Passenger Mobile App

Introduction



- Part of the FLEV Booking System
- Ride-hailing and delivery app
 - Initially developed for Local Government Units
- Services
 - Private Trip
 - Shared Trip
 - Service Unit Trip
 - Scheduled Trip
 - Delivery Request
- Accommodates or allocates passengers accordingly
- Overall FLEV Booking System short video

Technologies

Programming Languages

Javascript, Typescript

Frameworks

- React Native
- Expo

Query Language for API

GraphQL

Setup and configurations

Requirements

Node v14

Setup

- Copy .env.example to .env and fill in the values.
- npm i to install dependencies

Running the App

- npm run development to run the app in development.
- npm run start to run the app in production.

Testing GraphQL queries

npm run test to validate the queries

File directory structure

Packages

Package.json

Environment variables

env*

Compilers

jsconfig.json, tsconfig.json

Coding standards

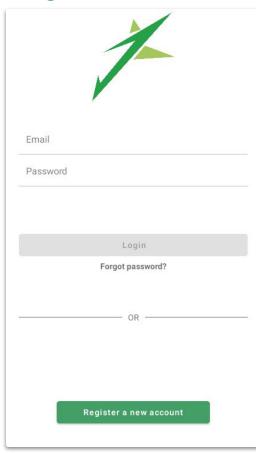
eslintrc.js, .prettierrc.js, .editorconfig

Directories

<u>directories</u>

Unrestricted Screens

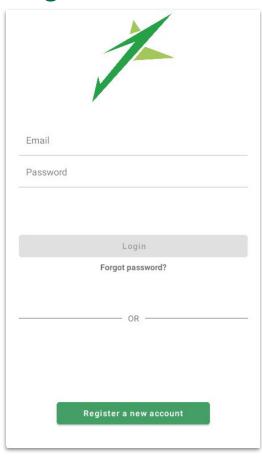
Login



Login Screen

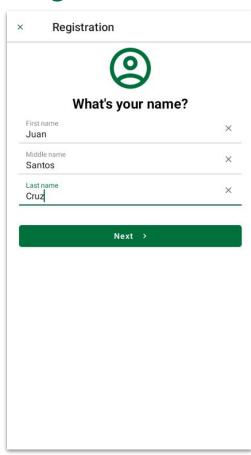
- Screen that authenticates the passenger.
- "Email" text field
 - Should be existing and approved passenger
 - Should easily be cleared by pressing "x" when filled up
- "Password" text field
 - When filled up
 - hide password -
 - show password •
- "Login" button
 - Uses passengerLoginByPassword mutation call to get passenger details and token
 - Goes to Service Options Screen when passenger is authenticated otherwise, shows an error message
- "Forgot Password?" label
 - When pressed, goes to Forgot Password Screen
- "Register a new account" button
 - When pressed, goes to Name Screen

Login



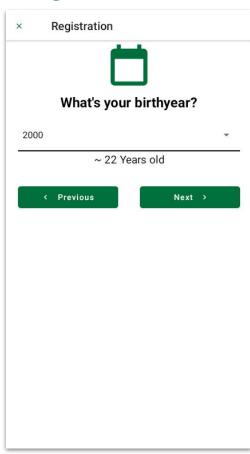
Login Screen

- Possible Errors
 - Internal server error Something has gone wrong in the application
 - Invalid credentials error Invalid email or password.
 - Pending user registration error Passenger have a pending registration.
 - Declined user registration error Passenger registration has been declined.



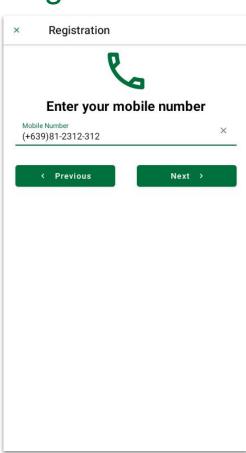
Name Screen

- Screen that asks for passenger's name. Part of the registration screens.
- Text fields (Passenger name)
 - Should easily be cleared by pressing "x" when filled up
 - Should only contain letters a-z and ñ
 - Should only contain single space(s)
 - If there is/are error(s), it should be visible below the text field.
- "Next" button
 - Should be pressable when all fields are valid
 - o Proceeds to Birthyear Screen
- "X" header button
 - Should go back to Login Screen



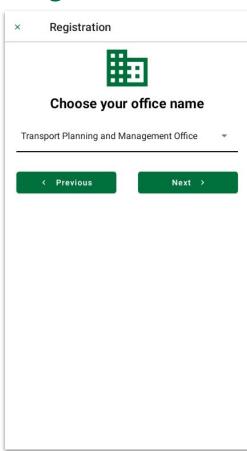
Birthyear Screen

- Screen that asks for passenger's birthyear. Part of the registration screens.
- "Year" picker
 - Should be able to select from 1940 to the current year
 - Should display the passenger's age.
 - Passenger's age should be ≥ 18 and < 100.
- "Previous" button
 - Goes back to Name Screen
- "Next" button
 - Should be pressable when all fields are valid
 - Proceeds to Mobile Screen
- "X" header button
 - Should go back to Login Screen



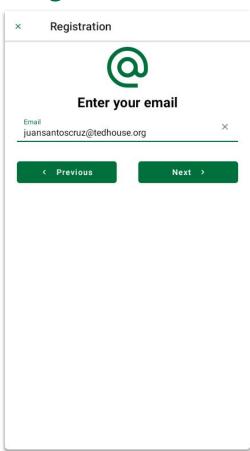
Mobile Number Screen

- Screen that asks for passenger's mobile number. Part of the registration screens.
- "Mobile Number" text field
 - Should have a (+639) prefix
 - Should be automatically formatted in this style (+639)xx-xxxx-xxx
 - Should be 9 digit.
 - Should easily be cleared by pressing "x" when filled up
 - If there is/are error(s), it should be visible below the text field.
- "Previous" button
 - Goes back to Birthyear Screen
- "Next" button
 - Should be pressable when all fields are valid
 - Proceeds to Office Name Screen
- "X" header button
 - Should go back to Login Screen



Office Name Screen

- Screen that asks for passenger's office name. Part of the registration screens.
- "Office Name" picker
 - Should include the following: Offices of General Services, Transport Planning and Management Office, Others
- "Previous" button
 - Goes back to Mobile Number Screen
- "Next" button
 - Proceeds to Email Screen
- "X" header button
 - Should go back to **Login Screen**



