

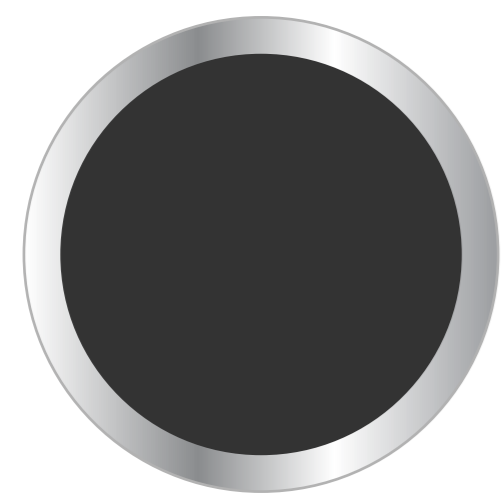


Android Wireframe

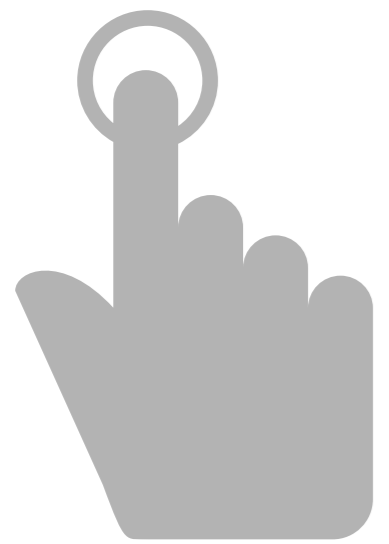
Connected car
Version 3, Nov 14, 2015

UX GLOBAL INTERACTION

CAR ROTARY SWITCH GESTURES



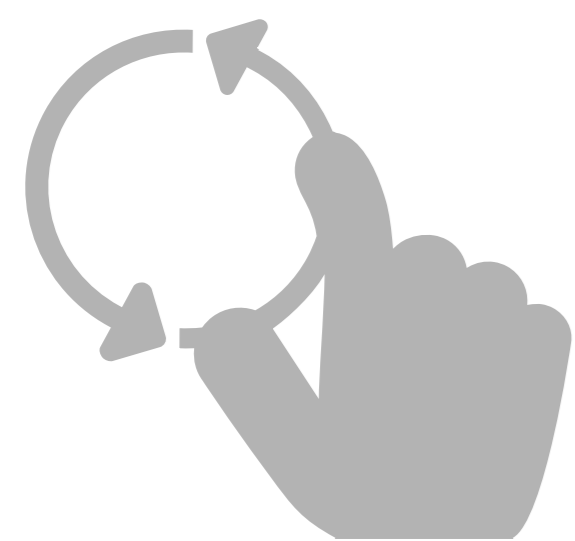
CAR ROTARY SWITCH



SINGLE TAP

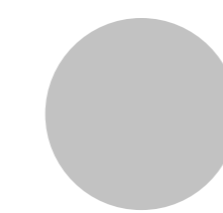


LONG PRESS

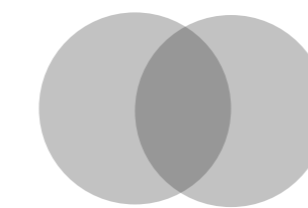


ROTATE KNOB

TOUCH SCREEN GESTURES



SINGLE TAP



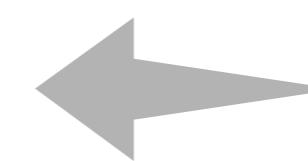
LONG PRESS



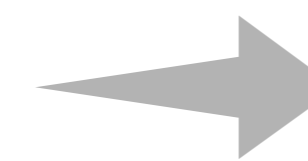
SWIPE UP



SWIPE DOWN



SWIPE LEFT

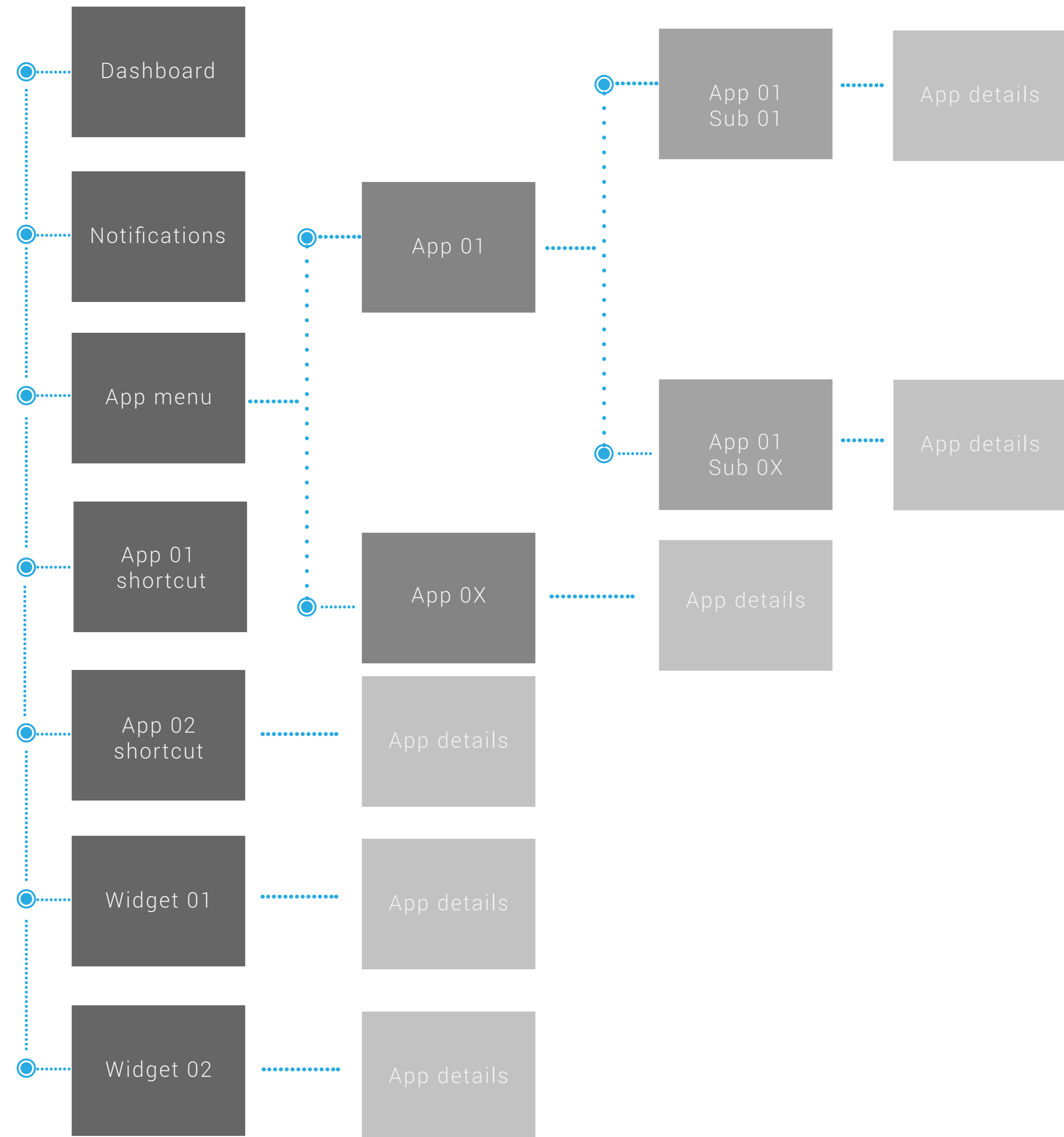


SWIPE RIGHT

USER FLOW

This user flow created based on seamless experience to the user.

Dashboard, Apps menu, and apps laid out one after the other to experience a uncluttered user experience



DASHBOARD

Phone status bar will be limited with necessary information

Display time & date

Weather info, OBD info (If critical) and notifications

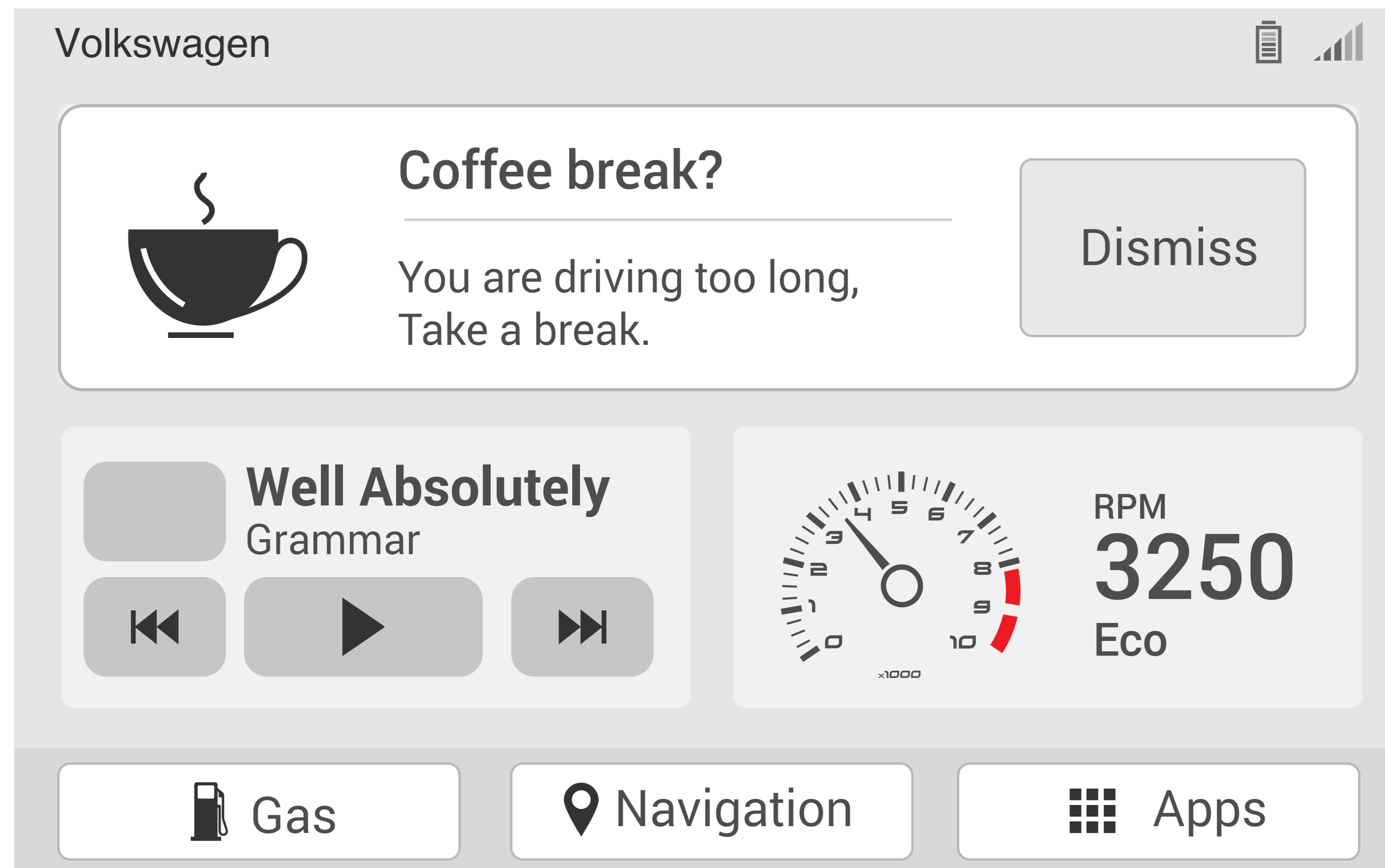
Customizable widgets. The user can place desired widgets instead of music and rpm widgets.

Customizable buttons

The user will get a quick access for apps menu & recent app from bottom buttons menu. The user can customize except apps button.

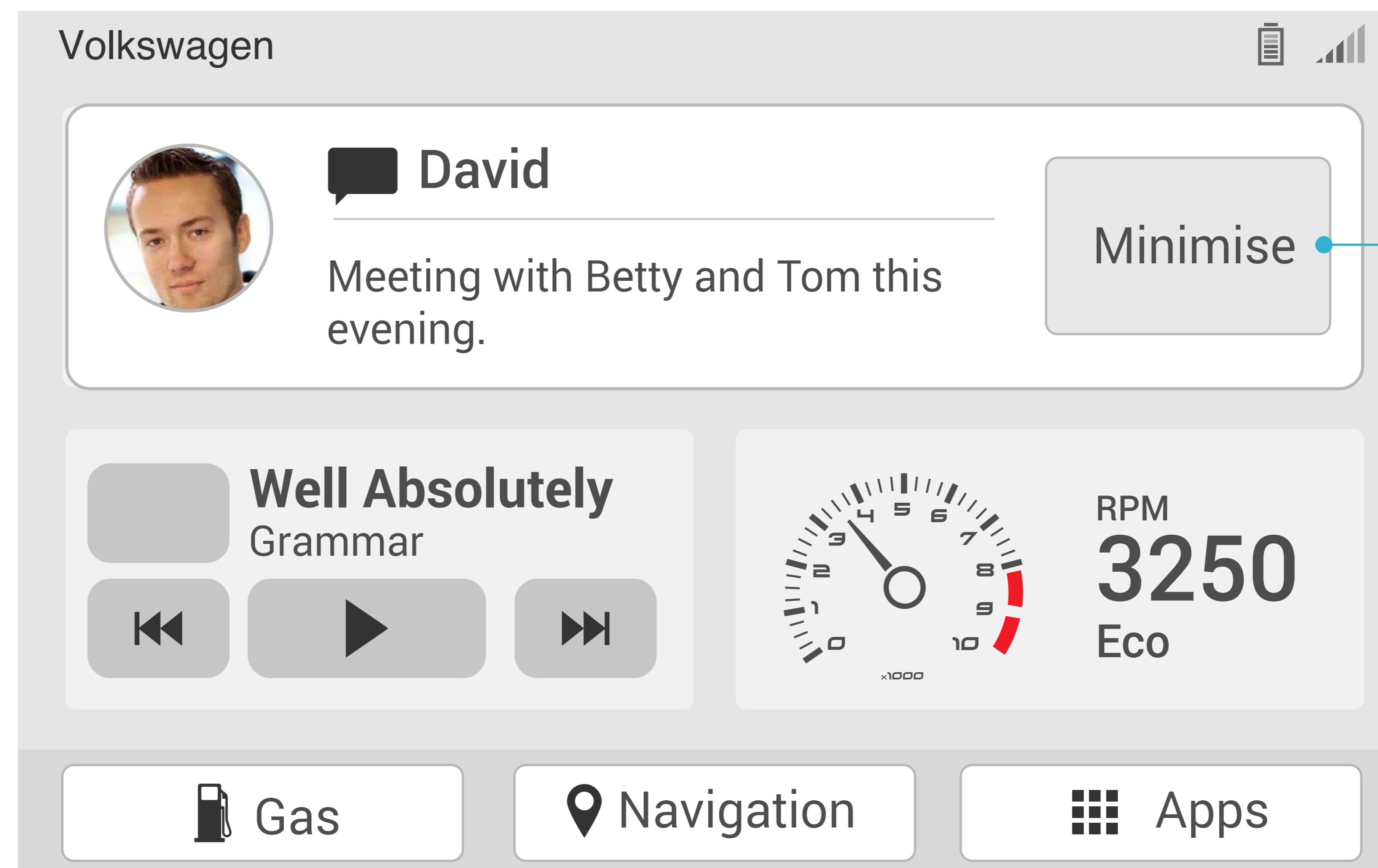
DASHBOARD - INCOMING NOTIFICATION

The user gets notified to take a break. User can tap on dismiss to ignore it or if user takes a break (car turned off) for a while, it detects and removes the card



DASHBOARD - INCOMING NOTIFICATION

The user gets notified as he receives a new notification.



Option1

Minimise/ read later - will minimise the big notification to notification area/ weather widget area

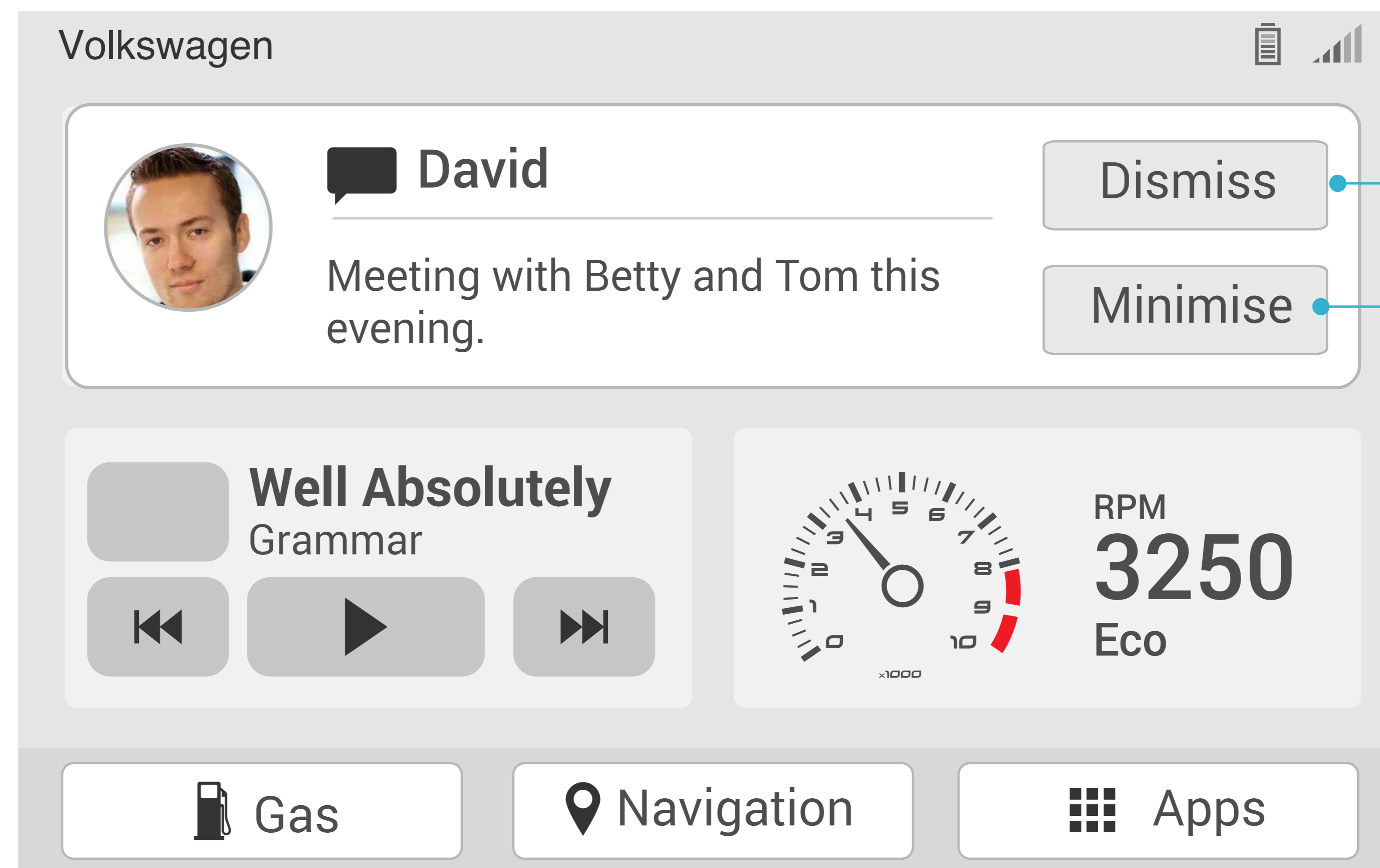
To dismiss the notification, swipe right or left.

Auto dismiss action removed from notification

As per CCC guidelines, section 6.3
Notifications SHALL NOT be removed until dismissed by the user. Time-sensitive information (such as turning instructions) MAY be dismissed automatically if the information is no longer relevant to the current activity.

DASHBOARD - INCOMING NOTIFICATION

The user gets notified as he receives a new notification.



