TRIPALLY

A concept mobile application for to traveler to get smart airport assistance

Conceptualize and Designed By Kaushik Sinha | Date: May 2018 | Kolkata, India

Assignment

An infrastructure company and some city's airport authority collaboratively want to develop a mobile based application for commuters. The application would be one stop information center for an user who commutes through various airports. User can get details of various corners, counters, security gates, shops, lounges, rest rooms etc. and locate those easily. User can get flight information of all different flights. Also the user/customer will get personalized notification like flight status and information for every check-in or check-out steps. The intelligent system would continuously track user's location and guide him accordingly.

This was the small brief from the stakeholders. Now as an UX expert, your job is to breakdown all the possibilities and provide a best solution for the commuters. Do all the required research at your end and come up with the solution.

Test 1:

Creating Wireframe After doing all the research you have to create a wireframe at least for a single flow. Take a scenario like User entered the airport for the first time to make a journey abroad.

Test 2:

Designing the Visual Interface Based on the wireframe, create visual design at least minimum 3 screens to showcase your best capabilities.

Test 3:

Design Document Also we would like to know your thought process for this solution. Create a design document and present you design thought process behind your design solution

Requirement Overview |
Understanding and defining scope

Who:
For domestic or international traveler who commute through various airports

What:
One stop solution of information's including: Flight status, for every check-in or check-out steps. Also about the details of various corners, counters, security gates, shops, lounges, rest rooms etc.

How:
This must be a smart mobile application that could fetch/ track information on real time and guide the user at every step during journey.
The application could have IOT, AI, VR integrated for smarter and flawless experience

User Profile

1. Domestic Traveler
> Age : Neutral (18-70 years)
> gender: Neutral (Male, Female, Transgender)
> Air Travel experience: Zero to High
> Technology experience: Zero to Moderate
> Domain Knowledge: Zero to moderate
> Language : English Preferred

2. International Traveler
> Age : Neutral (18-70 years)
> gender: Neutral (Male, Female, Transgender)
> Air Travel experience: Zero to High
> Technology experience: Zero to Moderate
> Domain Knowledge: Zero to moderate
> Language : English Preferred

Task Profile

Checking flight status: Yes
Immigration formalities: No
Boarding pass collection: Yes
Luggage Drop: Yes
Security Check: Yes
Shopping/ Restaurant/ Spa/Restroom/Medical Assistance: Yes
Retiring room/ logging: No
Boarding on flight: Yes
Connected flight: Yes/No
Collecting luggage from conveyer belt: yes
Custom check: Yes

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Immigration formalities: yes
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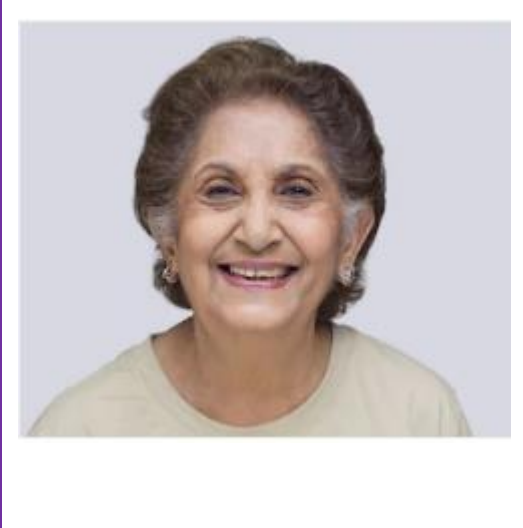Custom check: Yes

Environmental Profile

Day light/ heavy light: Yes
Noisy environment: Yes
On the move: Yes
Static: Yes
Public Place: yes

Day light/ heavy light: Yes
Noisy environment: Yes
On the move: Yes
Static: Yes
Public Place: yes

Nina Wadia

Picture Courtesy: shutter stock

AGE	69
OCCUPATION	RETIRED SCHOOL TEACHER
STATUS	WIDOW
LOCATION	COLABA, MUMBAI. INDIA
TIRE	DOMESTIC FLYER
ARCHETYPE	INFREQUENT

Scenario:

After her retirement from St. Peter missionary school Nina decided to stay independently at there Colaba residence. Even after her husband passed away 2 years back, she has refused to stay permanently her daughter, one stay and Guwahati and another is at Dehradun.

But every year she travels twice to her daughter and spends one month with each.

However, Air travel makes her very nervous as she feels lost all the time. From boarding to security checking, from reaching to the gate to boarding at flight, from collecting luggage from conveyor belt to getting the taxi at airport parking all makes her feel she is doing something wrong. She always feels a urge to get a companion / assistance that would make her travel relaxed and stress free.

As she is fairly good mobile savvy and regularly use it for buying grocery, medicine and for paying bills, She also want some app that would help her

Objective

She is looking for an

Mobile app that

Could guide her, notify her, remind her for each important steps required at airport

Goal

- She want notifications and updates of her flight status

- She want a smart assistance help het to collect boarding pass, show the security checking area, departure gate and conveyor belt

- Also help her to find wash room, café, shopping area and medical assistance

Pain point

- She can not find one single app that can give all the information she is looking for.

- Apps are not smart enough to understand if she is stuck somewhere

- Apps are not customized enough to give only those information she needed

- Apps doesn't have the artificial intelligence to prevent her if something went wrong

Andrew Hopkins

Picture Courtesy: shutter stock

AGE	38
OCCUPATION	NATURE PHOTOGRAPHY
STATUS	SINGLE
LOCATION	LONDON
TIRE	INTERNATIONAL FLYER
ARCHETYPE	FREQUENT

Scenario:

Andrew work with a famous travel and nature magazine. He travels most of the time. Currently he is on an assignment to cover Asia. Due to that he comes to India very frequently mainly to capture Himalayans Terrain, Rajasthan, Goa, South India etc. Sometime He also go to other Asia countries through India.

Most of the time his schedules are very hectic, even he goes directly at his work site straight from the airport. And majorly he requires to catch connected flights too.

For a reason he relies on airports for freshen up, having meals, taking rest or buying essential things. Every time a major time get wasted a immigration que of collecting luggage at conveyor belt.

He is looking for a alternate solution where he does not need to search for things or could do multiple task together. Like while he is on que for immigration could he book a cab for him or place order a for coffee

Objective

He is looking for a mobile app that could give smart guidance at airport. Track movement, suggest proactively to save time and effort.
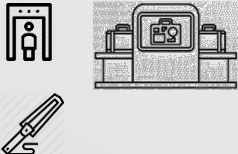
Goal

- He wants information regarding his connected flight and it's departure gates to save the time to find out

- Need smart suggestions regarding best buys of foods

- Guidance on rest rooms, cloakroom, shops, retiring rooms more than a digital map

- Live tracking and status of his flights

Pain point

- The big barrier at Asian countries is understanding language. Even at airports he has faced similar issues

- Each country has their own rule of security check. If get some guidance person can get himself ready as accordingly

- Currency exchange is a hassle as well. He carries currency of multiple countries as he travels, it is difficult to remember the exchange rates, or understand the money paying at shops

