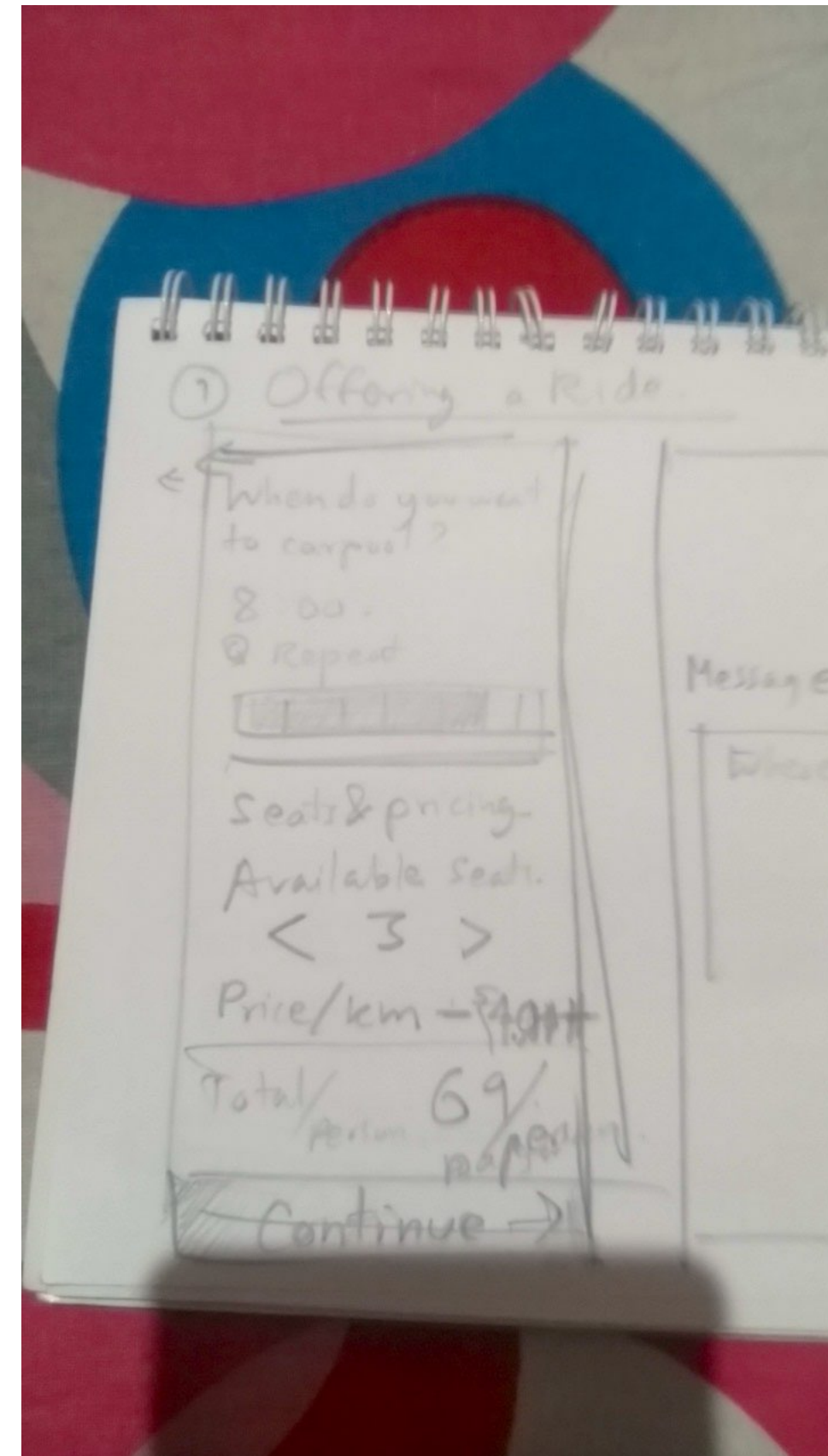
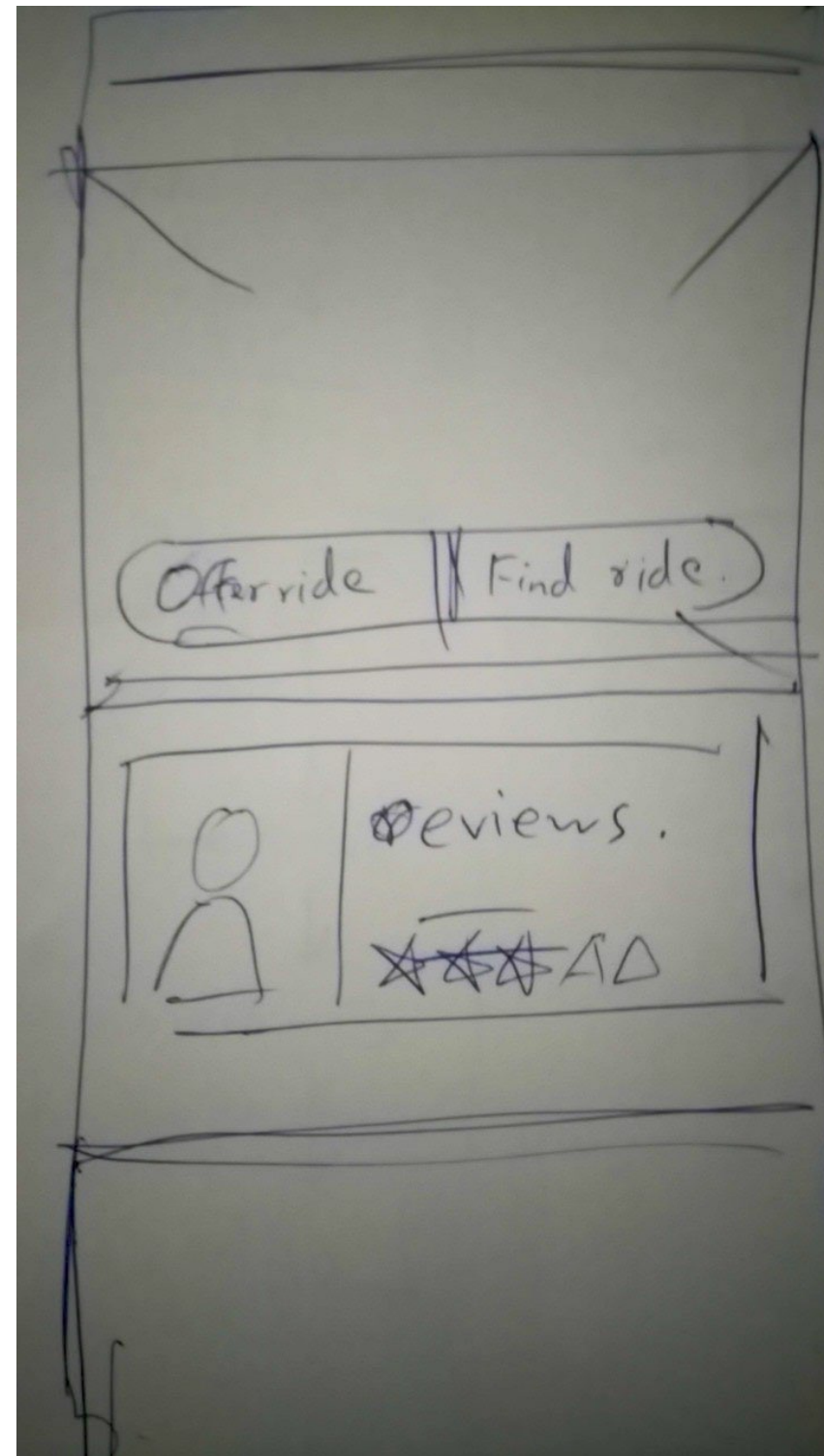
CONCEPTS