Email Screen

- Screen that asks for passenger's email. Part of the registration screens.
- "Email" text field
 - Should be valid email address
 - Should easily be cleared by pressing "x" when filled up
 - If there is/are error(s), it should be visible below the text field.
- "Previous" button
 - Goes back to Office Name Screen
- "Next" button
 - Should be pressable when all fields are valid
 - Proceeds to Password Screen
- "X" header button
 - Should go back to Login Screen



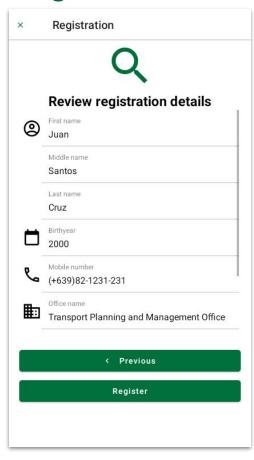
Password Screen

- Screen that asks for passenger's password. Part of the registration screens.
- "Password" text field
 - When filled up
 - hide password -
 - show password •
 - Should be between 8 to 30 characters
 - Accepts the following characters:
 - Alphanumeric (A-Z, a-z, 0-9)
 - Special Characters ~`! @#\$%^&*()_-+={[}]|:;"\'<,>.?
- "Password" checklist
 - Should be checked when password criteria is matched
- "Confirm Password" text field
 - Should matched "Password". Otherwise, error will show below the text field.



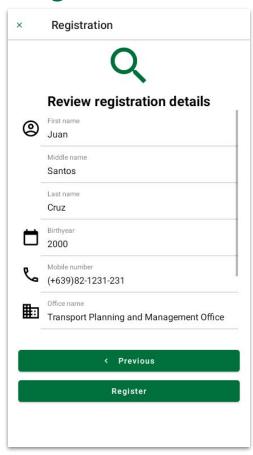
Password Screen

- Screen that asks for passenger's password. Part of the registration screens.
- "Previous" button
 - Goes back to Email Screen
- "Next" button
 - Should be pressable when all fields are valid
 - Proceeds to Send Registration Screen
- "X" header button
 - Should go back to Login Screen



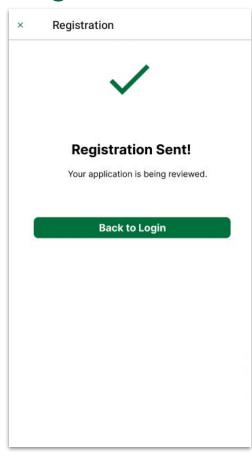
Send Registration Screen

- Screen that lets the passenger review their details. Part of the registration screens.
- Fields
 - Should be scrollable.
 - should reflect the input provided by the passenger
- "Password" text field
 - When filled up
 - hide password -
 - show password •
- "Previous" button
 - Goes back to Email Screen
- "Register" button
 - Sends the registration to server
 - Uses createUserRegistration mutation send registration to server.
 - Goes to Send Notification Screen when successful. Otherwise, shows an error message
- "X" header button
 - Should go back to Login Screen



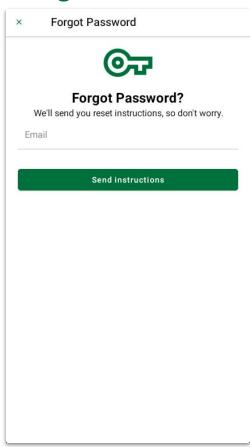
Send Registration Screen

- Possible errors when sending registration
 - User email already exists error Email address already exists or is taken by another passenger.
 - User mobile number already exists error Mobile number already exists or is taken by another passenger.



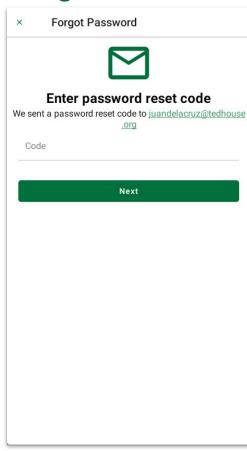
Send Notification Screen

- Screen that notifies the passenger that the registration is sent to the server.
- "X" header and "Back to Login" button should go back to Login Screen



Email Screen

- Screen that asks for passenger's email. Server will send a reset instructions to the email.
- "Email" text field
 - Should be existing and approved passenger
 - Should easily be cleared by pressing "x" when filled up
- "Send Instructions" button
 - Should be pressable when all fields are valid
 - Should send instructions to the specified email
- "X" header button should go back to **Login Screen**



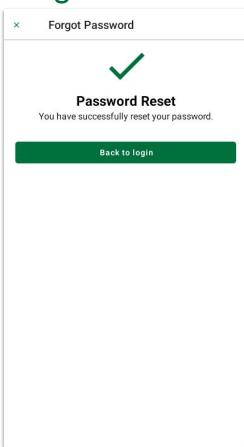
Code Screen

- Screen that asks for the code that is sent on the email.
- "Code" text field
 - Numeric 4 digit
- "Next" button
 - Should be pressable when all fields are valid
- "X" header button should go back to **Login Screen**



Set New Password Screen

- Screen that asks for a new password.
- "Password" text field
 - When filled up
 - hide password -
 - show password -
 - Should be between 8 to 30 characters
 - Accepts the following characters:
 - Alphanumeric (A-Z, a-z, 0-9)
 - Special Characters ~`! @#\$%^&*()_-+={[]]|:;"\'<,>.?
- "Password" checklist
 - Should be checked when password criteria is matched
- "Confirm Password" text field
 - Should matched "Password". Otherwise, error will show below the text field.
- "Reset password" button
 - Should be pressable when all fields are valid
 - Should send request for reset password
 - Proceeds to Reset Password Screen if successful. Otherwise, shows an error message



Set New Password Screen

- Screen that informs the passenger that their password has been reset successfully.
- "X" header and "Back to Login" button should go back to Login Screen

Bottom Navigation

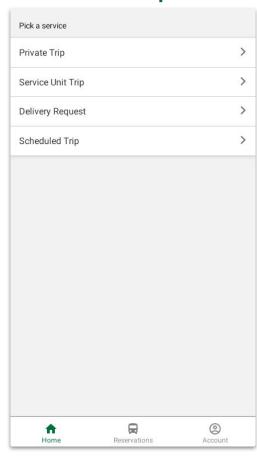


Bottom Navigation Buttons

- Buttons that lets the passenger navigate to different tabs.
- If selected, button is highlighted.