User Story : As an user want to take a domestic flight

Stage	Reaching Airport	At Airport Gate	Boarding pass	Security Check	Waiting Time	Reaching departure gate	Boarding on Flight
Customer Action	User reaching to the airport from home/hotel/others by car, bus or rail	User show the ticket and Photo ID proof/Passport to enter the Airport	User collects boarding pass and drops luggage's	User goes through the security checking including everything his is carrying as cabin luggage	User spends the waiting time for refreshment, shopping or relaxing	On announcement of flight use makes cue at departure gate to board on flight	User is boarding in the aircraft
Touchpoints							
Experience	Neutral	Delightful	Critical	Critical	Delightful	Neutral	Delightful
Product Goals	User should get the flight details, terminus and gate information	User should be able to show digital ticket and ID(if applicable) within the app. App must guide the user to go to the boarding pass desk	Can we capture the digital. Boarding pass and the luggage details to track? QR code??	Make the user aware of rules at security check, So that they could prepare themselves to save time and hassle	Give personalized and smart suggestion to the user about restaurant, stores, restroom, medical assistance, internet, all other airport services	Give user alert when boarding get started, Guide them to reach to the gate	Give user information of flying time, time difference while reach at the destination. Ask for change the phone status as airplane mode
Suggestion	At this point user must enter his flight PNR to get all details. Also, information can be capture from google map to show the traffic status and suggest the route take minimum time	Could we use IOT to track user movement in real time and guide to their movement with Augmented reality? Similar as connected car "Head up display"	Could we use IOT to track user movement in real time and guide to there movement with Augmented reality	Display the list of things prohibited by govt. Give tips to how they should proceed to the checking zone to save time and hassle	This part of application could give most personalized and engaging experience. App must to proactive and reactive at this stage.	Some time people get late if they are busy with other activity. Need push notification and alerts unless they reaches to the boarding gate	Help the user to set duel time if traveling other country. Keep the application idle till the travelling time. Turn the airplane mode on automatically

Blue tooth sensor at airport can track the movement of the user in real time.

Switching on the blue tooth can happen automatically with the user permission at the time of registration
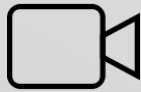
Mind Map

Google map / GPS information can be fetched and integrated in the app to give traffic information to the user while approaching the airport

Augmented reality could have great scope by using the security cameras of airport. Alike layer app, user could show all corner surrounding the user
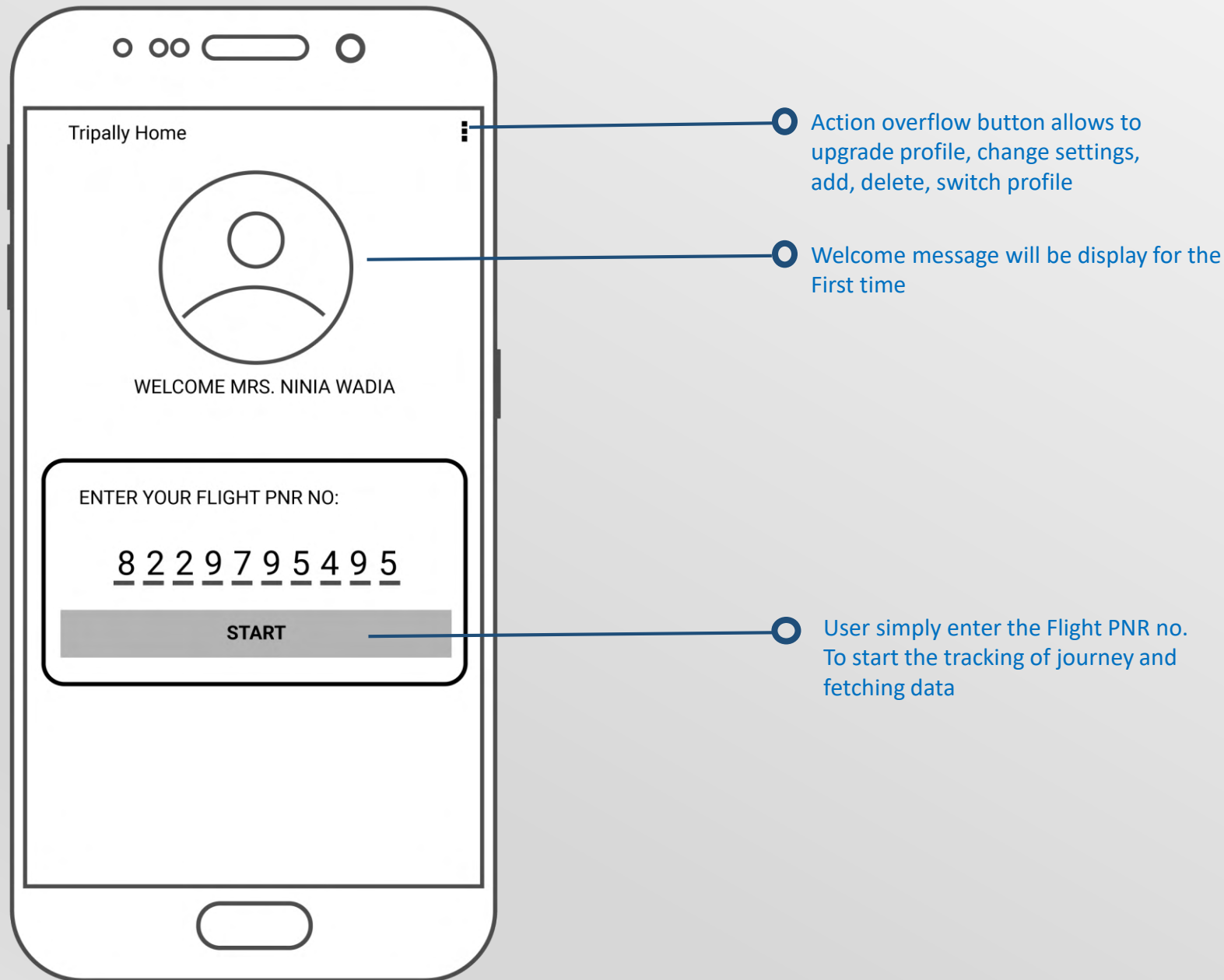
AI (Artificial Intelligence) could give smart customized notification/suggestions based on weather, temperature, time for food, shopping and others. Example: at the morning 7 am. App would suggest, Best breakfast and coffee around the user

All so similar experience as Connected car's head up display

Smart trolley can be introduced, that could show the weight of luggage

Concept Model Creation | Wireframe

Tripally Home

WELCOME MRS. NINIA WADIA

ENTER YOUR FLIGHT PNR NO:

8 2 2 9 7 9 5 4 9 5

START

Action overflow button allows to upgrade profile, change settings, add, delete, switch profile

Welcome message will be display for the First time

User simply enter the Flight PNR no. To start the tracking of journey and fetching data

User Task:
Start the Journey

Precondition:

User has been registered with the app and logged in to the app

User is connected with internet

User allowed the app to turn on GPS

User allowed the app to turn on blue-tooth

User allowed the app to pair blue tooth with blue-tooth sensors at airport

Concept Model Creation | Wireframe

Start Journey

FILGHT NO:
AI308

BOM● ✈ ➔ ●DEL
MUMBAI · SUN, 20 MAY   DELHI · SUN, 20 MAY

DEPARTED 10.30 AM   DEPARTED 12.30 PM
TERMINAL 2   TERMINAL T3
GATE _   GATE _

You are 20 km far from Airport. Reaching time approx 40 Minutes.
Please start by 7.30 am to avoid any hassel

Congratulation!!

You have reached the Airport

You have 2.10 minutes left to catch the flight.
Please click on proceed to go to the next step

PROCEED

Display of ticket details always be on the top. On a tap User could also see the E-ticket.

Completion of each phase popup message will appear for confirmation

Floating button will have more actions like change map view to VR view. Search for specific thing etc.