PLANNING

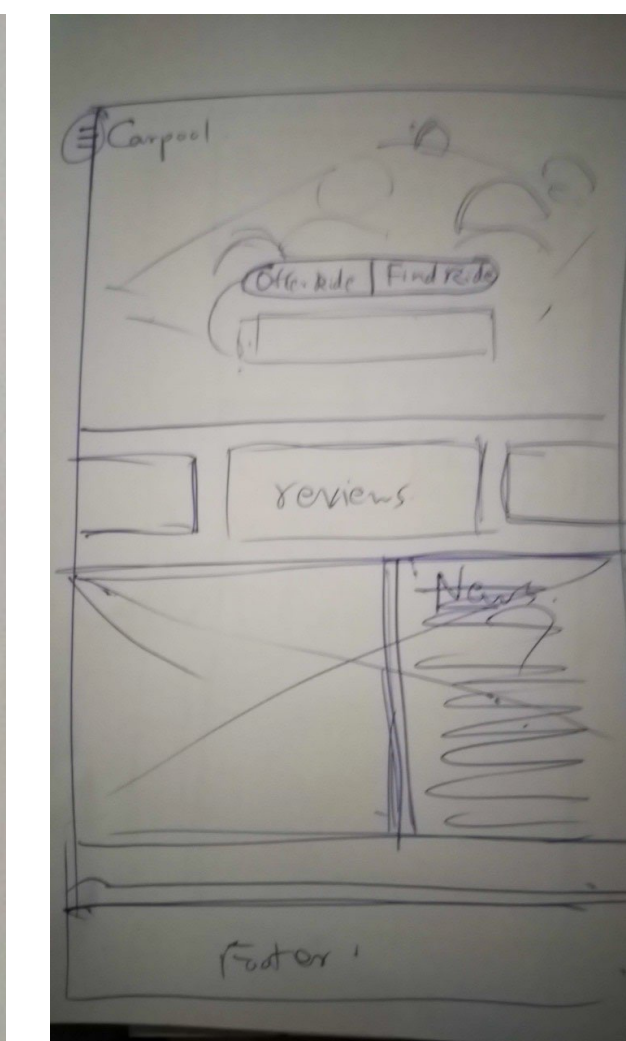
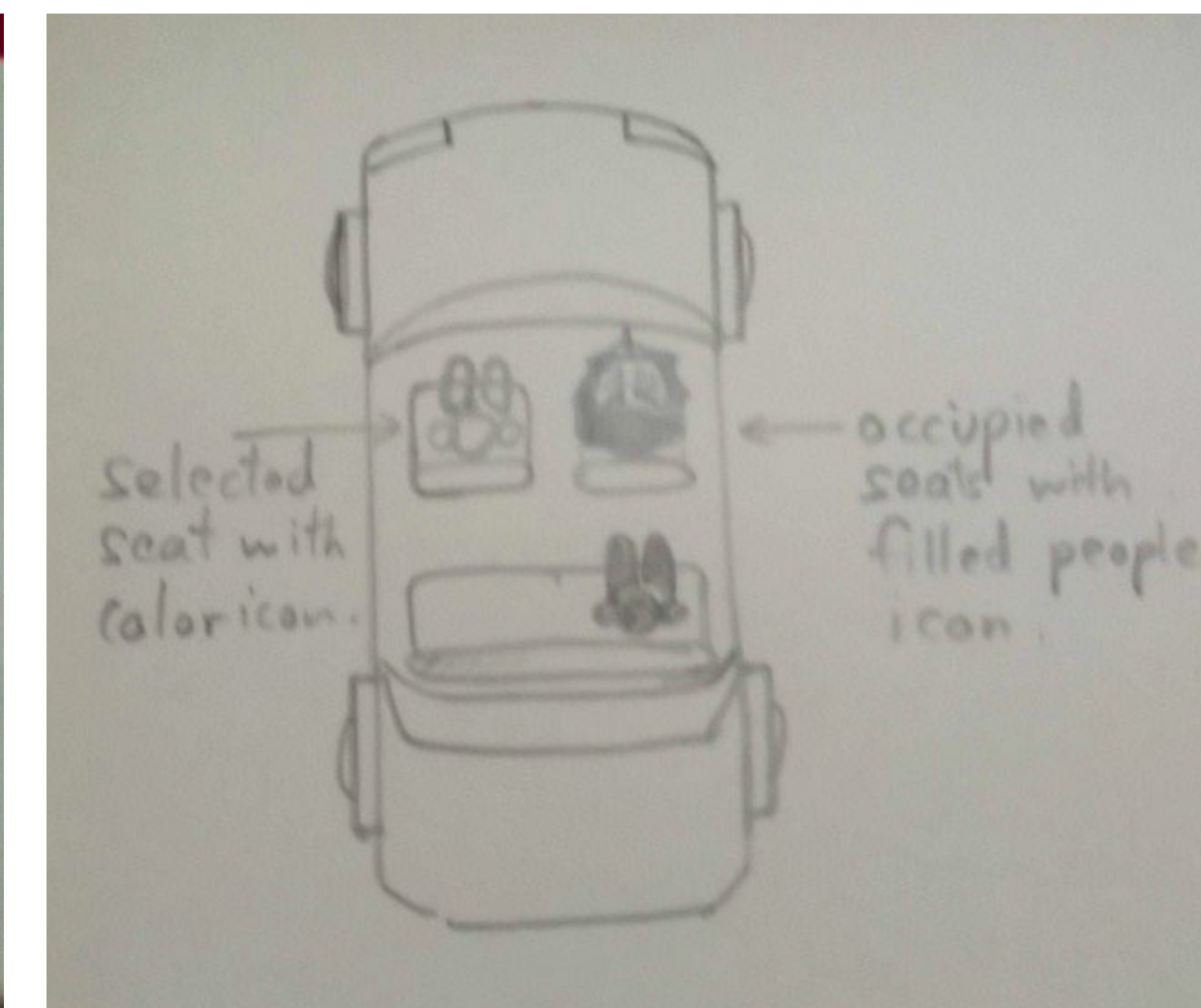
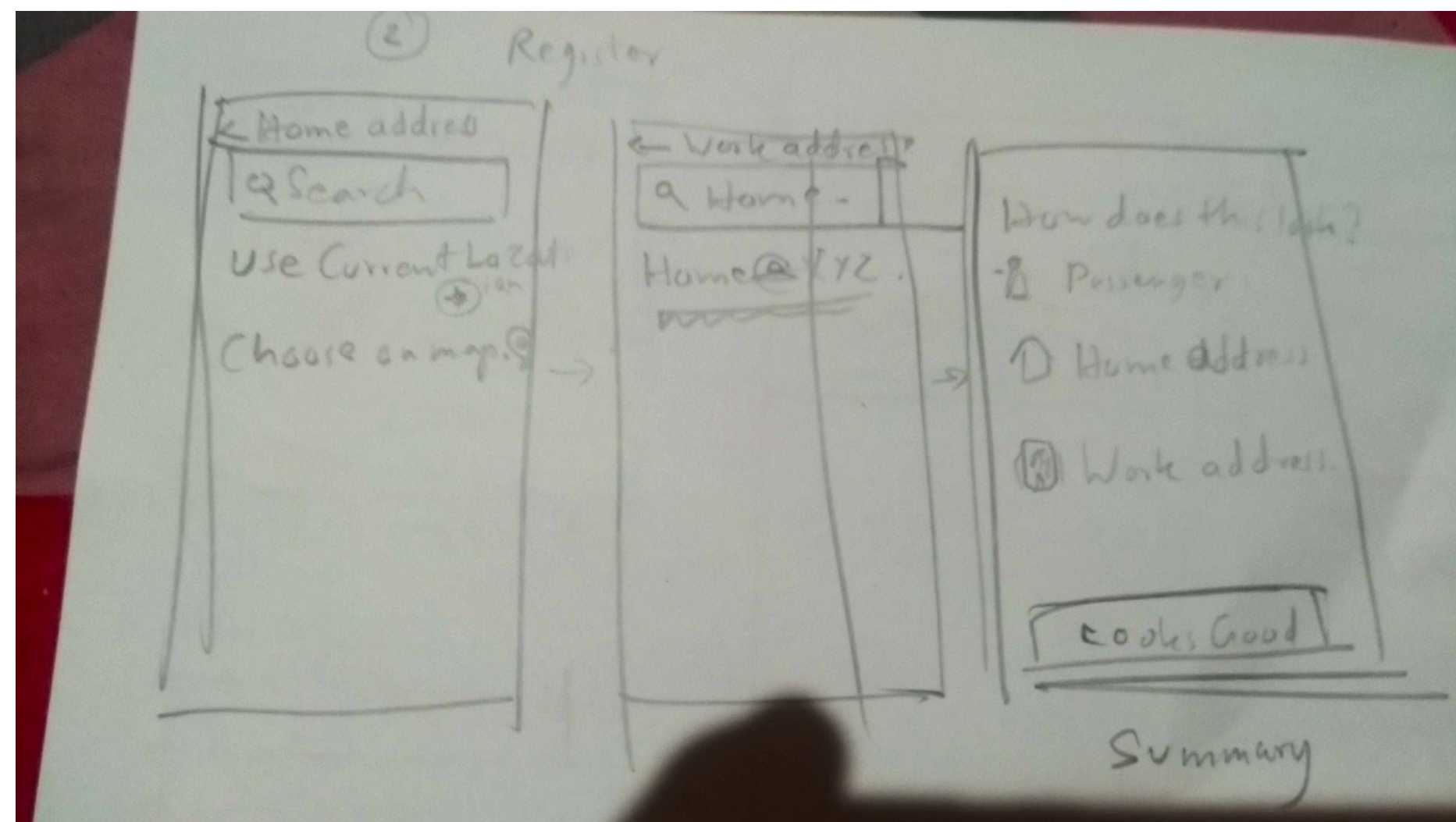
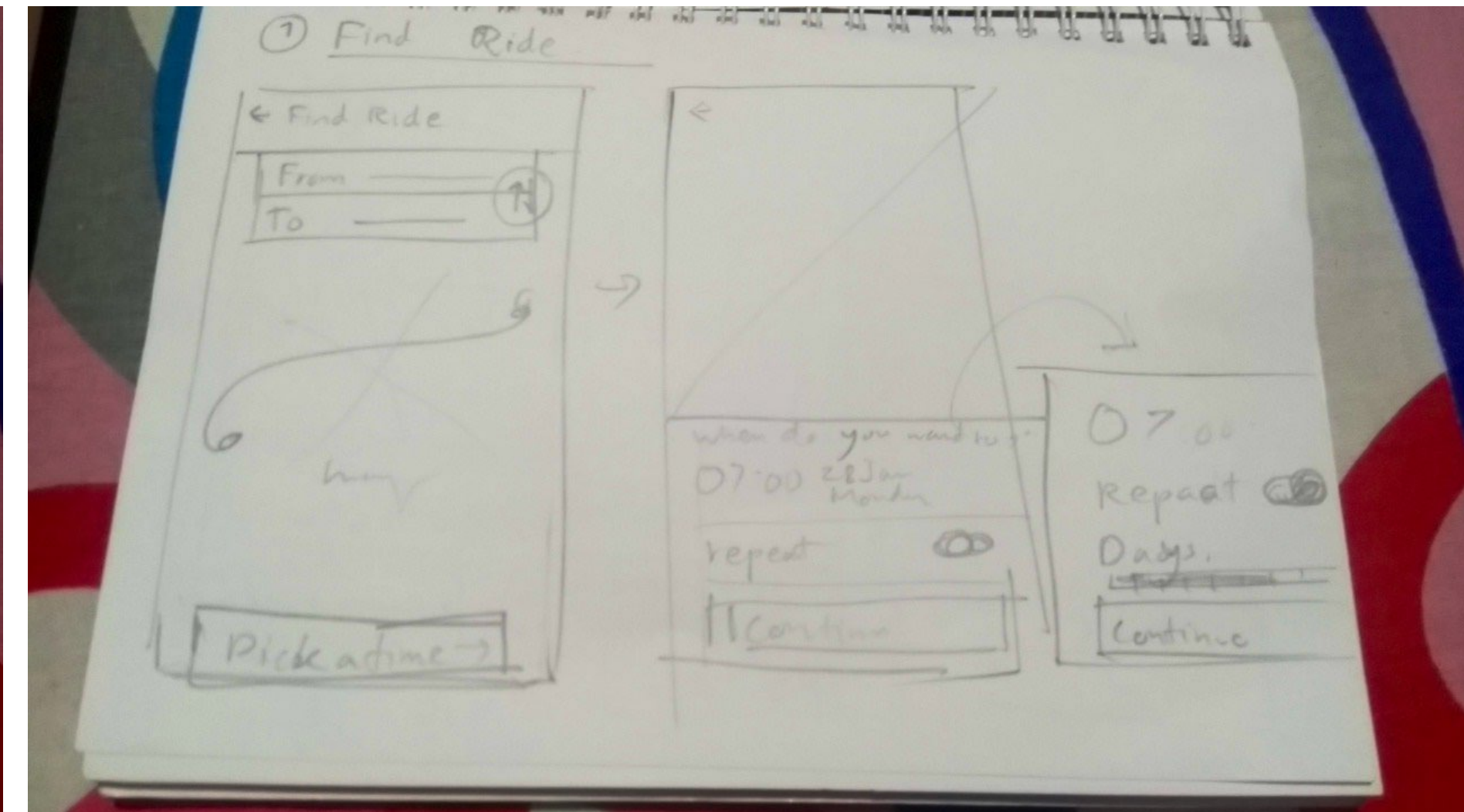
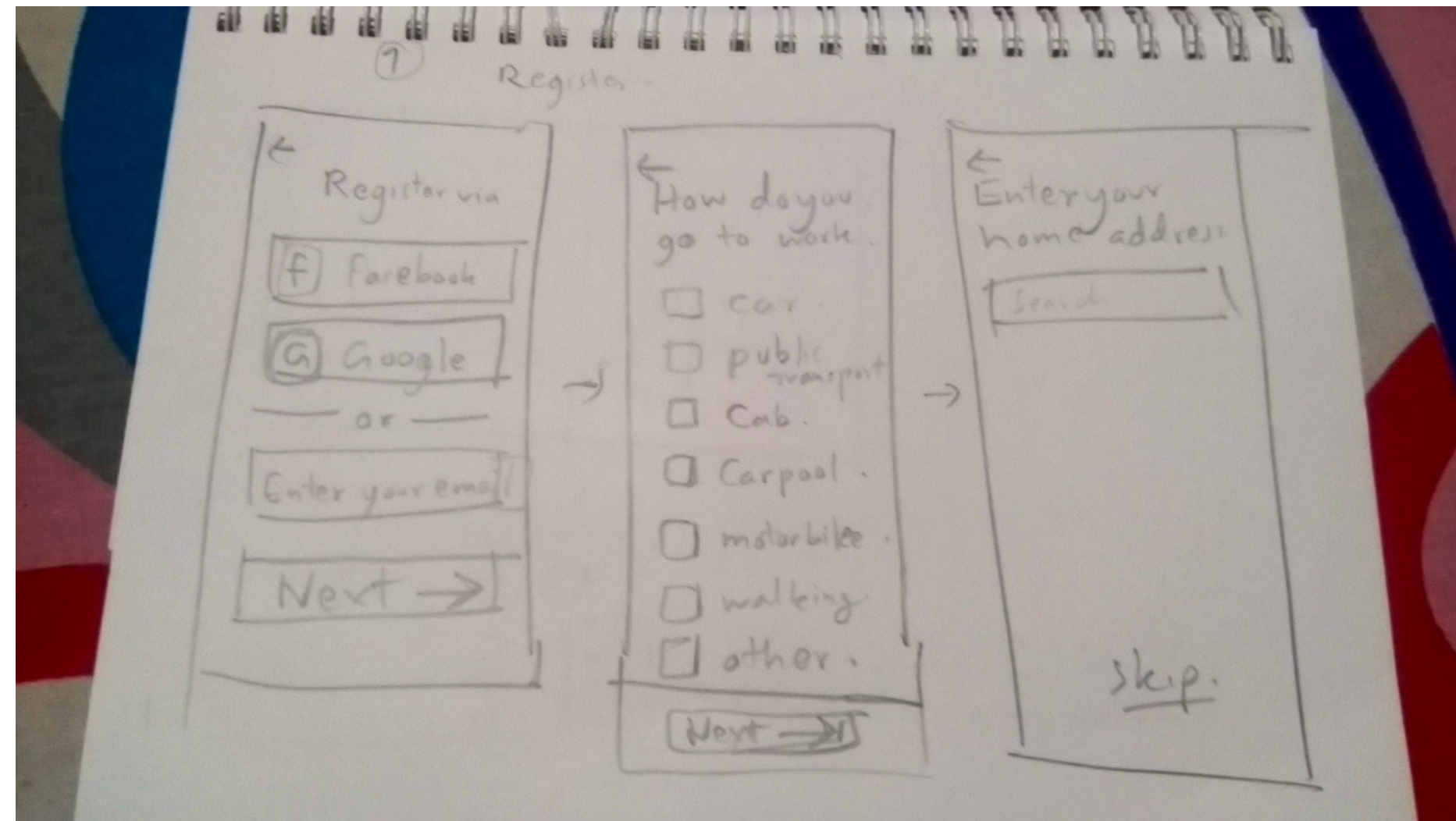


Before	During	After
Register • Social Med • Car	Emergency Call Help	Rate • Ride • Companion
Login	See Route & Location	Share Experience
Create/Join Rides	See Nearby Hospital	Save Companion as Friend
Create Daily Commutes	See fuel pump enroute	Pay Split Bill
Find & Verify Companions	See Mechanic enroute	
See Bill estimate	See Police Station	
	See Toilets onroute	

THINKING



WIREFRAMES





DESIGNS

Common Journey

LANDING PAGE

The desktop view of the Carpool landing page features a large hero image of a car with passengers. The main text reads: "Carpooling is travelling in one car, splitting fuel bills, reducing traffic, saving money, and saving our planet with less carbon emissions!". Below this text are two buttons: "Offer ride" and "Find ride". The page is divided into three columns: "Carpooling benefits" with icons for saving money, splitting costs, and making friends; "80 Rides in Pune" with a list of ride offers; and "Pune news" with a list of local news items.

Carpooling benefits

- Save money with each ride
- Split costs riding together
- Making a friend travelling

80 Rides in Pune

Name	Rating	Origin	Destination	Time	Price
Raghu Rajput	★★★★☆	Mundhwa	Kothrud	8:10am	₹ 80.00
Saikat Roy	★★★★☆	Koregaon P.	Kothrud	9:00am	₹ 90.00
Varun Cheerala	★★★★☆	Mundhwa	Railway s...	10:00am	₹ 72.00
Surya Kumar	★★★★☆	Lonavala	Pimpri	7:40am	₹ 100.00
Amar Singh	★★★★☆	Talegaon	Alandi	10:00am	₹ 200.00
Radha Agarwal	★★★★☆	Chakan	Lavasa	7:00am	₹ 220.00

Pune news

- Polution Hit Hard**: Tight streets and difficult situations have been a c..
- Greenary Lost**: Incosiderate traffic and pollution has left the city..

The mobile view of the Carpool landing page is a vertical layout. It features the same hero image and main text as the desktop version. Below the text are two buttons: "Offer ride" and "Find ride". The "Carpooling benefits" section is shown as a vertical list of icons and text. The "80 Rides in Pune" section is also a vertical list of ride offers. The "Pune news" section is a vertical list of news items.

Carpooling benefits

- Money with ride
- Split costs riding together
- Making a friend travelling

80 Rides in Pune

Name	Rating	Origin	Destination	Time	Price
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Pune news

- Polution Hit Hard**: Tight streets and difficult situations have been a c..
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- The landing page educates users about carpooling.
- Users are also shown rides in their cities

DASHBOARD

My Dashboard

Carbon Footprint 70% reduced

30Bn, 20Bn, 10Bn, 5Bn, 2Bn

Apr, May, June, July, Aug, Sep

Offer ride **Find ride**

My upcoming rides

Driver	Origin	Destination	Time	Price	Cancel	Start
Raghu Rajput	Mundhwa	Kothrud	8:10am	₹ 80.00	Cancel	Start
Surya Kumar	Kothrud	Mundhwa	7:40pm	₹ 100.00	Cancel	Start

80 Rides in Pune

Driver	Origin	Destination	Time	Price
Maria Hector	Mundhwa	Kothrud	8:10am	₹ 80.00
Saikat Roy	Koregaon P.	Kothrud	9:00am	₹ 90.00
Varun Cheerala	Mundhwa	Railway s...	10:00am	₹ 72.00

My wallet ₹ 900.00

Withdraw **Deposit**

21 friends View all

- Morea Wilson
- Peter Naveen
- Veronica Govind
- Rai Saxsena
- Henry Mathew

My rides View all

- Mundhwa → Kothrud, 8:00am, 1 Feb 2018, ₹ 190.00
- Lonavala → Pimpri, 11:00am, 30 Jan 2018, ₹ 390.00
- Kothrud → Mundh.., 5:00am, 28 Jan 2018, ₹ 180.00
- Mundhwa → Kamsh., 5:00pm, 22 Jan 2018, ₹ 290.00
- Mundhwa → Kothrud, 11:00am, 10 Jan 2018, ₹ 190.00