Option 2

Dismiss

Dismiss will remove it

Minimise

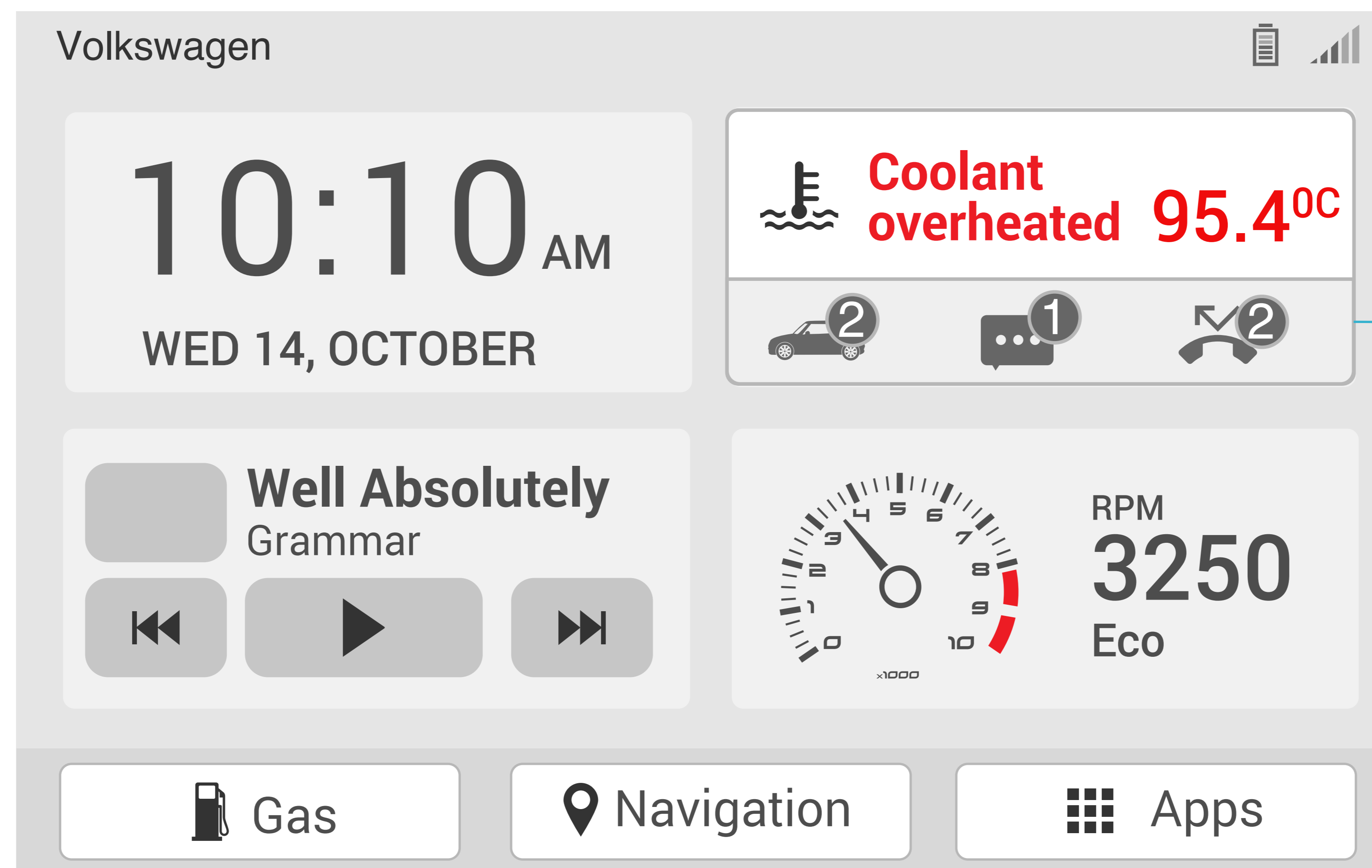
Minimise/ read later - will minimise the big notification to notification area/ weather widget area

DASHBOARD - MULTIPLE NOTIFICATION

OBD alerts get priority among the notifications. By tapping them will take the user to messages app.

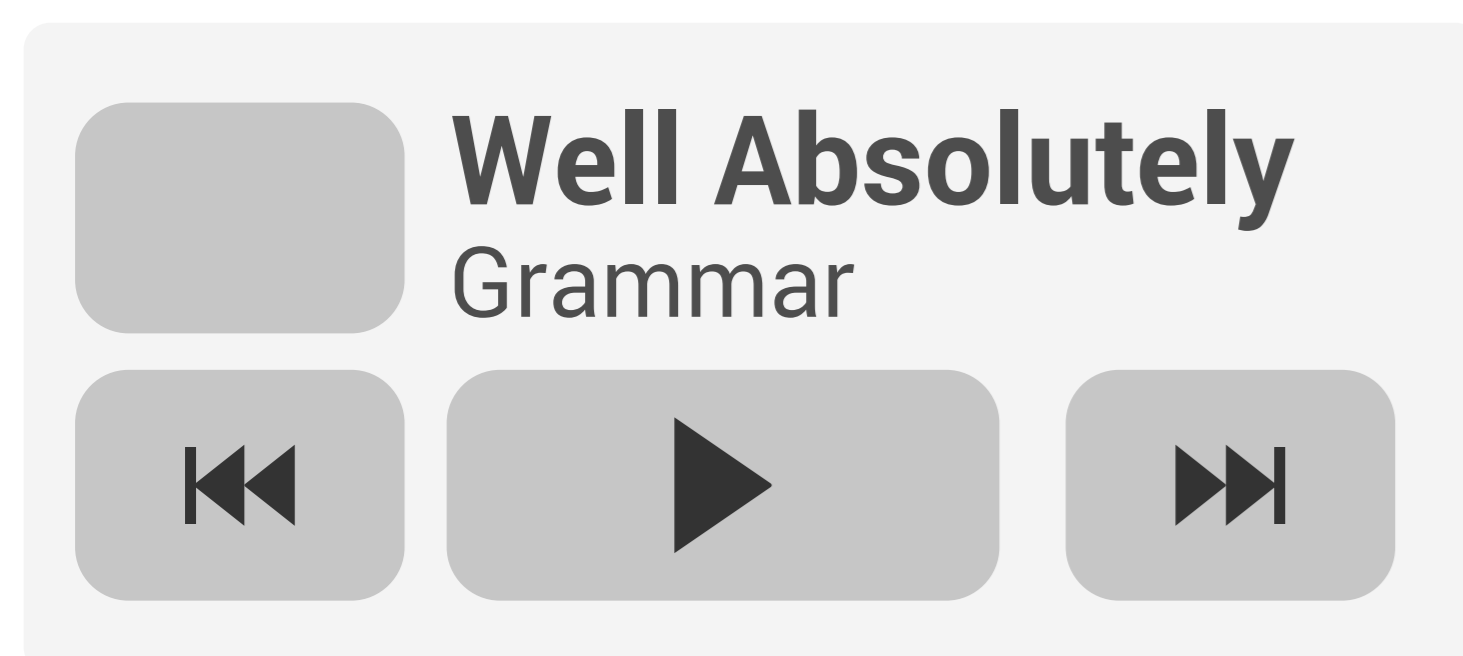
Notification priority

1. Diagnostics
2. Coolant level
3. Engine oil
4. Battery Level
5. Tyre Pressure
6. Gas Level
7. Other notifications (SMS, Call etc...)



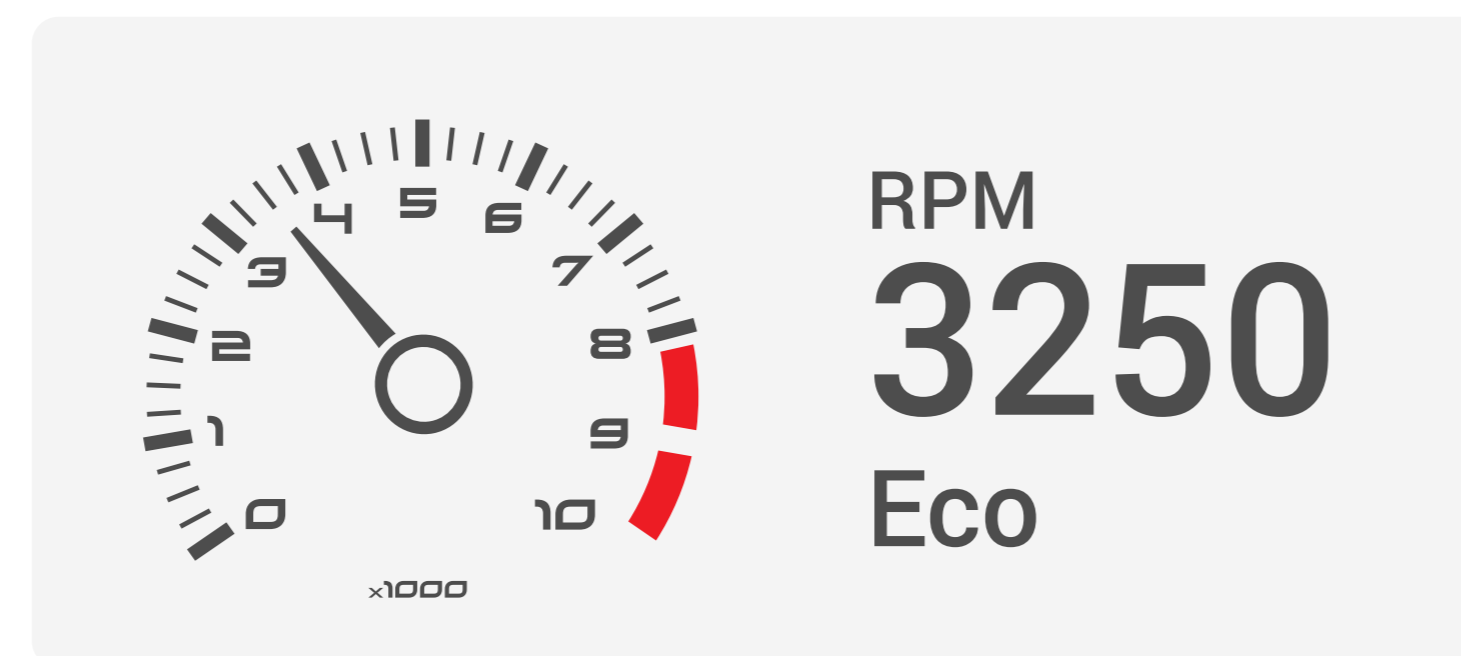
Shows unread notifications in category - OBD, Msgs, missed call and service

ADDITIONAL WIDGET

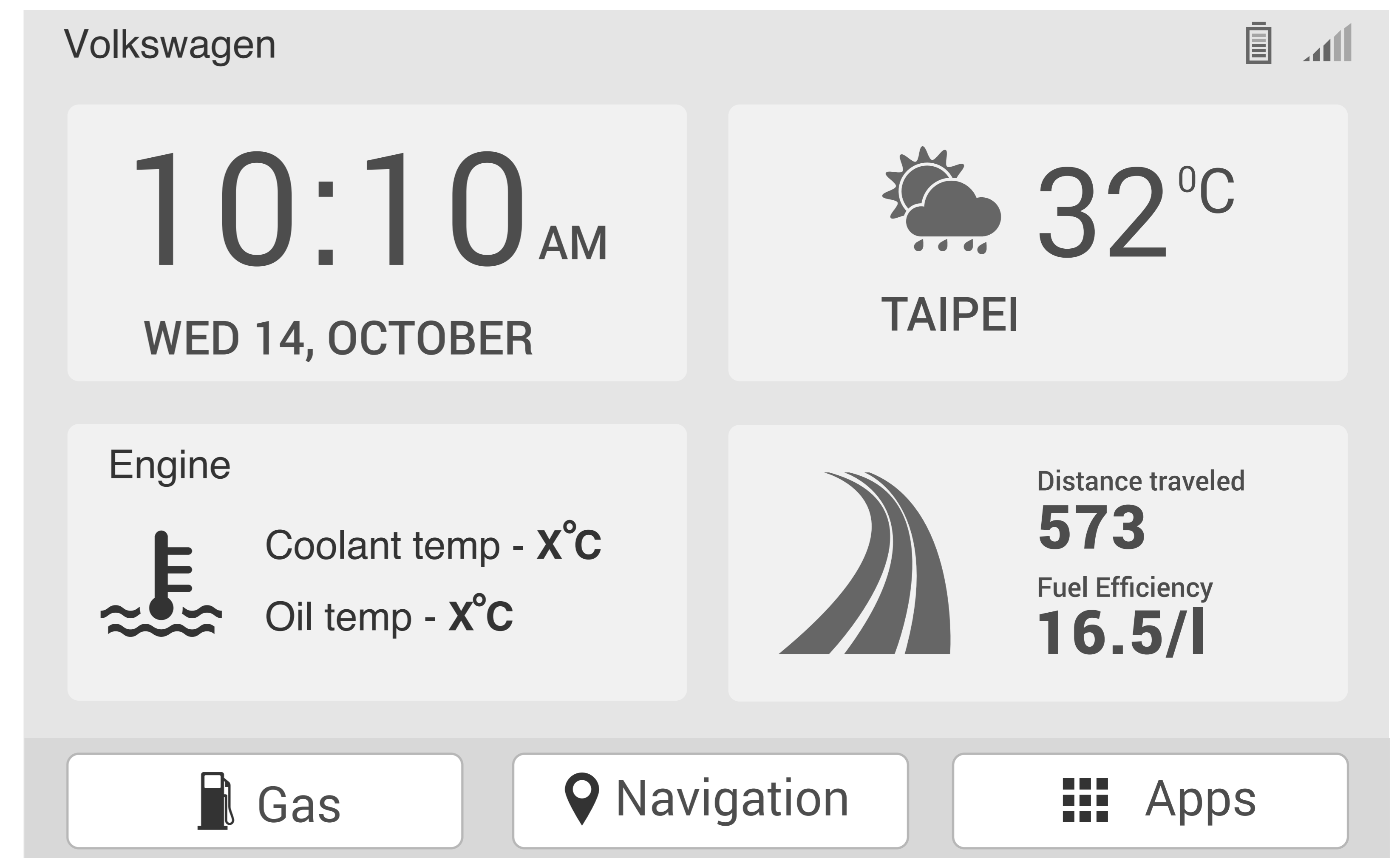


Well Absolutely
Grammar

⏮ ⏪ ⏩ ⏭



RPM
3250
Eco



Volkswagen

10:10 AM
WED 14, OCTOBER

☀️☁️ 32°C
TAIPEI

Engine
Coolant temp - X°C
Oil temp - X°C

Distance traveled
573
Fuel Efficiency
16.5/l

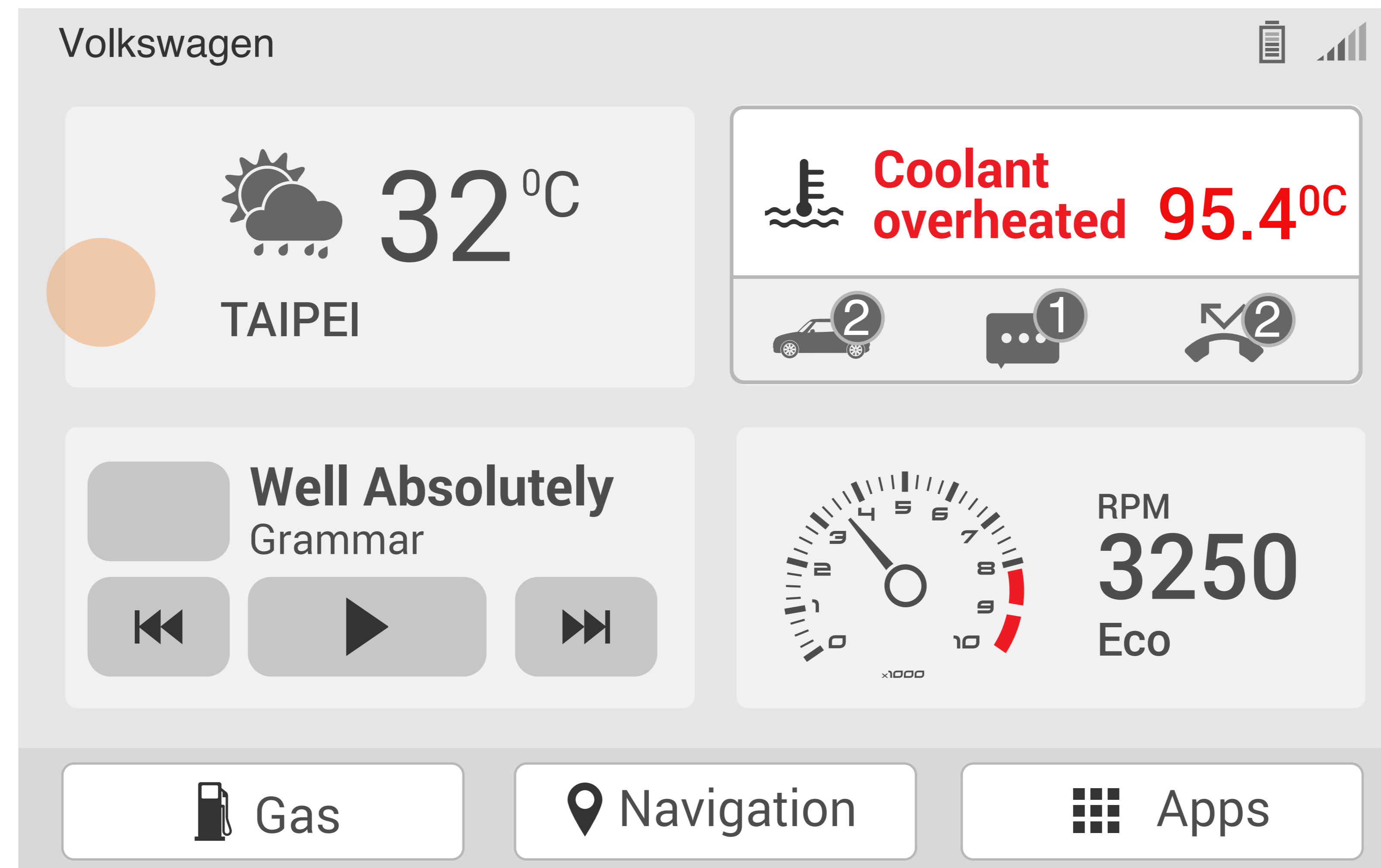
Gas Navigation Apps

➡️ Swiping to right/left, user can view more widgets. Only bottom two widgets keeps changing. Swipe again to view prev widgets

DASHBOARD - DATE & TIME WIDGET - OPTION

Notification will be an overlap on weather widget.
There should be an option for user to view weather and location.

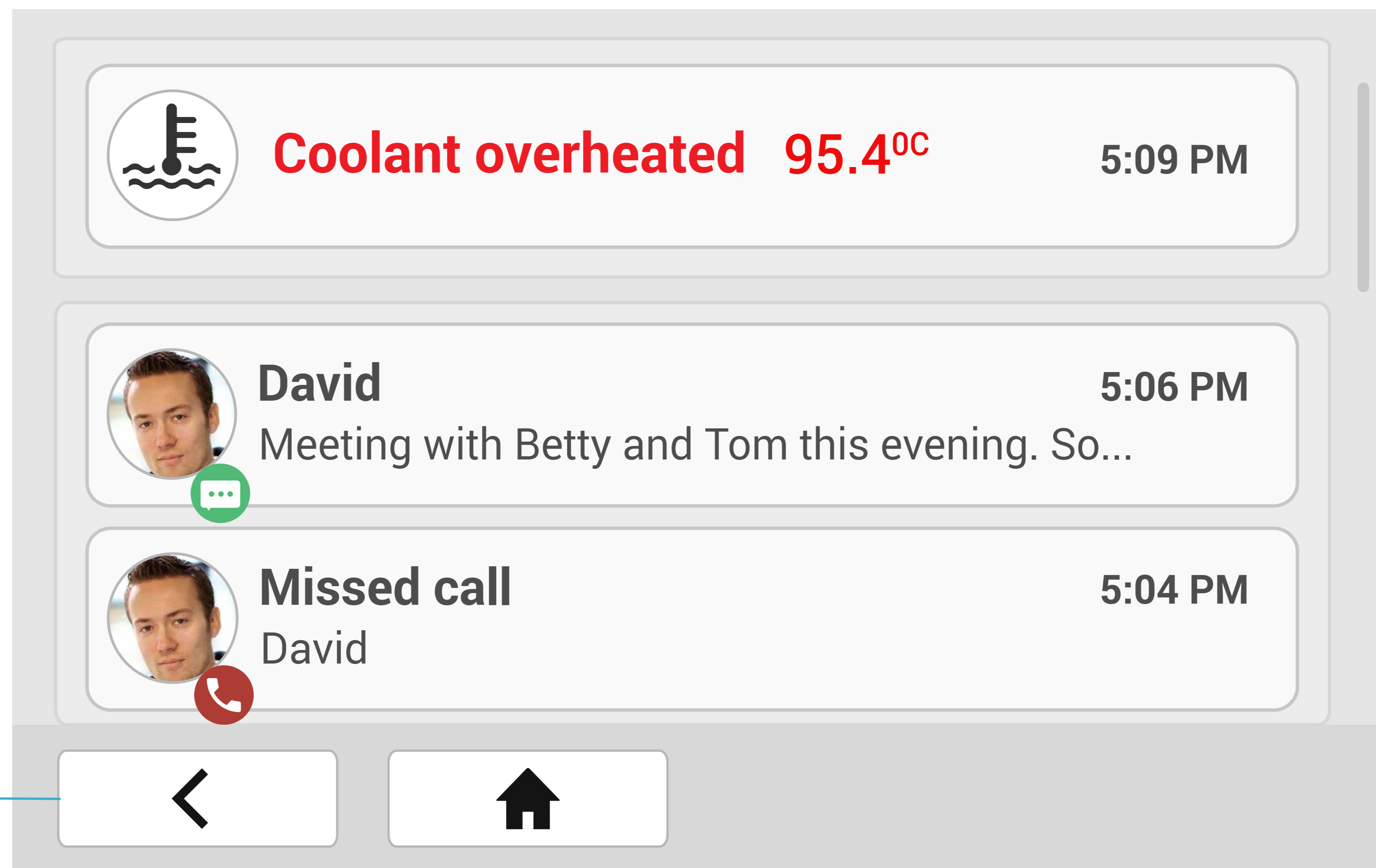
Tapping on the date & time widget will load weather widget. Tapping on it again shows loads date & time widget



DASHBOARD - MESSAGES APP

Notifications get categorized in three groups-

1. OBD alerts
2. Msgs and calls displayed based on time
3. Service notifications



Msg shall display first line of message that will give user a hint of the content

