TOYOTA AUGMENTED REALITY APP - USER MANUAL

TOYOTA

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/INTRODUCTION TO AR //OVERVIEW

The basic requirement for any AR experience is the ability to create and track a correspondence between the real-world space and a virtual space.

The Toyota AR App displays 3D content together with a live camera image, the user experiences augmented reality: the illusion that the accessories are part of the real world.

/INTRODUCTION TO AR //BEST PRACTICES AND LIMITATIONS

AR tracking can produce impressive accuracy, leading to realistic AR experiences. However, it relies on details of the device's physical environment that are not always consistent.

To enjoy a high-quality AR experiences, have a look at the following recommendations:

- Provide a well-lit indoor lighting conditions (dealership)

- AR tracking involves image analysis, which requires a clear image

- Tracking quality is reduced when the camera can't see details, such as when the camera is pointed at a blank wall or the scene is too dark.

- Avoid excessive motion - too far, too fast, or shaking too vigorously – this results in a blurred image, reducing tracking quality

- Brighter car paints - e.g. Silver provide a better contrast for AR tracking

/APP USER FLOW //START SCREEN

Welcome to Toyota AR

Enter IP/Server name

Confirm
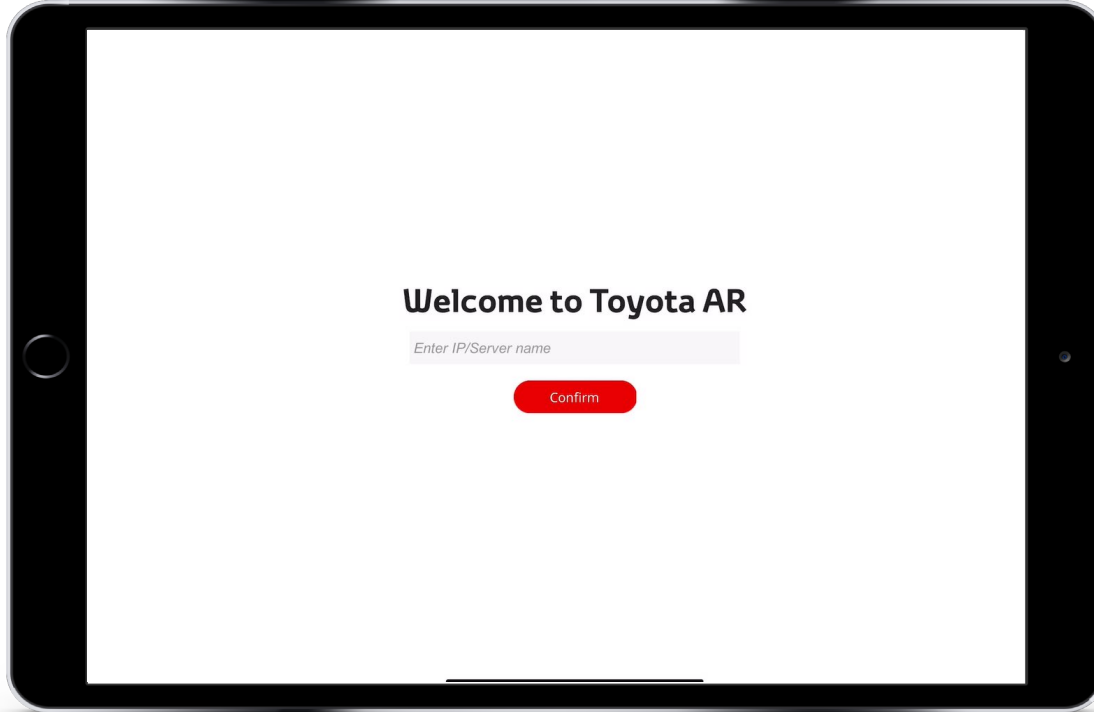
- The first screen invites you to start the Toyota AR experience

- Please turn on your Wi-Fi to use Toyota AR

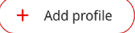- The connection to the server is started by selecting the Confirm button

/APP USER FLOW //PROFILE MENU

Who is using Toyota AR?