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Offer ride **Find ride**

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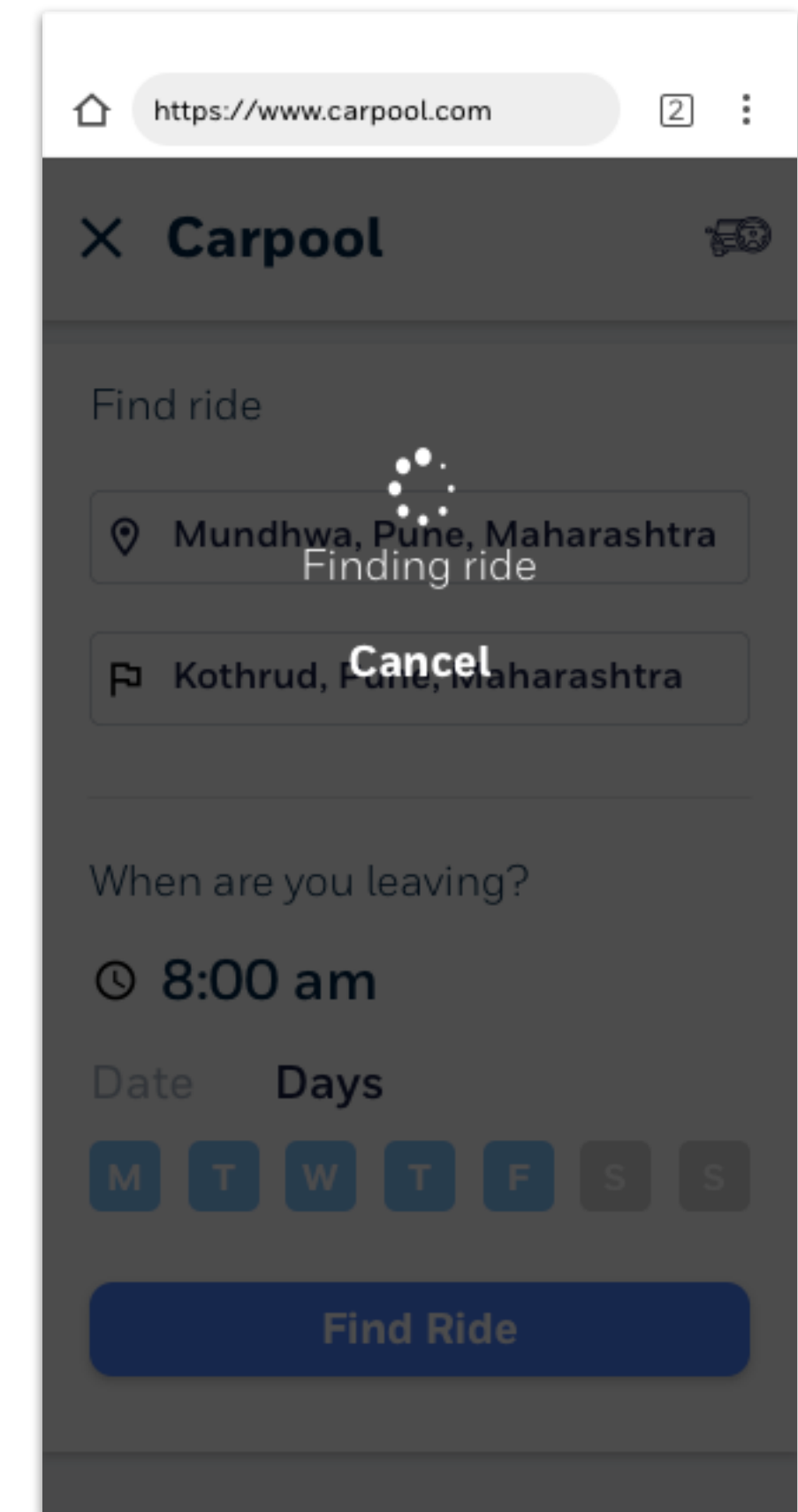
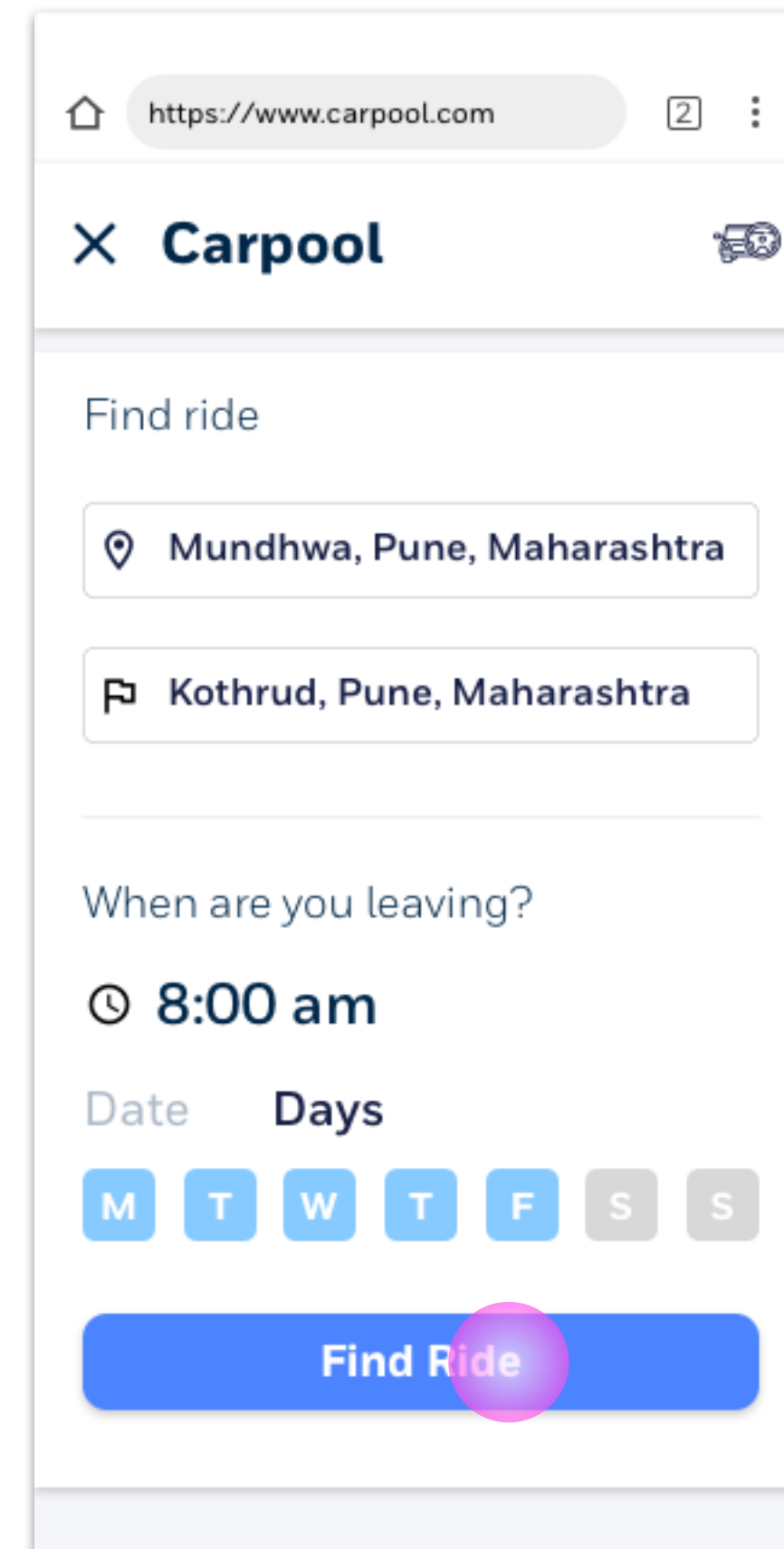
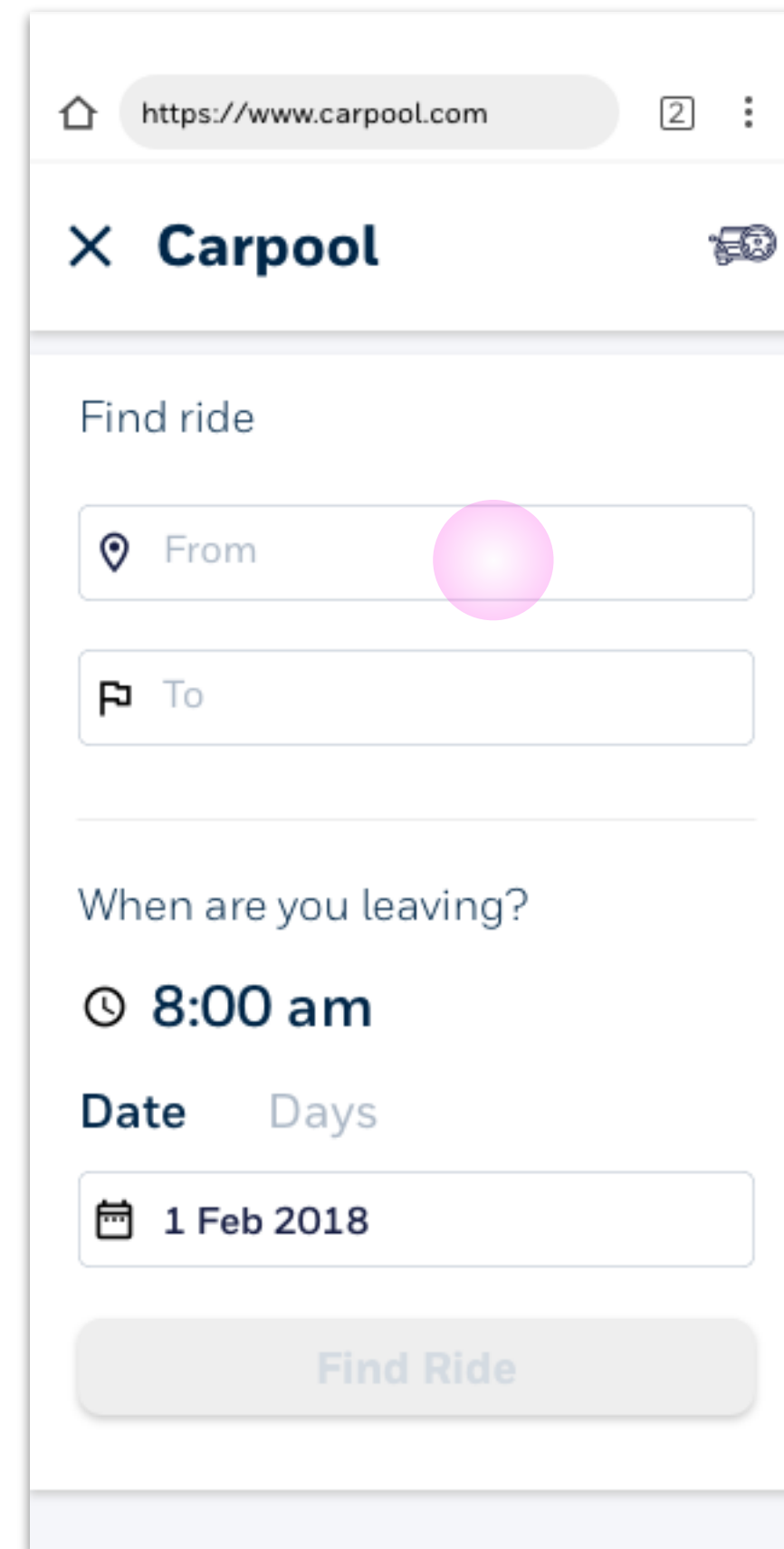
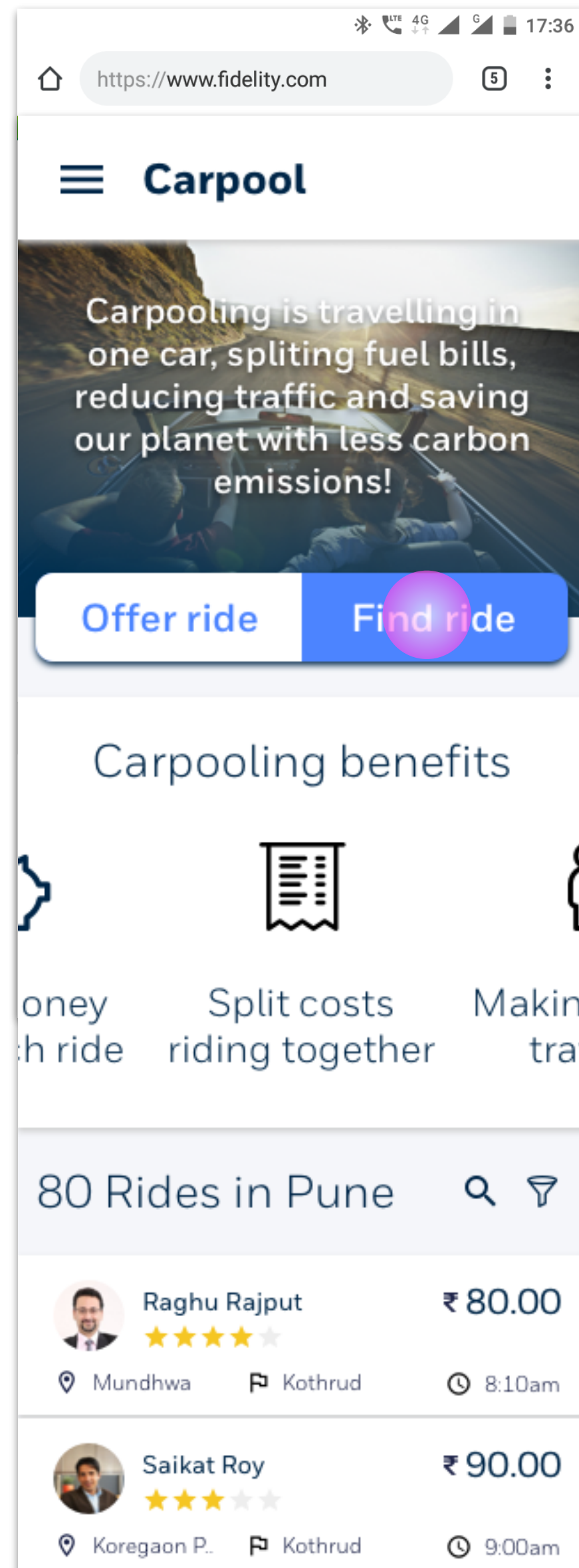
My rides View all

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- The dashboard contains the profile information, carbon footprint for environment friendly, upcoming rides, list of friends, ride history and the two CTA's