Traffic data from google map will be integrated
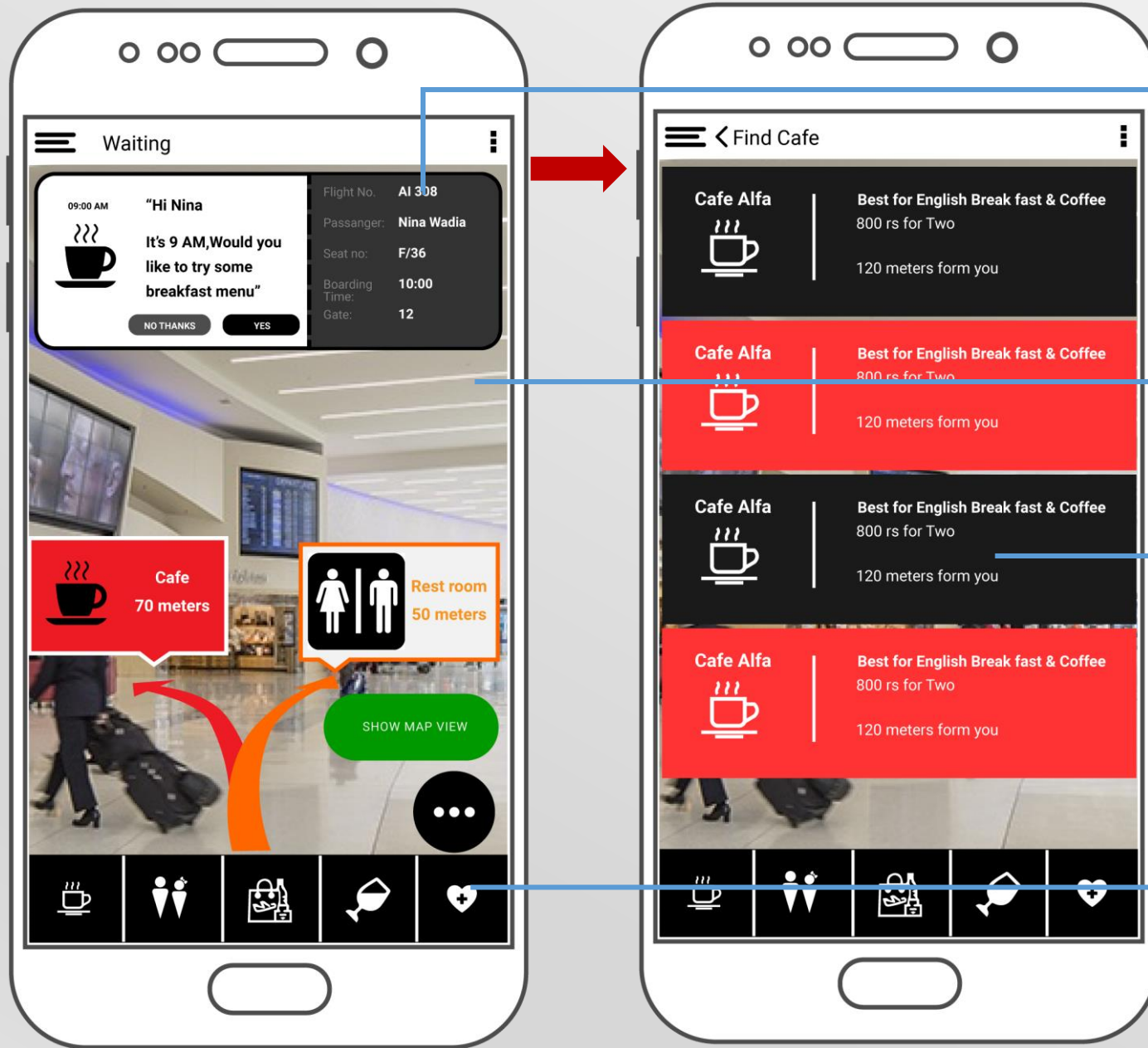
Go to the next step
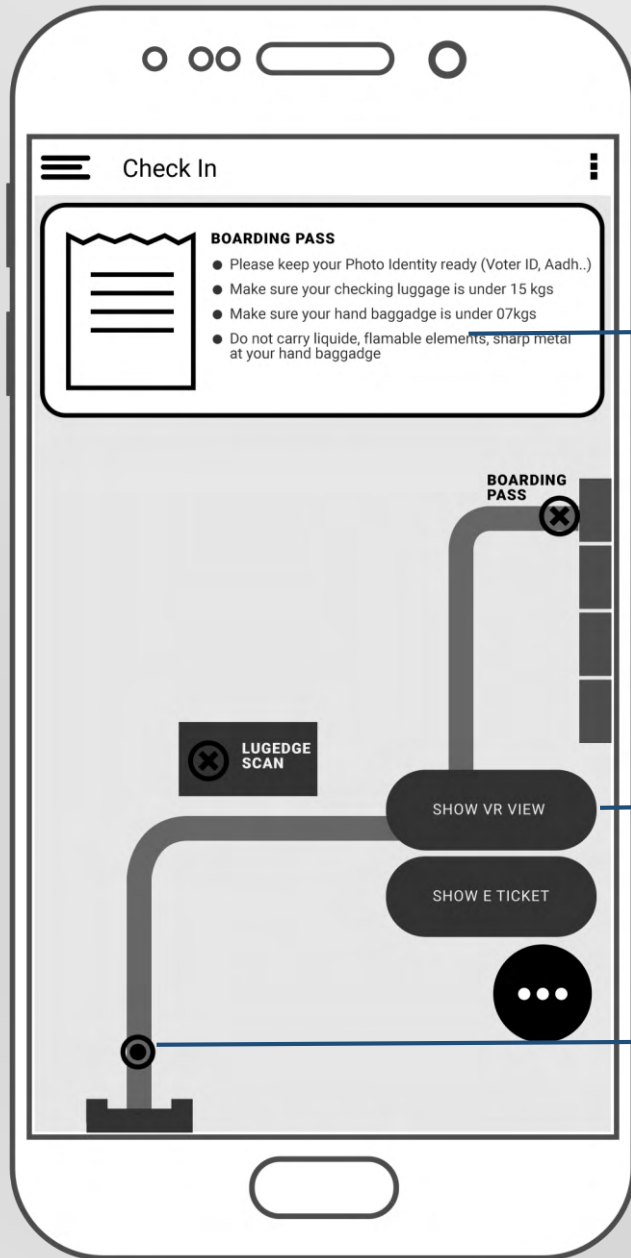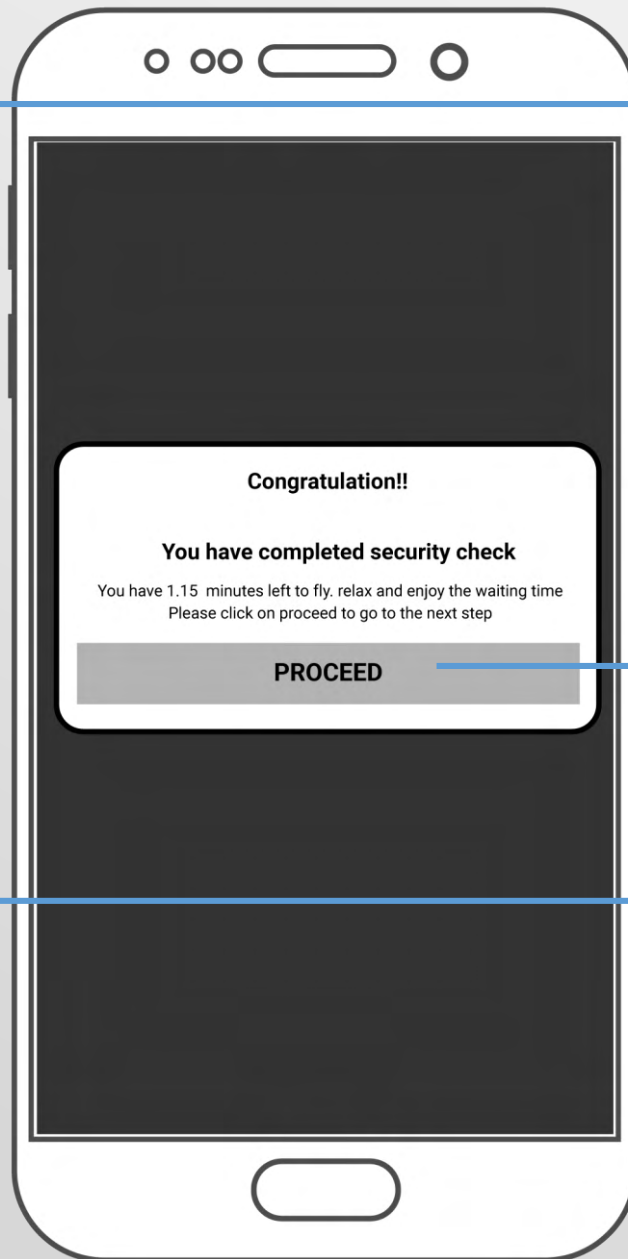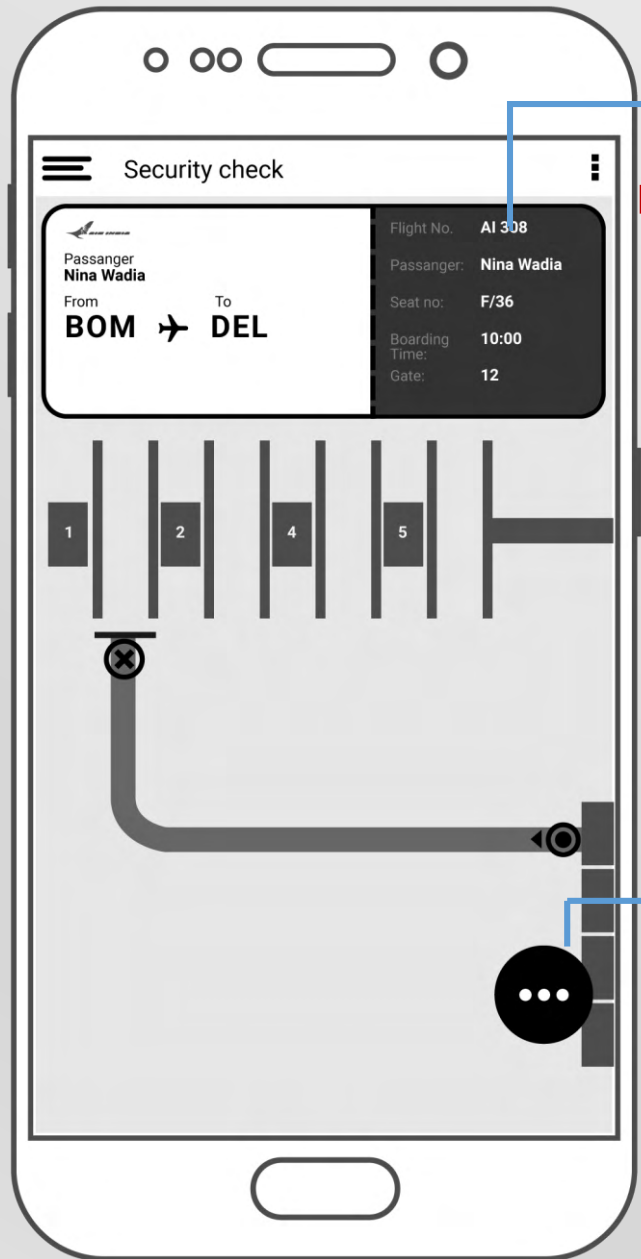
Post boarding pass collection this display will be changed
With digital boarding pass details. This section is scrollable
To see previous multiple cards