Service Options Screens

Service Options



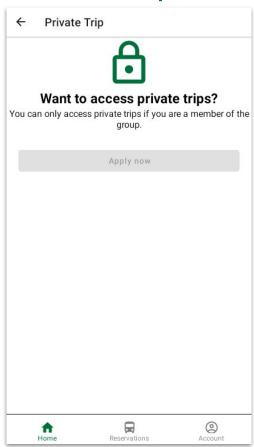
Service Options Screen

Screen that shows the services options for passenger.

Services:

- Private Trip Urgent vehicle trips are trips that require immediate attention or action. Not shared.
- Service Unit Trip Trips that are shared or accessible by multiple passengers.
- Delivery Request FLEV picks up a package at point A and delivers it to point B."
- Scheduled Trip Scheduled trips are trips that are planned in advance and have a specific time and place for pick-up and drop-off. These trips are shared with other passengers, but unlike Service Unit Trip, the passengers are required to be present at the designated time and place.

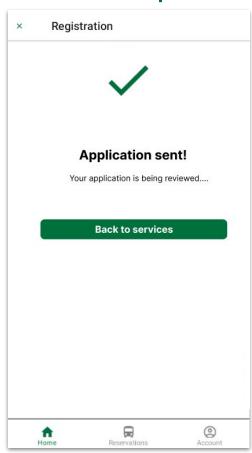
Private Trips



Restricted Service Screen

- The private trips access Restricted Service Screen is displayed when the passenger does not have permission to access private trips
- To gain access, passengers must apply for the service.
- "Apply now" button
 - Should send a request to the server.
 - Disabled if the passenger is restricted to private trips.
 - Proceeds to Send Application Screen if successful. Otherwise, shows an error.

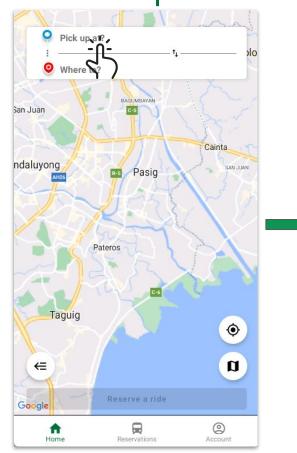
Private Trip

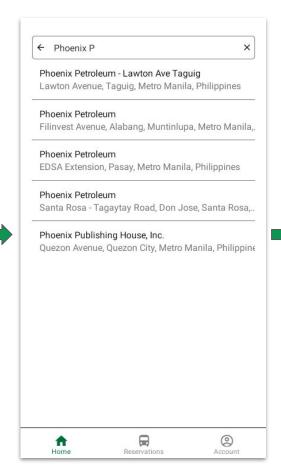


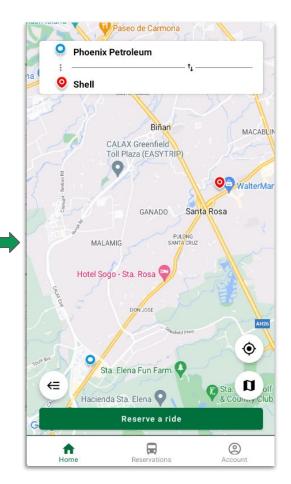
Send Notification Screen

- Screen that notifies the passenger that the application is sent to the server.
- "X" header and "Back to services" button should go back to **Services Options Screen**

Private Trips Flow







Map Search Buttons



- Back to service options



- Go to user location



- Display origin or destination or origin and destination on the center of the map

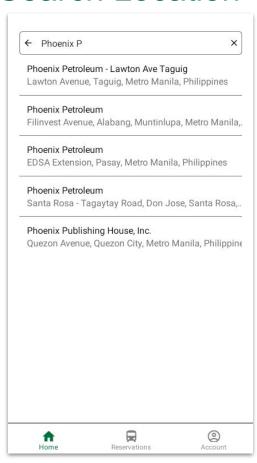
Search Location



Search Location Index Screen

- The screen allows the passenger to search for or select their location and set it as the origin or destination.
- Current Location
 - Passenger picks their location.
- Pin on map
 - o Passenger pinpoint their location in the map.

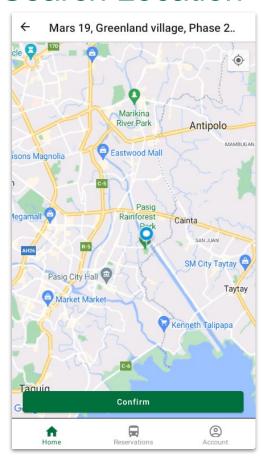
Search Location



Search Location Index Screen

- The screen allows the passenger to search for or select their location and set it as the origin or destination.
- Google Places Autocomplete text field
 - Passenger searches for their location using Google Places Autocomplete, and then selects their location from the list provided by Google.
 - Should easily be cleared by pressing "x" when filled up

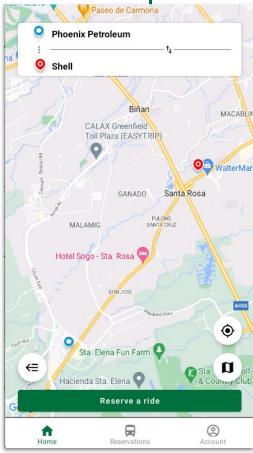
Search Location



Pin Map Screen

- The screen allows the passenger pinpoint their location and set it as the origin or destination.
- Confirm button
 - Sets the location where the pin is located.
- Target button
 - Located at the top right corner of the map.
 - Locates and moves to the location of the passenger.