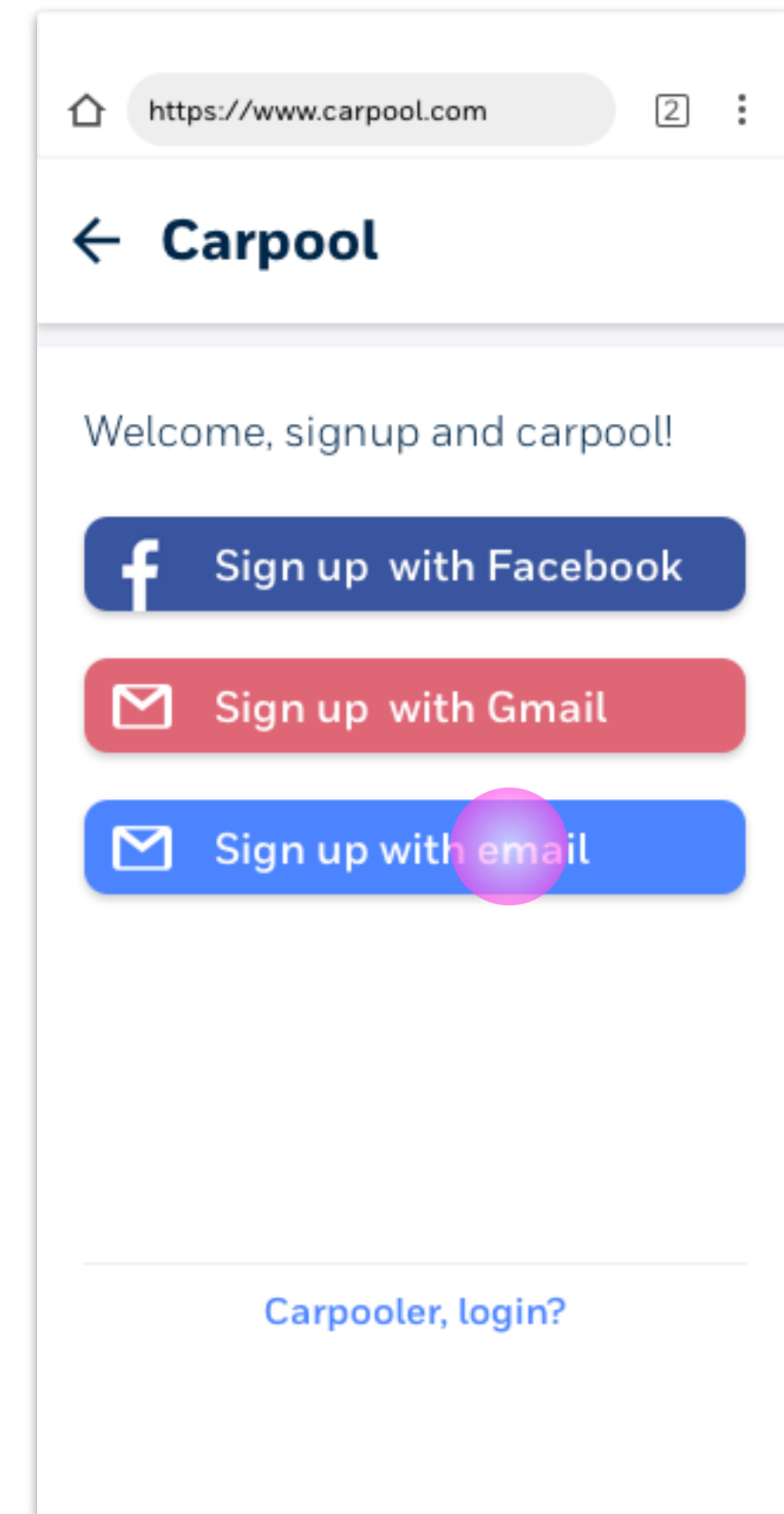
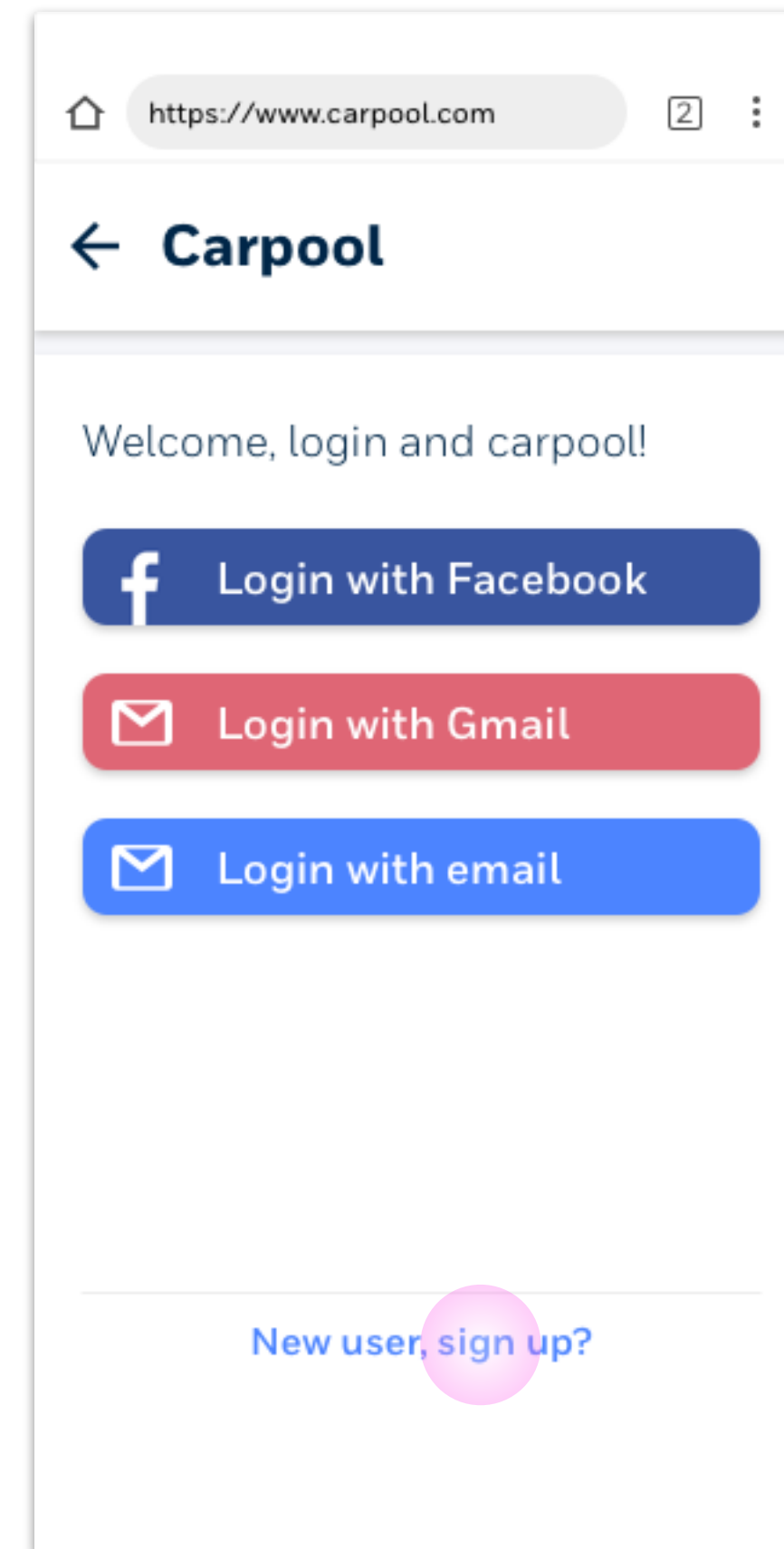
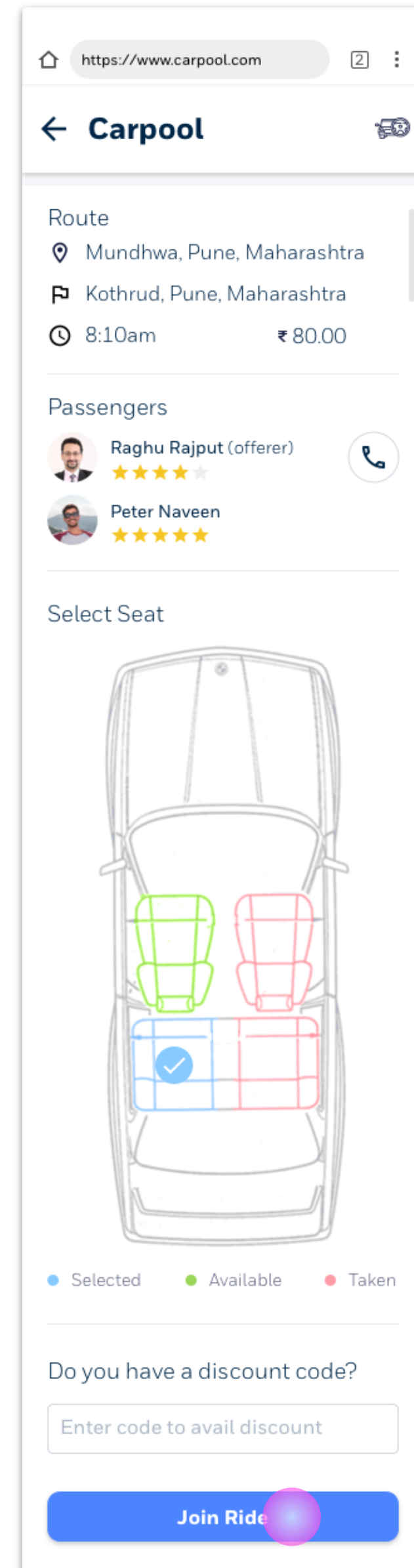
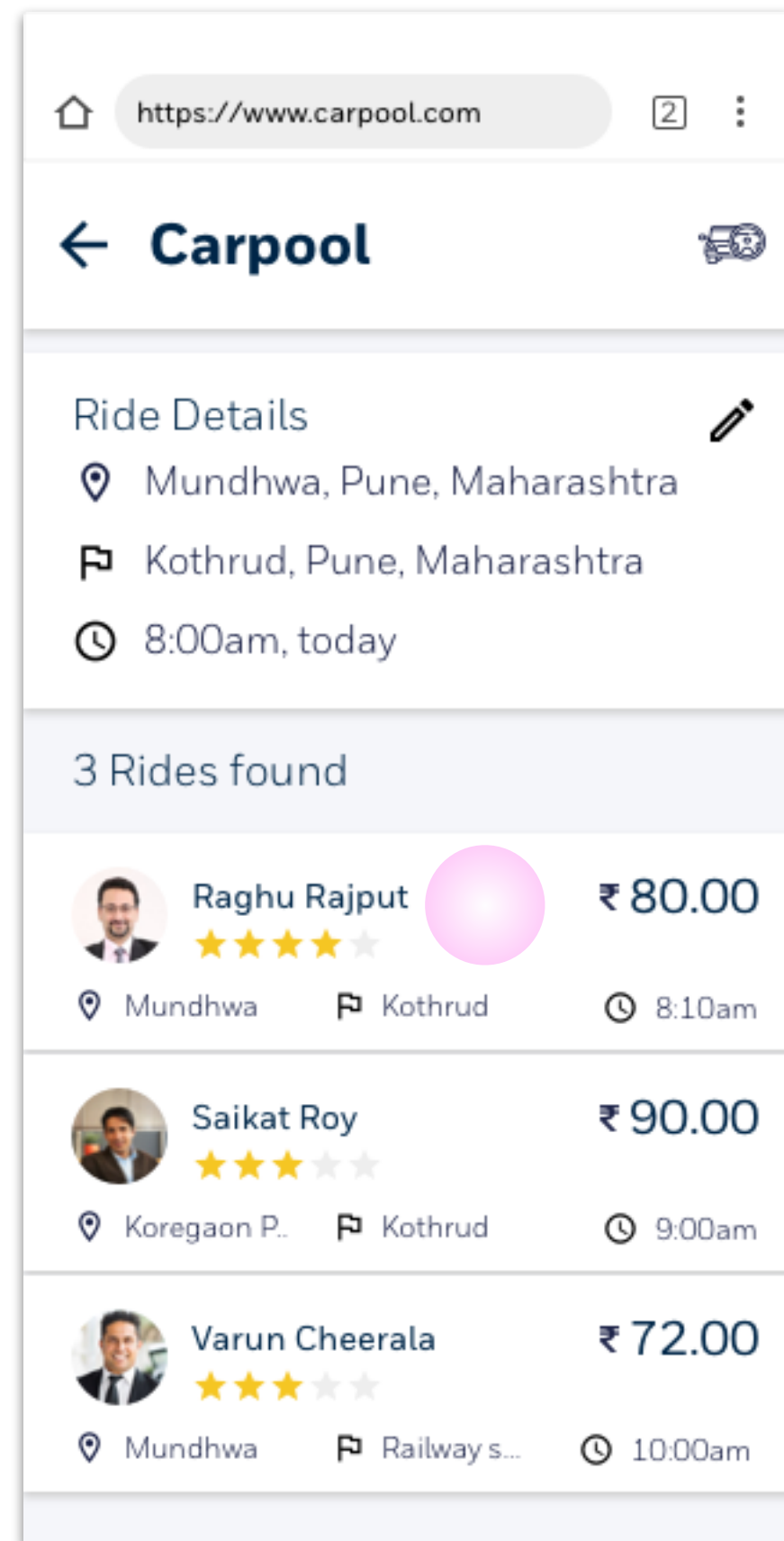
Passenger Journey

FINDING A RIDE



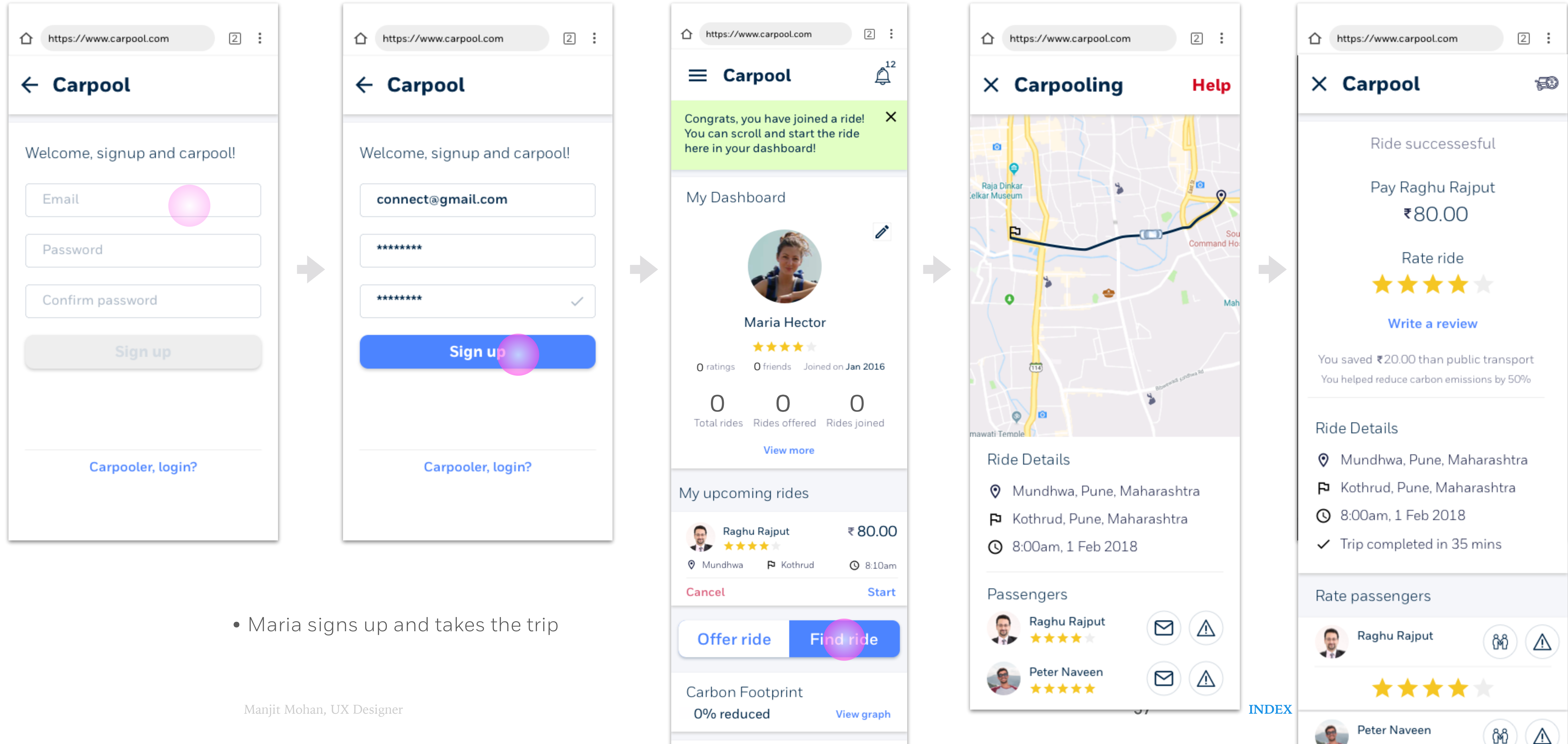
- Maria visits and decides to find a ride
- She provides location and other information and searches for rides