Alexander-James   Laura   Katelyn

+ Add profile
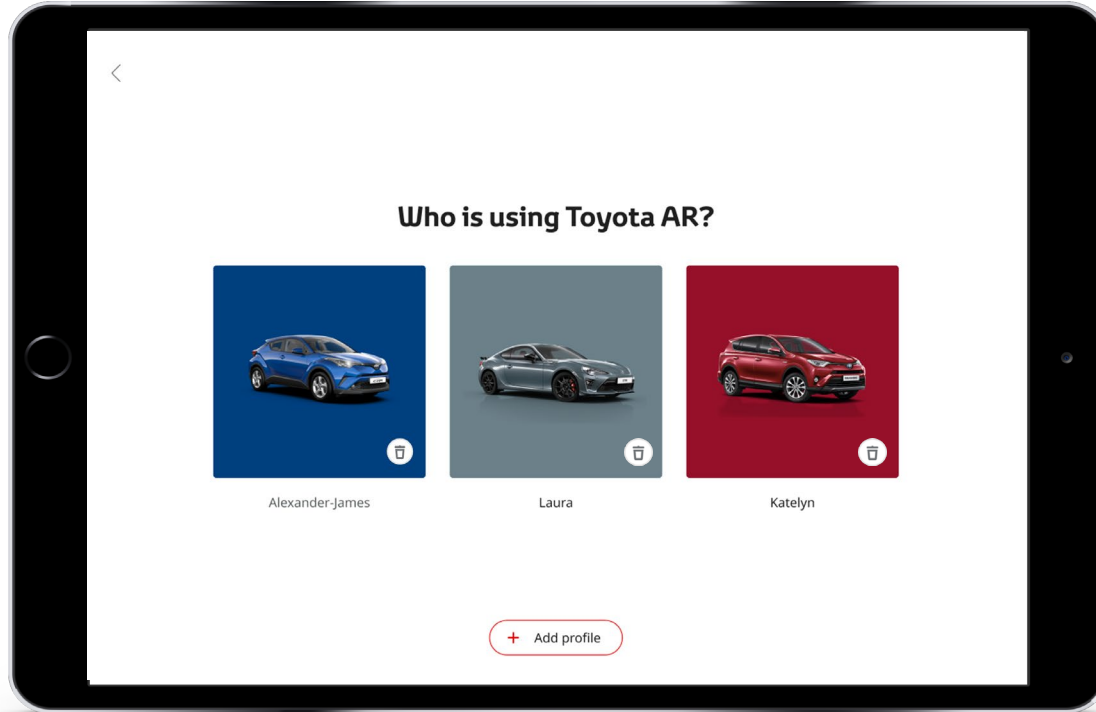
- Once you are connected to the server you will enter the profile menu

- The profile menu gives you the possibility to create your own personalized user profile