As earlier mentioned with completion of each phase
A popup message appear to confirm the previous task

Map would have zoom in zoom out,
rotation options available

Go to the next step

Security check

Flight No. | AI 308
Passenger | Nina Wadia
Seat no: | F/36
Boarding Time: | 10:00
Gate: | 12

Passanger
Nina Wadia

From
BOM ✈ To **DEL**

Congratulation!!

You have completed security check

You have 1.15 minutes left to fly. relax and enjoy the waiting time
Please click on proceed to go to the next step

PROCEED

Concept Model Creation | Wireframe

At this section, this display card would get even smarter. It would suggest User, options based on time, weather, Location. Like at 7 am morning it would give option of fresh breakfast and coffee. However at 7 pm evening it would give option of fine dining with wine

Screen is showing the real view with augmented reality Similar like connected car "Heads up display".

Here the app is showing filtered search for breakfast and cafe

A bottom bar will appear at this point for quick search for things. However same is always available under hamburger menu

Go to the next step

Screen 1 (left phone):

Waiting

09:00 AM

"Hi Nina

It's 9 AM, Would you like to try some breakfast menu"

NO THANKS   YES

Flight No.   AI 308
Passanger: Nina Wadia
Seat no: F/36
Boarding Time: 10:00
Gate: 12

Cafe
70 meters

Rest room
50 meters

SHOW MAP VIEW

Screen 2 (right phone):

< Find Cafe

Cafe Alfa   Best for English Break fast & Coffee
800 rs for Two
120 meters form you

Cafe Alfa   Best for English Break fast & Coffee
800 rs for Two
120 meters form you

Cafe Alfa   Best for English Break fast & Coffee
800 rs for Two
120 meters form you

Cafe Alfa   Best for English Break fast & Coffee
800 rs for Two
120 meters form you

Inspirations

Modern

Refreshing

Delighting

Helping

Easy

Mood Board

Design Goal

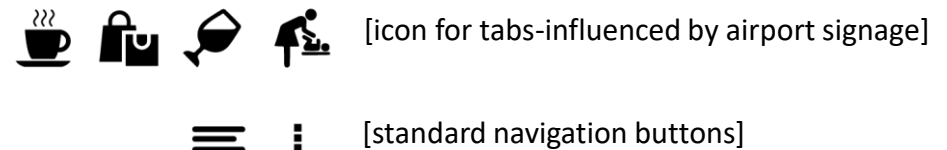| Trendy | | Classic |
Intuitive		Complex
Proactive		Reactive
Happy		Serious

Style Tile

Font: open sans

Open Sans [Regular]
Open Sans [Bold]

Iconography:

Color palate:

Base

Primary content

Secondary content

[icon for tabs-influenced by airport signage]

[standard navigation buttons]