Back - to prev screen
Home - loads dashboard

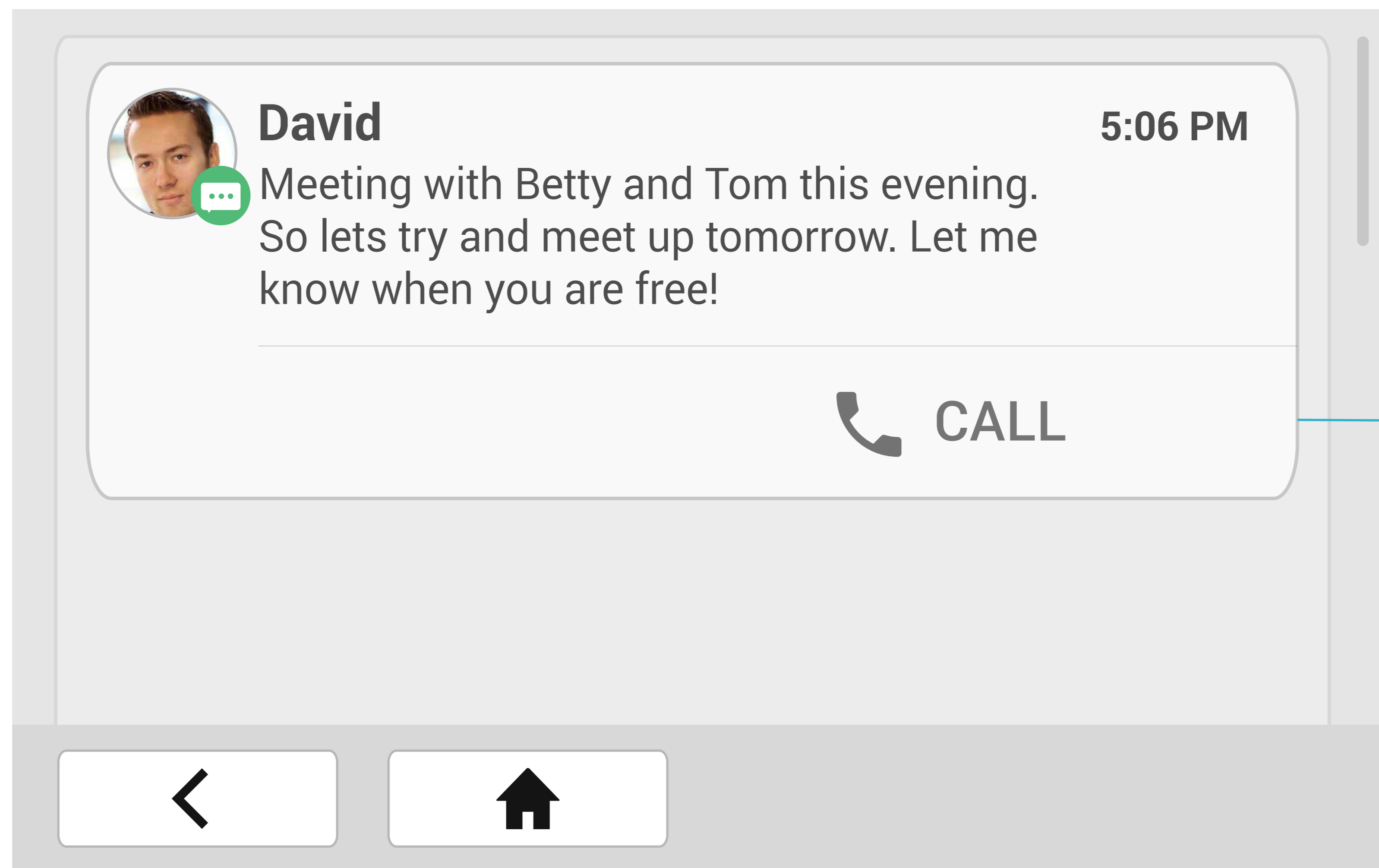
Notifications - OBD, SMS, calls and service

➔ User can swipe right to dismiss the notification

● On tapping on notification, the details/more text can be read

DASHBOARD - MESSAGE DETAILS

Tapping on msg notification to see msg details.



Option to call the contact person - Tapping on call initiates call and "calling" screen loads

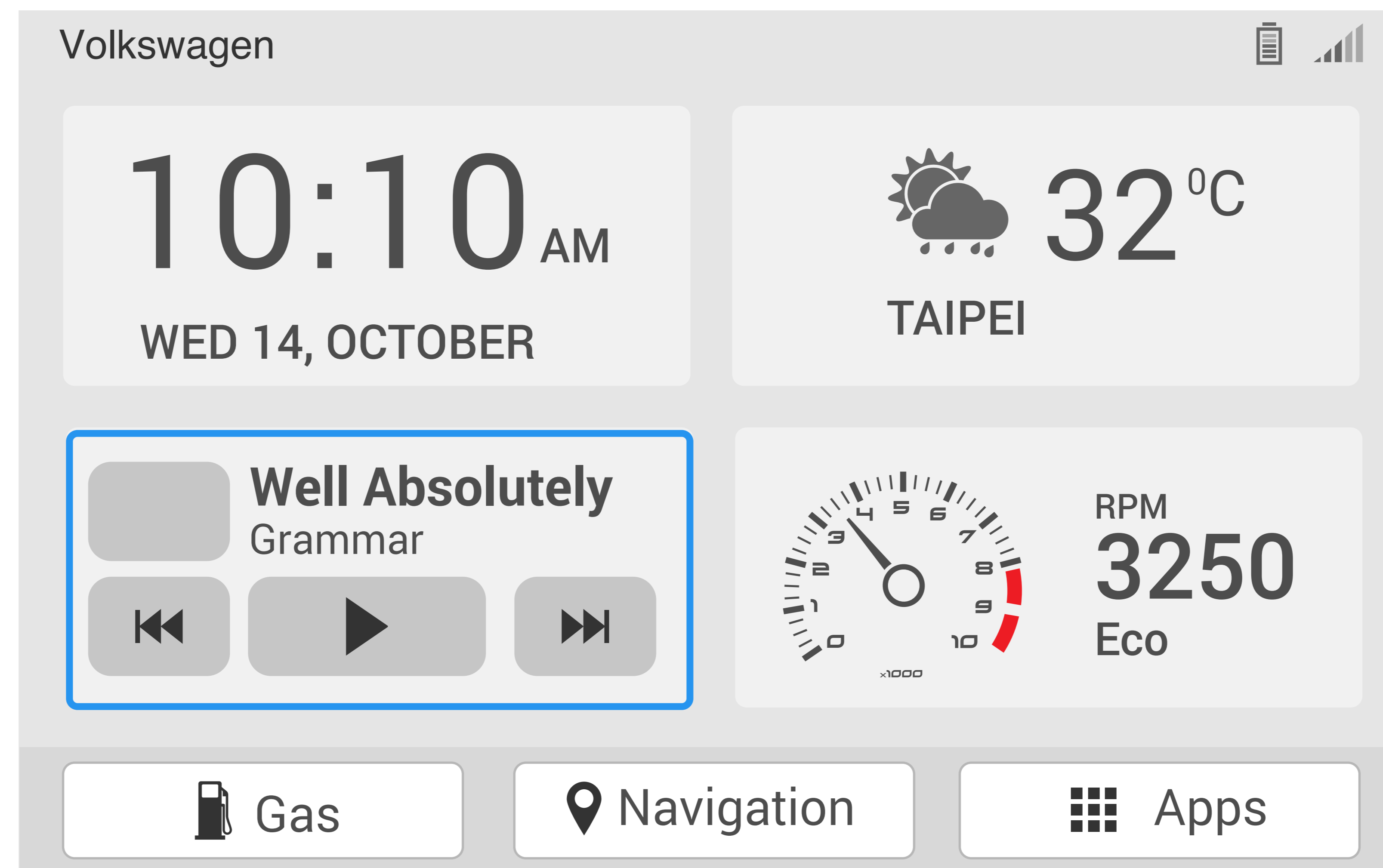
Since a msg is considered read here, it will remove this notification from the list

CUSTOMIZING HOME SCREEN

Customisation available only on park mode

For non- touch screen, customisation is available on phone only

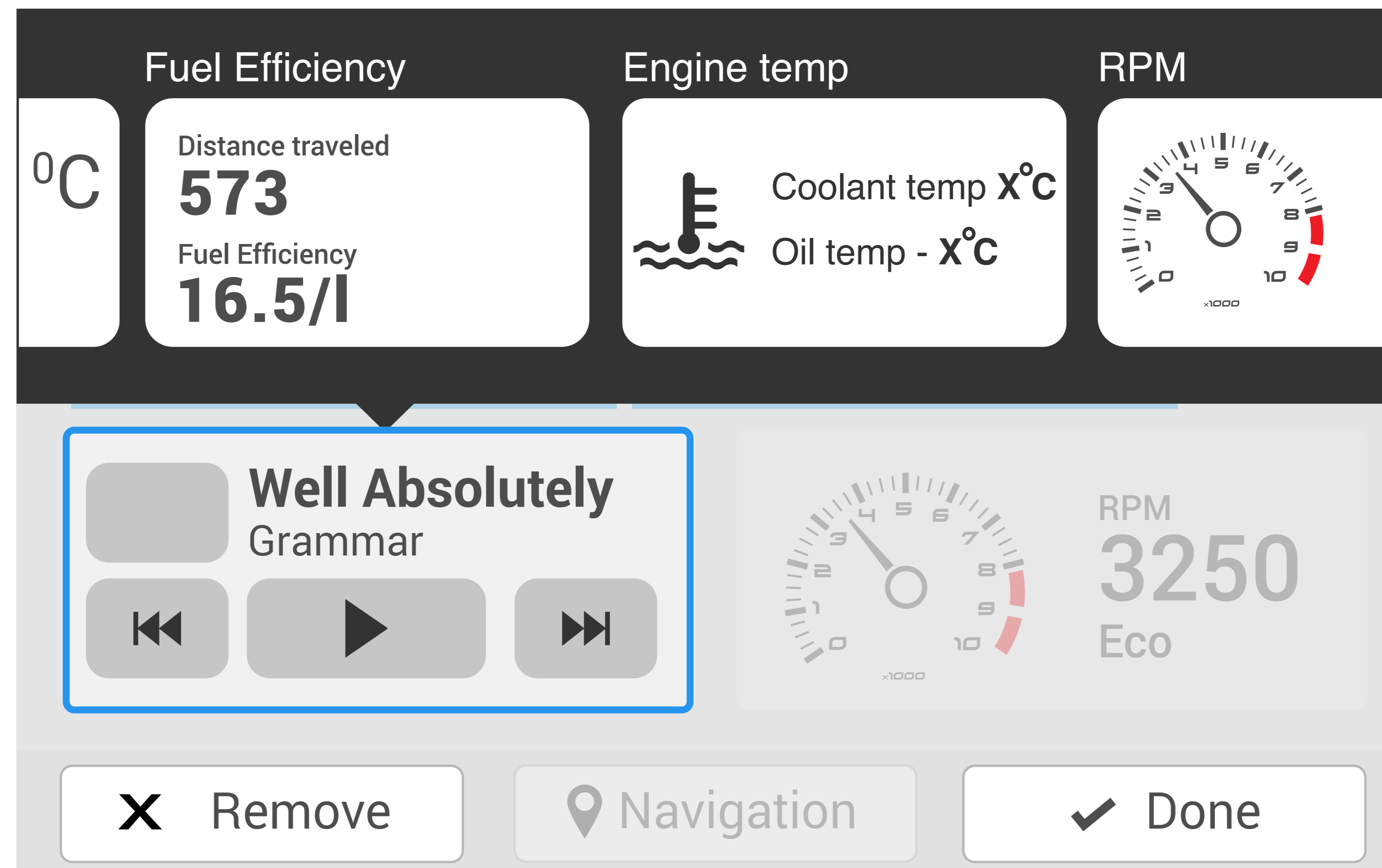
The user can long press on customizable widgets(Bottom 2) and change to the desired widget from list.



CUSTOMIZING HOME SCREEN

Tapping on other area/done will leave the edit mode

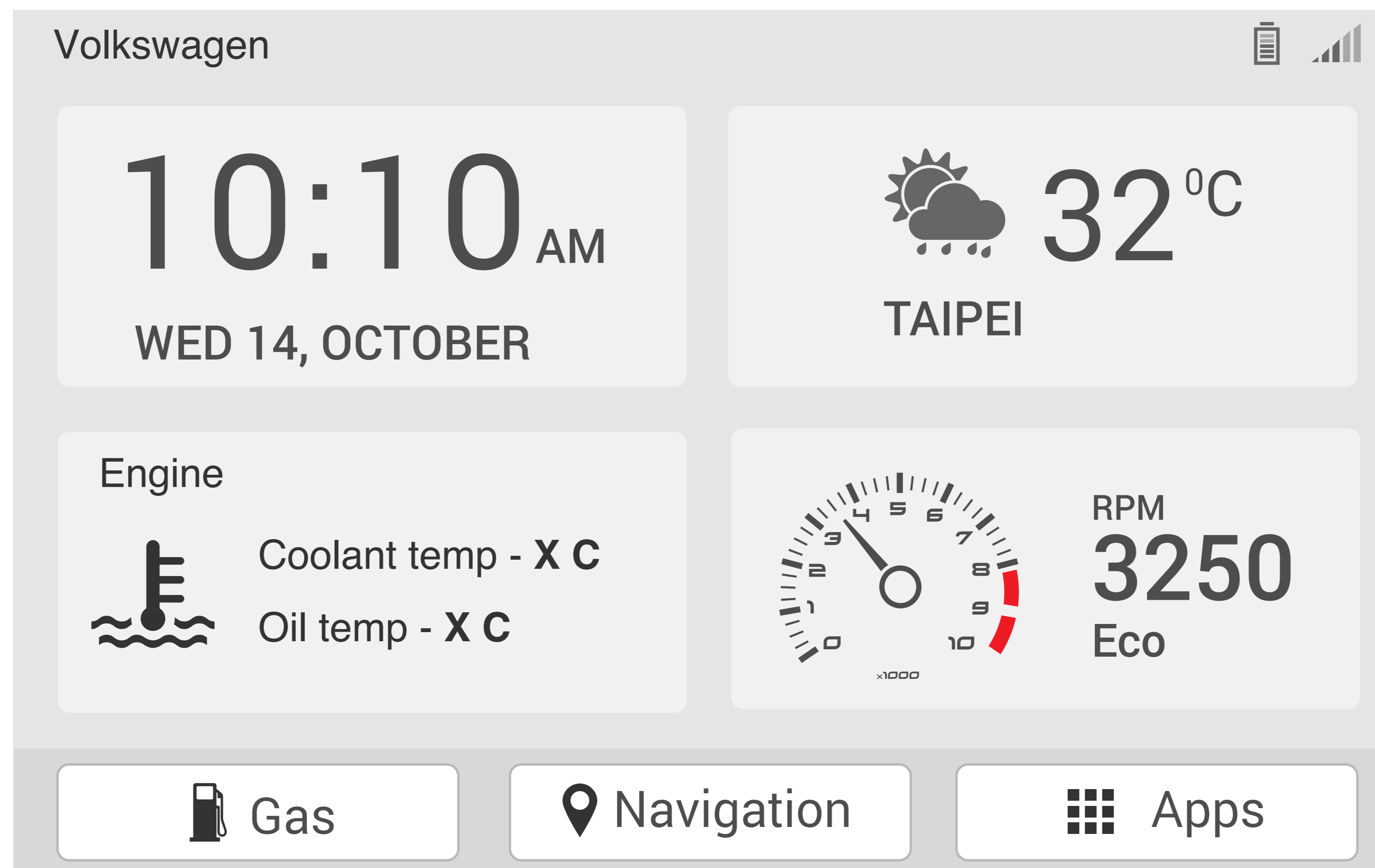
The user can scroll right/left and tapping on the desired widget from the list will give a preview on the widget area. Tapping on done confirms the action.



User can change the location by dragging to desired location, even to next page

Once interface change into 'editing mode,' all the other widgets (except the selected widget) and buttons will get inactive. Apps button will change to 'Done' button for exiting edit mode and "Remove" to remove selected widget

CUSTOMIZING HOME SCREEN



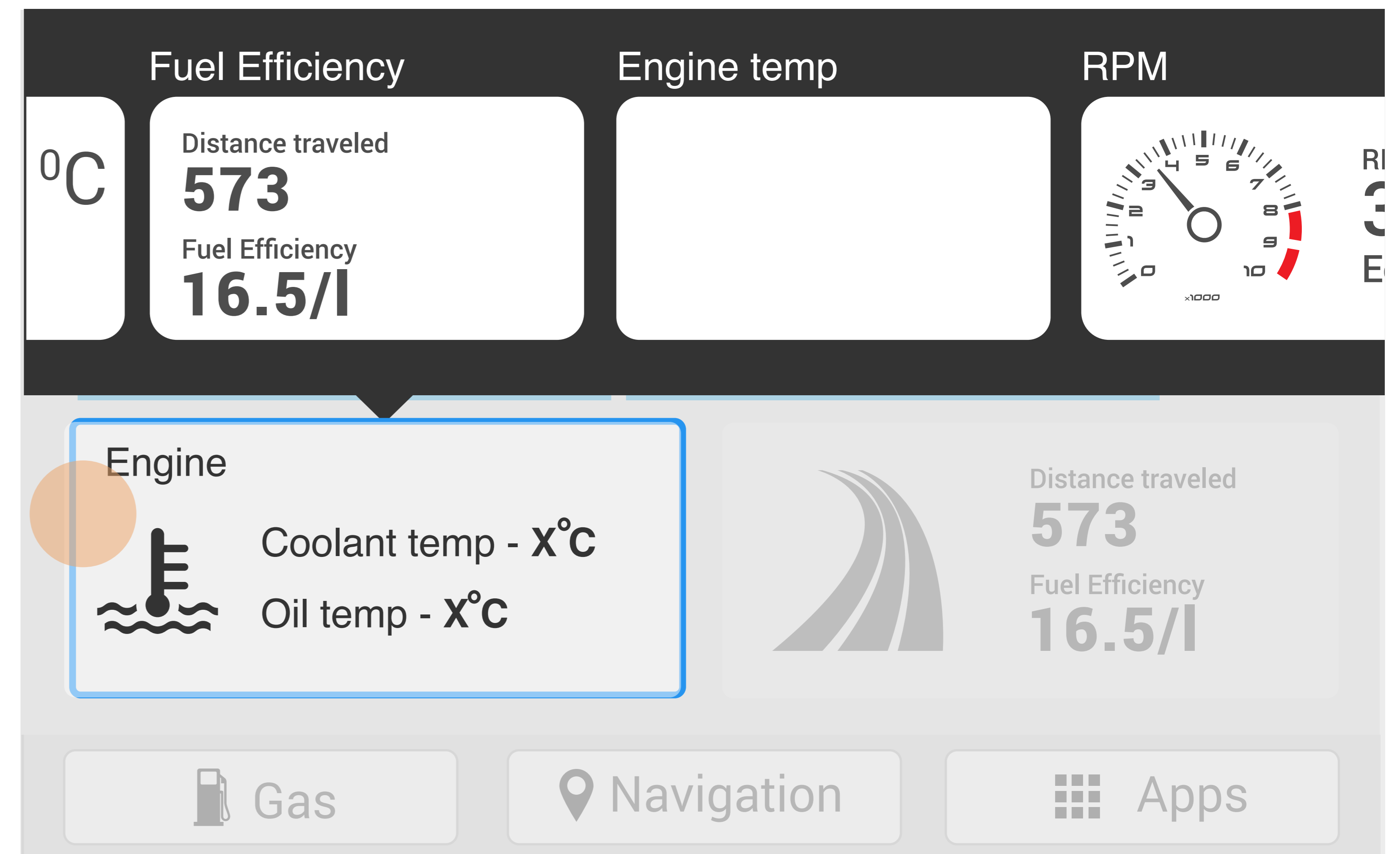
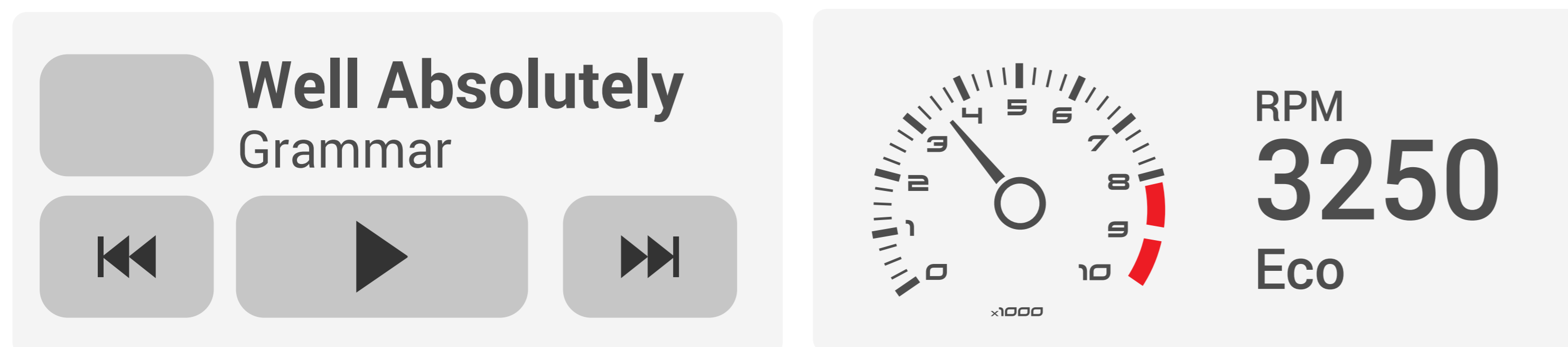
After finish editing, new widget will be displayed on home screen.

CUSTOMISING ADDITIONAL WIDGET

User can add only 4 widgets(2 each page). By default, 4 widgets will be added. User can swipe right/left to view next set of widgets.

To edit any widget, user can long press and edit.