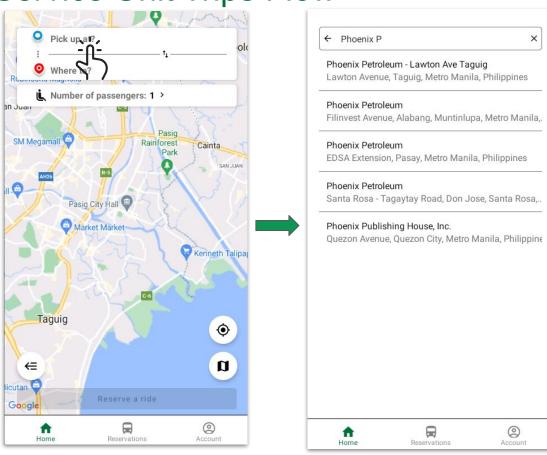
Private Trip

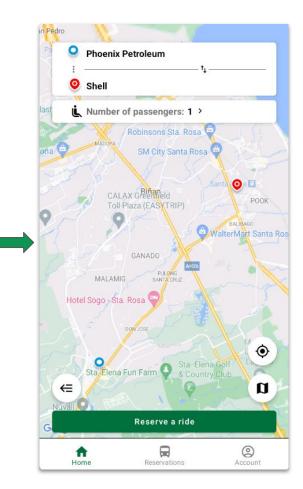


Private Trip Screen

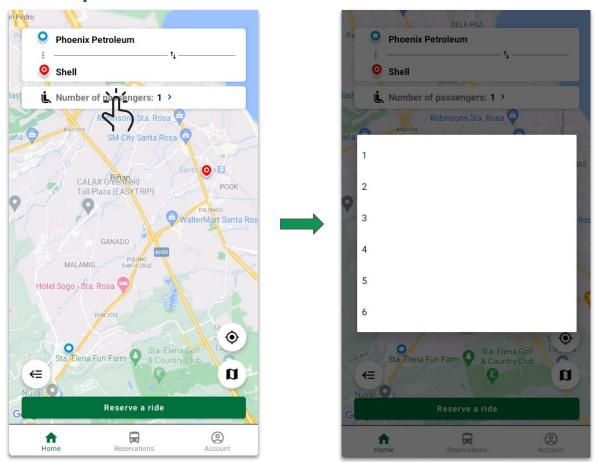
- Screen where the passenger searches trips for Private Trips.
- Reserve a ride
 - When origin (Pick up at?) and destination (Where to?) is filled up, the button should be pressable
 - If successful
 - It should go to the Reservations tab and the passenger should see their trip request.
 - The passenger awaits for the trip request confirmation popup or notification and should see the status of the request, whether it was successful (Driver accepts the request) or failed (Failed to find a trip).
 - If failed (Request failed or didn't send)
 - It should show a popup dialog containing the error message.
 - Uses createTripRequest mutation call to create trip request.
 - Passes origin and destination details along with the trip type PRIVATE.

Service Unit Trips Flow



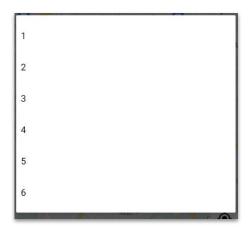


Service Unit Trips Flow



Number of passengers

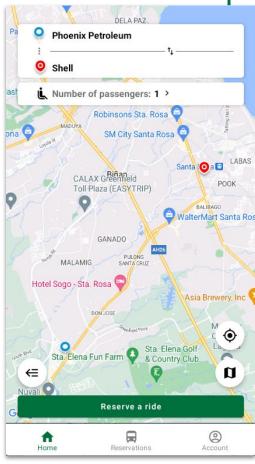




Number of passengers card

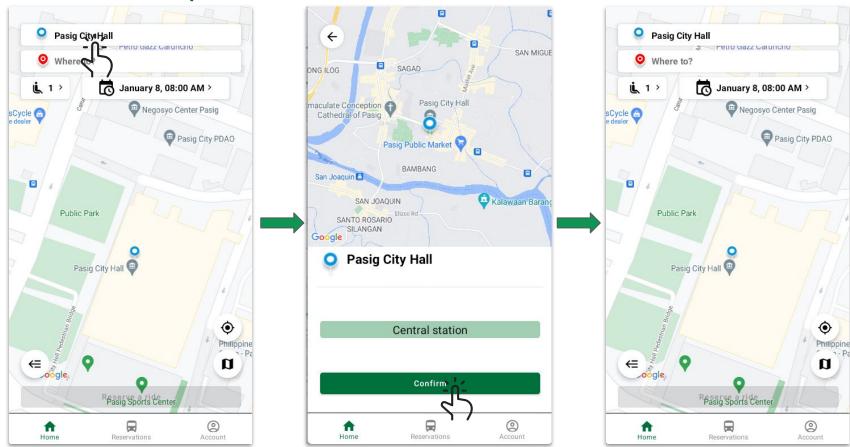
- If pressed, it will show a numbered list.
- Passenger selects the number of passengers they want to book for the reservation.