FOUND RIDE & LOGIN



- She finds a ride
- She verifies the passengers
- Selects seat and joins the journey
- Now she is asked to login to carpool

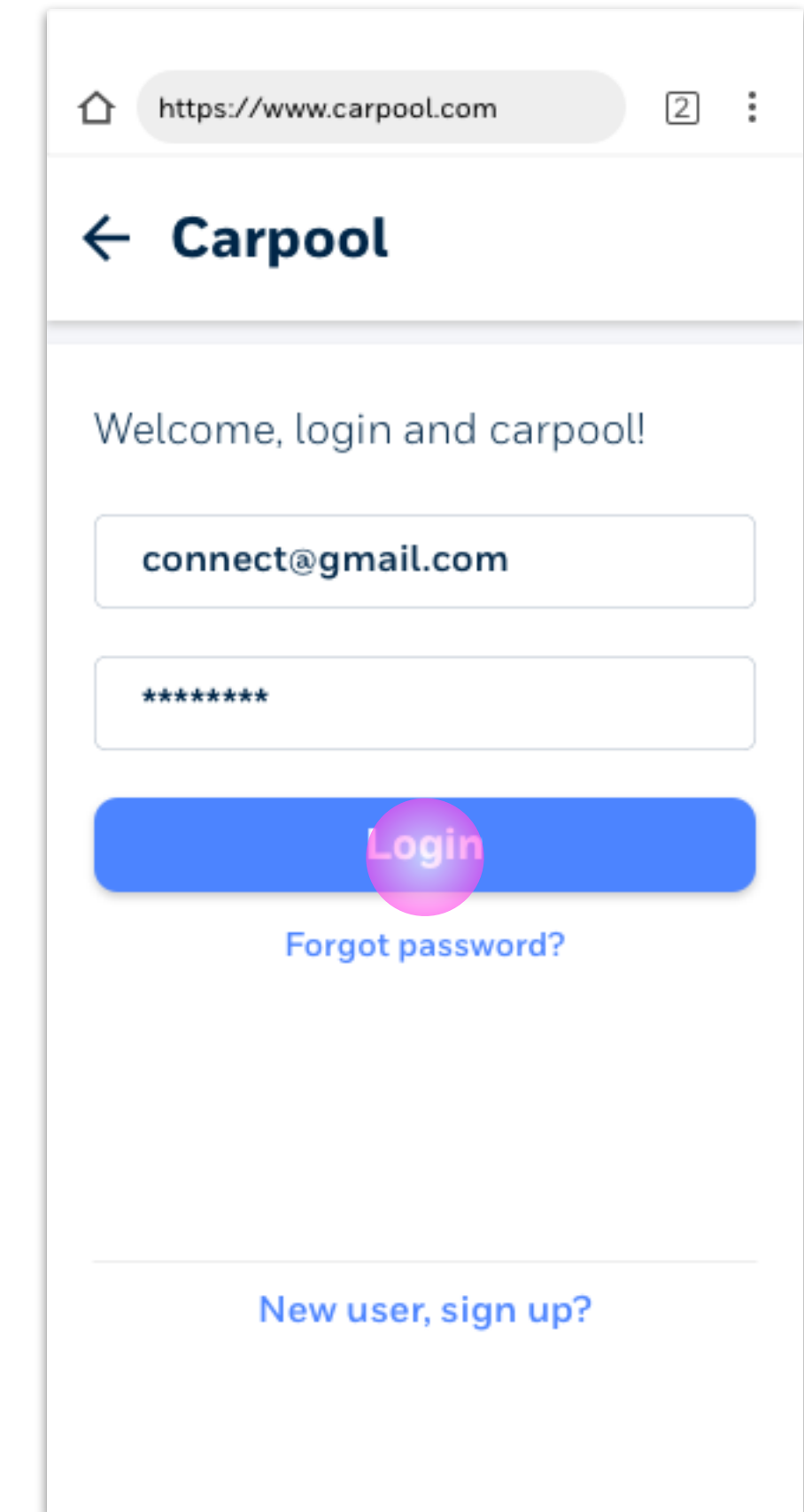
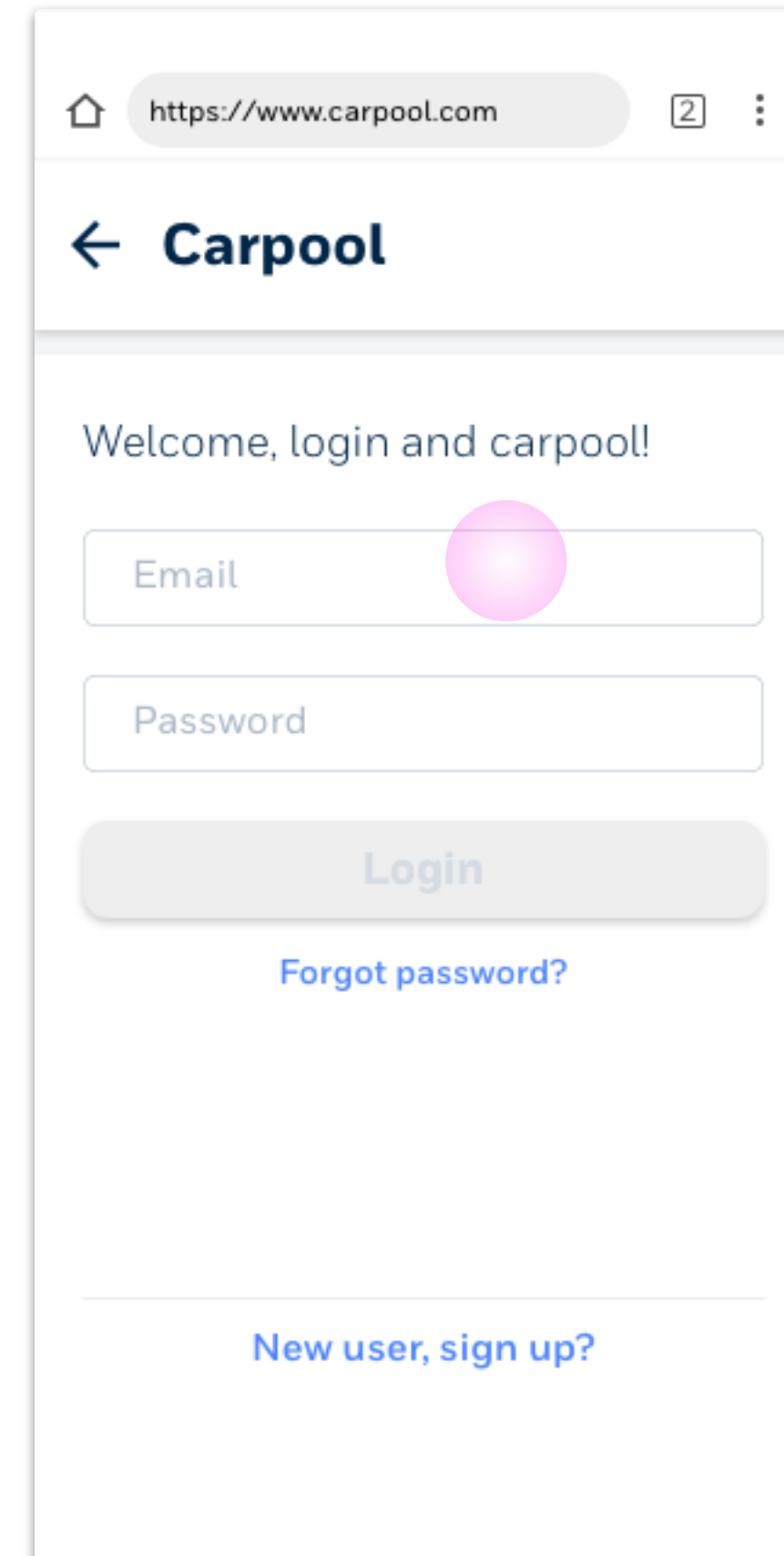
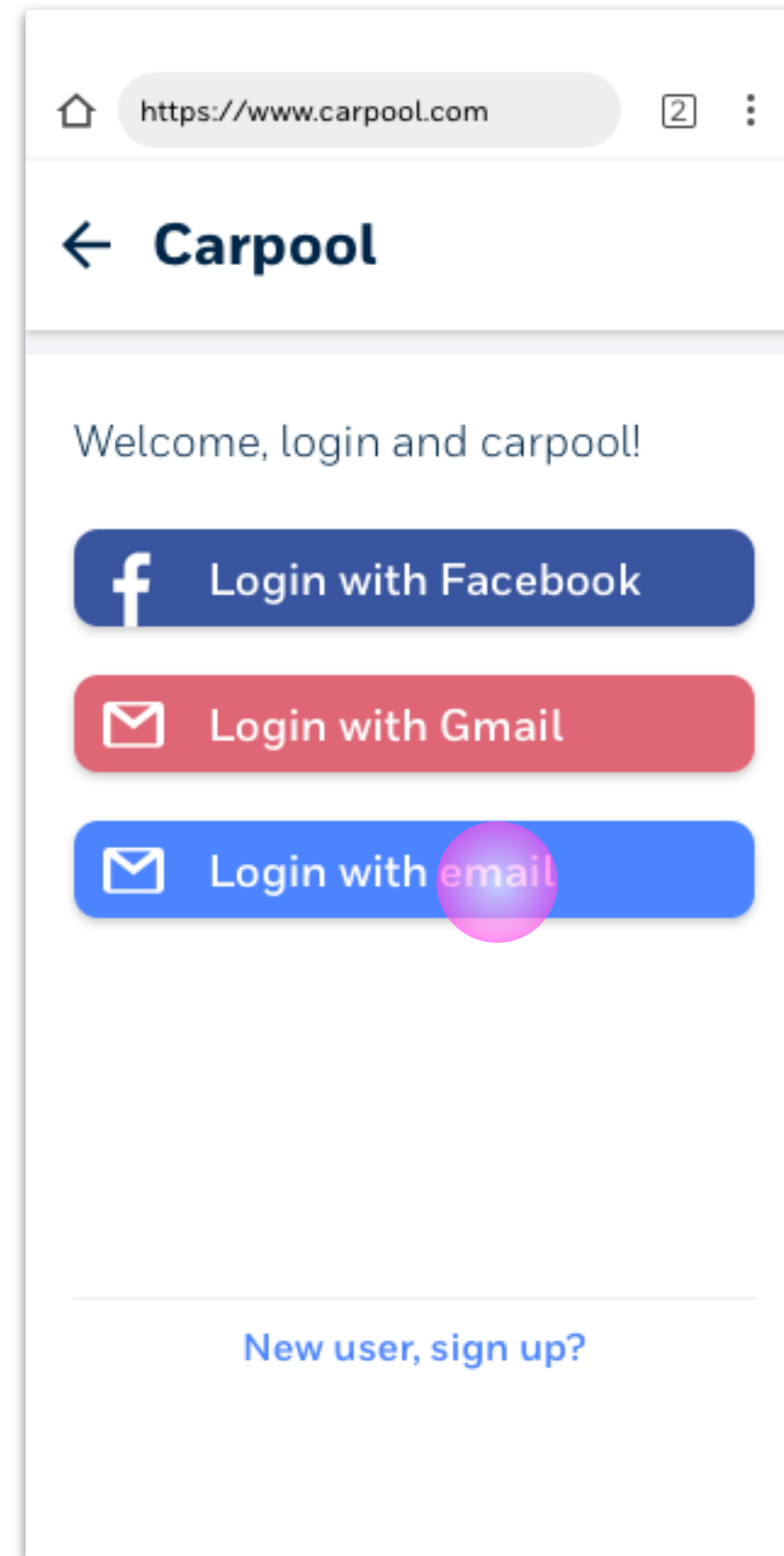
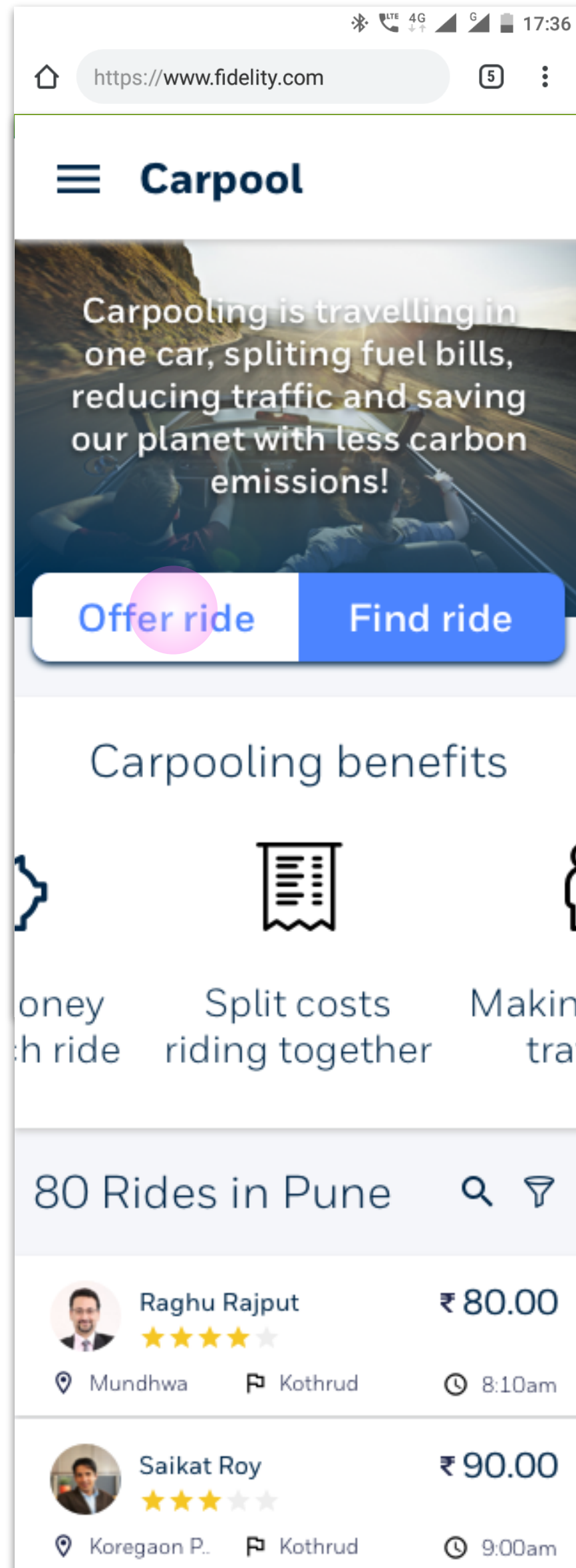
THE RIDE



- Maria signs up and takes the trip

Driver Journey

SIGNING UP



- User wants to offer a ride
- He logs in with his email

CREATING A RIDE

https://www.carpool.com

Carpool

Offer ride

From

+ Add stop

To

When are you leaving?