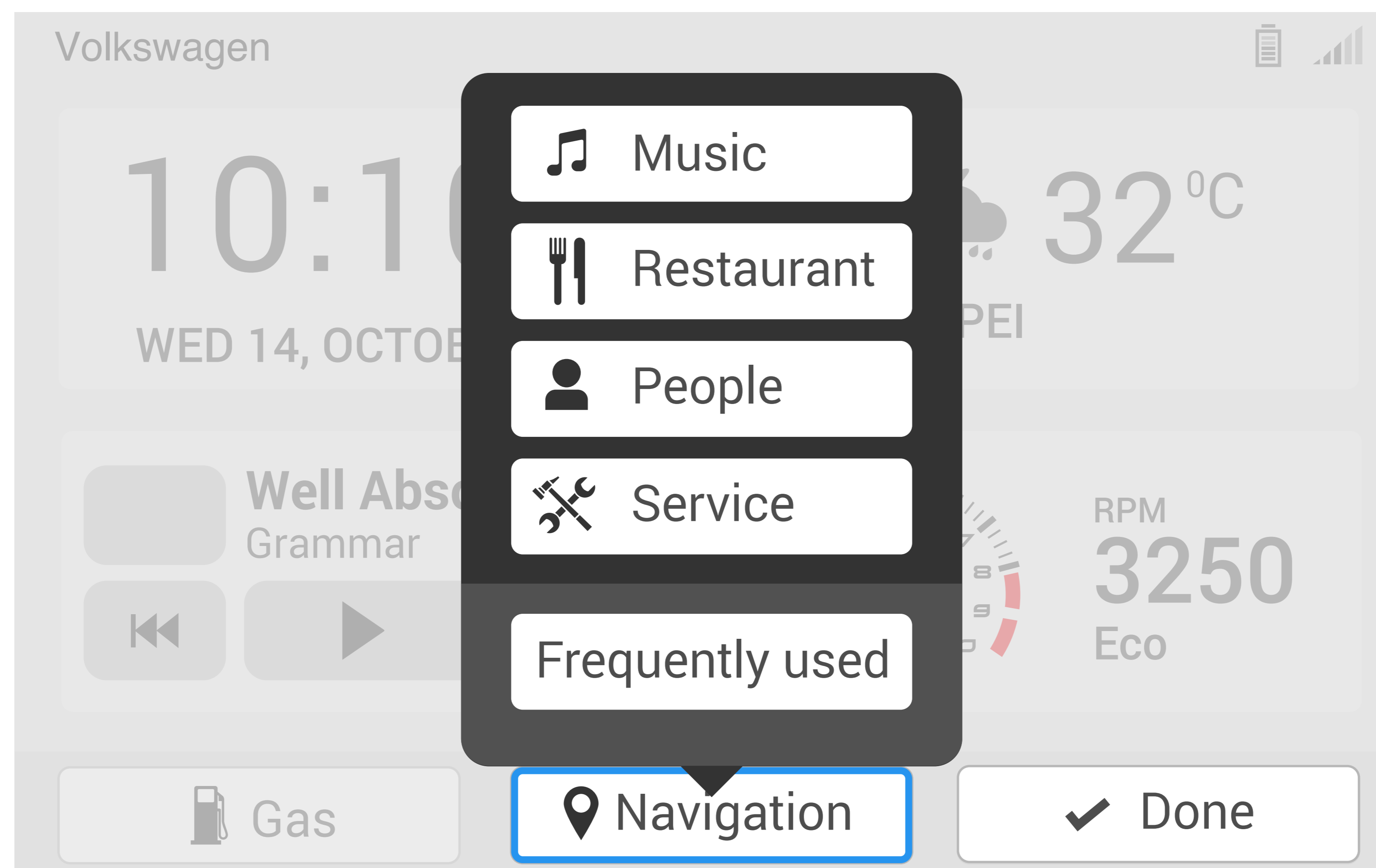
To drop a widget from one page to other, long press and drag it to corner of the screen (will load next page) and drop it to next page (like in android). Long press engine widget and drop it on RPM widget, both widgets swap position



Swiping to right/left, user can view more widgets. Only bottom two widgets keeps changing. Swipe again to view prev widgets

CUSTOMIZING HOME SCREEN

Options will be only those app approved by CCC and inbuilt app of HTC, so search is not required.

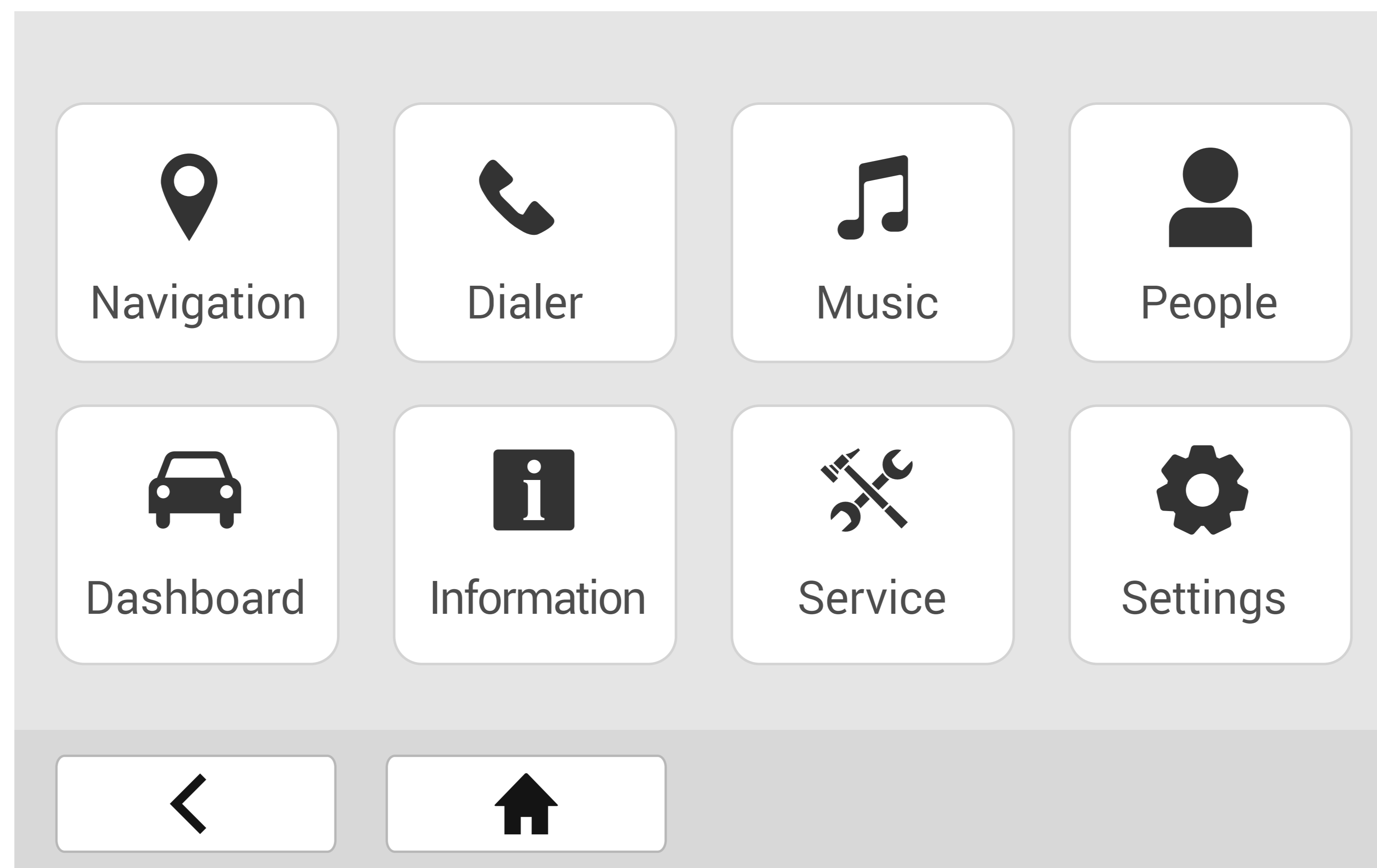


User should not be able to add apps that are not approved by CC because in drive mode it will be disabled and purpose of shortcut goes waste.

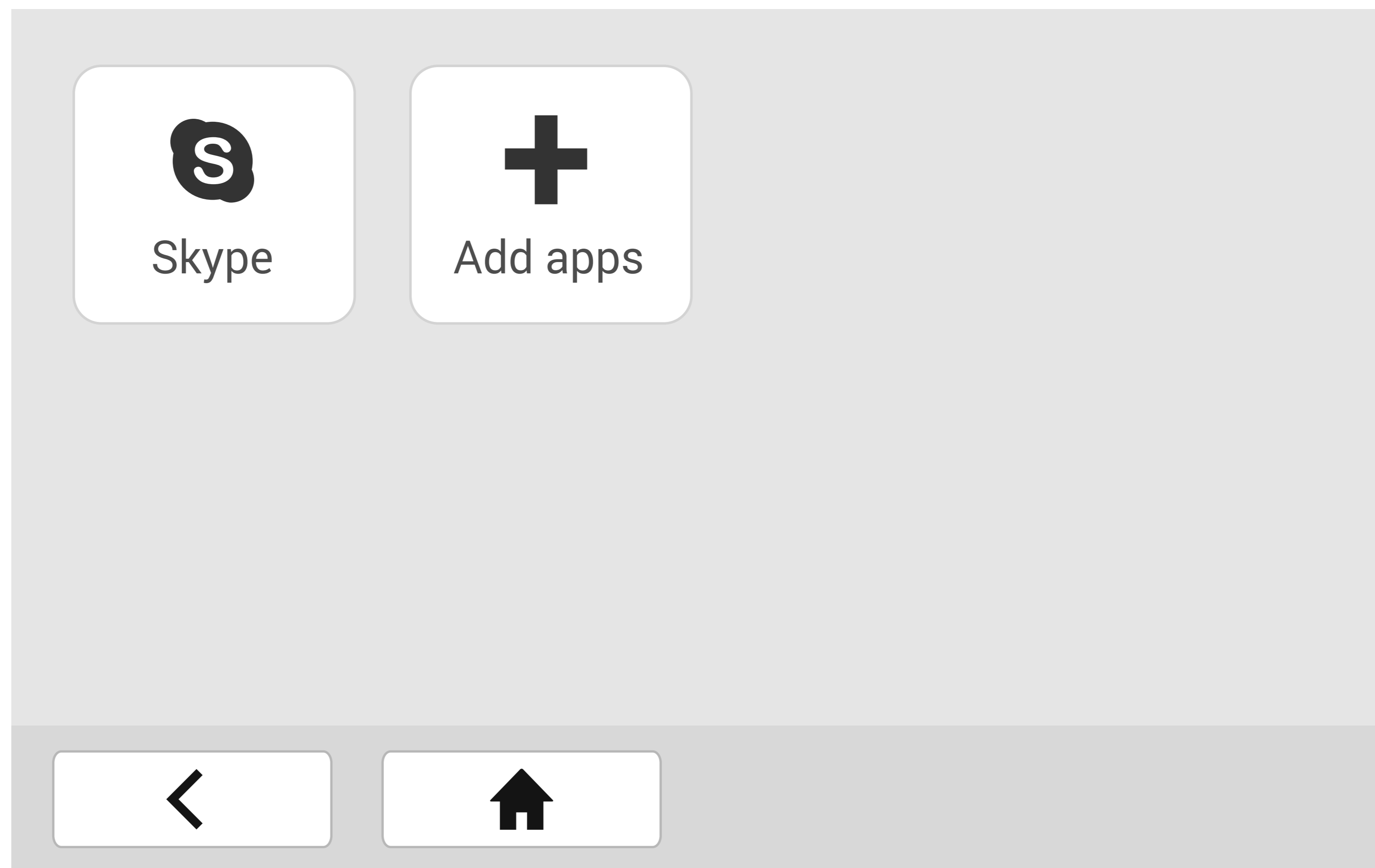
The user can long press choose desired button.

APPS MENU

If the user taps on app menu button from the home screen he will get access to the apps menu. The user can scroll down to view the complete list.



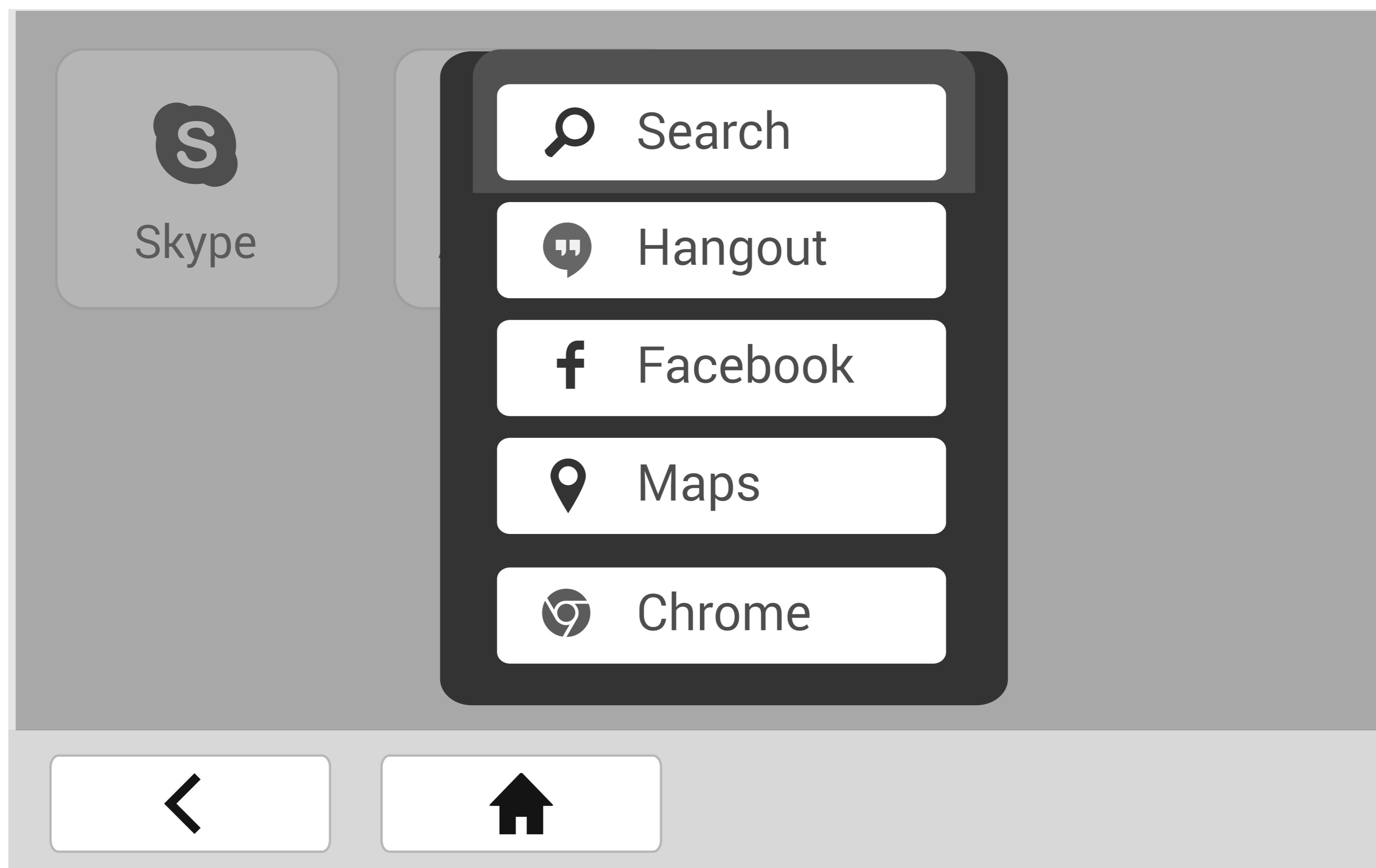
APPS MENU



Swipe up to view more apps

ADDING NEW APP

On tapping on add apps, user gets a pop-up to choose the app from phone



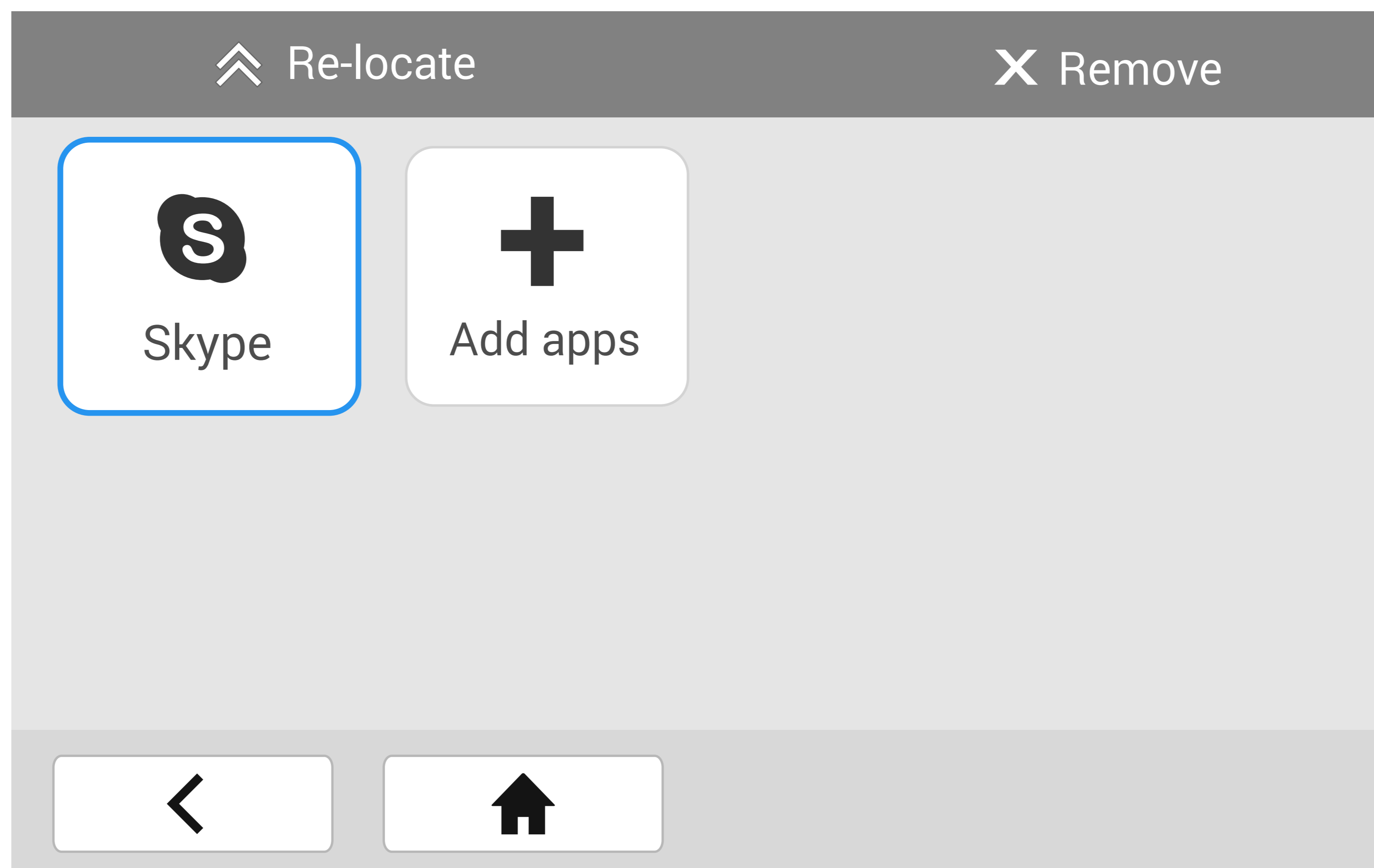
List is smaller in landscape, but in portrait, it can accommodate 9 at once. Since the customisation is not available in drive mode, it is most likely that user will add apps in portrait mode on phone.