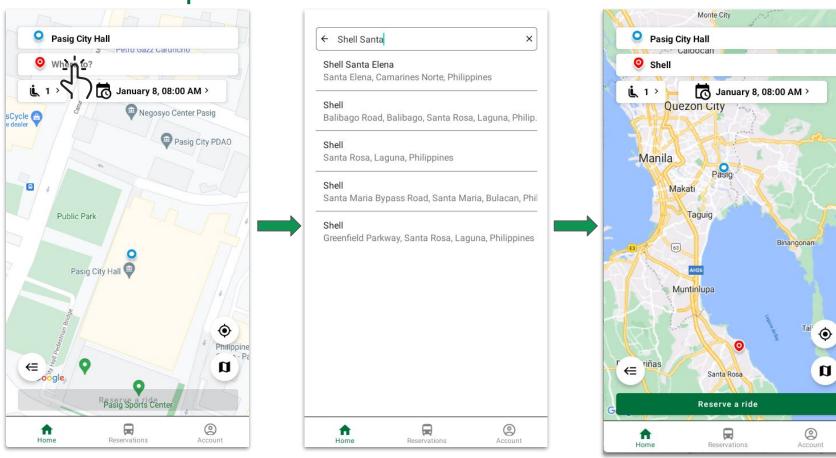
Service Unit Trip

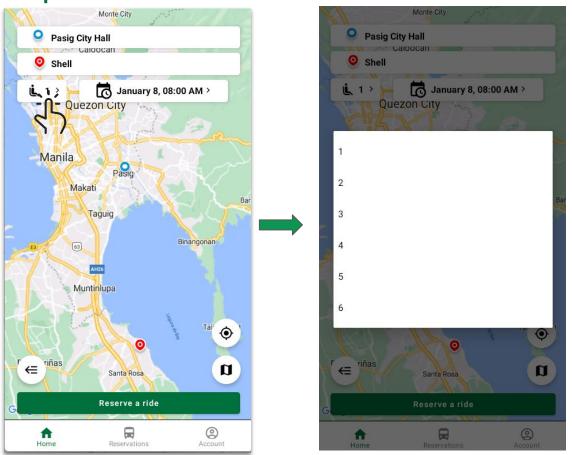


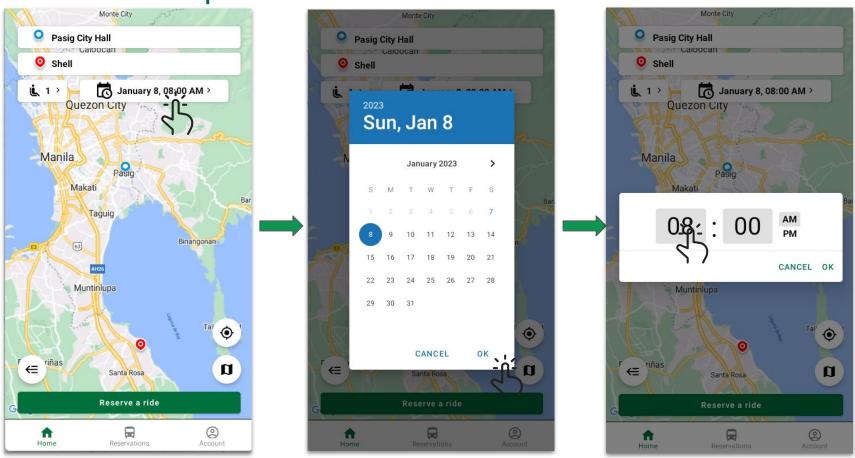
Service Unit Trip Screen

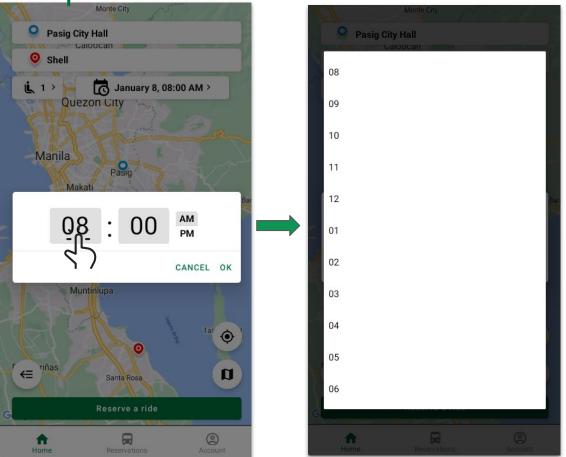
- Screen where the passenger searches trips for Service Unit Trips.
- Reserve a ride
 - When origin (Pick up at?), destination (Where to?), and number of passengers is filled up, the button should be pressable
 - If successful
 - It should go to the Reservations tab and the passenger should see their trip request.
 - The passenger awaits for the trip request confirmation popup or notification and should see the status of the request, whether it was (Driver accepts the request) or failed (Failed to find a trip).
 - If failed (Request failed or didn't send)
 - It should show a popup dialog containing the error message.
 - Uses createTripRequest mutation call to create trip request.
 - Passes origin and destination details along with the trip type SERVICE_UNIT and number of passengers.



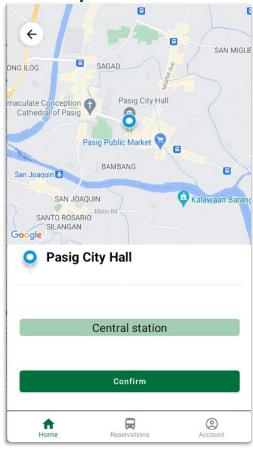








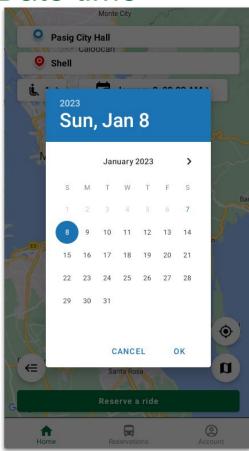
Pickup Location



Pickup Locations Screen

- Screen where the passenger selects from a list of pickup options.
- Pressing the "Confirm" button sets the highlighted pickup location (in this case, Central station) as the origin.

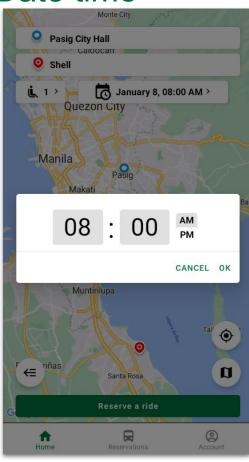
Date time



Date Picker

- If pressed, a calendar with selectable dates from tomorrow to 30 days after tomorrow will be displayed.
- Pressing "OK" will display the **Time Picker**.
- Pressing "CANCEL" will close the **Date Picker**.

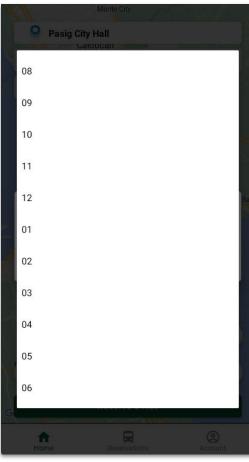
Date time



Time Picker

- Shown after the date is set.
- Pressing "OK" will set the date time.
- Pressing "CANCEL" will close the **Time Picker**.

Date time



Time Picker

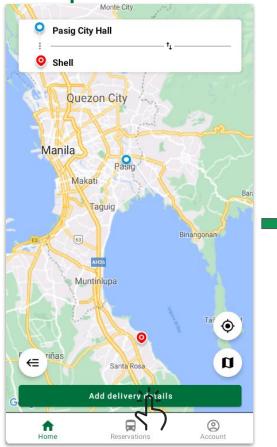
- Shown after the date is set.
- Pressing "OK" will set the date time.
- Pressing "CANCEL" will close the **Time Picker**.