🕒 8:00 am

Date Days

📅 1 Feb 2018

Available seats

− 3 +

Price per km

− ₹2.00 +

Estimated cost

Same Page

https://www.carpool.com

Available seats

− 3 +

Price per km

− ₹2.00 +

Estimated cost

₹40.00 per passenger

Share your phone number so your passengers may call you

📞 Phone number

Write passengers a note

Note the route, timing or anything important

Offer Ride



https://www.carpool.com

Carpool

Offer ride

📍 Kadkhi, Pune, Maharashtra

+ Mundhwa, Pune, Maharashtra

📍 Kothrud, Pune, Maharashtra

When are you leaving?

🕒 8:00 am

Date Days

M T W T F S S

Available seats

− 3 +

Price per km

− ₹4.00 +

Estimated cost

Same Page

https://www.carpool.com

Available seats

− 3 +

Price per km

− ₹4.00 +

Estimated cost

₹80.00 per passenger

Share your phone number so your passengers may call you

📞 12345 82822

Write passengers a note

Note the route, timing or anything important

Offer Ride

THE RIDE

https://www.carpool.com

Carpool

My Dashboard

Raghu Rajput
★★★★★
72 ratings 16 friends Joined on Jan 2016

109 Total rides 90 Rides offered 19 Rides joined

View more

My upcoming rides

- Raghu Rajput** ₹80.00
★★★★★
Mundhwa → Kothrud 8:10am
Cancel Start
- Surya Kumar** ₹100.00
★★★★★
Kothrud → Mundhwa 7:40pm
Cancel Start

Same Page

Cancel Start

Offer ride Find ride

Carbon Footprint
70% reduced View graph

21 Friends View all

- Morea Wilson** ★★★★★
- Peter Naveen** ★★★★★

My rides View all

- Mundhwa → Kothrud 8:00am, 1 Feb 2018 ₹190.00
- Lonavala → Pimpri 11:00am, 30 Jan 2018 ₹390.00

80 Rides in Pune

- Maria Hector** ₹80.00
★★★★★
Mundhwa → Kothrud 8:10am

Cancel Start

× Carpooling Help

Ride Details

- Mundhwa, Pune, Maharashtra
- Kothrud, Pune, Maharashtra
- 8:00am, 1 Feb 2018

Passengers

- Maria Hector** ★★★★★
- Peter Naveen** ★★★★★

https://www.carpool.com

× Carpool

Ride successful

Passengers will pay you
₹80.00

You saved ₹20.00 in fuel costs
You helped reduce carbon emissions by 50%

Ride Details

- Mundhwa, Pune, Maharashtra
- Kothrud, Pune, Maharashtra
- 8:00am, 1 Feb 2018
- ✓ Trip completed in 35 mins

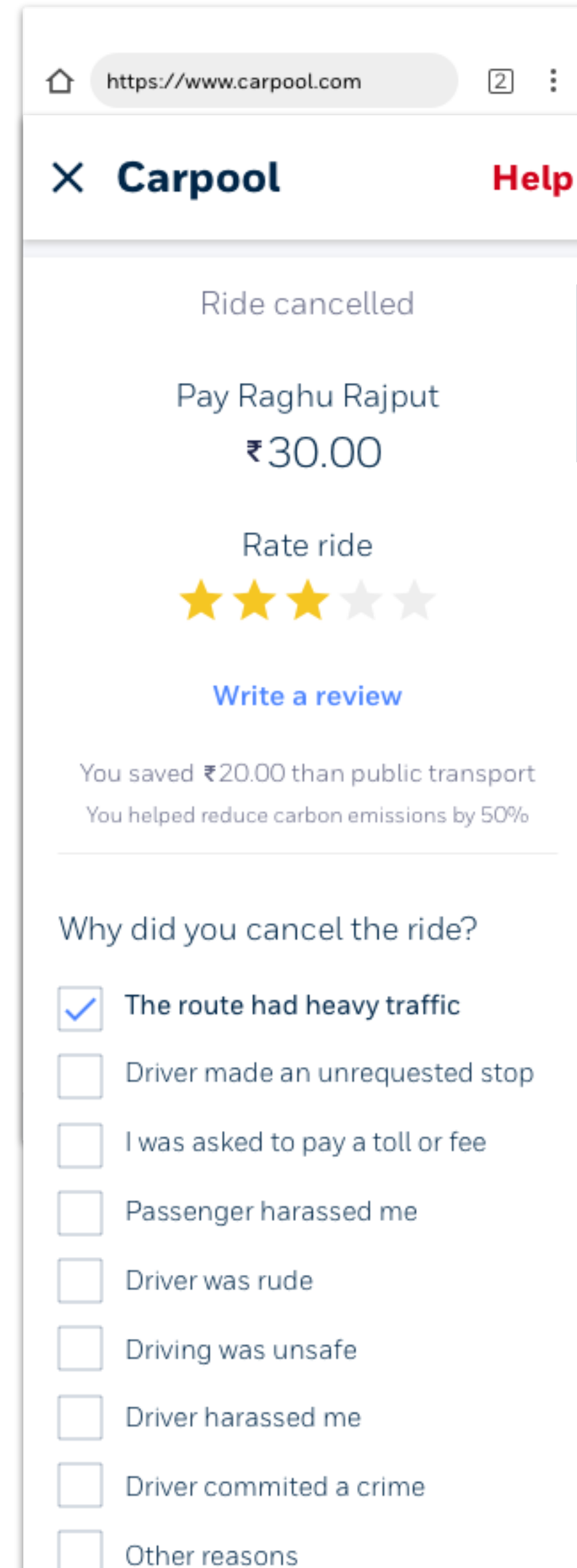
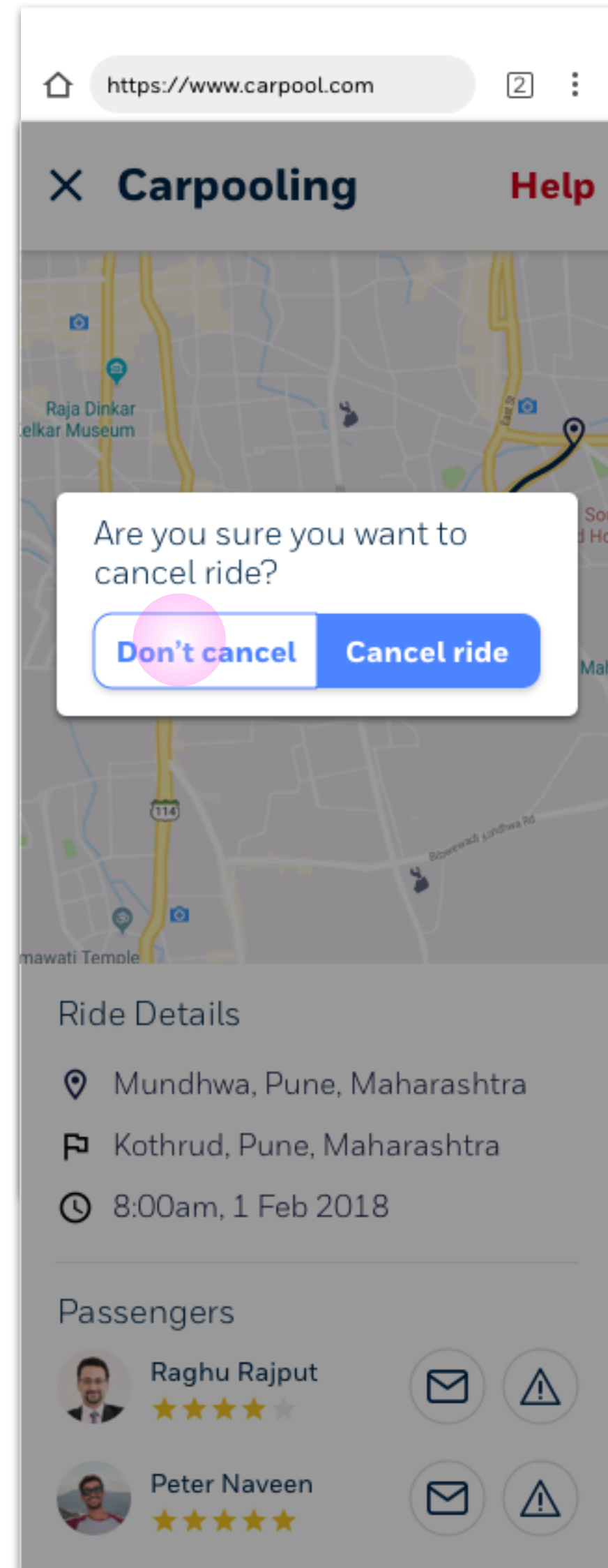
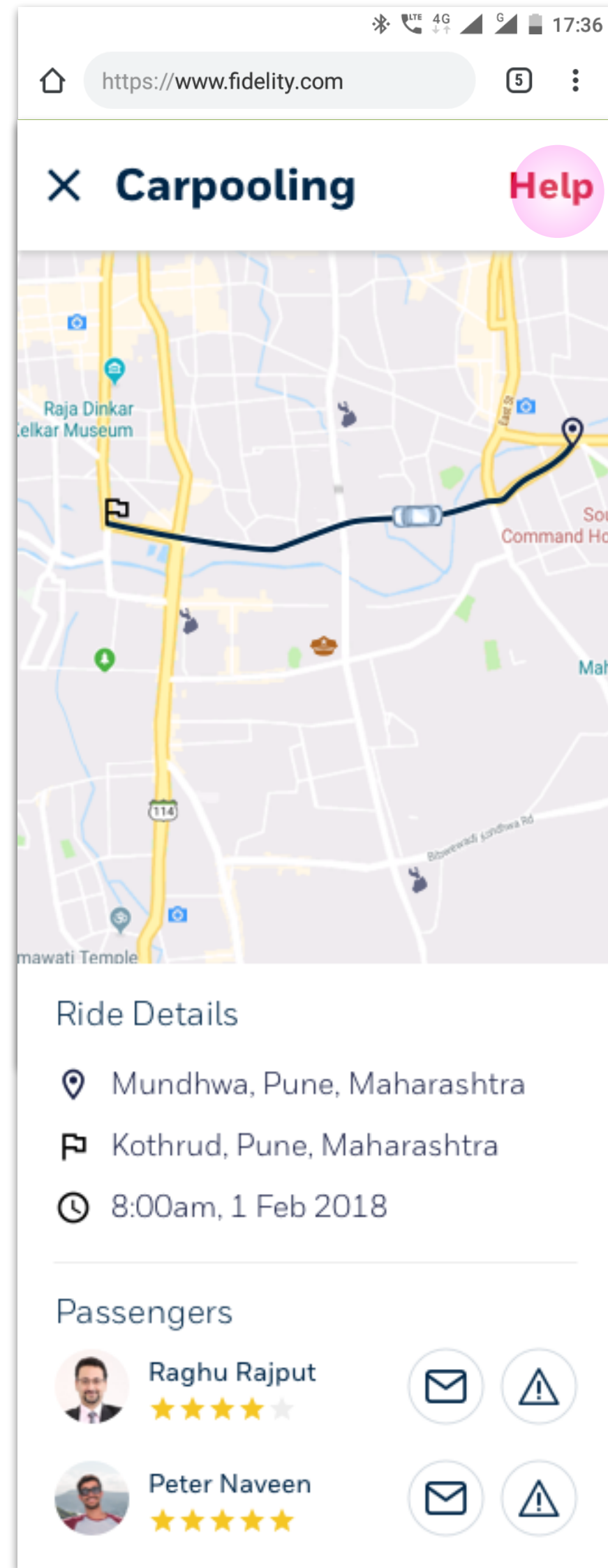
Rate passengers