- Or to select an existing profile

/APP USER FLOW //PROFILE MENU
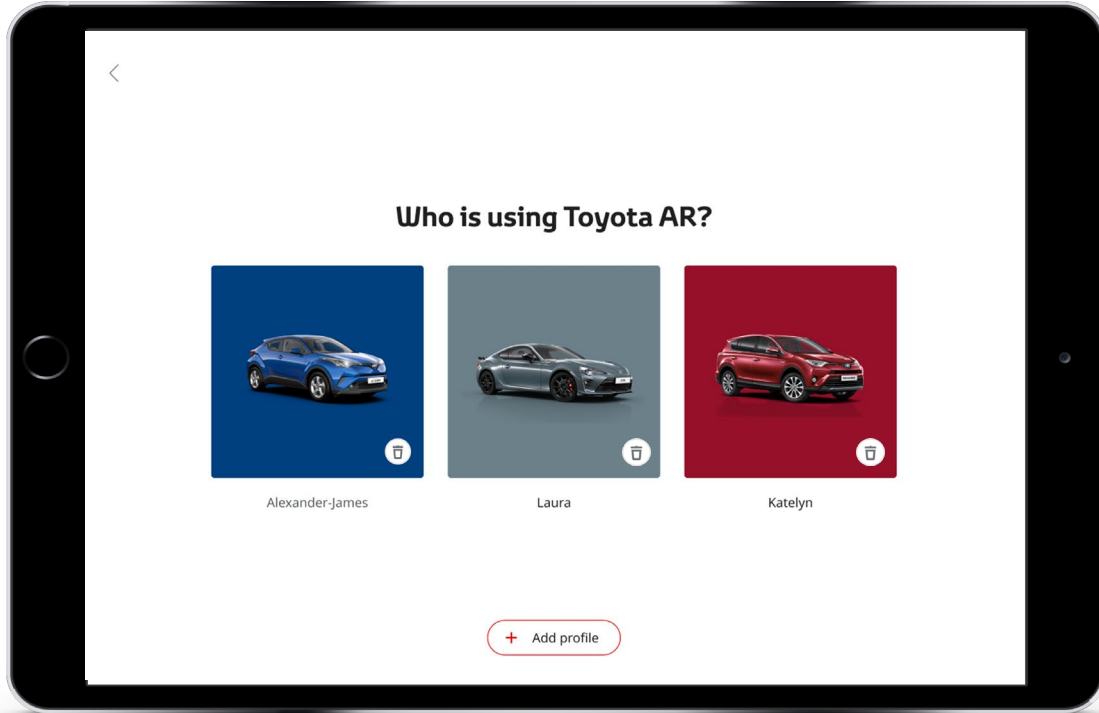
- To create a new profile select ⊕ Add profile button

/APP USER FLOW //PROFILE MENU

Welcome to Toyota AR

Select country ⌄

Confirm
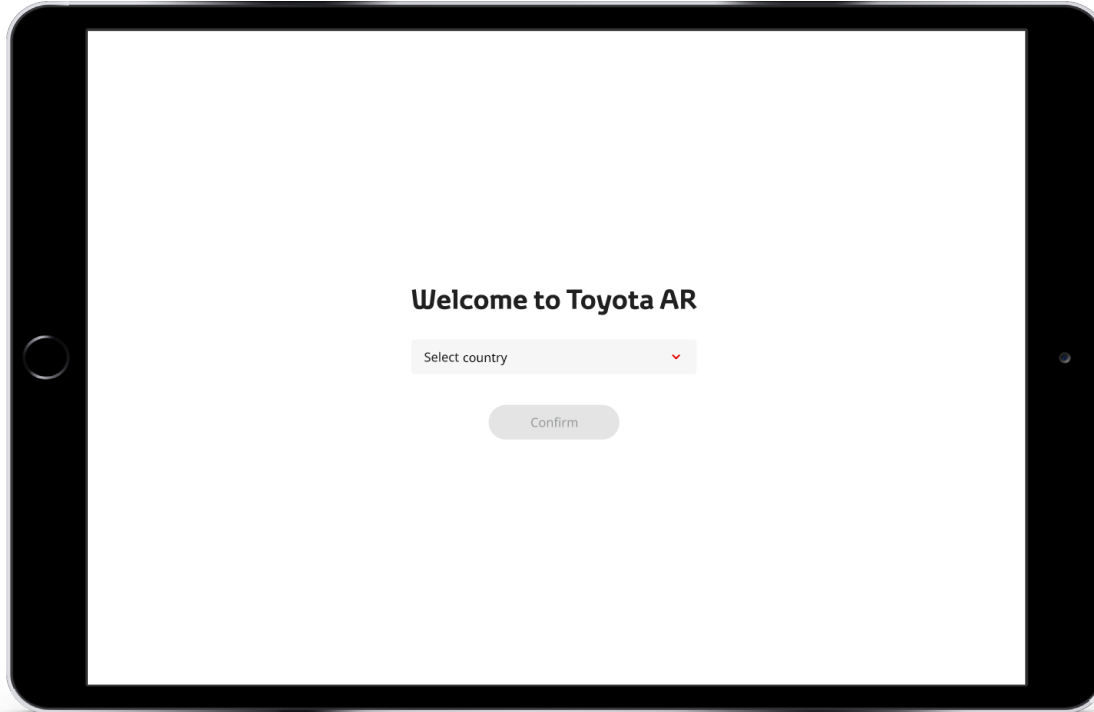
- In the first step of the profile creation you need to select your dealership location