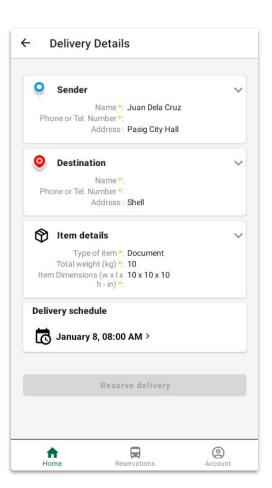
Scheduled Trip

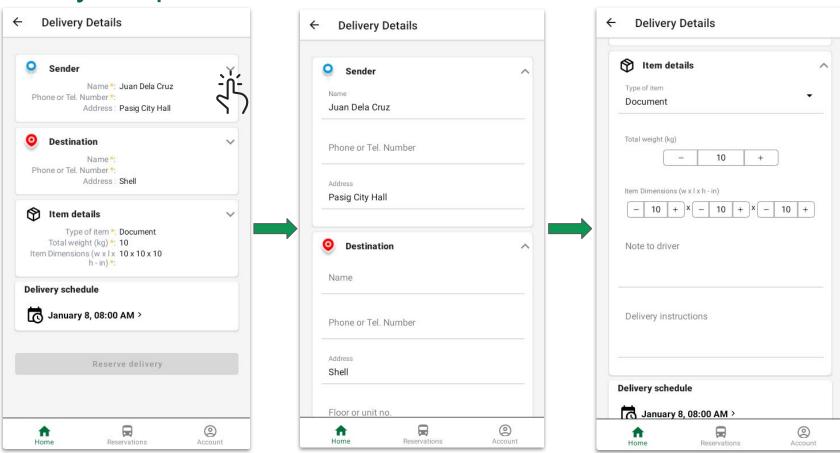


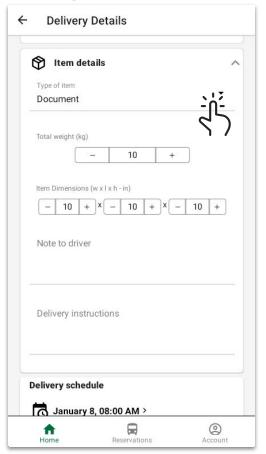
Scheduled Trip Screen

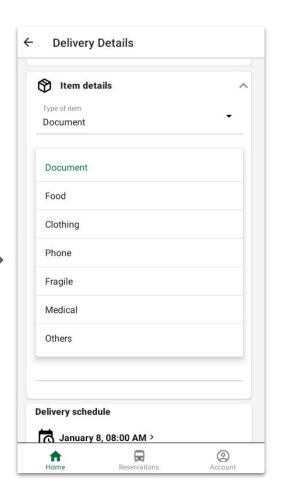
- Screen where the passenger searches trips for Scheduled Trips.
- Reserve a ride
 - When origin (Pick up at?), destination (Where to?), number of passengers, and date time is filled up, the button should be pressable.
 - If successful
 - It should go to the Reservations tab and the passenger should see their scheduled trip request.
 - The passenger awaits for the trip and should see the status of the request, whether it is ongoing or not.
 - If failed (Request failed or didn't send)
 - It should show a popup dialog containing the error message.
 - Uses createScheduledTripRequest mutation call to create scheduled trip request.
 - Passes origin, destination, selected date, and number of passengers.

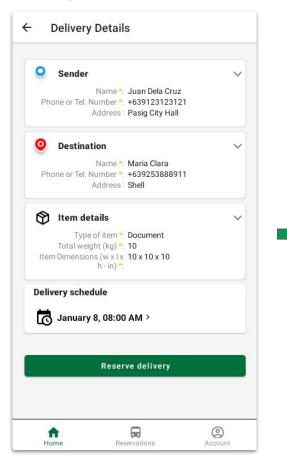






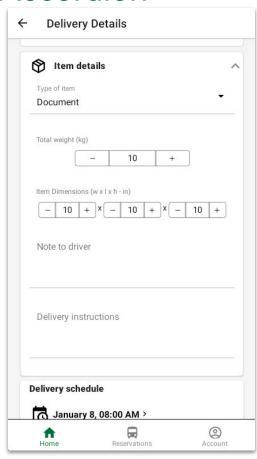








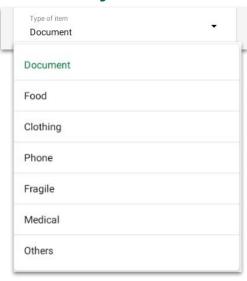
Accordion



Accordion

- A list of items stacked vertically, in this case a list of fillable details.
- Each item can be expanded or collapsed to show or hide the content associated with it.
- Helps present content in a compact format, allowing passengers to see a summary of their filled-out details.

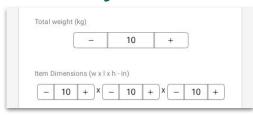
Delivery Item Details



Type of item

- Determines the type of item to be delivered
- Should include the following: Document, Food, Clothing, Phone, Fragile, Medical, Others

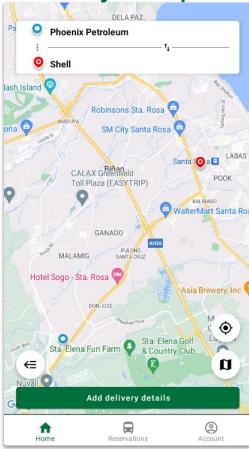
Delivery Item Details



Item weight and dimensions

- Passenger estimates the weight and dimensions of the item. This is used to arrange the item in the Electric Vehicle.
- Ideally, this should be a list of selectable items.

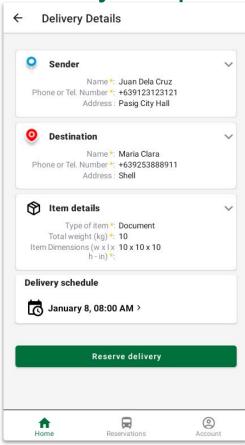
Delivery Request



Delivery Request Screen

- Screen where the passenger searches trips for Delivery Requests.
- Add delivery details
 - When origin (Pick up at?) and destination (Where to?) the button should be pressable.
 - When pressed, it should go to the **Delivery Details Screen**.

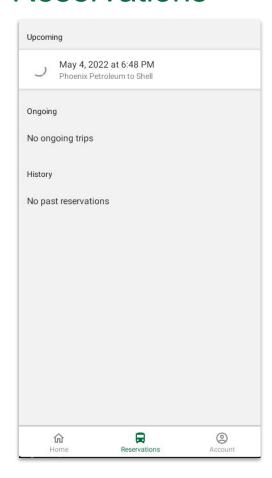
Delivery Request

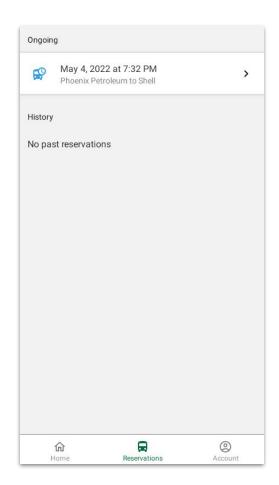


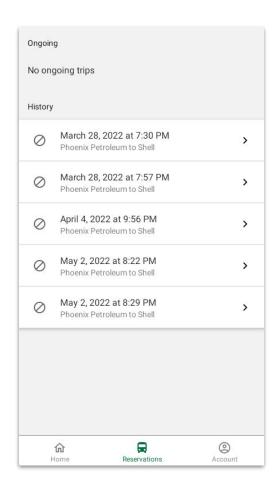
Delivery Details Screen

- Screen where the passenger fills up the details for delivery request.
- Details with an asterisk (*) are required fields. Passengers cannot reserve a delivery if these are not filled out.
- Reserve delivery
 - Should be pressable when * fields are filled out.
 - If successful
 - It should go to the Reservations tab and the passenger should see their delivery request.
 - The passenger awaits for the delivery request confirmation popup or notification and should see the status of the request, whether it was (Driver accepts the request) or failed (Failed to find a trip).
 - If failed (Request failed or didn't send)
 - It should show a popup dialog containing the error message.
 - Uses createTripRequest mutation call to create trip request.
 - Passes the delivery details along with the trip type DELIVERY_REQUEST.