TRIP ALLY
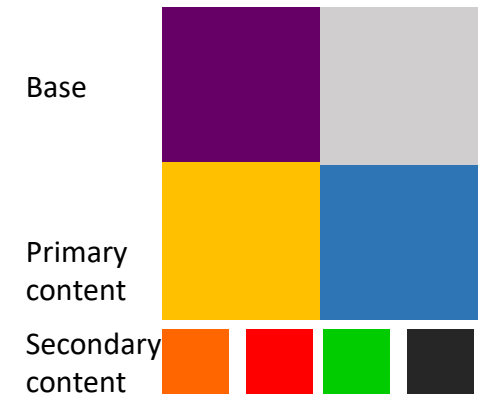
AN ALLIANCE TILL THE DESTINATION
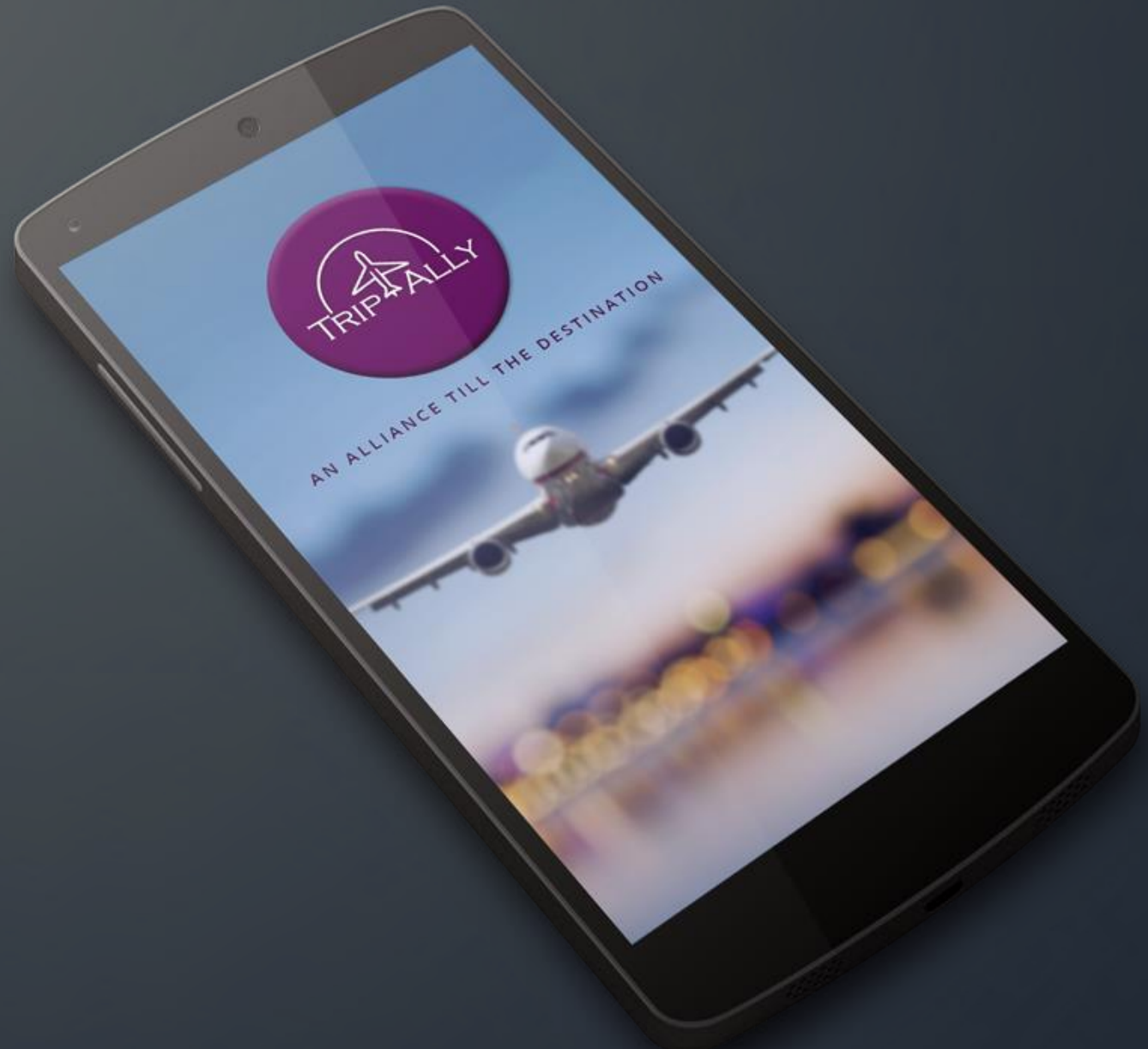
- All images are taken from internet just