- You do this by selecting:
  - Country
  - Region
  - City
  - Dealer name

- Once you found your dealership select the **Confirm** button
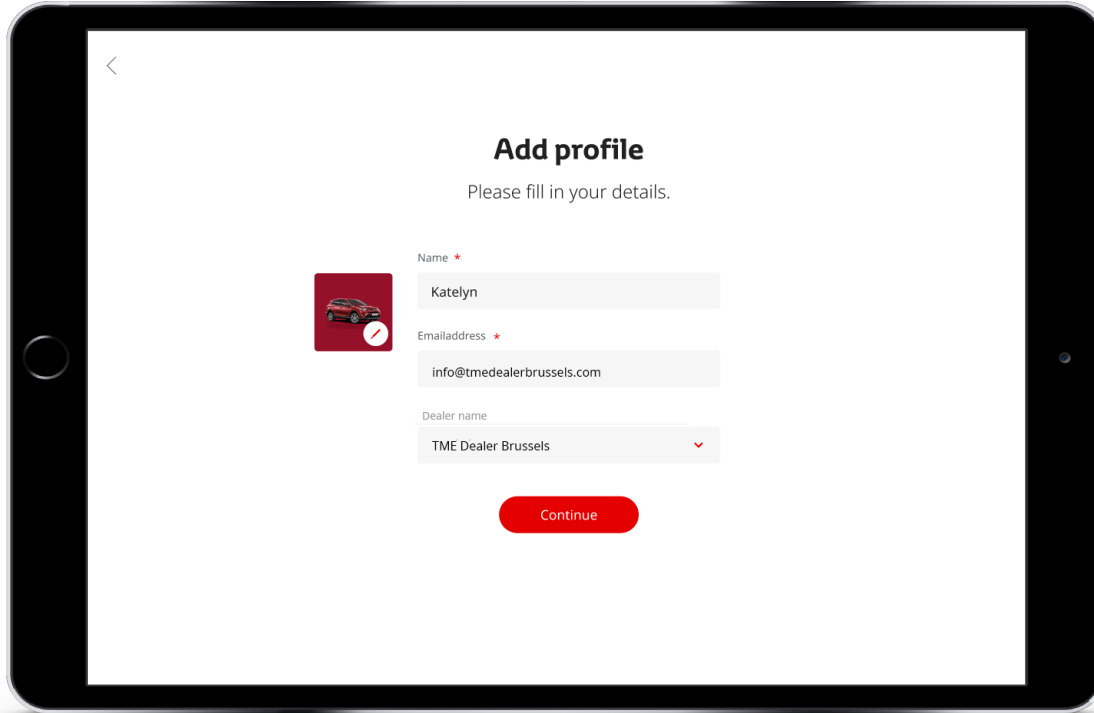
/APP USER FLOW //PROFILE MENU
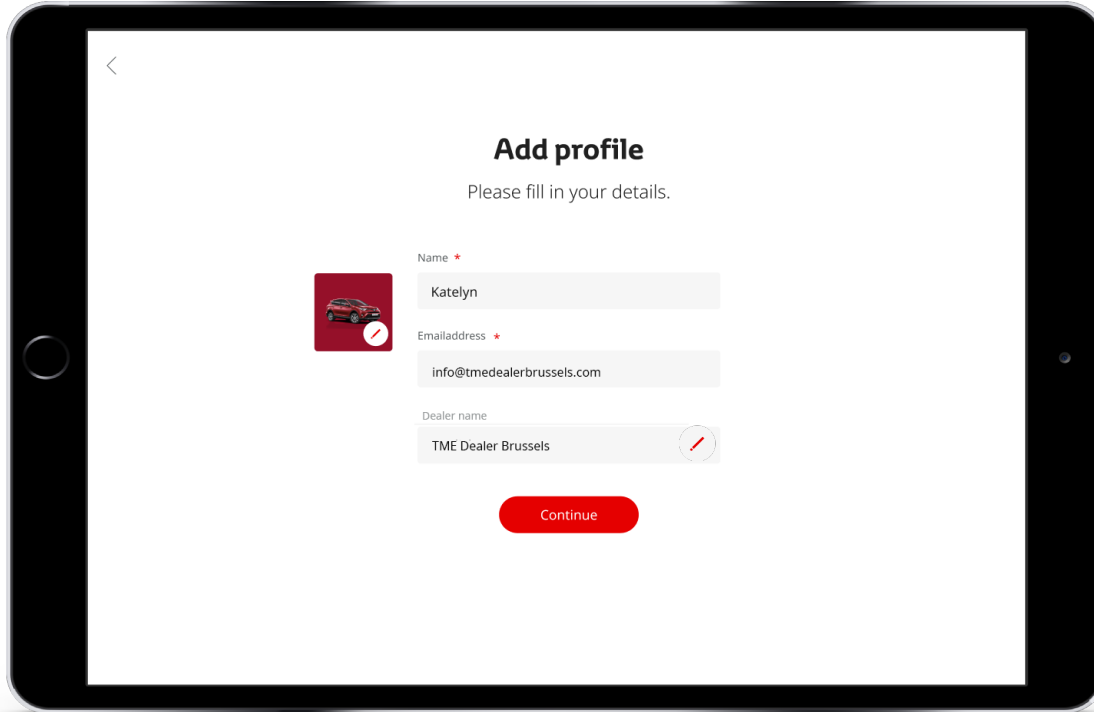
- To finalize the profile creation enter the name of your profile