Reservation Screens

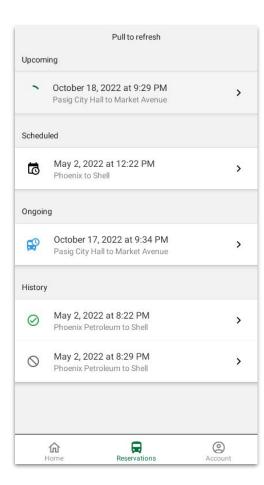


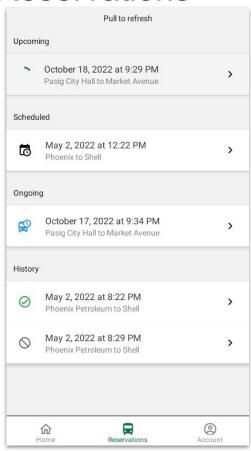




Passenger Mobile App

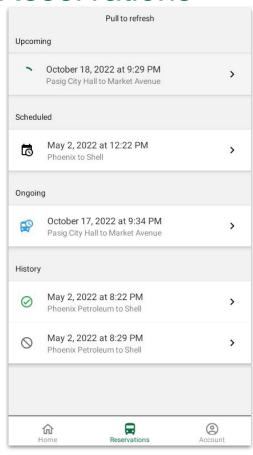
Reservations





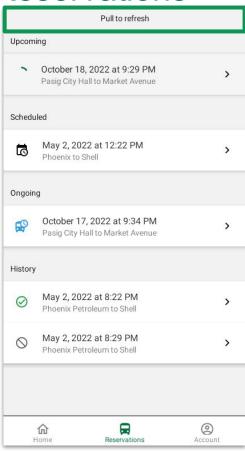
Reservation List Screen

- Screen where the passenger sees their **Upcoming**, **Ongoing**, **Scheduled**, and **Past reservations** sections.
- Uses tripRequest and reservation query call to get the trip request and reservation data.
- The data retrieved is then arranged into upcoming, ongoing, scheduled, and past reservations based on their status.
- Trip request are requests that have not yet been accepted.
- Scheduled trip request indicates that the trip has not yet been accepted or has not yet started.
- Reservation are accepted requests.



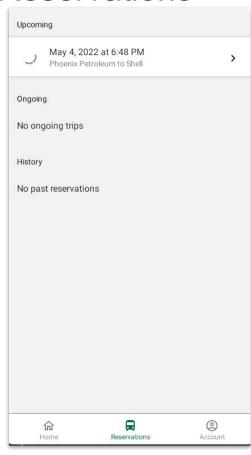
Reservation List Screen

- Reservation List Screen also "subscribes" for updates in trip request.
 - It uses on TripRequestUpdate to receive live updates from the server.
 - If there is an update
 - It re-queries the trip requests and reservations using the tripRequest and reservation queries



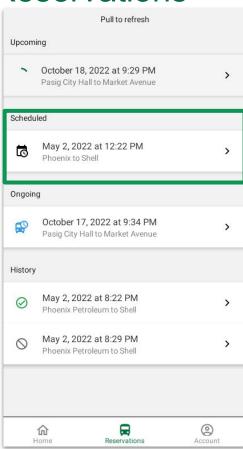
Reservation List Screen

- If the updates didn't reflect, the passenger can "Pull to Refresh" to re-query.



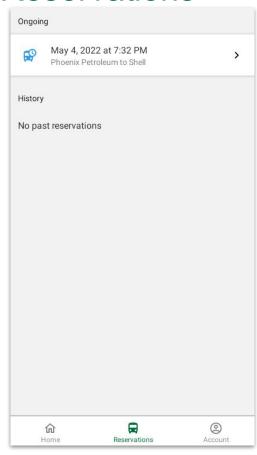
Reservation List Screen

 If the trip request status is CREATED, PENDING, or SEARCHING, it will be displayed in **Upcoming** section.



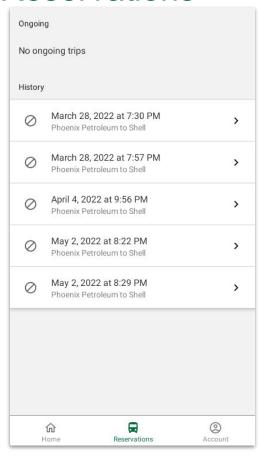
Reservation List Screen

- Scheduled trip request are in the **Scheduled** section.



Reservation List Screen

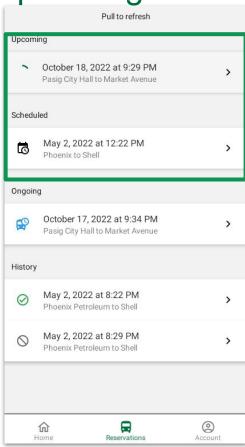
- If the reservation status is BOARDED and CONFIRMED, it will be displayed in Ongoing.
- CONFIRMED
 - o Icon 😭
 - o Driver has not yet picked up the passenger.
- BOARDED
 - o Icon 🚍
 - The driver has picked up the passenger and is en route to the passengers' destination.



Reservation List Screen

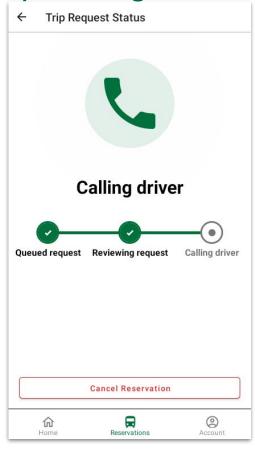
- If the reservation status is CANCELED or the trip status COMPLETED, it will be displayed in **History**.
- COMPLETED
 - o Icon 🕢
 - Passenger trip is completed.
- CANCELED
 - o Icon 🕢
 - Passenger canceles the CONFIRMED reservation.