REMOVING AN APP

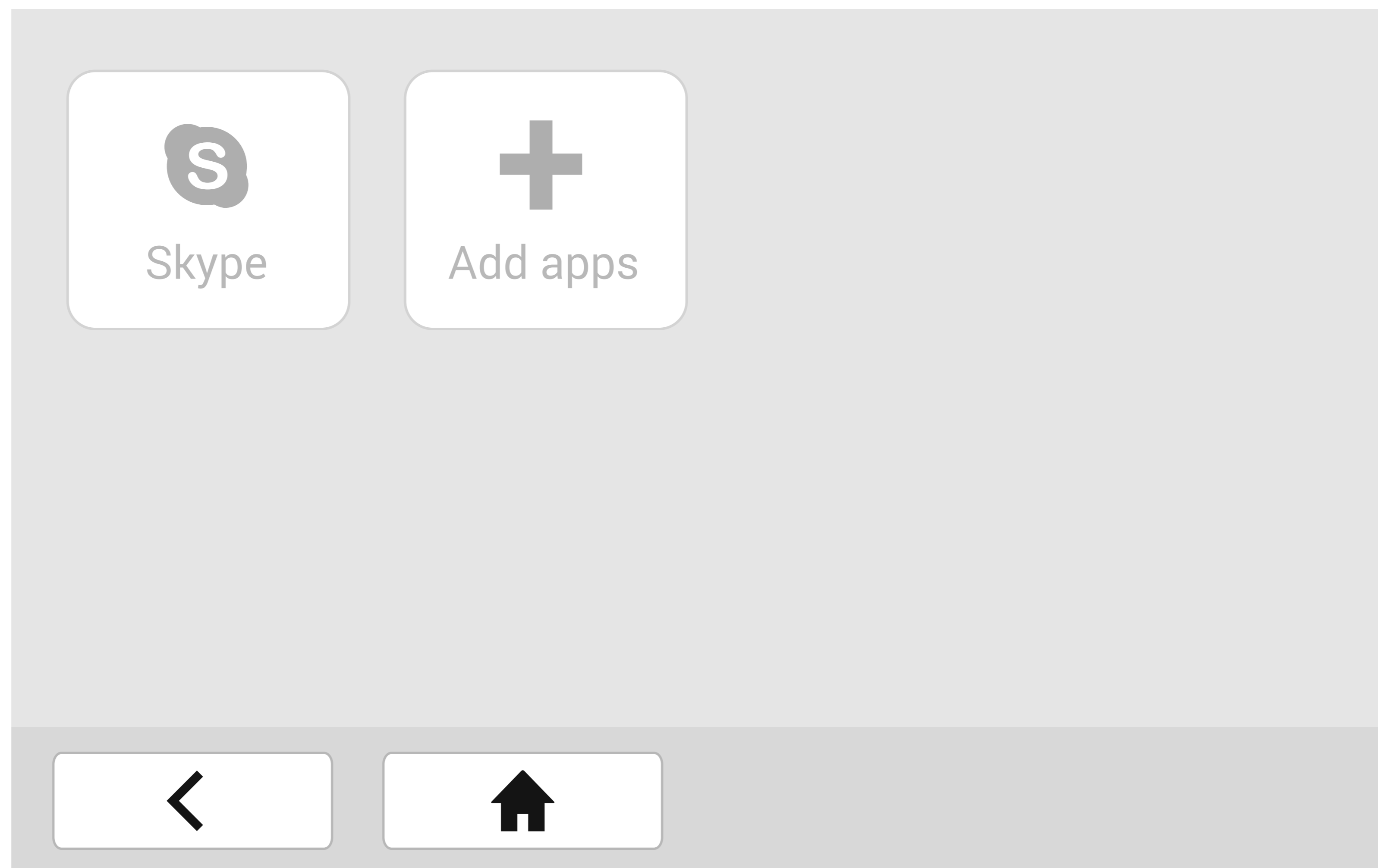
To remove - Long press and drag the app icon to remove icon

Re-locate - After long press user can drag and drop the app icons anywhere on the same screen/ take it to next screen by dragging it to re-locate

To cancel - release the long press, it goes back to previous state (like android)

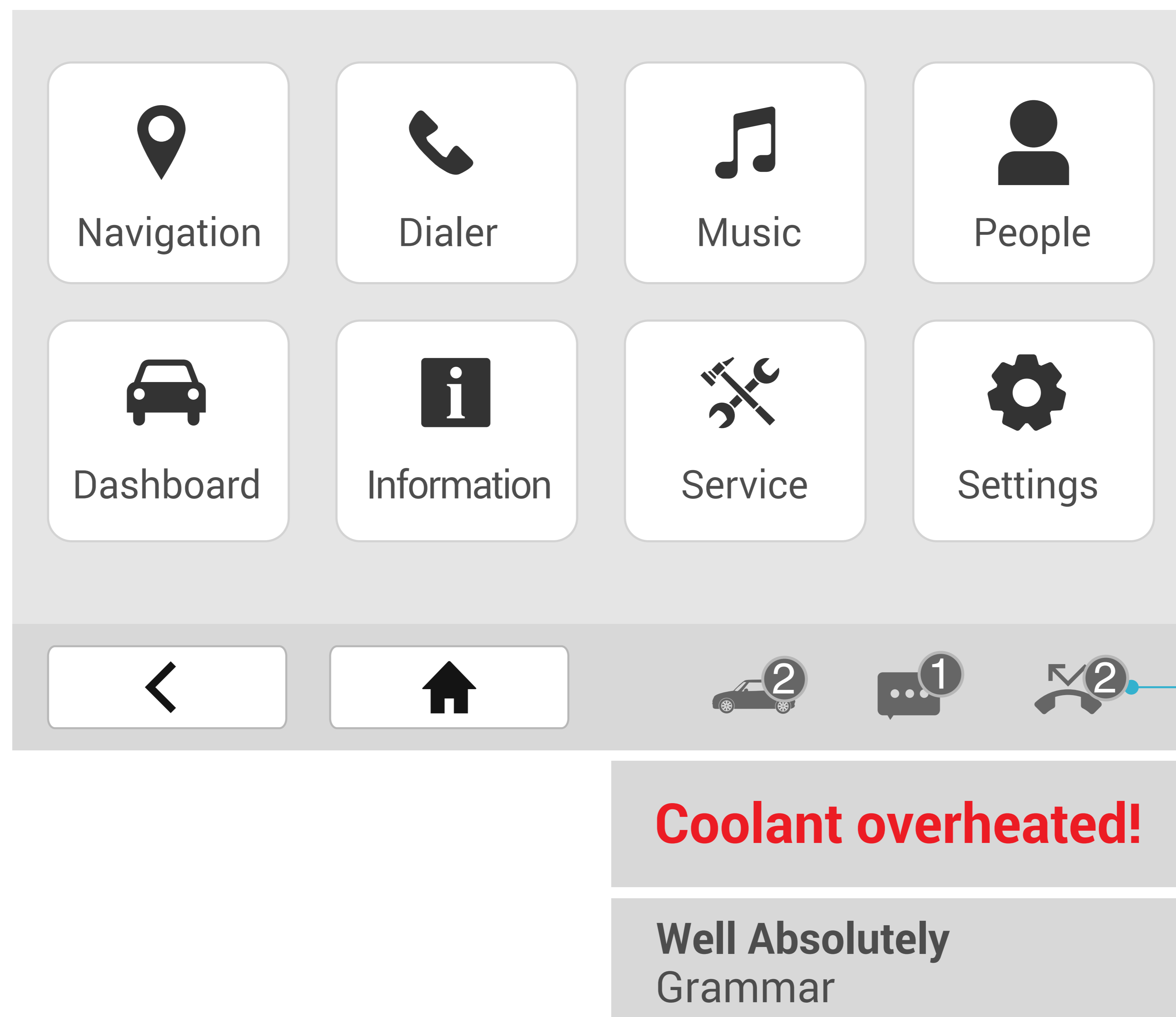


APPS MENU - DRIVE MODE



App not supported by CCC will be disabled in drive mode

NOTIFICATION ON INSIDE PAGES



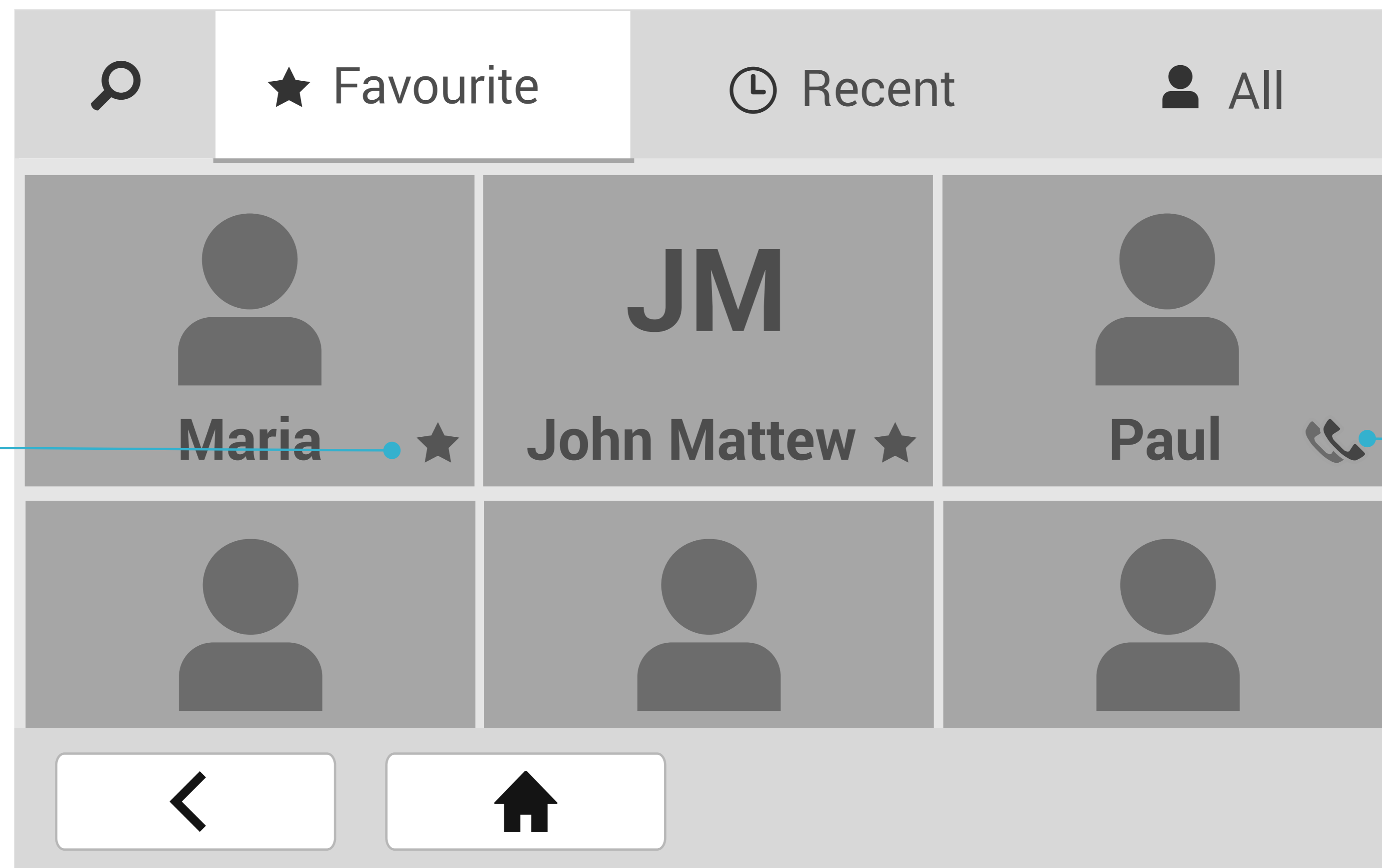
Dynamic notification area will display important OBD info, Music track changes and notifications.

PEOPLE - FAVORITE

The integrated dialer can be used for searching contacts or dialling a number.

Indicates contact is favourite

← User can tap on the tabs/ swipe to left to load next tab



Favourite contacts will have favourite contacts followed by frequently dialed contacts.

→ Frequently dialed

Very few users consciously add contacts to favourite and over a time, user doesn't update the list. So it will be helpful for user to view both favorites and frequently dialed (like how android inbuilt people app does). High chances that user will call either favourite/frequently dialed number while driving

Favourite contacts are the contacts where user adds photos. So even while driving, the user can tap looking at the photo instead of reading the names.(designed for easy access)

We would suggest having photo displayed. If the photo is missing we can use JM to show John Matthew.

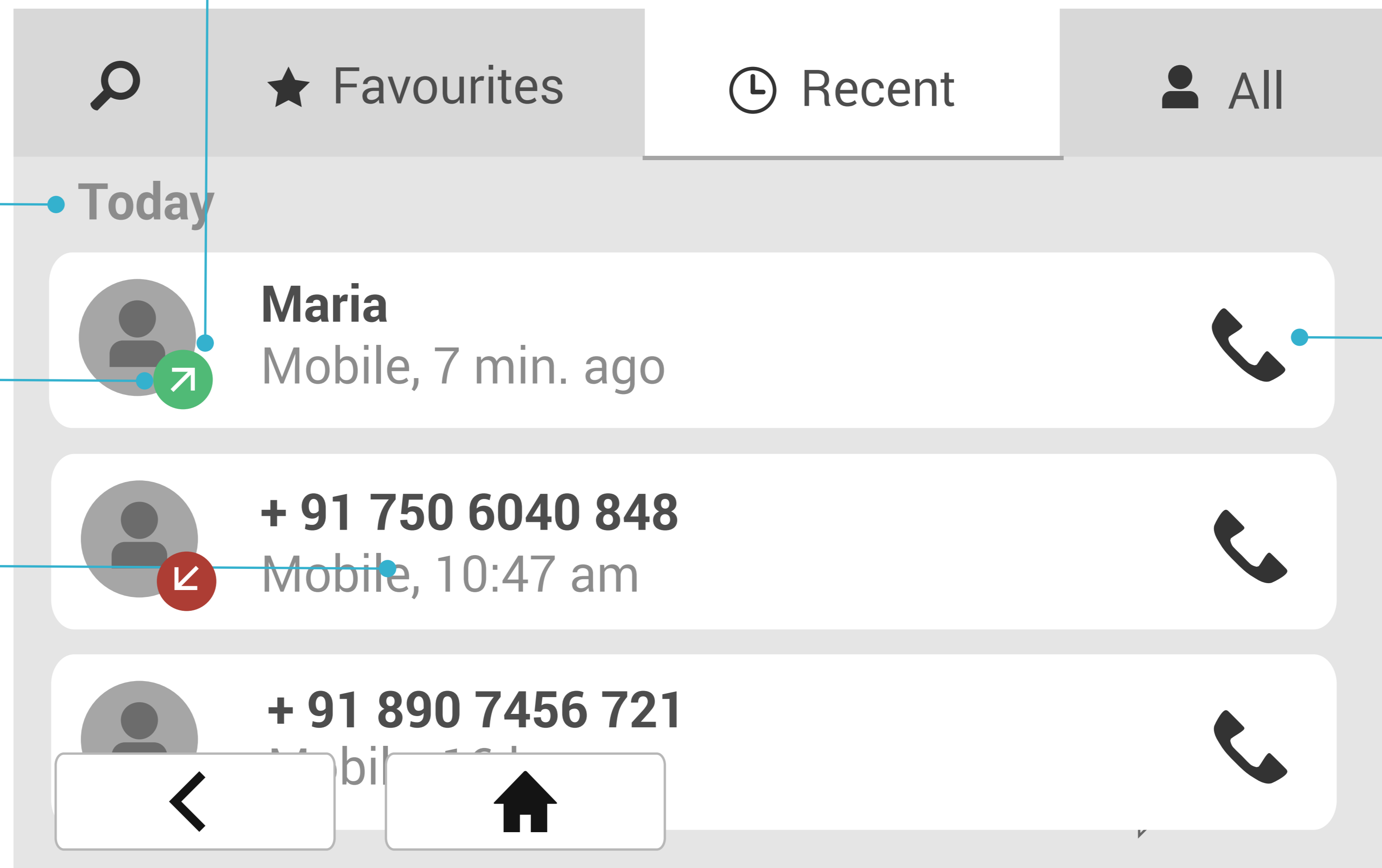
PEOPLE - RECENT

Time and call information will be helpful if you have received calls from two/more unknown numbers and wants to call back to one of them.

Sorted by date - Today, Yesterday, and dates(eg : 20 Nov) from then on.

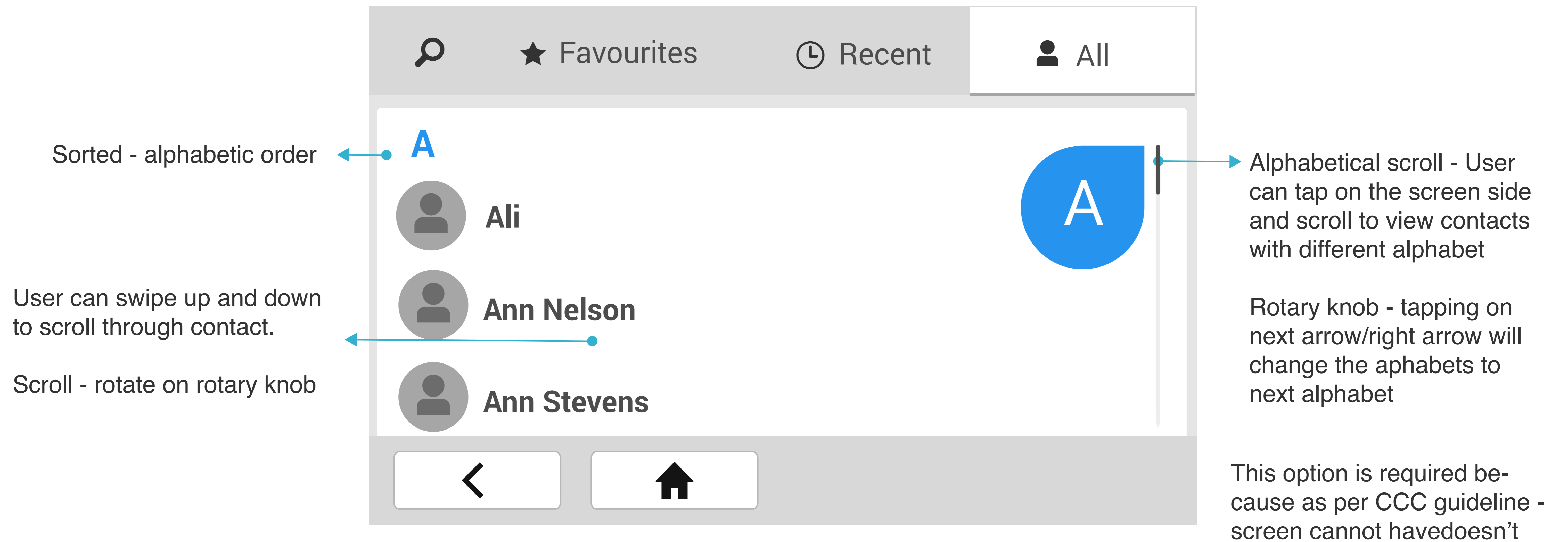
Indicates incoming/outgoing, attended/missed call

Time until 2 hr. ago will be displayed as 2hr. ago and from then on time will be displayed



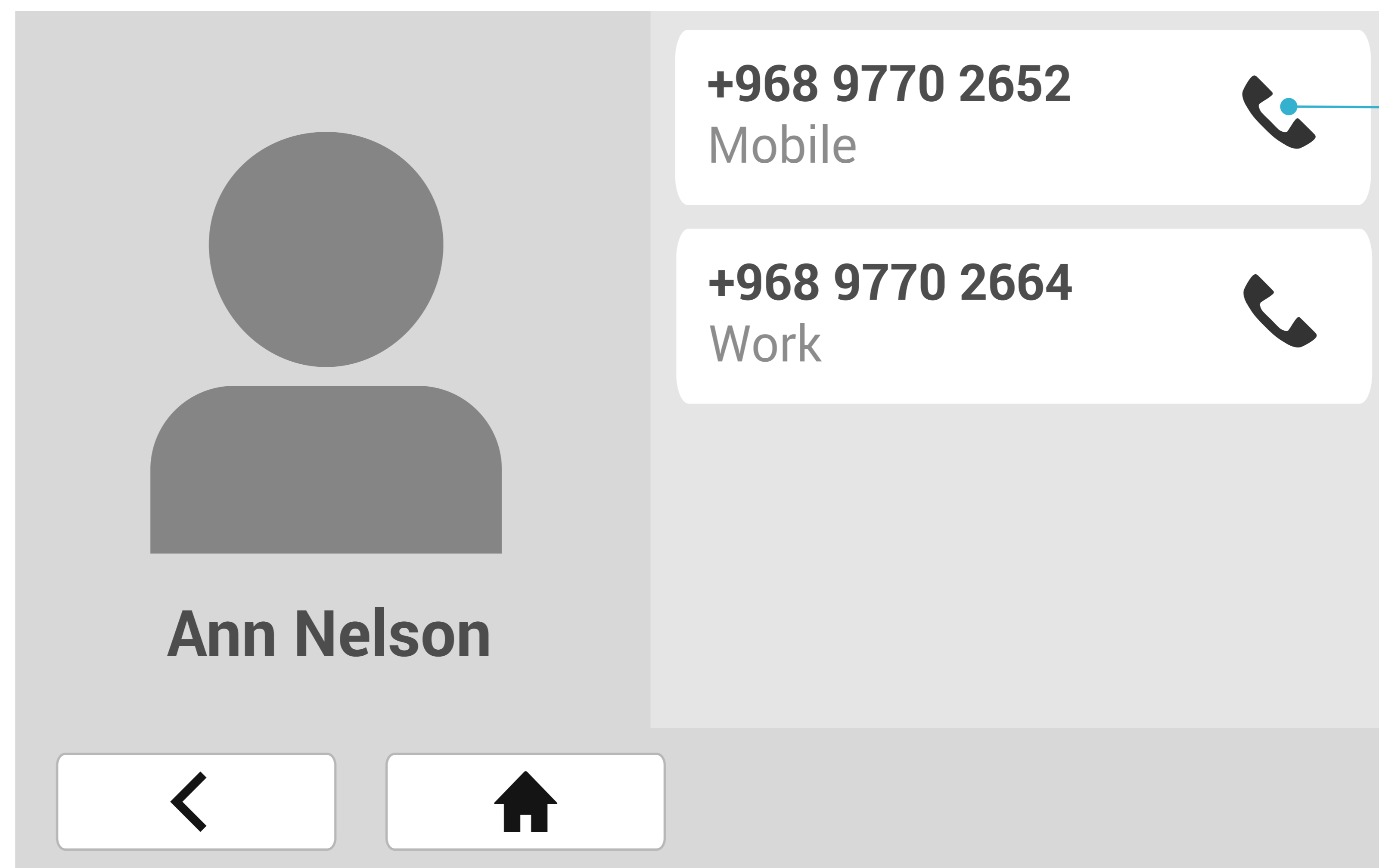
Indicates taping on the row/card/rectangle will initiate call

PEOPLE - ALL



PEOPLE - ALL - DETAILS

Tapping on a contact, user can view details



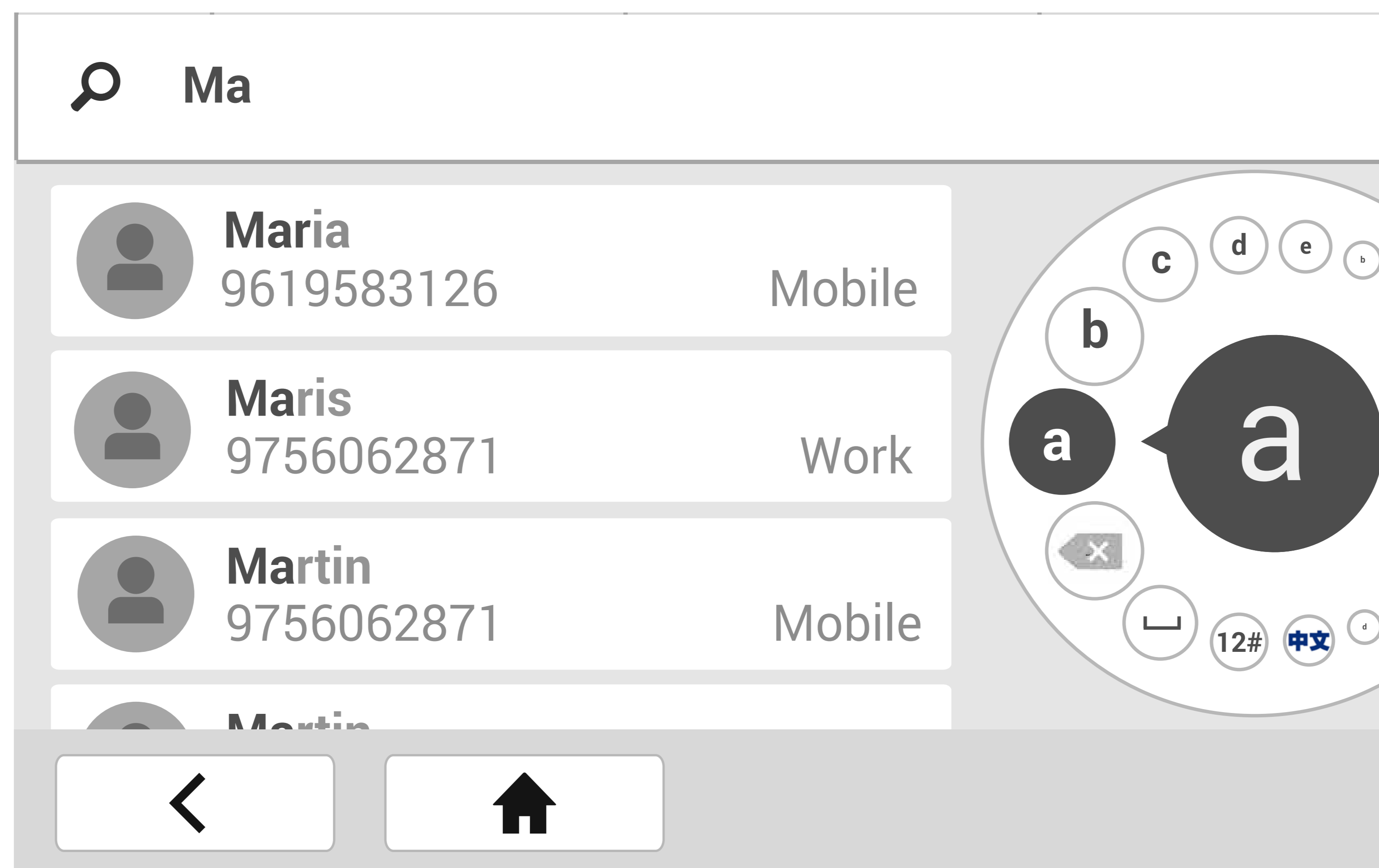
Tapping on this card will initiate call

PEOPLE - SEARCH

Tapping on search, below screen appears

The rotary keyboard will appear where screen doesn't have touch capability

Search results will be displayed as the list below the search box.