- Add the email address that you would like to use

- And select an avatar by selecting the ✏ icon

/APP USER FLOW //PROFILE MENU
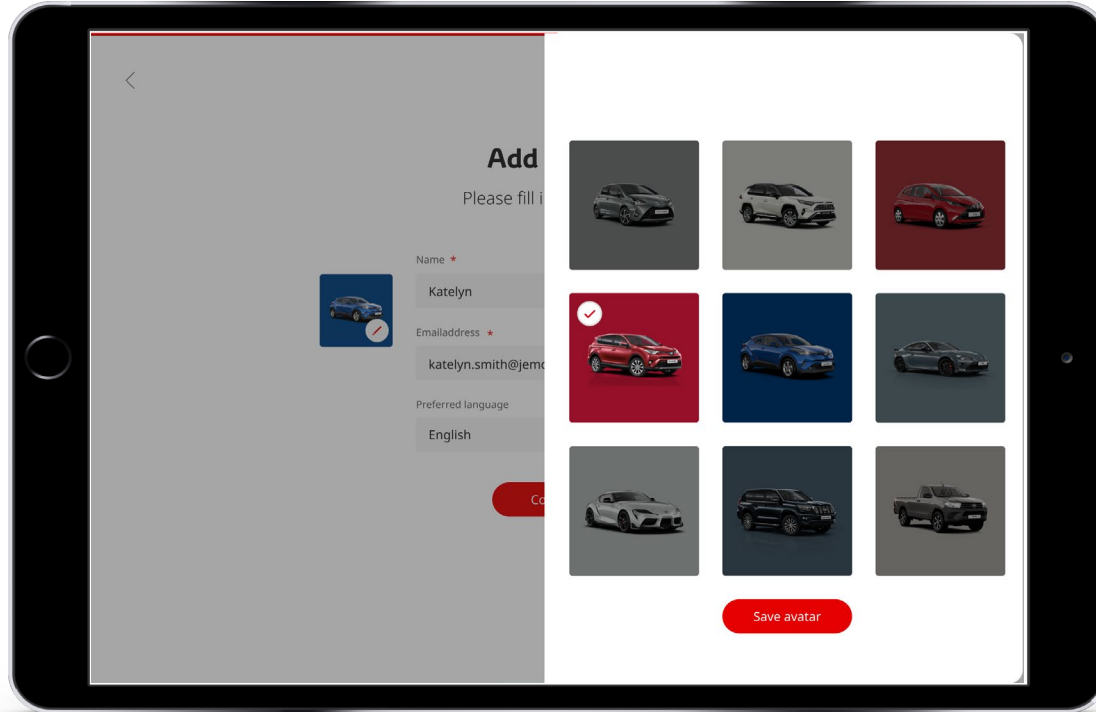
- On the avatar page you can choose an icon to show on the profile selection screen