Upcoming and Scheduled



Reservation List Screen

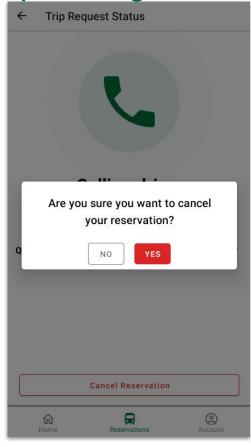
 Pressing the Upcoming and Scheduled reservations will navigate to the Trip Request Progress Screen along with the trip request details. **Upcoming and Scheduled**



Trip Request Status Screen

- Screen where the passenger sees their request for reservation status.
- "Cancel Reservation" button
 - Cancels the reservation
 - If pressed, it will ask the passenger for confirmation.

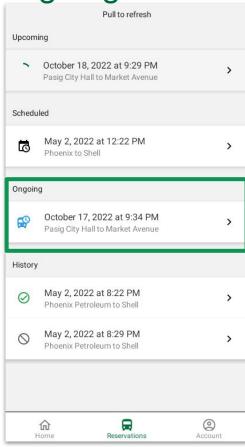
Upcoming and Scheduled



Trip Request Status Screen

- If the passenger presses "YES", it will send a status update to the server using the updateReservationStatus mutation call and pass the CANCELED reservation status.

Ongoing



Reservation List Screen

- Pressing the **Ongoing** reservations will navigate to the **Booking Details Screen**.
- Pressing on the **Ongoing** reservations will also query the trip data using the trip query call.

3M's Pansit 👊 Rosa Highway Balibago Complex κ_{λ} KУ Arriving to Phoenix Petroleum 51123 11:43 - 11:53 AM Estimated time of arrival reservation code ToJo Motors Electric Vehicle • Cancel Reservation 命 Reservations Account

Booking Details Screen

- Screen where the passenger can see the vehicle for the trip, location of the vehicle in real-time, its details, its destination, and the trip details.
- Uses onVehicleLocationUpdated subscription to get the live location of the vehicle.
- Uses vehicle query to get the vehicle details.
- "Cancel Reservation" button is the same as in Slide 71: Upcoming and Scheduled
- Vehicle destination icon will depend on the status of the Reservation
 - If it's CONFIRMED, the icon will be origin icon
 - o If it's BOARDED, the icon will be destination icon o
- Popup reservation code
 - If "Expand" button is pressed, a popup containing reservation code will appear.
 - If the vehicle is \leq 500 meters, the popup will also appear.

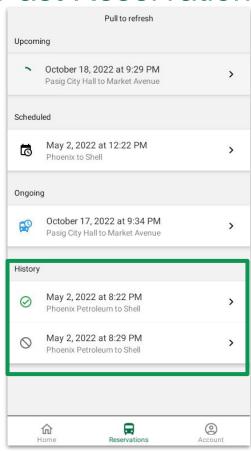
Ongoing



Booking Details Screen

- Pressing the code will expand the QR code and minimize the text code, and vice versa.

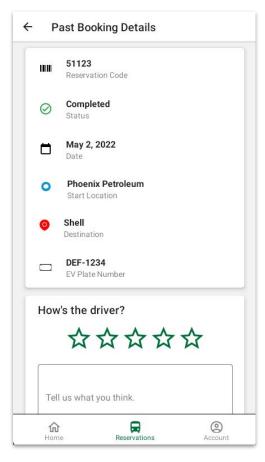
Past Reservation



Reservation List Screen

- Pressing the **History** reservations will navigate to the **Past Booking Details Screen**.

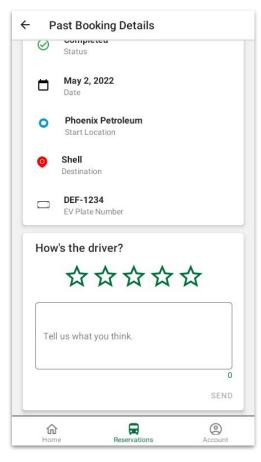
Past Reservation



Past Booking Details Screen

- Screen where the passenger can view the details of their past reservation.
- If the status of reservation is "COMPLETED" and the passenger still has to review, it will show the **Driver Rating Card**.

Past Reservation

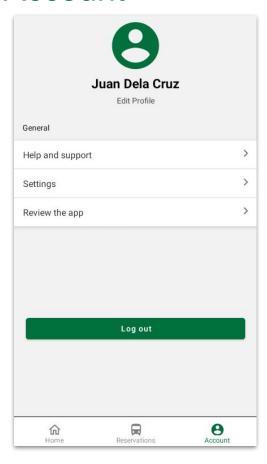


Driver Rating Card

- The passenger can rate the driver from 1 to 5 stars and can also provide a text feedback of up to 500 characters.
- "Send" button
 - If pressed, it will send the feedback through the createDriverFeedback mutation call.
 - If successful, it should return a success message. Otherwise, it will show an error message.

Account Screens

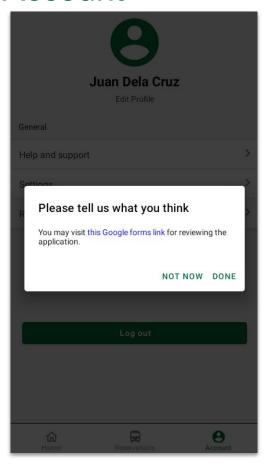
Account



Account Index Screen

- Screen where the passenger can see the general settings, edit their profile, and review the app.
- "Log out" button
 - When pressed, it will logged out the user.
 - Deletes the stored token.
- "Review the app" item
 - When pressed, it a review dialog will appear.
- "Edit item" button
 - When pressed, it go to Edit Profile Screen.

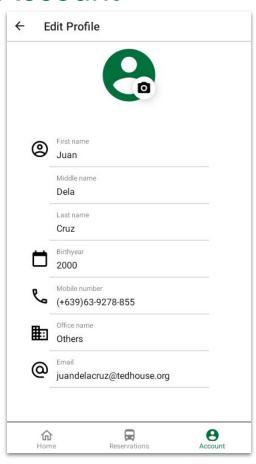
Account



Review Dialog

- It prompts the passenger to review the application through the Google form <u>link</u>.
 When pressed, it will redirect to Google forms.
- Pressing the "NOT NOW" button will postpone the review 1 month.
- Pressing the "DONE" button will close the dialog.
- The **Review Dialog** will appear every month.

Account



Edit Profile Screen

- Screen where the passenger can see and edit their details.