for presentation purpose
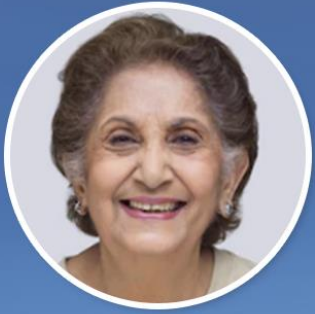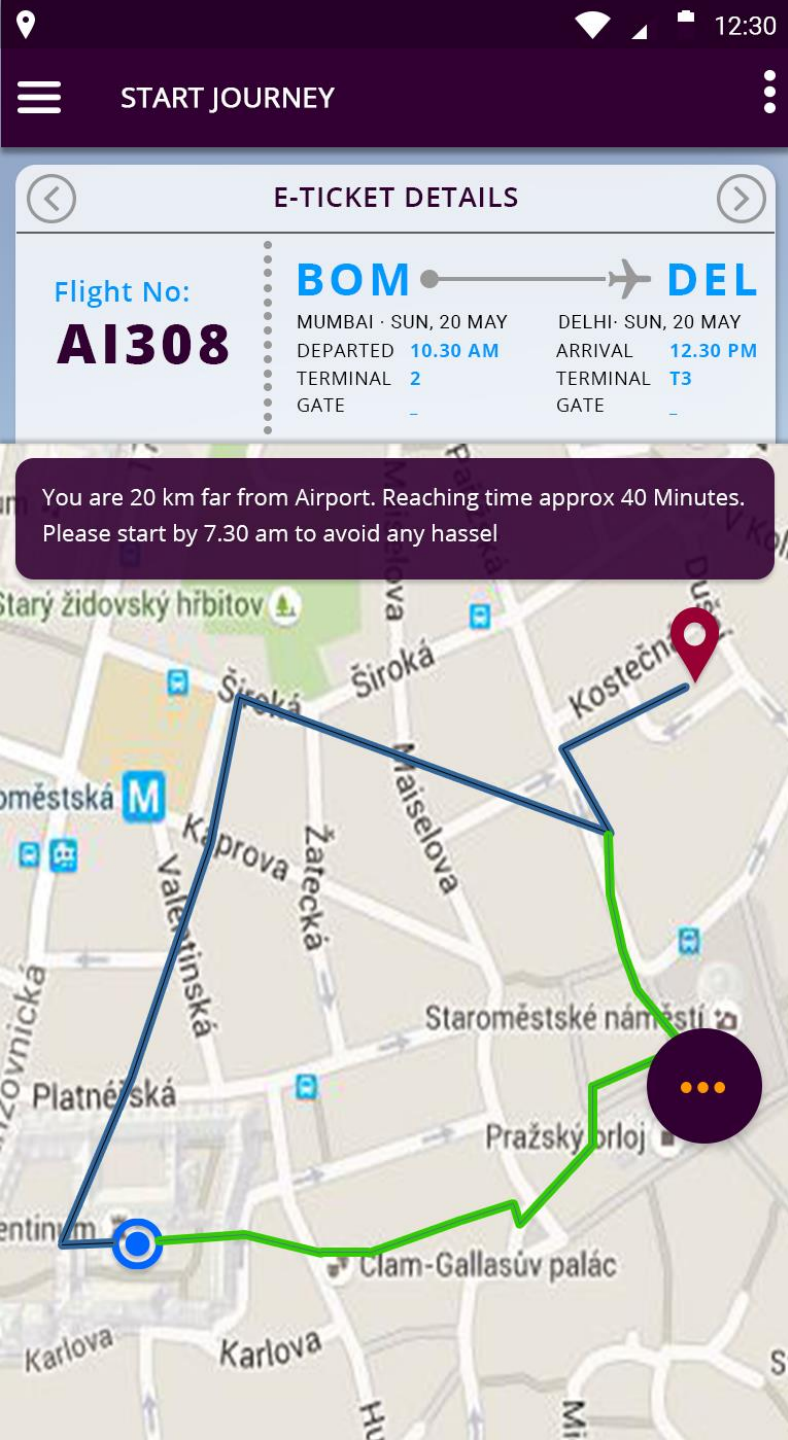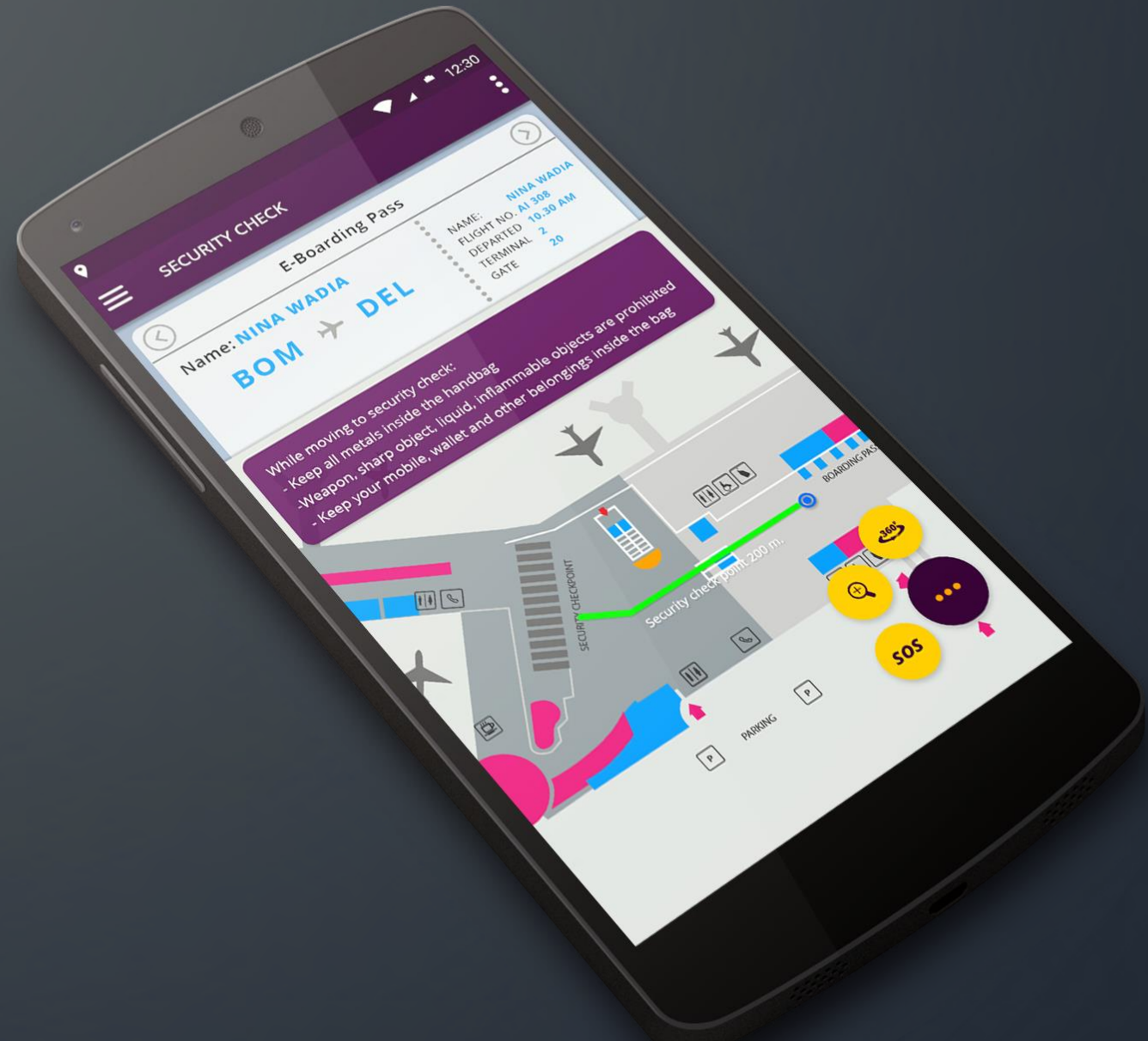
WELCOME NINA WADIA