- Maria Hector** ★★★★★
- Peter Naveen** ★★★★★

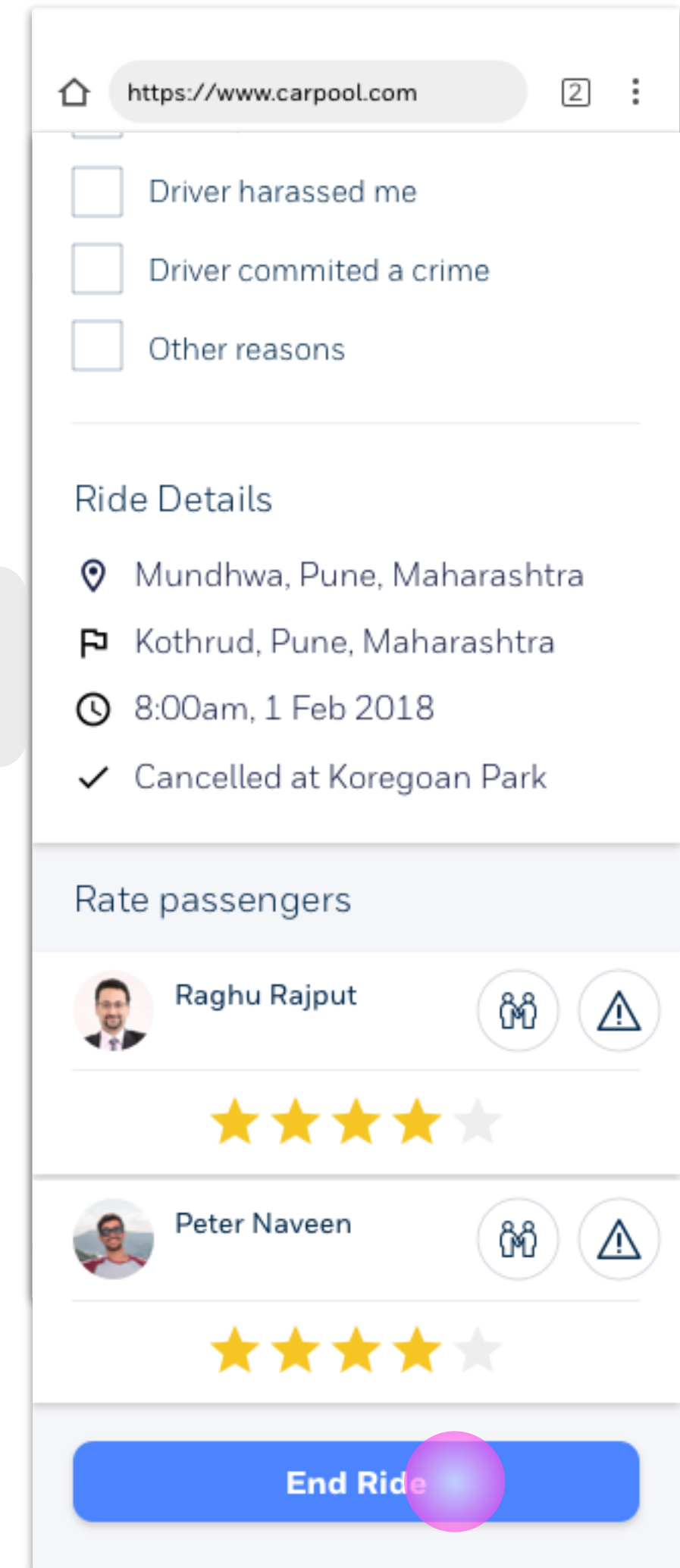
End Ride

Exceptions

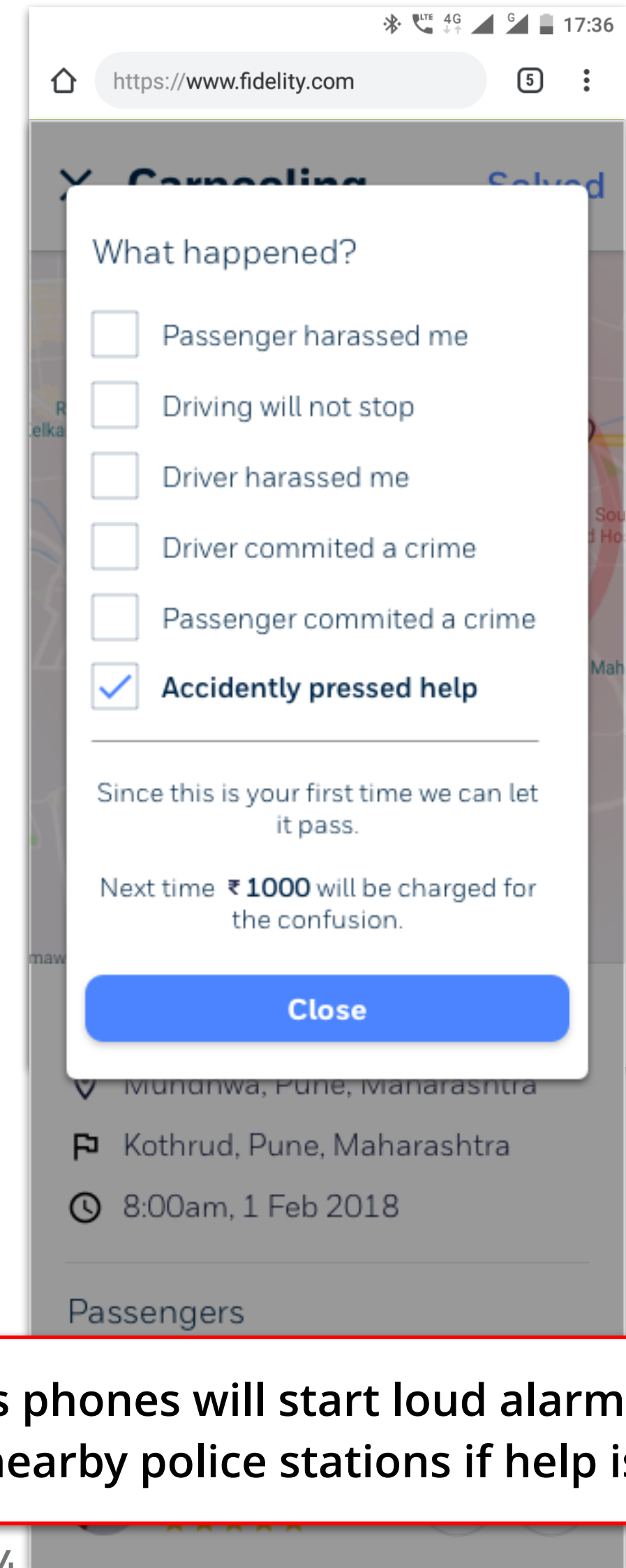
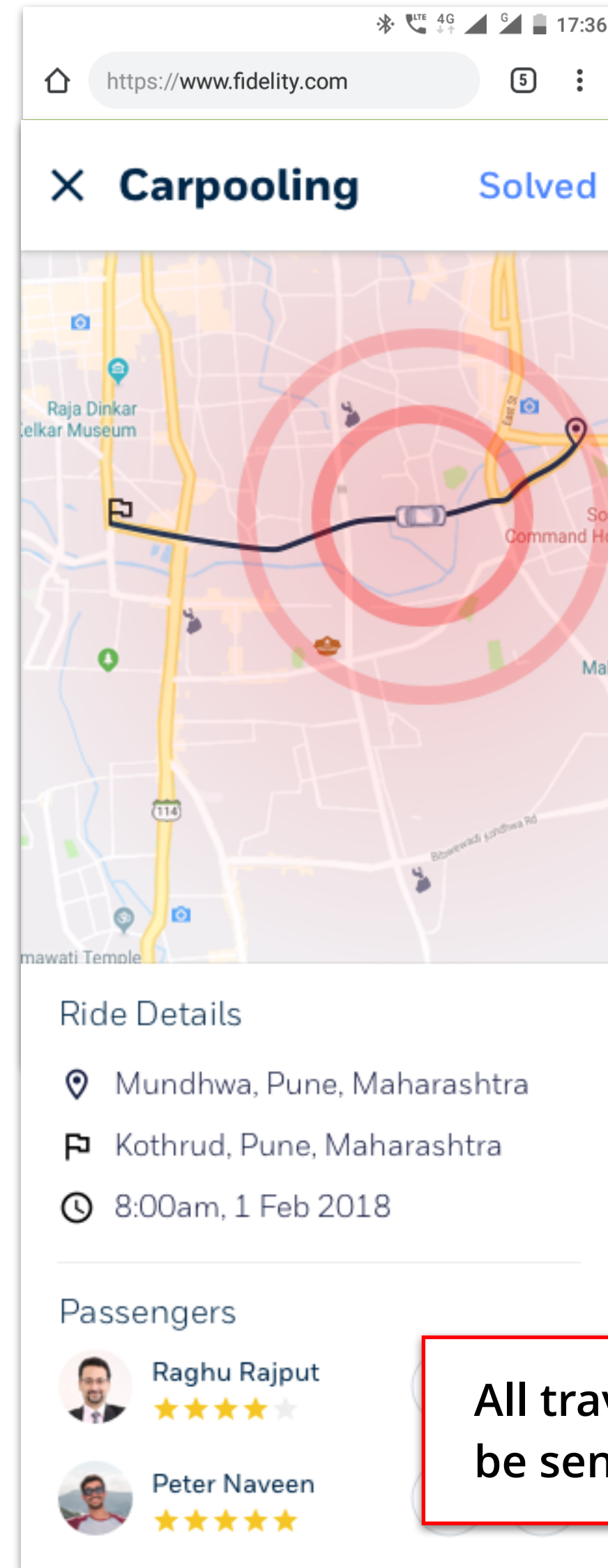
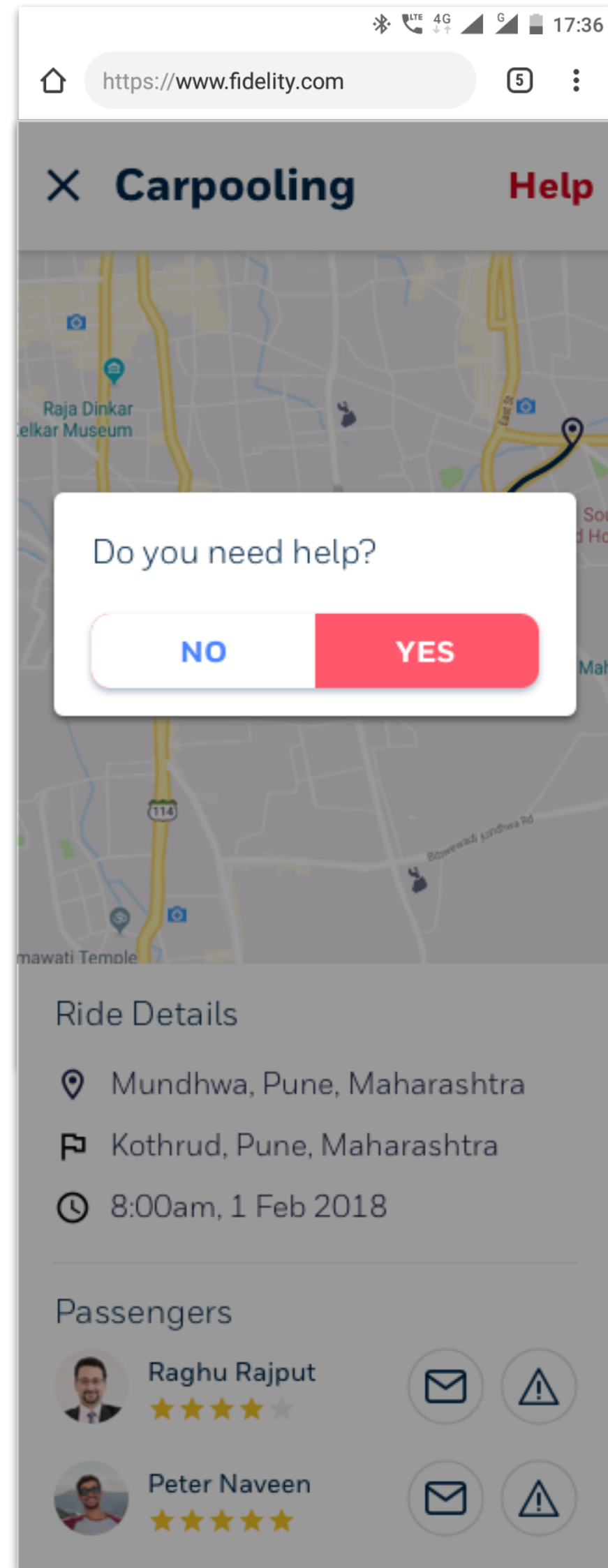
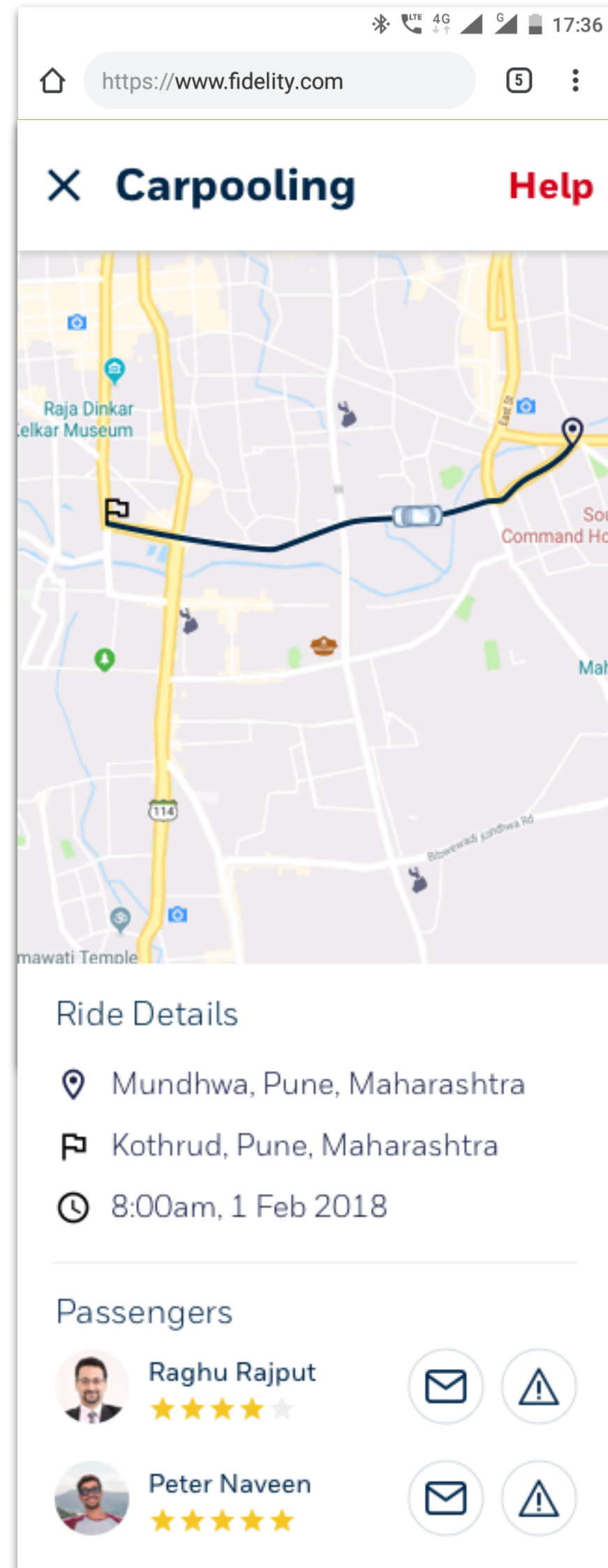
PASSENGER CANCELLING RIDE