- Tap on an image in the selection shown and confirm your avatar selection with the **Save avatar** button
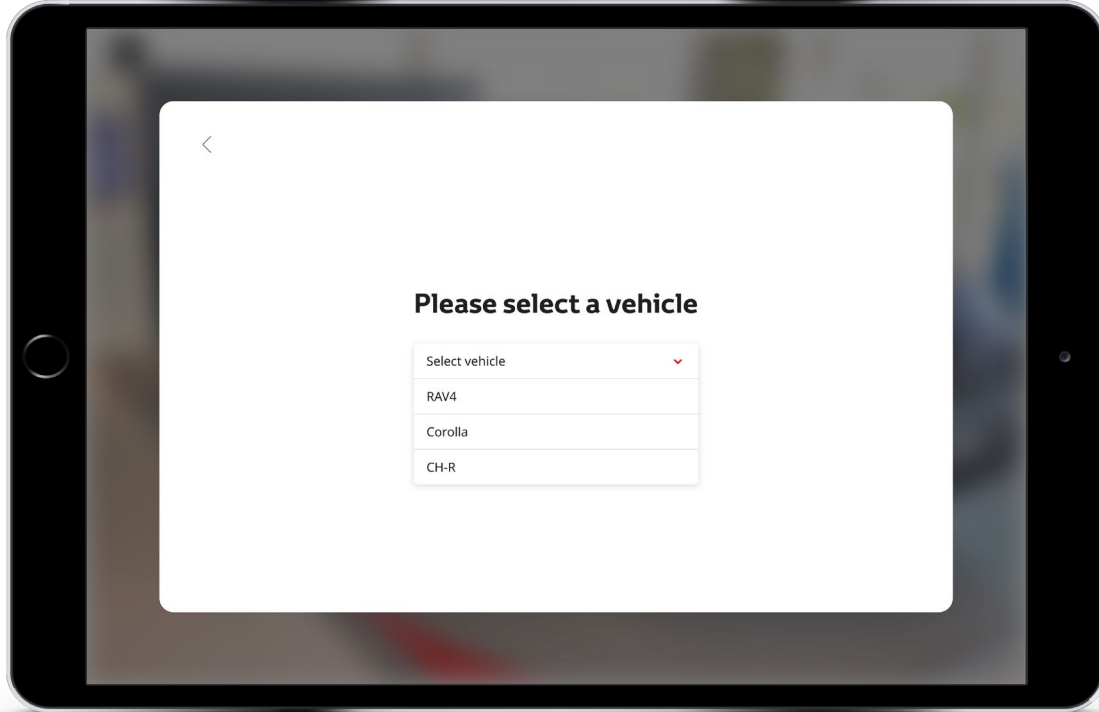
/APP USER FLOW //PROFILE MENU