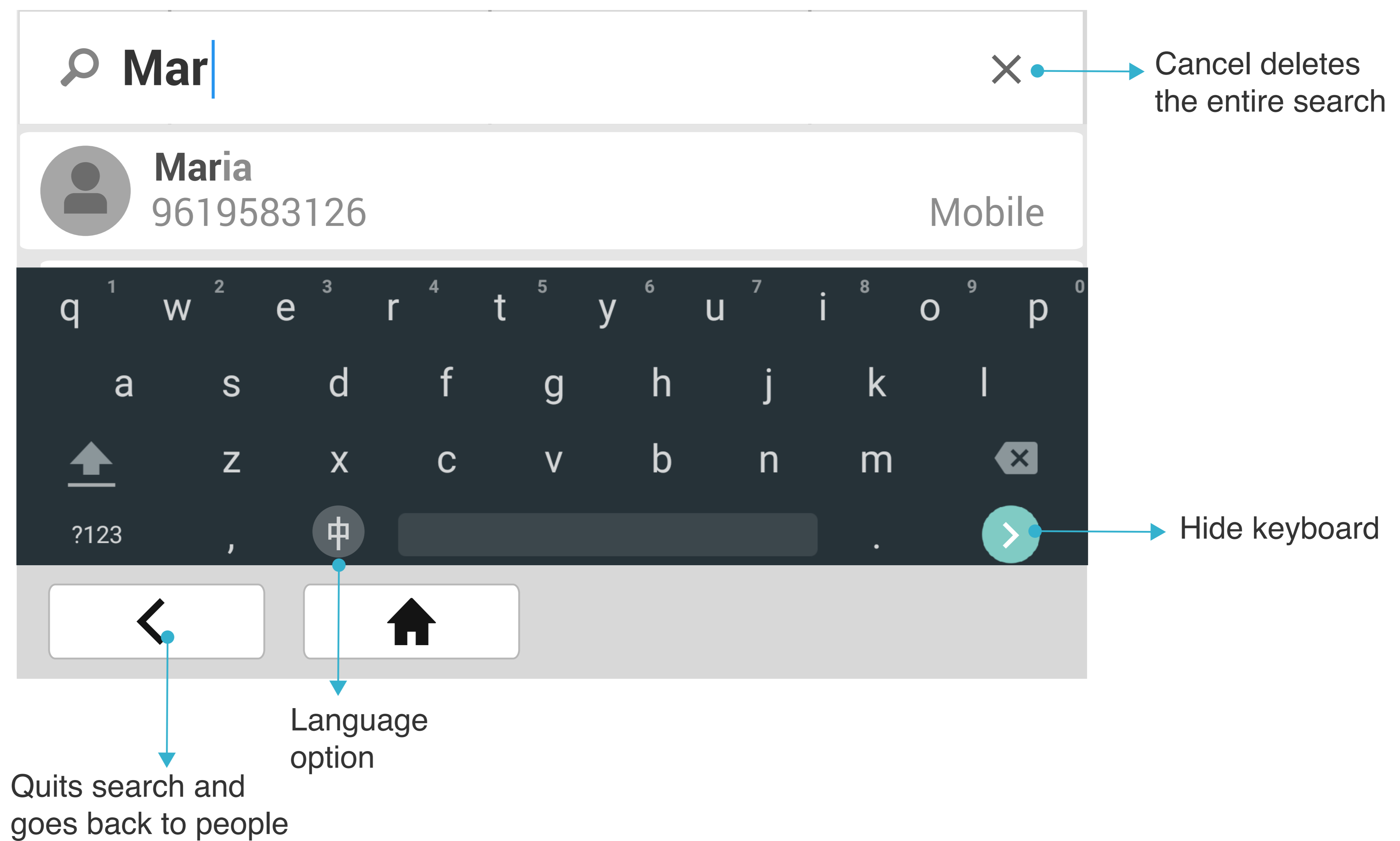
To select from the search list, user can tap on left arrow on rotary knob to enter the list area. If user wants to again move to rotary area, tap on right arrow on the rotary knob

PEOPLE - SEARCH (PARK MODE)

As per CCC : While text entry via keyboard (including rotary knob keyboard) is allowed, applications SHOULD NOT allow for text entry via keyboard while in drive mode.

Default screen when in park mode

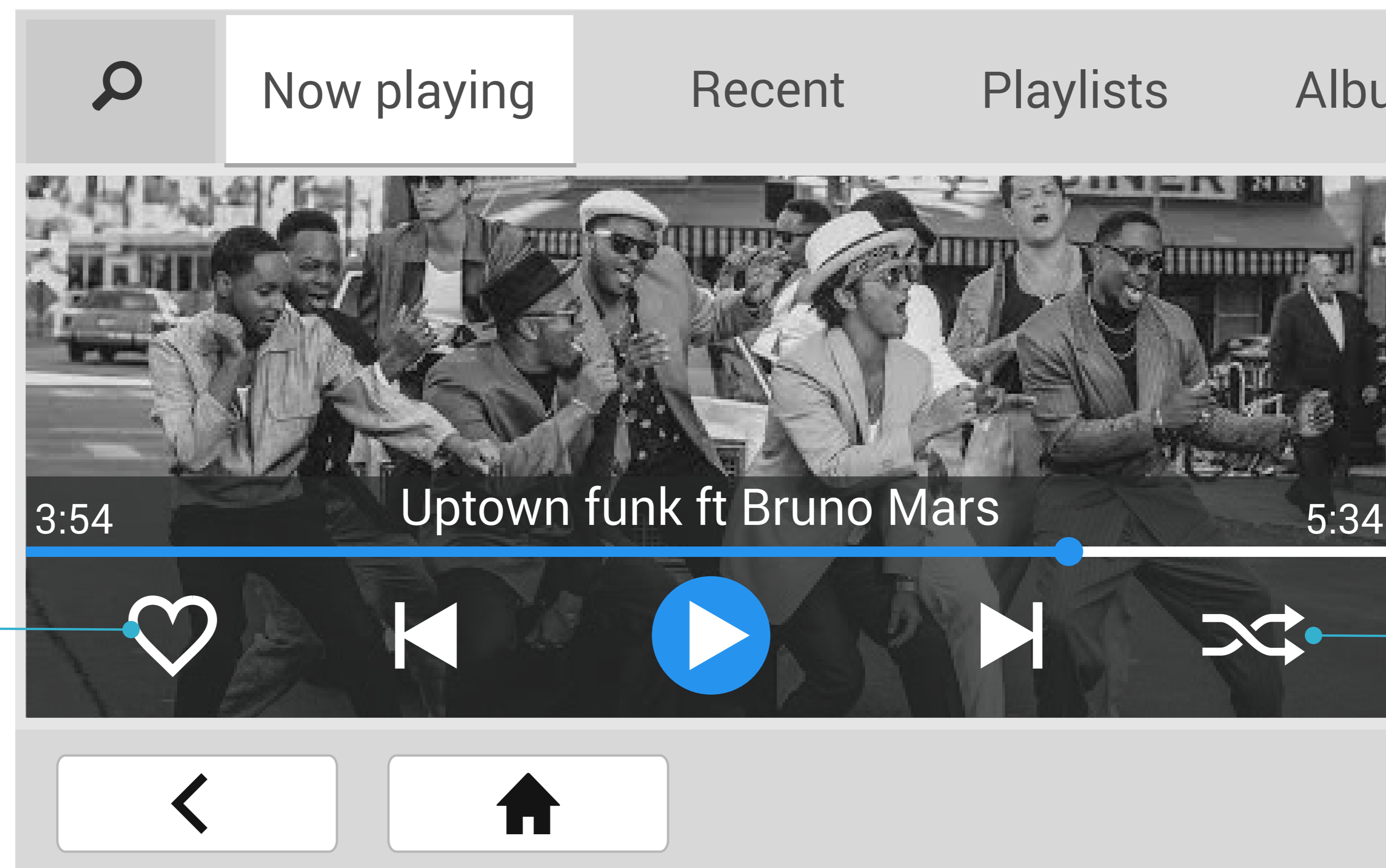
If user taps on search using the touch screen, then the keypad appears. User can search with numbers and alphabets



MUSIC PLAYER

User can tap on the visible tabs or keep swiping to left to view more and load next tab.

eg: To load “recent” user can tap on recent tab/ swipe to left to load it. Swiping to left again loads “playlists” and “artist”/“genres”/“songs” will become visible on the main tabs.

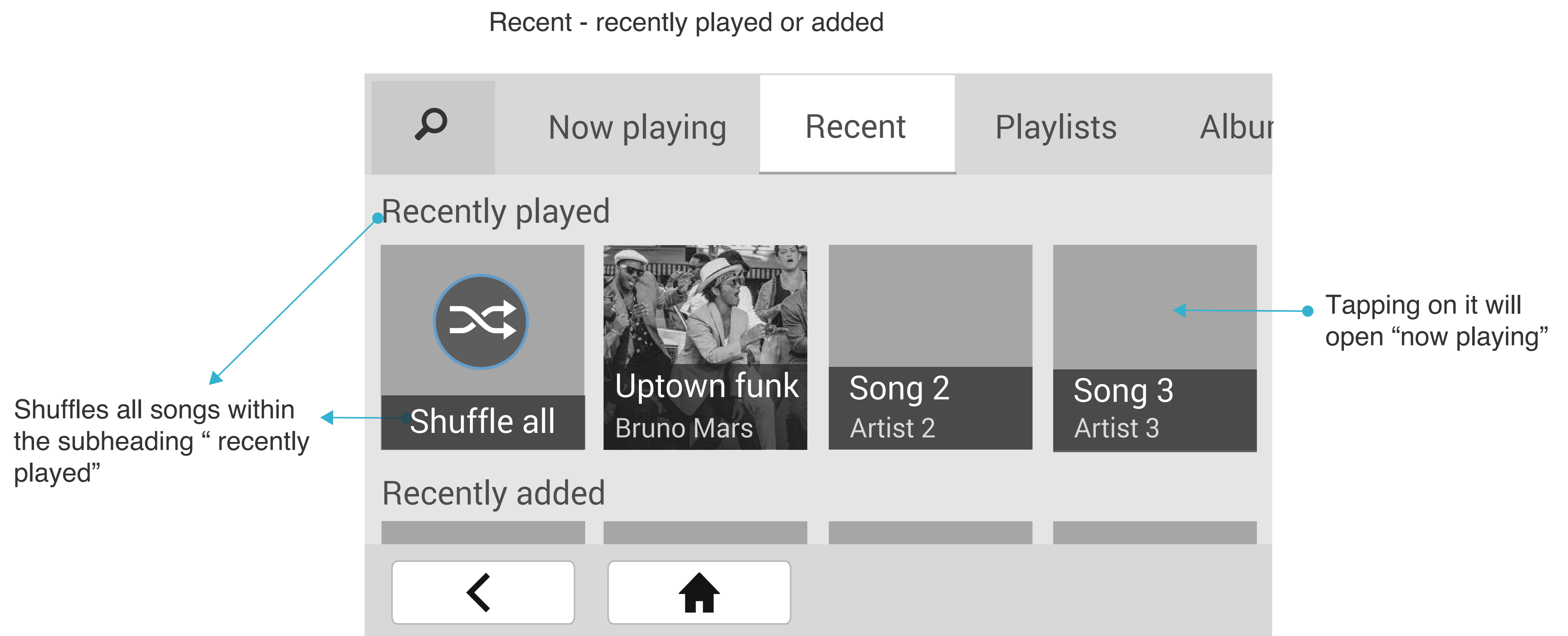


1. Now playing
2. Recent
3. Playlist
4. Albums
5. Artists
6. Genres
7. Songs

Adding to favourite in playlist and will appear more often in shuffle mode

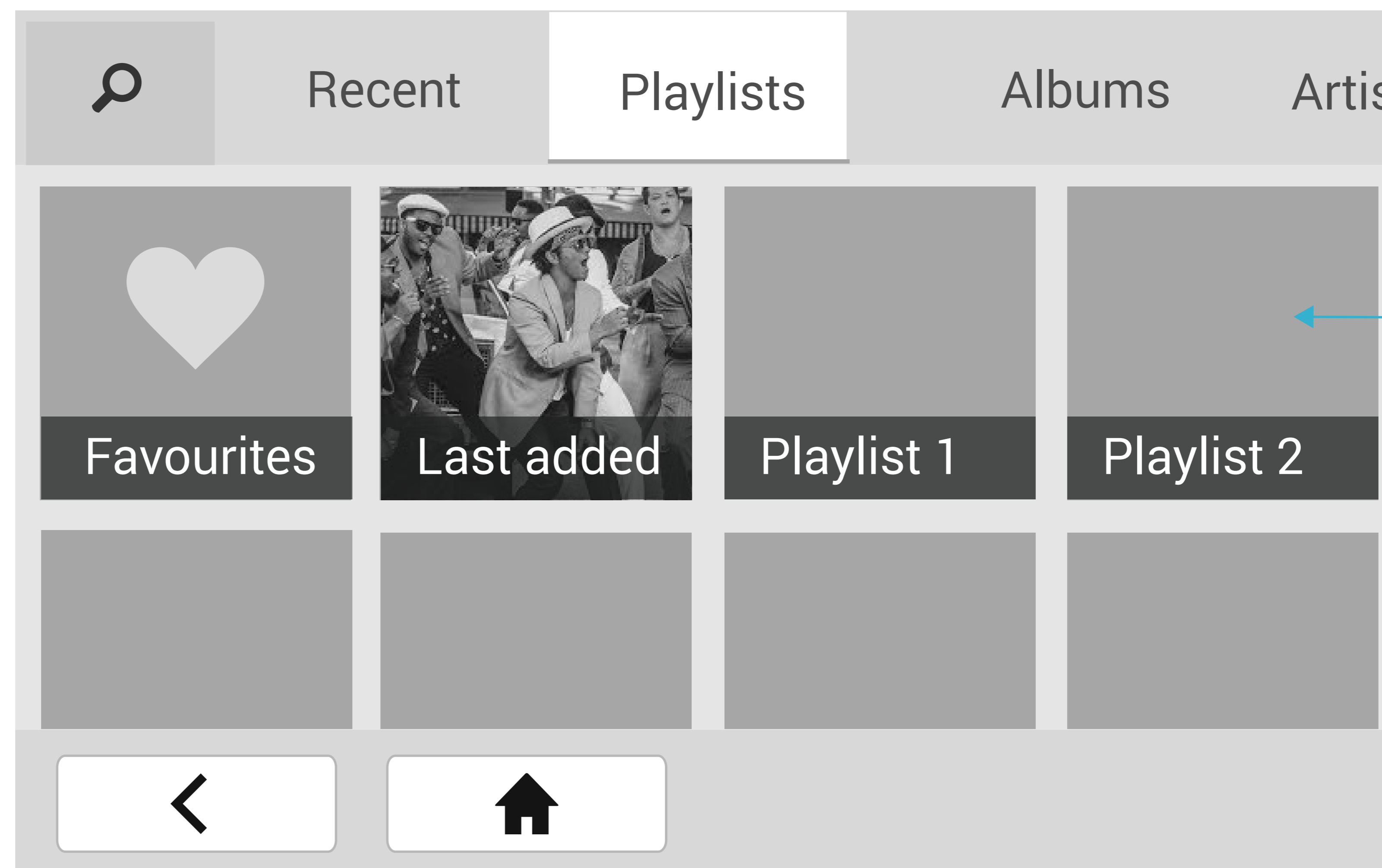
Shuffle within the selected mode. Eg. within playlist or within songs