Enter flight PNR No:

8 2 2 9 7 9 5 4 9 5

START

START JOURNEY

E-TICKET DETAILS

Flight No:
AI308

BOM ✈ DEL

MUMBAI · SUN, 20 MAY
DEPARTED 10.30 AM
TERMINAL 2
GATE _

DELHI· SUN, 20 MAY
ARRIVAL 12.30 PM
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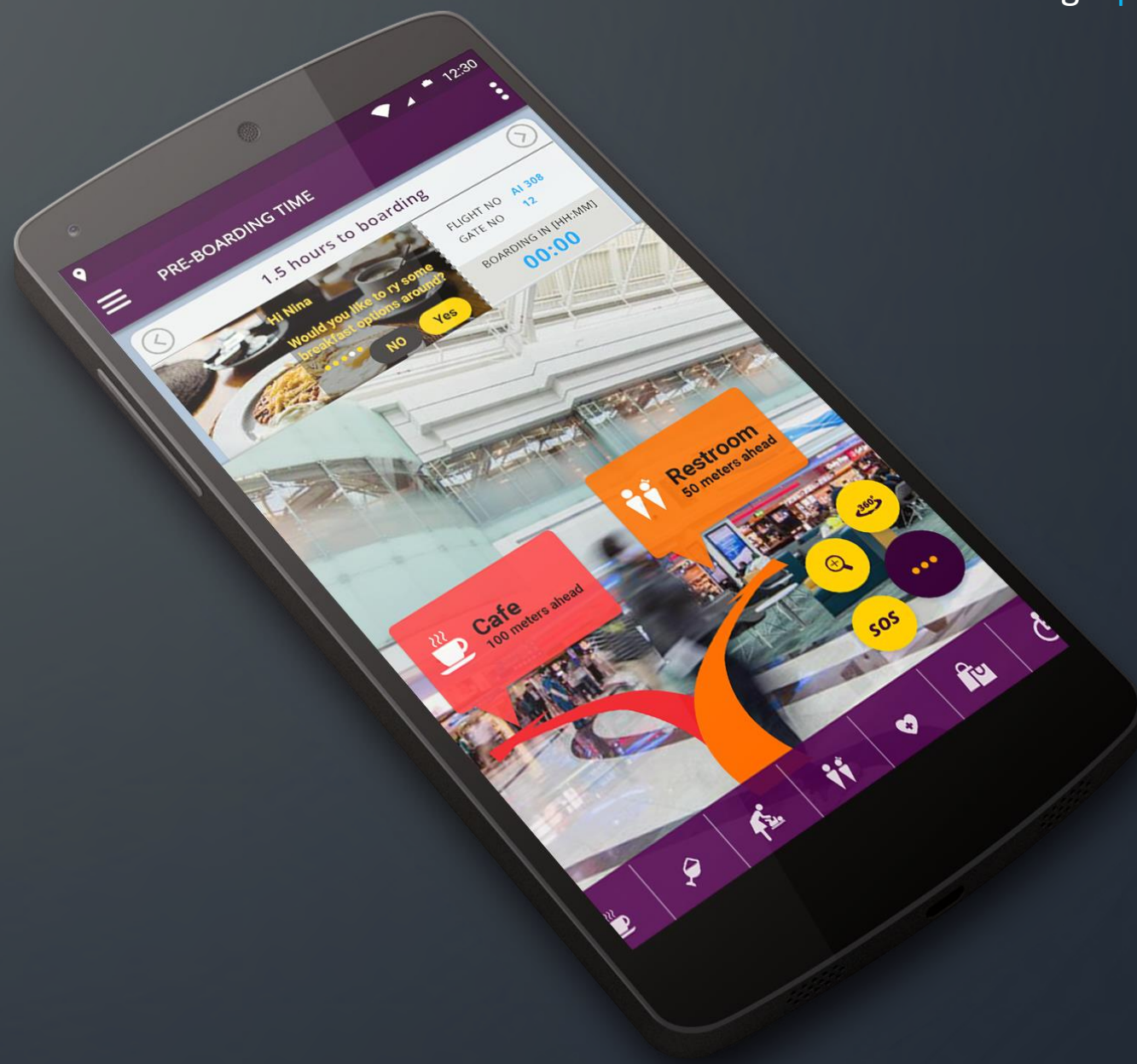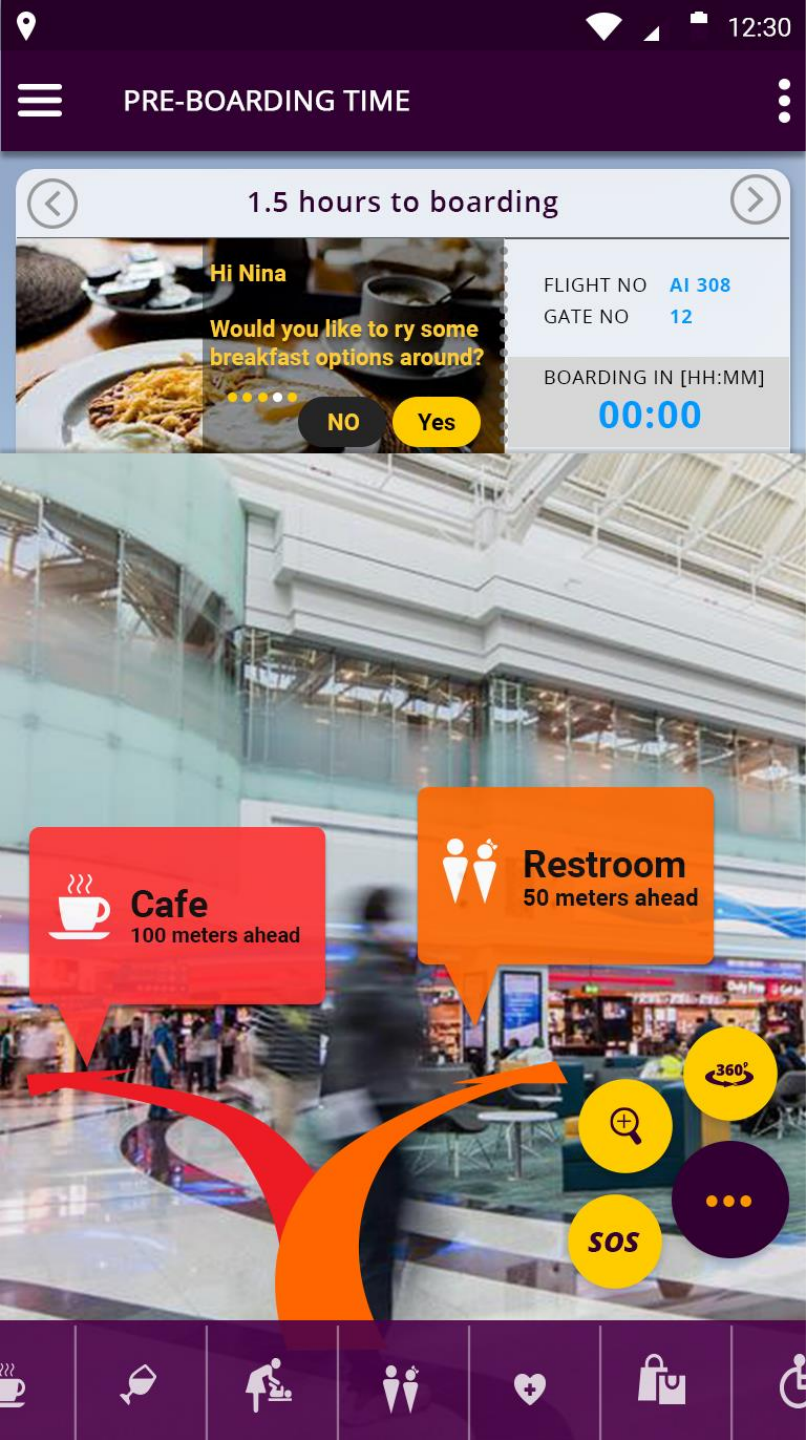You are 20 km far from Airport. Reaching