Same Page

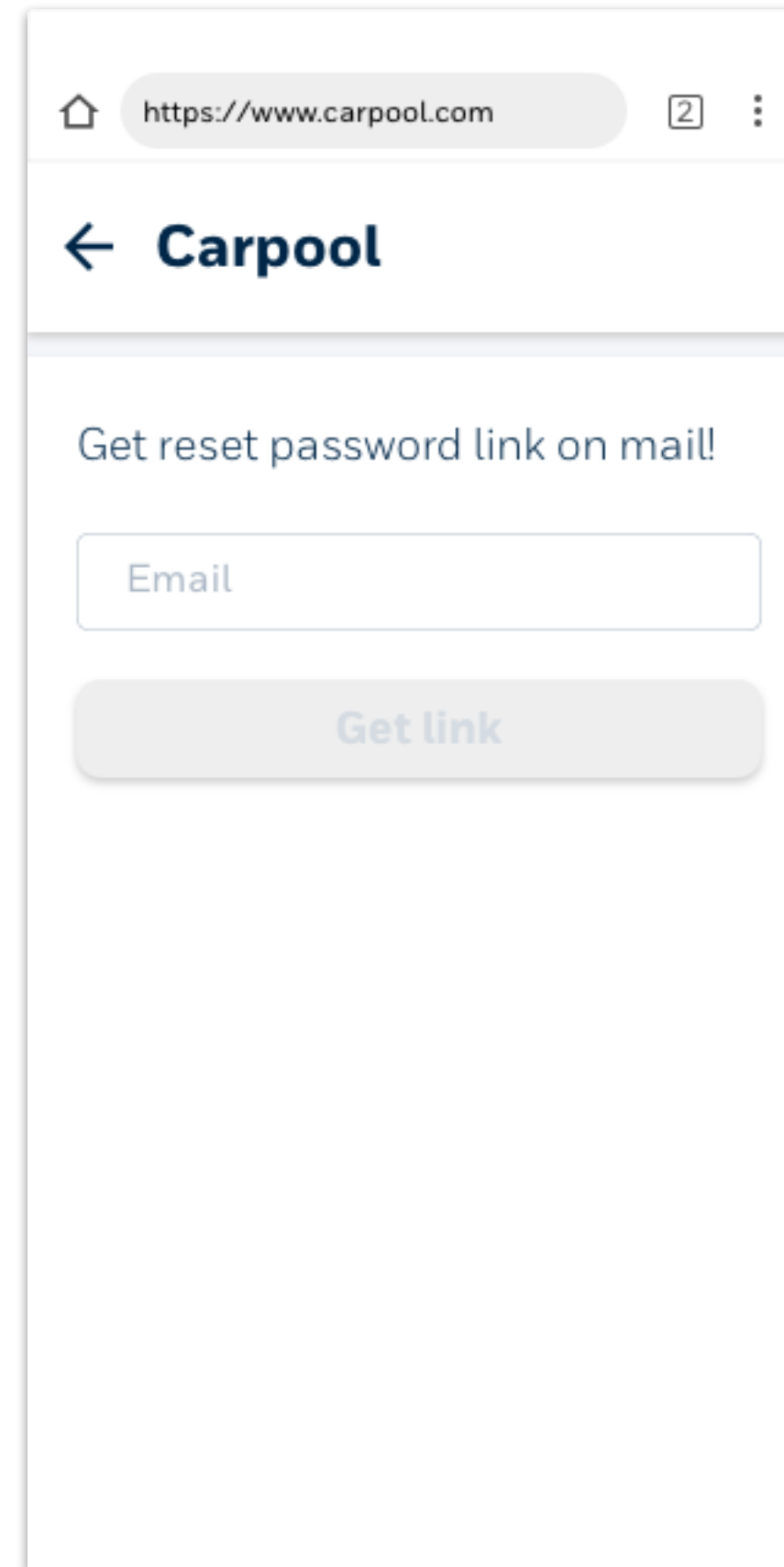
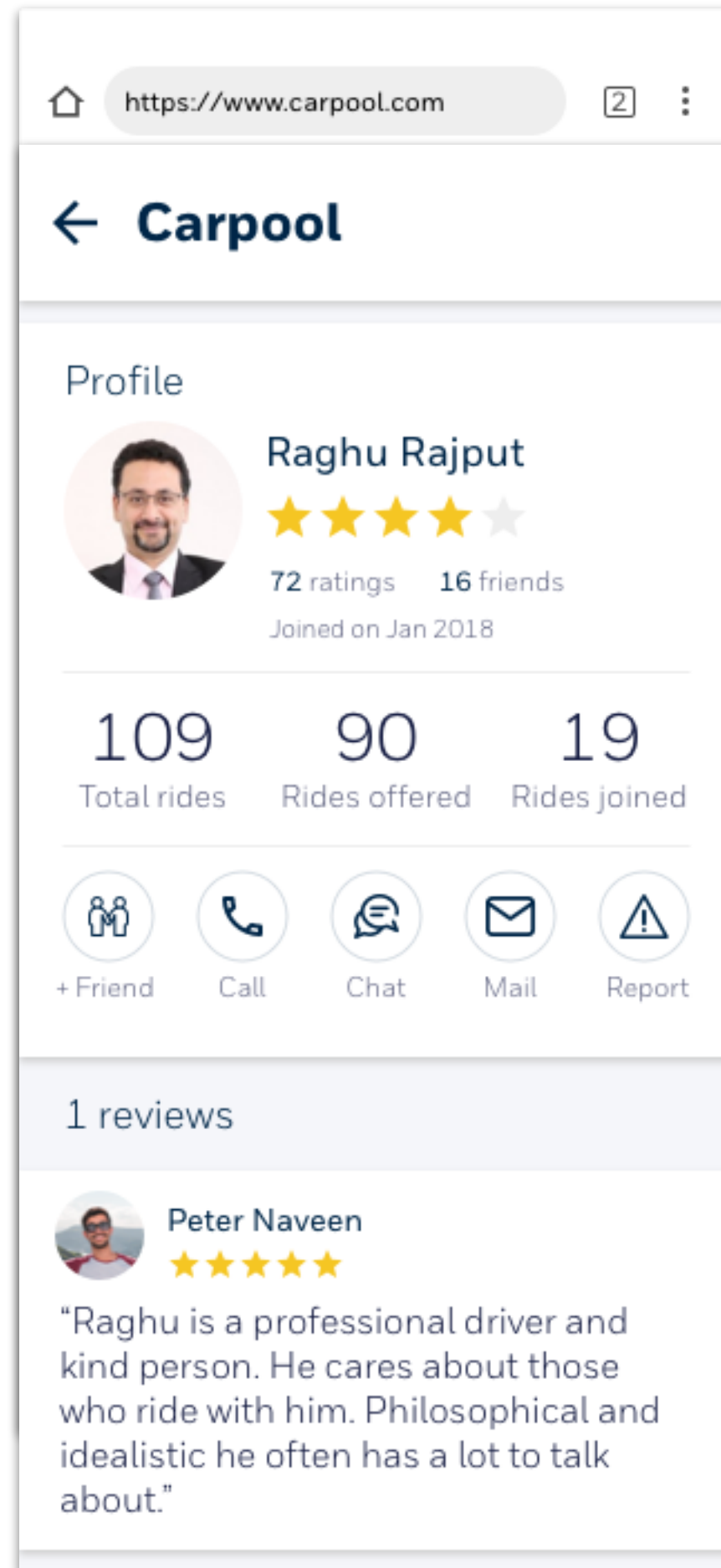


PASSENGER CLICKING HELP

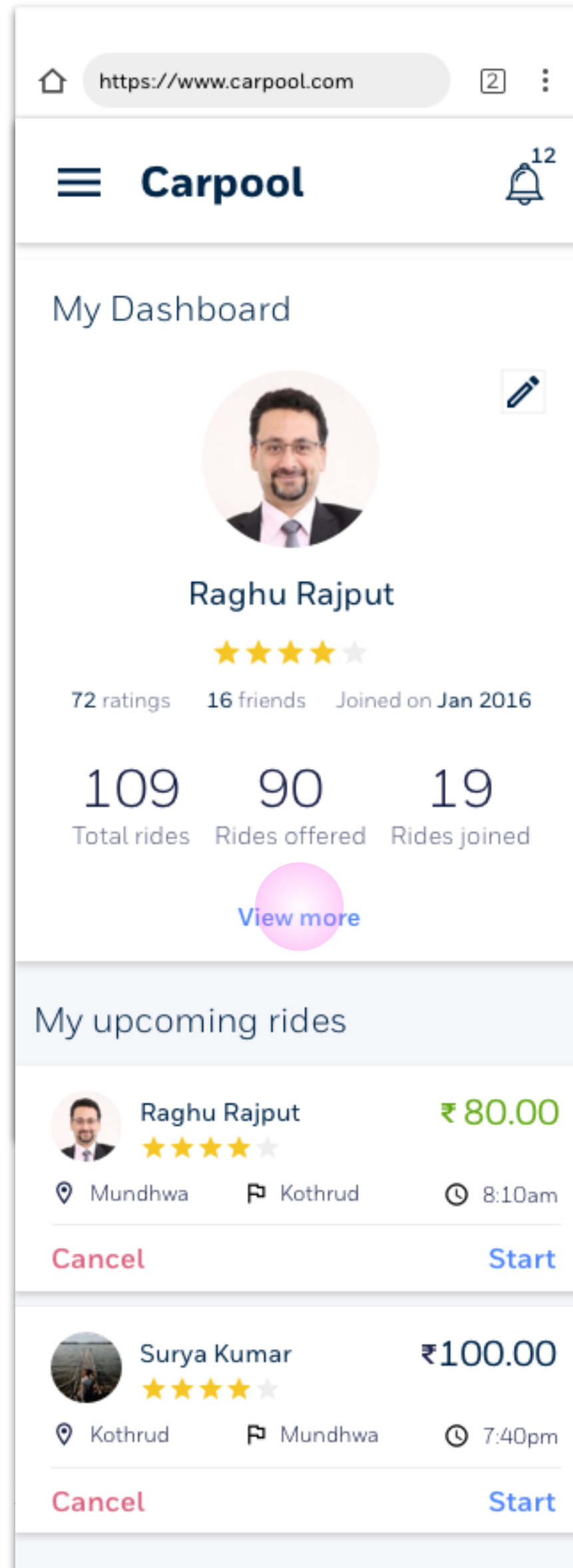


All travellers phones will start loud alarm and alerts will be send to nearby police stations if help is clicked

PASSENGER PROFILE , RESET PASSWORD




DASHBOARD



https://www.carpool.com

Carpool

My Dashboard

 Raghu Rajput



★★★★★

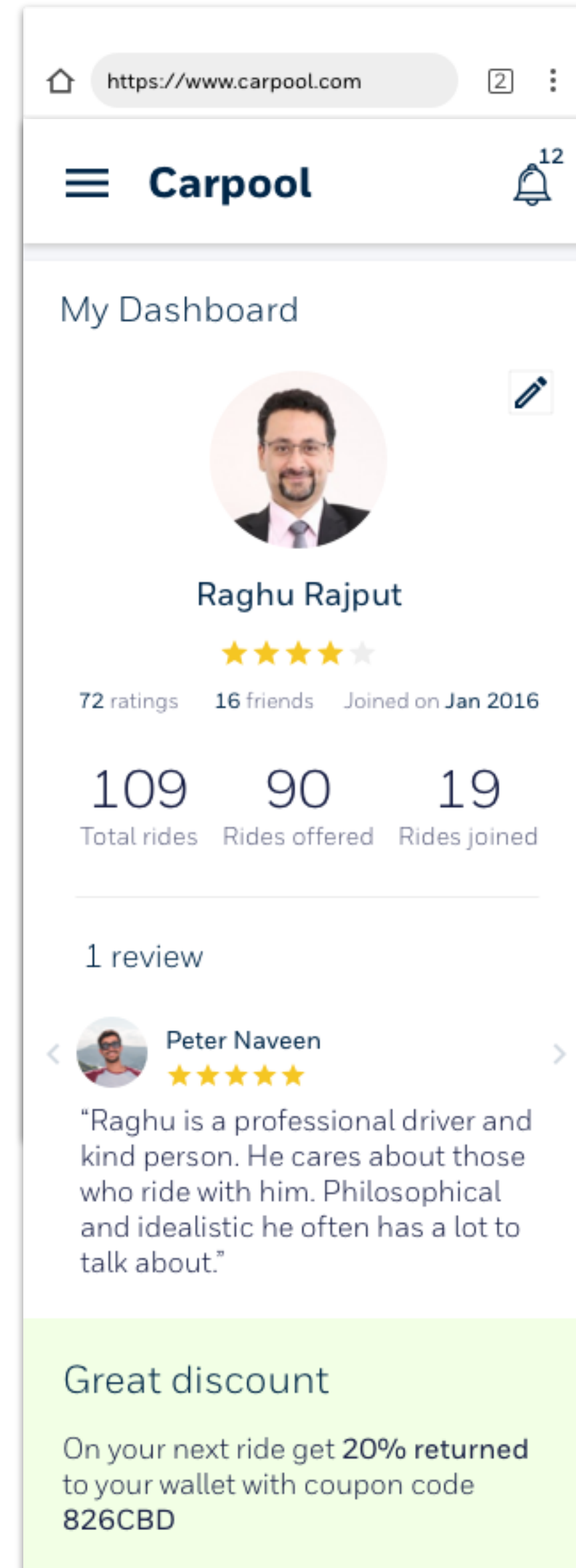
72 ratings 16 friends Joined on Jan 2016

109 Total rides 90 Rides offered 19 Rides joined

[View more](#)

My upcoming rides


 Raghu Rajput	₹80.00
★★★★★	
Mundhwa Kothrud	8:10am
Cancel	Start
 Surya Kumar	₹100.00
★★★★★	
Kothrud Mundhwa	7:40pm
Cancel	Start



https://www.carpool.com

Carpool

My Dashboard


 Raghu Rajput

★★★★★

72 ratings 16 friends Joined on Jan 2016

109 Total rides 90 Rides offered 19 Rides joined

1 review

 Peter Naveen

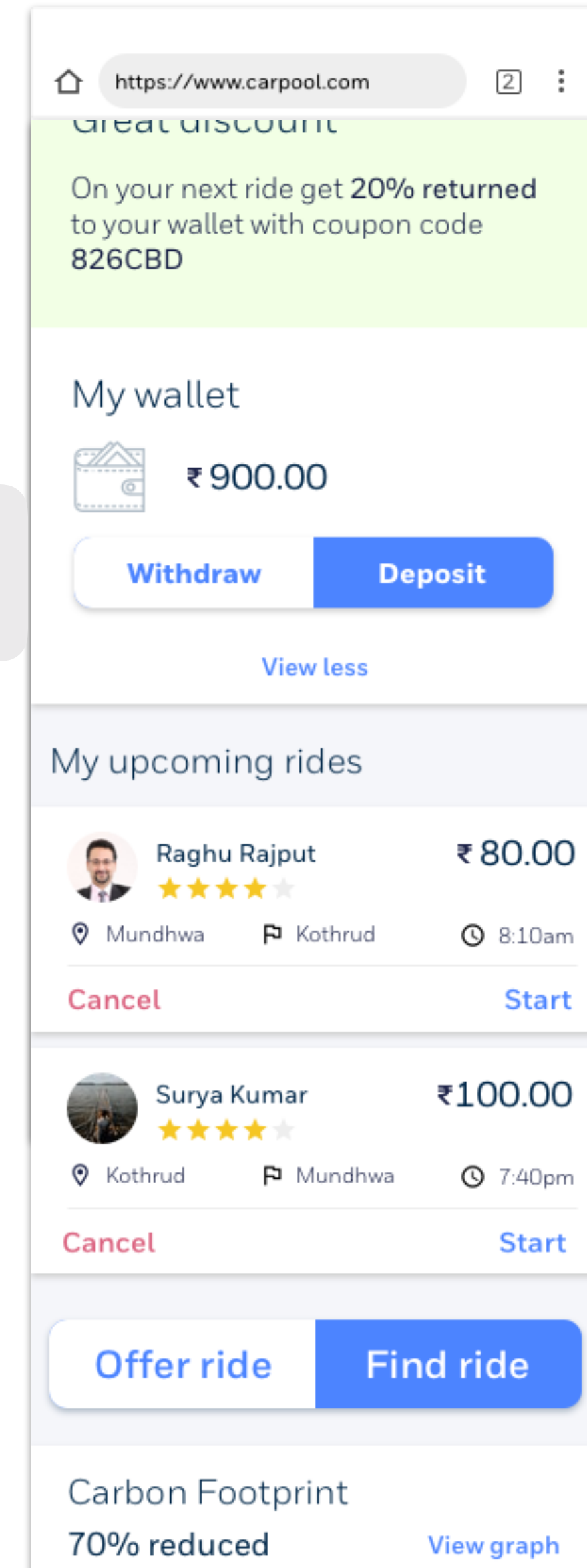
★★★★★

"Raghu is a professional driver and kind person. He cares about those who ride with him. Philosophical and idealistic he often has a lot to talk about."

Great discount

On your next ride get 20% returned to your wallet with coupon code 826CBD

Same Page



https://www.carpool.com

Great discount

On your next ride get 20% returned to your wallet with coupon code 826CBD



My wallet

₹900.00

[Withdraw](#) [Deposit](#)

[View less](#)

My upcoming rides

 Raghu Rajput	₹80.00
★★★★★	
Mundhwa Kothrud	8:10am
Cancel	Start
 Surya Kumar	₹100.00
★★★★★	
Kothrud Mundhwa	7:40pm
Cancel	Start

[Offer ride](#) [Find ride](#)

Carbon Footprint

70% reduced [View graph](#)

RECOMMENDATION

The greatest challenge a carpooling application will face is being found within a storm of massive competition inclusive of other carpooling apps and professional cab/taxi applications (Uber, Ola, etc).

I will recommend a thorough study of the users for all the above applications with which our designers can find key pain points and ever changing user needs to address with the design for Carpool.

[CLICK HERE](#) to view the interactive prototype



THANK YOU SO MUCH



for your valuable time!