MUSIC PLAYER - RECENT



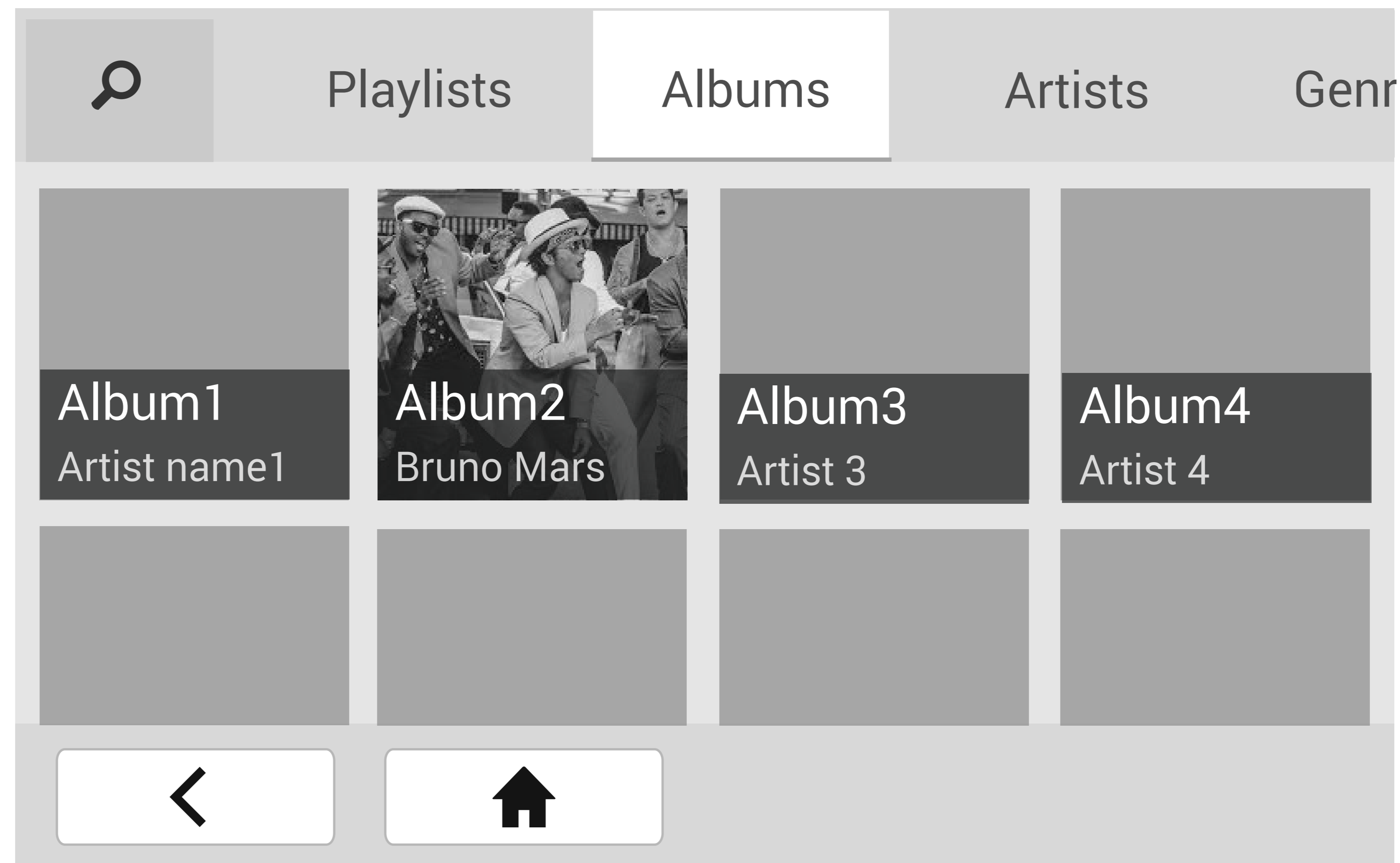
MUSIC PLAYER - PLAYLIST

Last added and favourites are auto created playlist



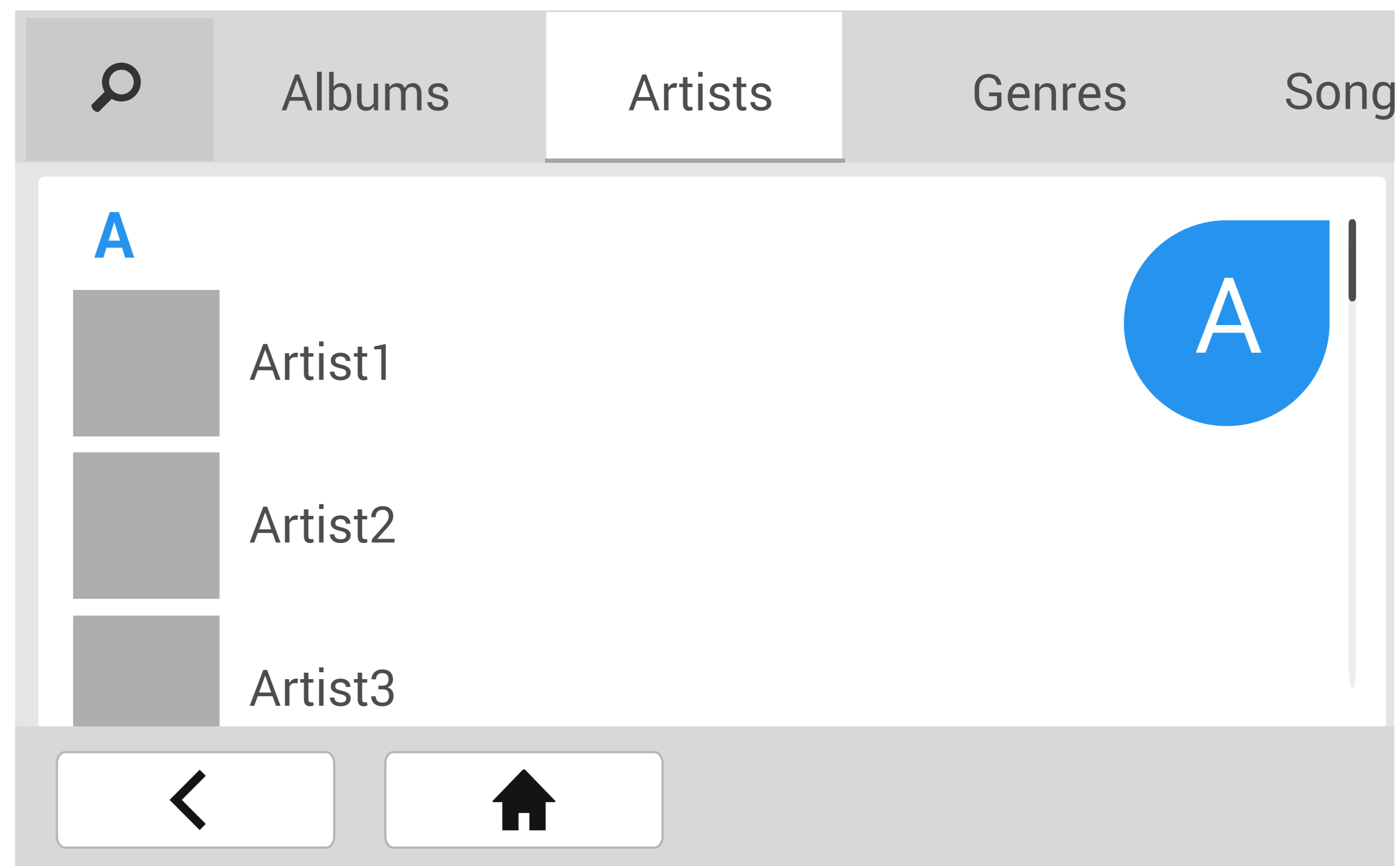
Cover will be album art of the songs in the list

MUSIC PLAYER - ALBUMS



MUSIC PLAYER - ARTISTS, SONGS & GENRE

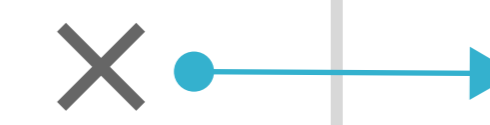
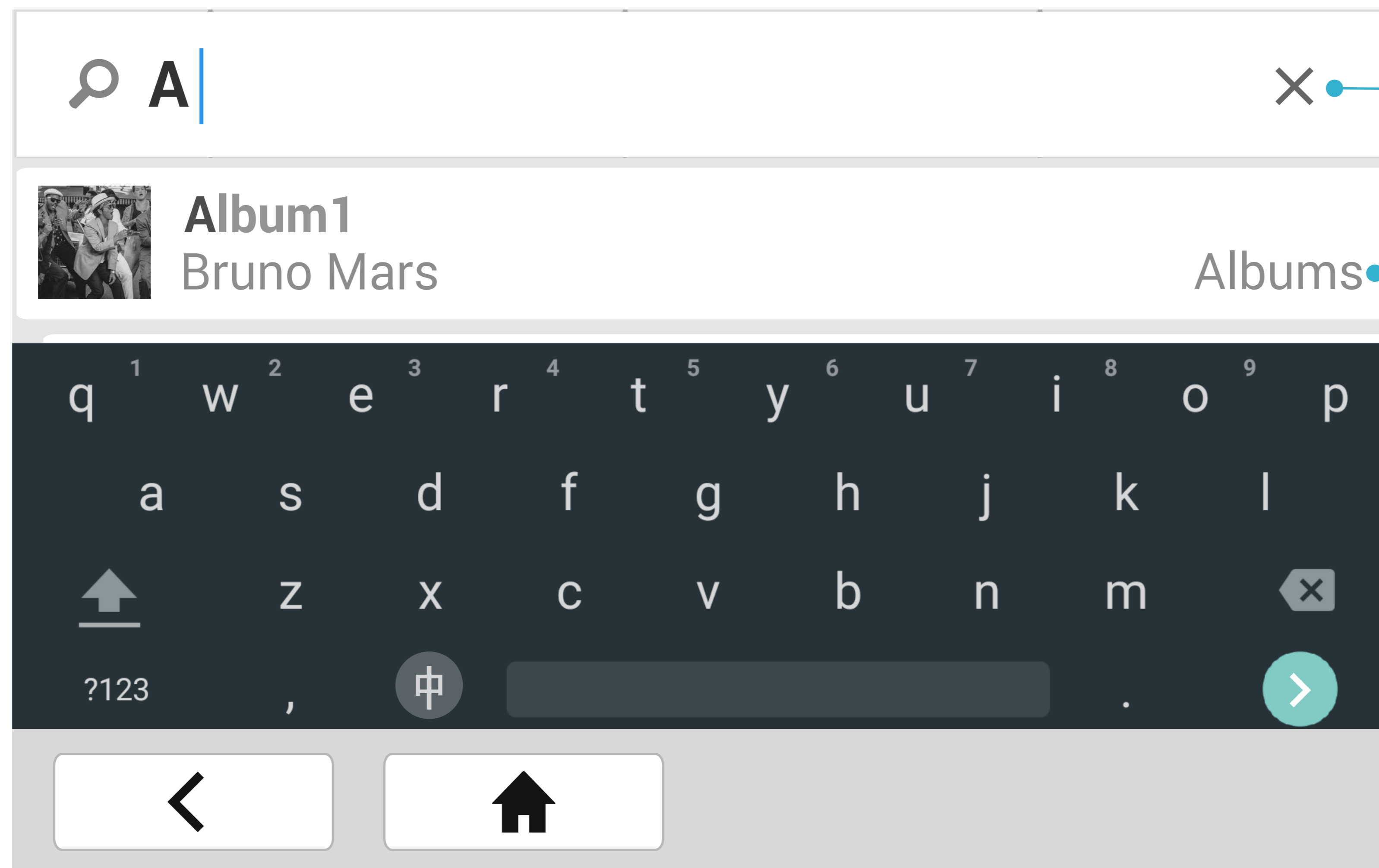
Sorted alphabetic order



Artist, songs and genres appear in list format

MUSIC PLAYER - SEARCH (PARK MODE)

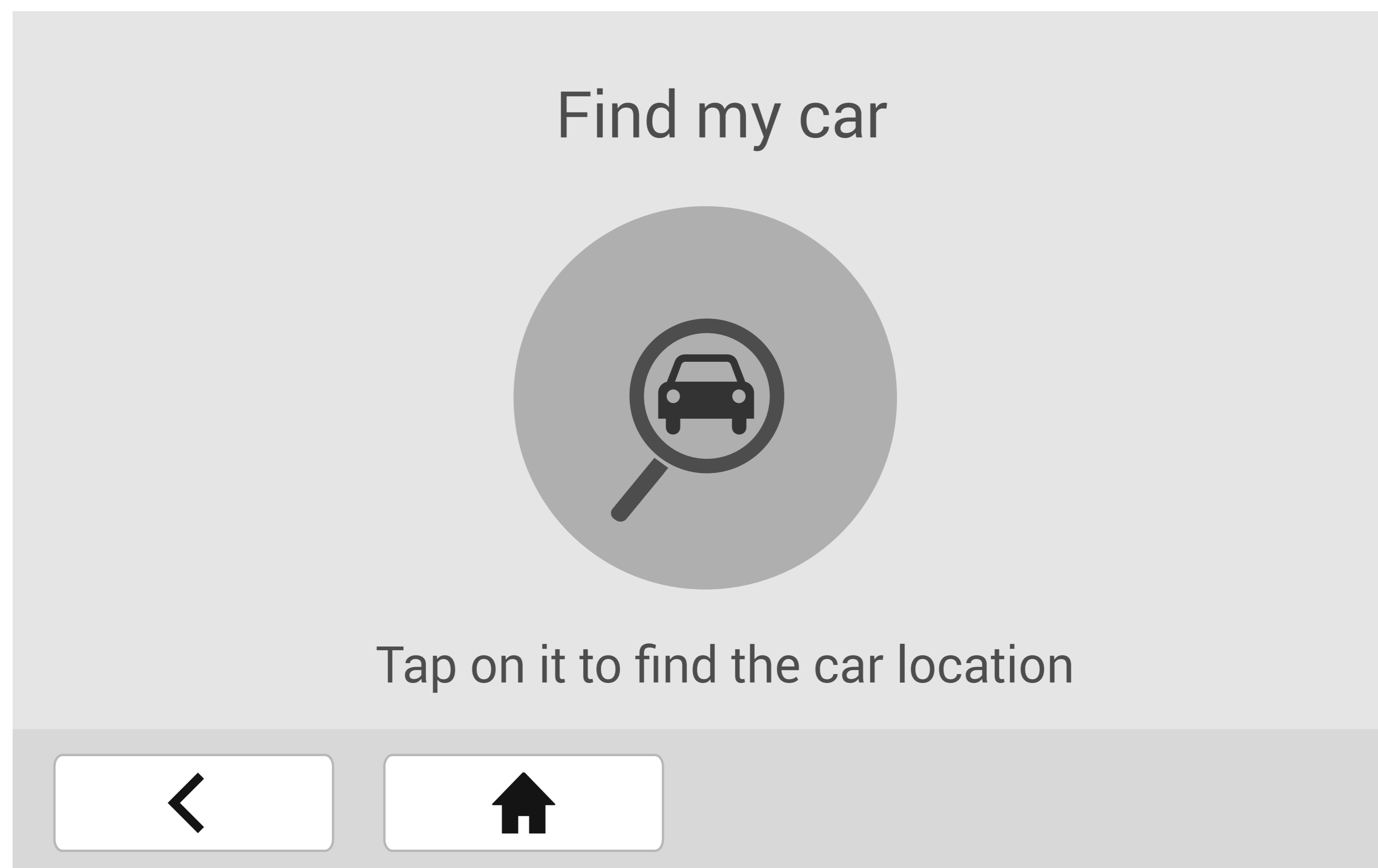
Tapping on search in park mode will launch below screen



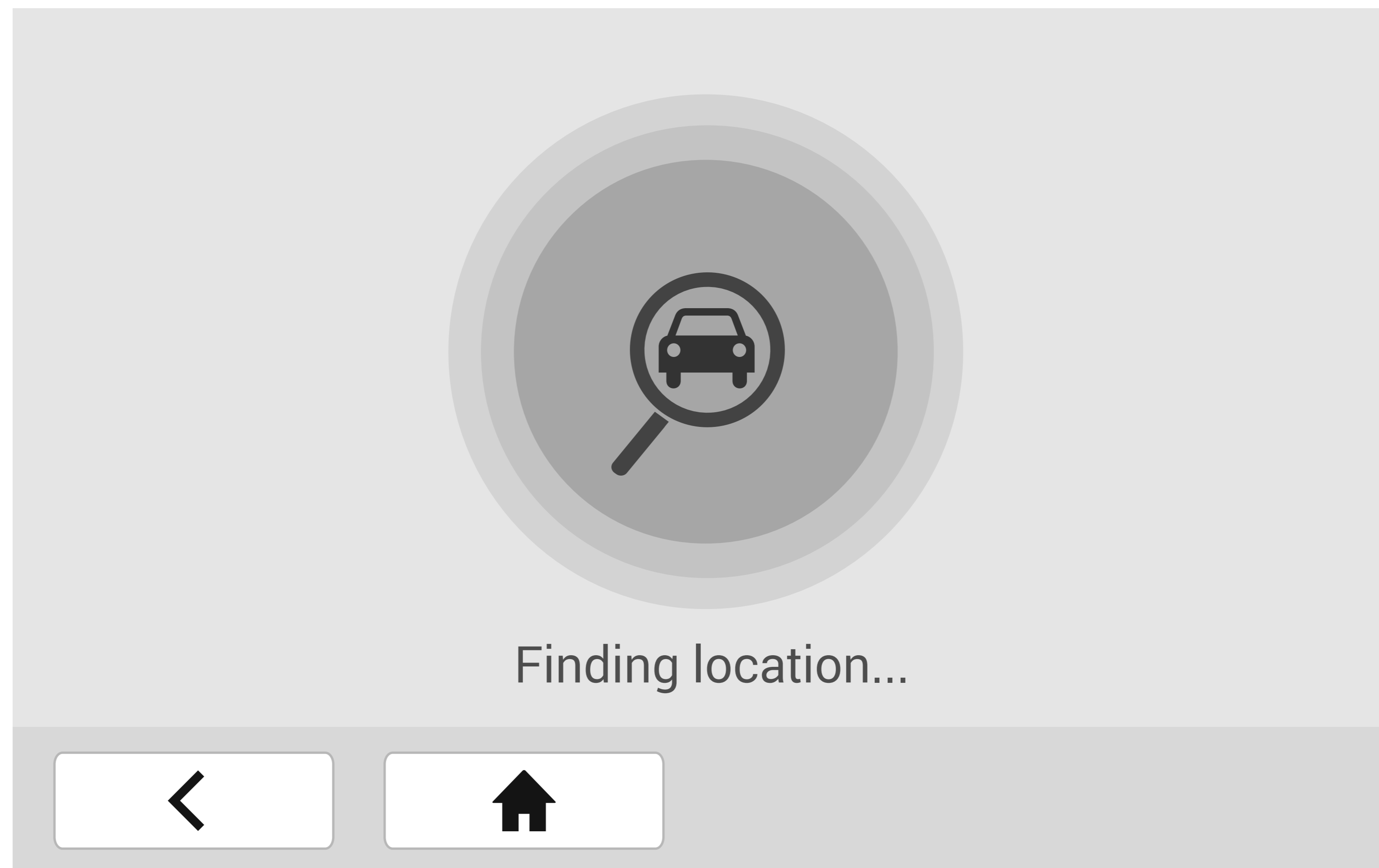
Shows the category - album/song/playlist etc

FIND MY CAR

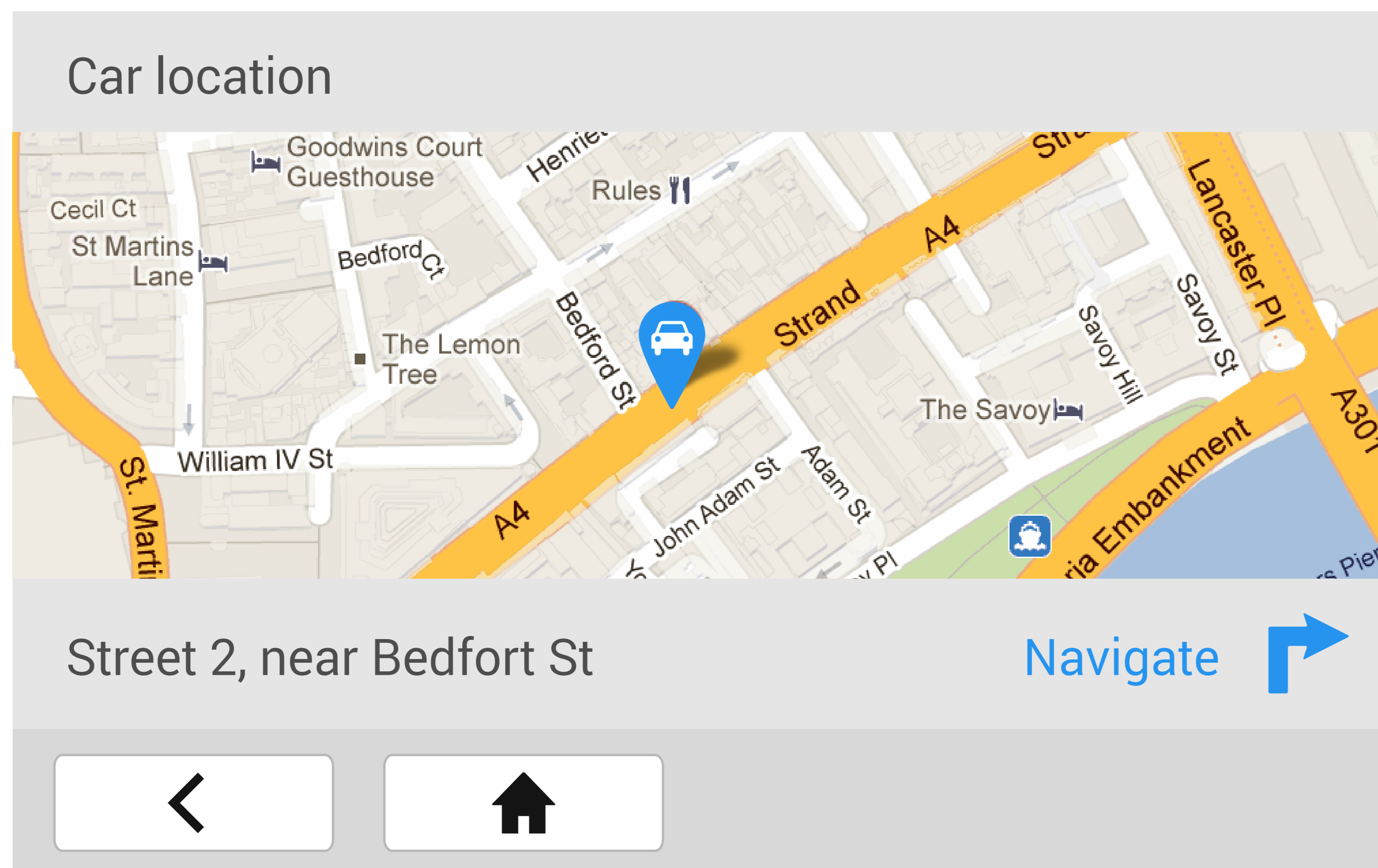
Find my car fetches the current location of car and navigate the user to the location



FIND MY CAR



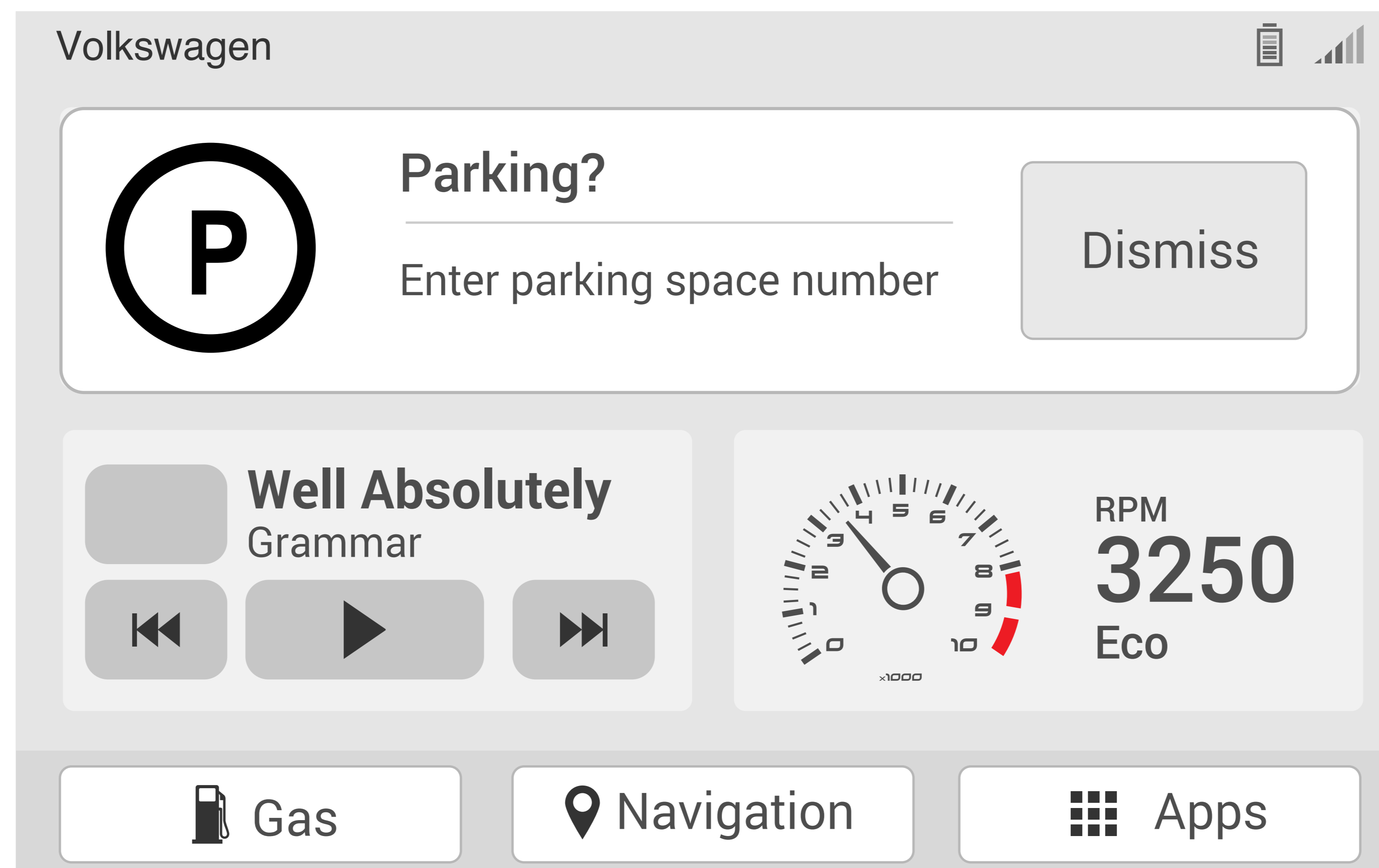
FIND MY CAR



Tapping on navigate will start navigation to the location.