time approx 40 Minutes. Please start by 7.30 am to avoid any hassel
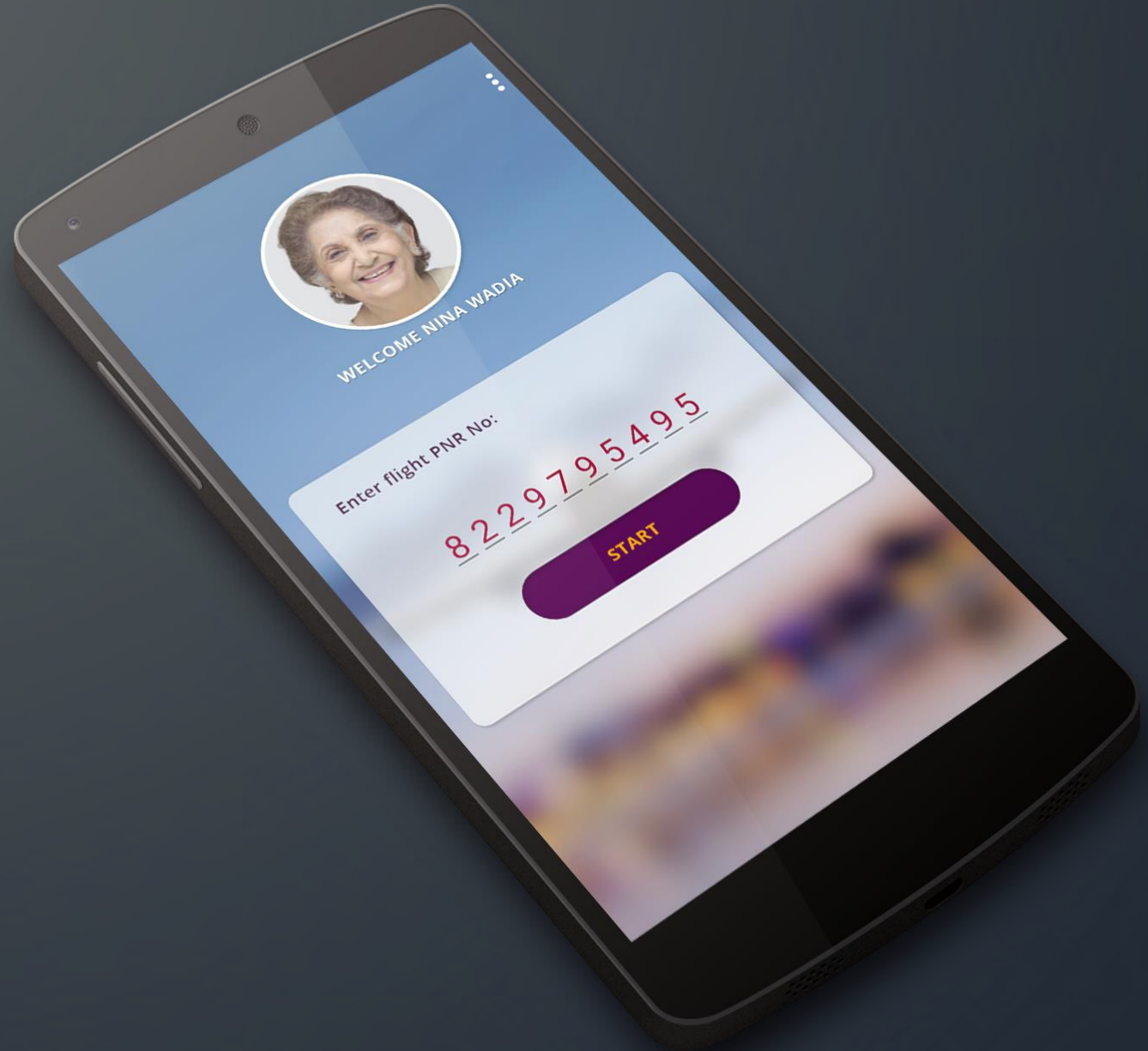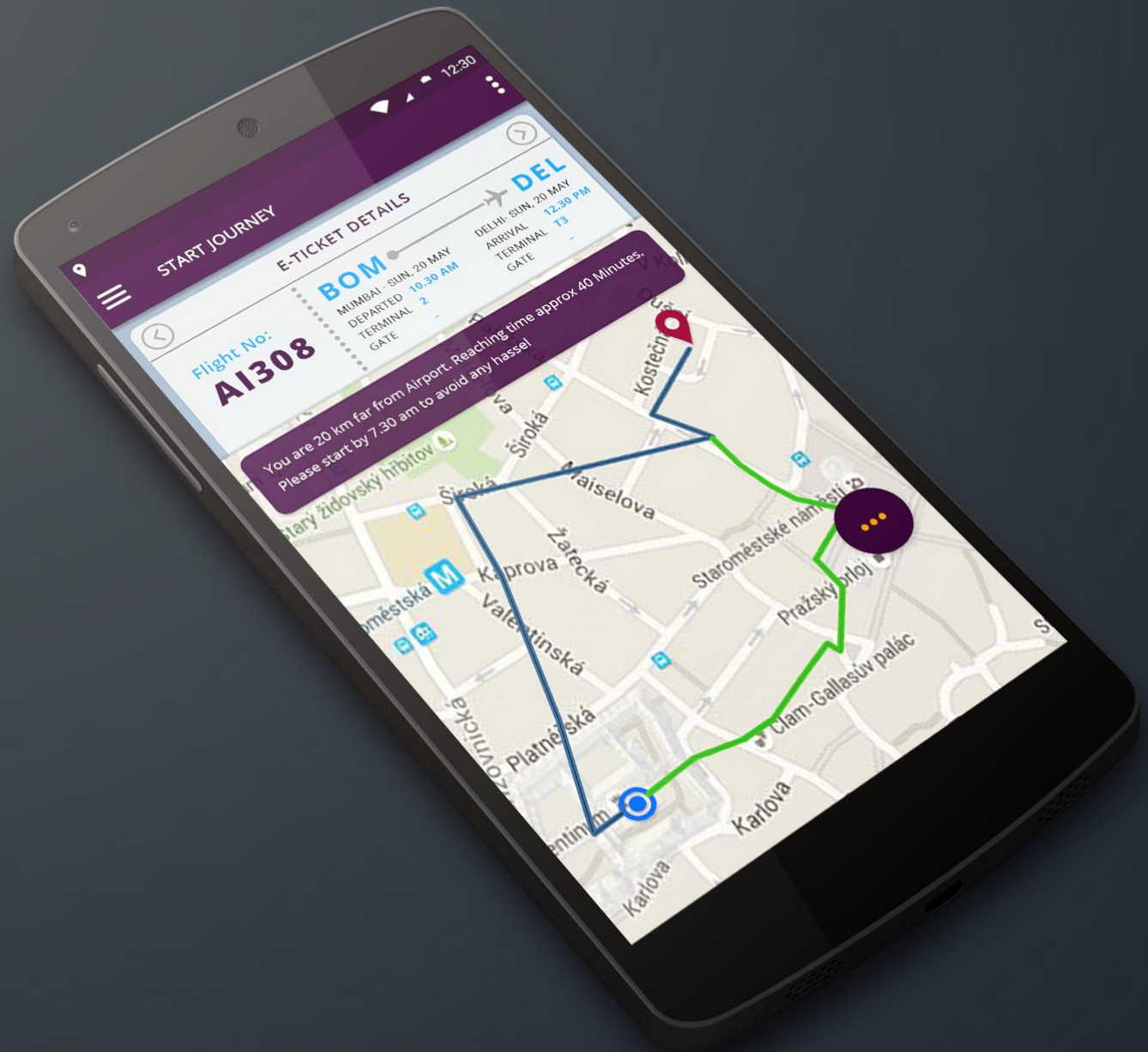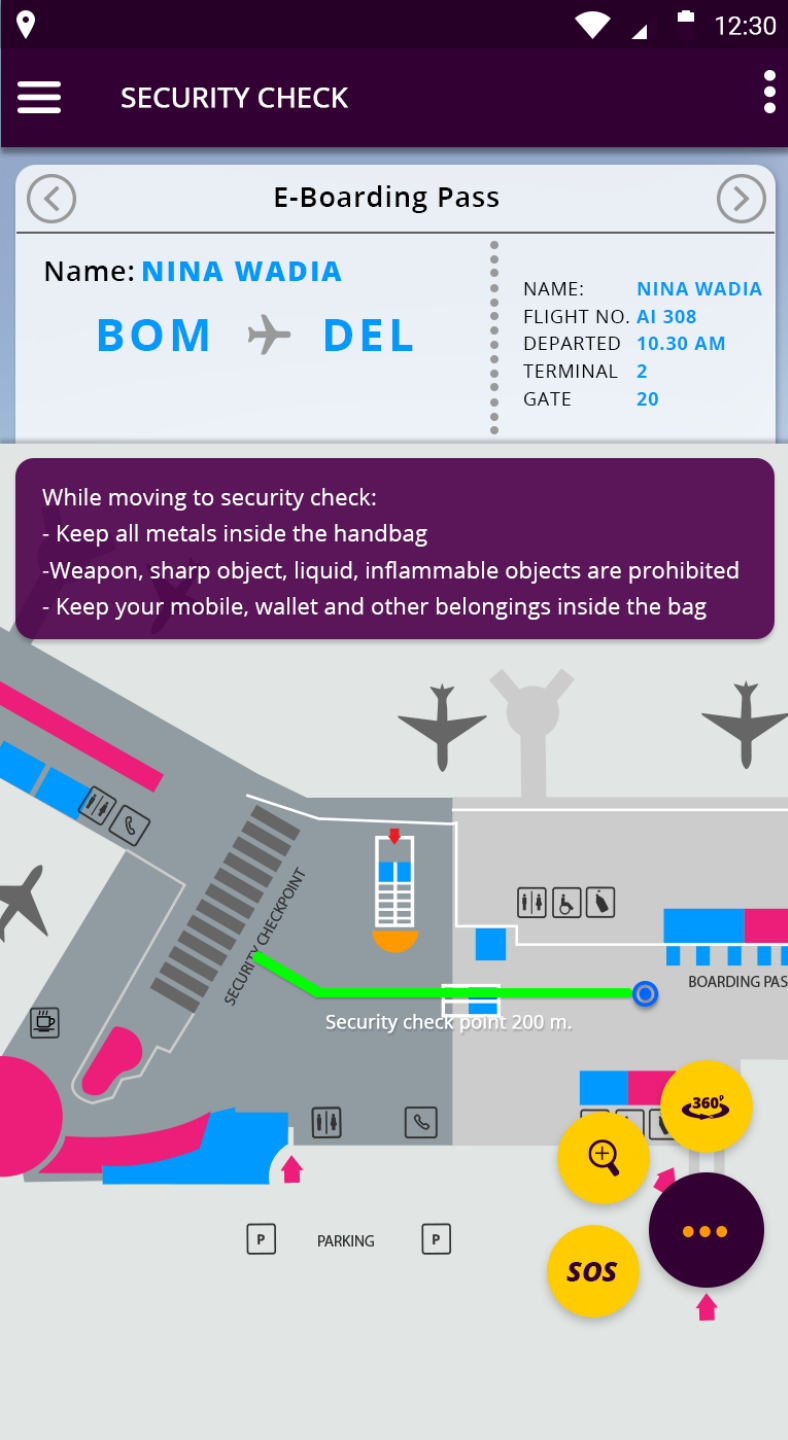
■ All graphics, icons including the Airport diagram has been created

Visual Design | UI

Thank You

Kaushik Sinha (UXER)

HCI, IIT Bombay, 2016
CUA- HFI, 2012
Bachelor of Visual Arts, 2000