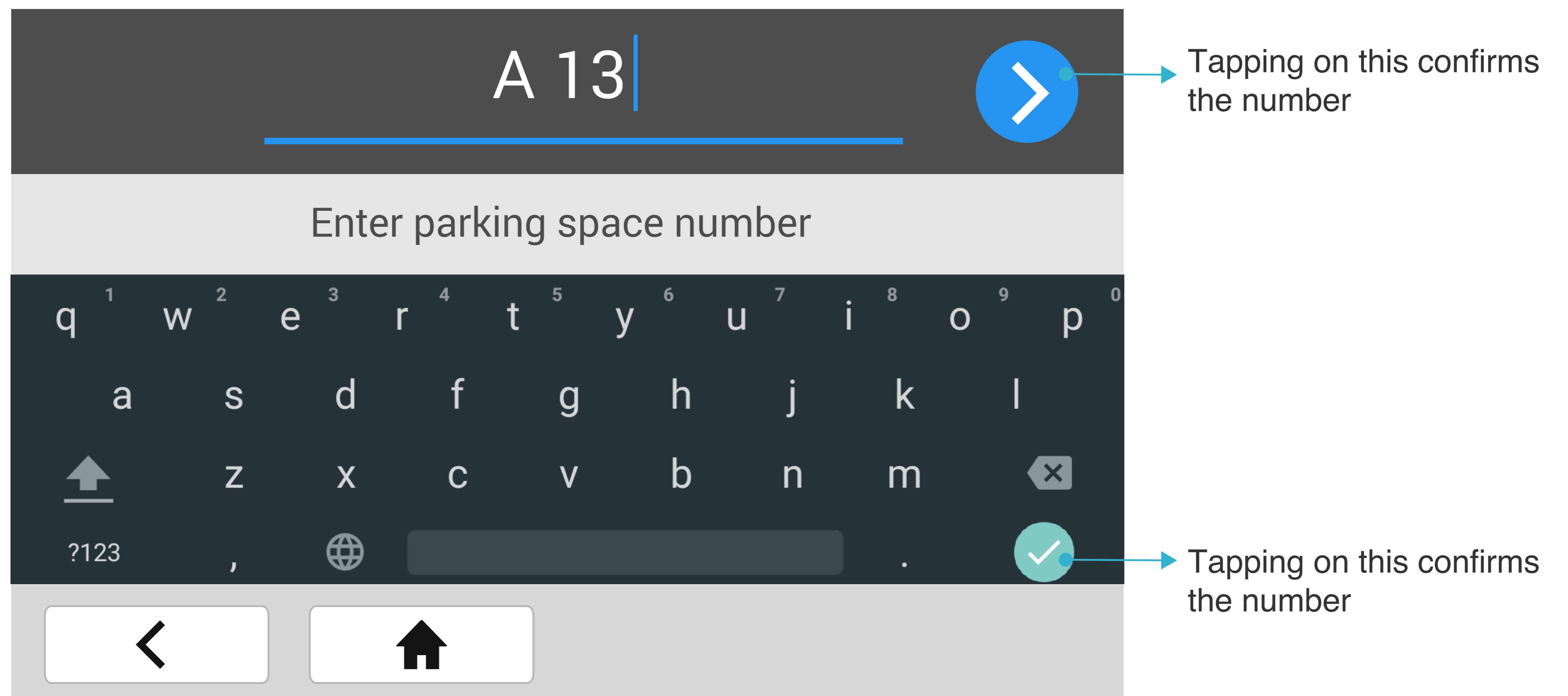
FIND MY CAR

If while parking, GPS signal is not available - it then gives user an option to enter the parking lot number. This msg appears when you disconnect the phone from car.

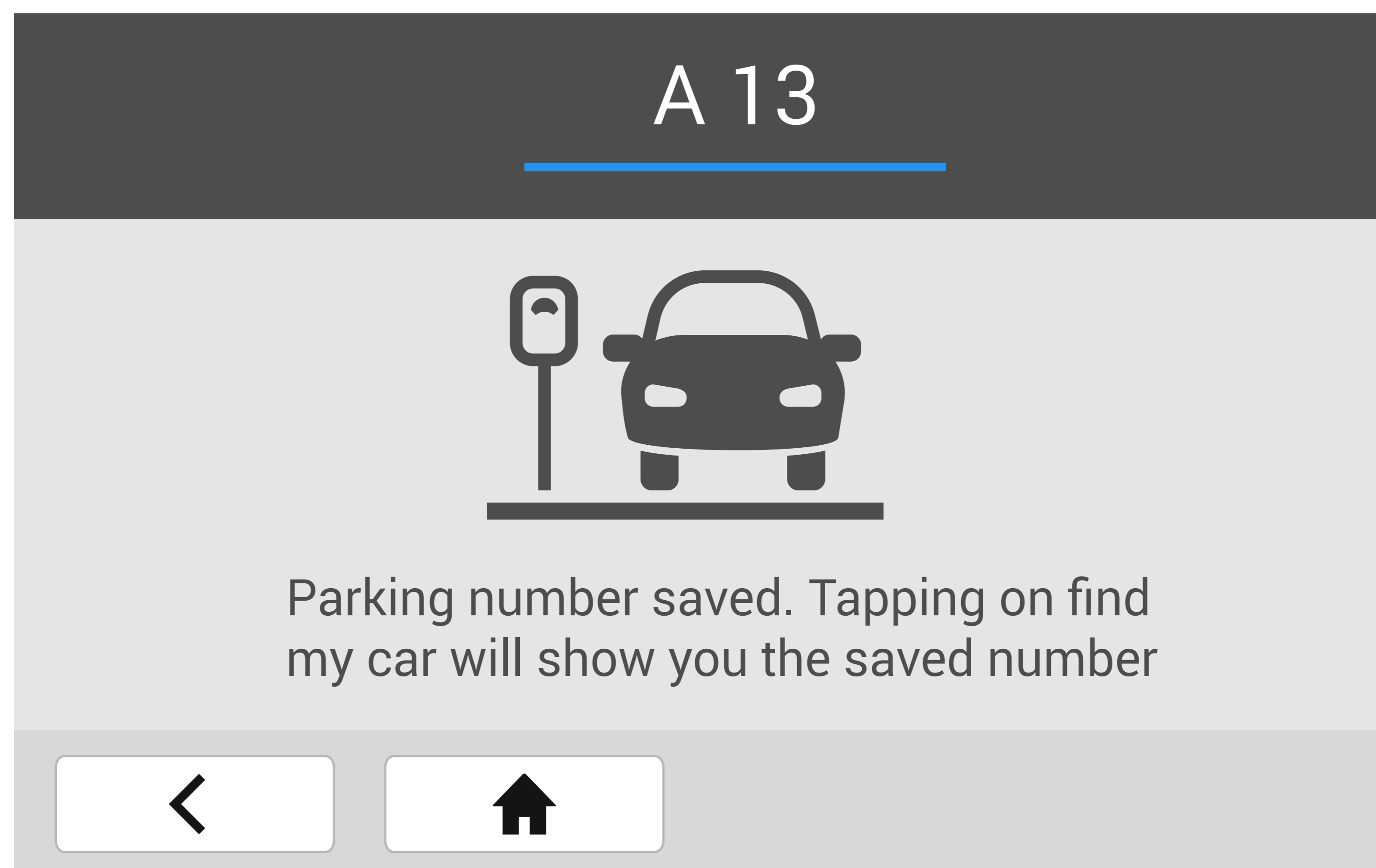


FIND MY CAR

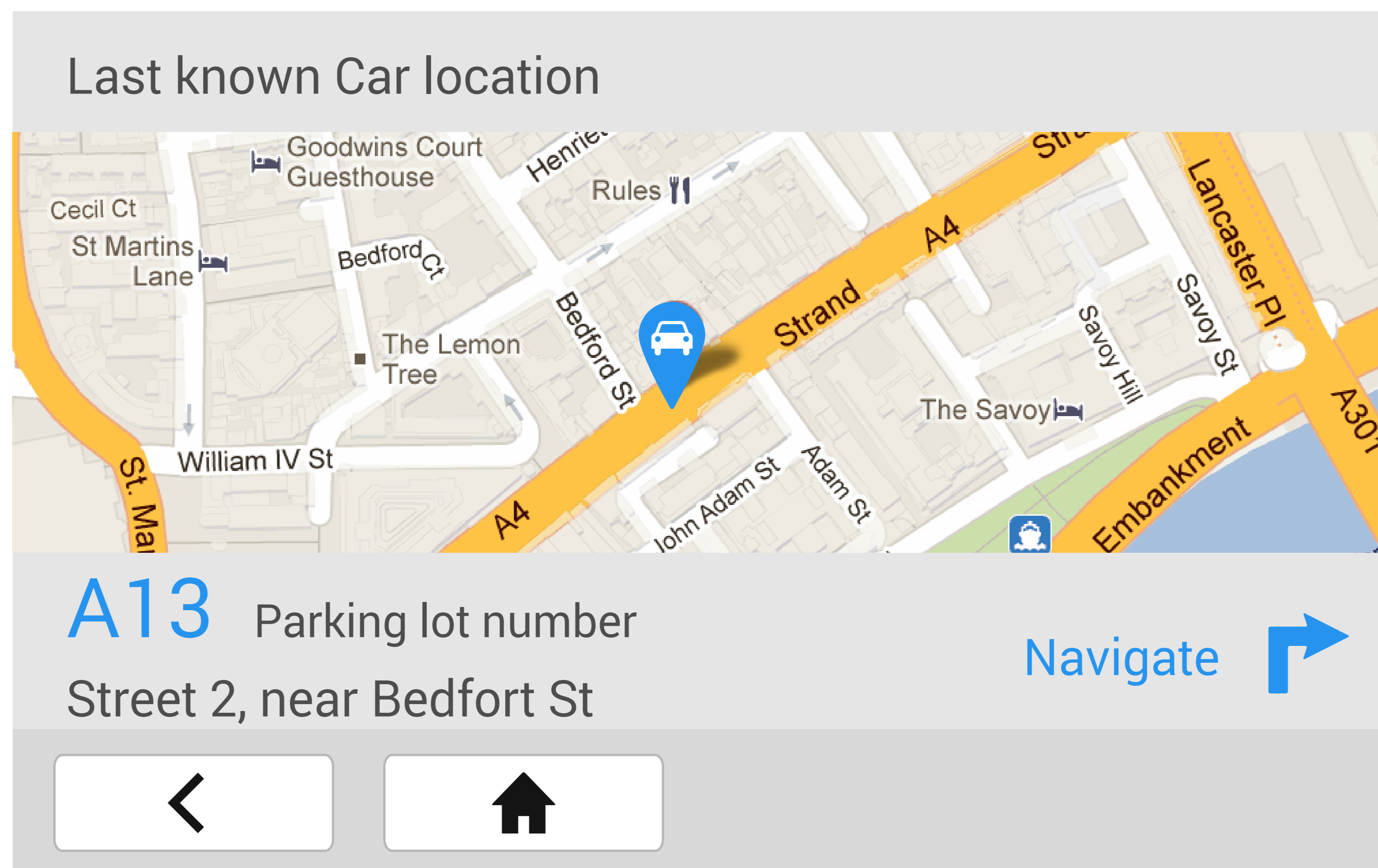
Tapping on the parking notification, user gets an option to enter the parking slot number



FIND MY CAR



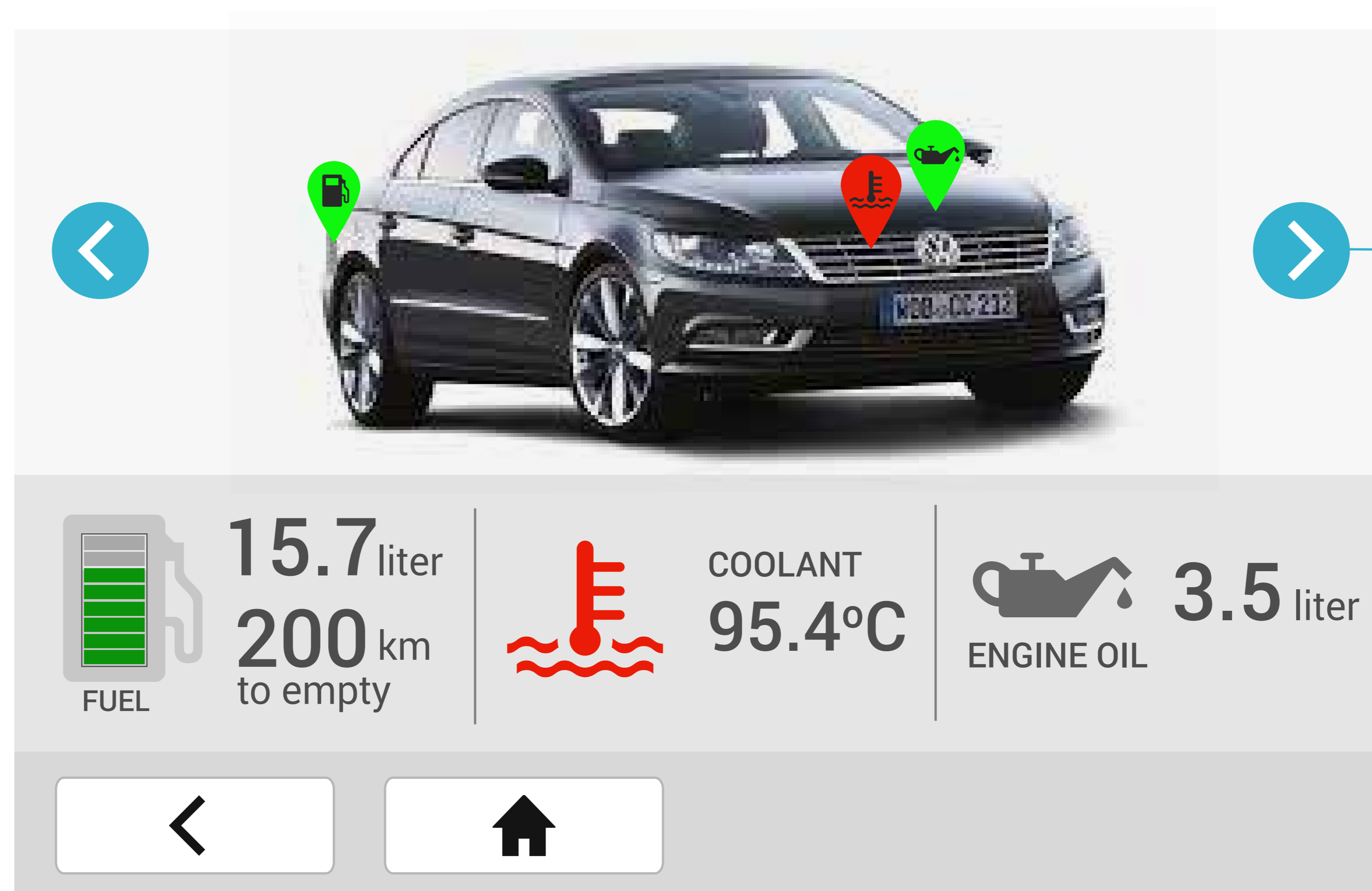
FIND MY CAR



Tapping on navigate will start navigation to the location.

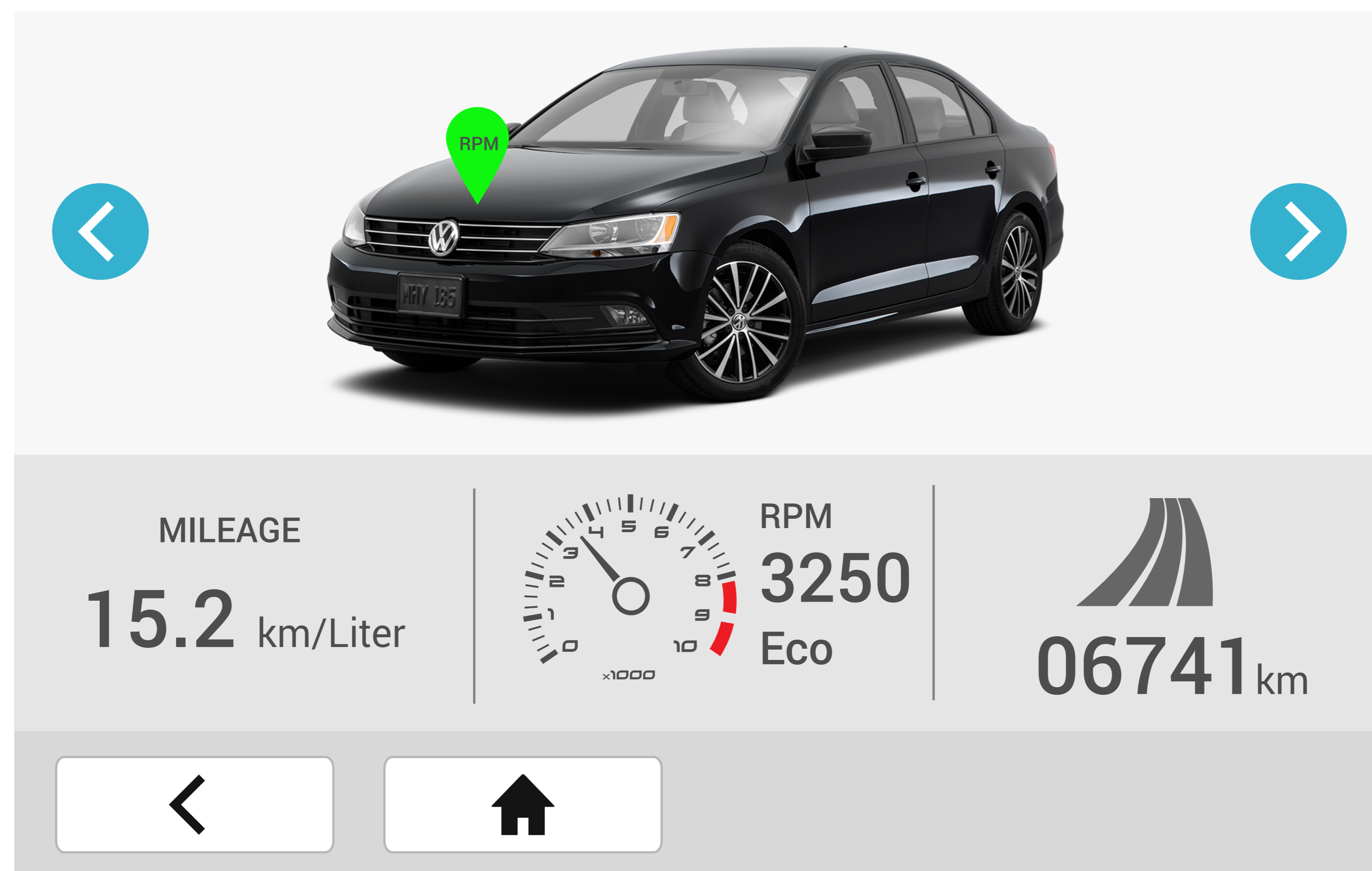
The user can tap on left/right arrow button or swipe right/left to view more details and the car rotates at the same time.

It will first display the image that has critical value.



Tapping on this automatically rotates the car and new OBD parameters loads

The user can tap on any button or zoom in an area to view details.



Tapping on coolant will give user option to take action to resolve the issue. On tapping on “contact” will initiate call and tapping on book service will open service page (will be detailed along with “services”).