- Once everything is set select
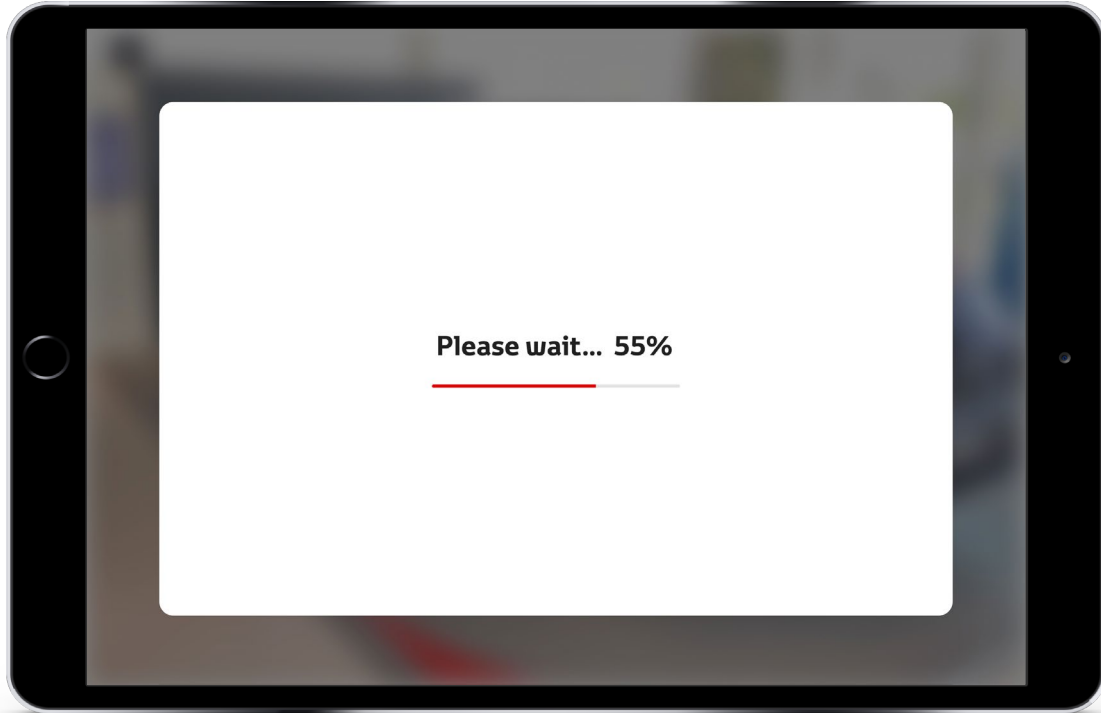
/APP USER FLOW //PROFILE MENU
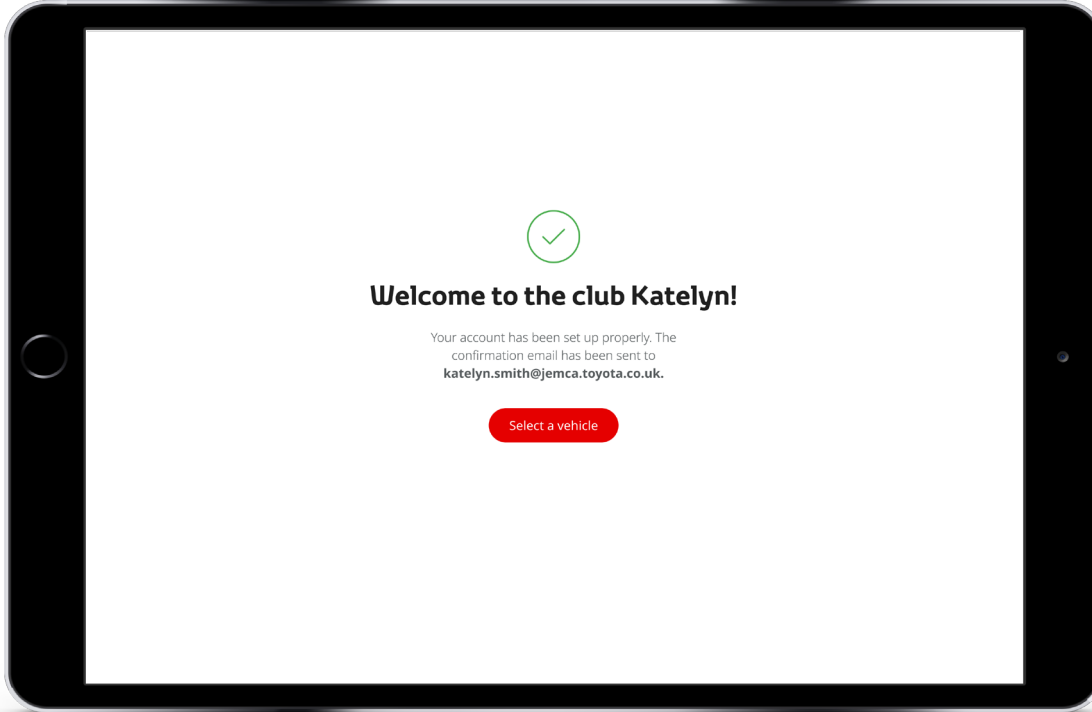
- Welcome to the club
- Select **Select a vehicle** to start the AR experience
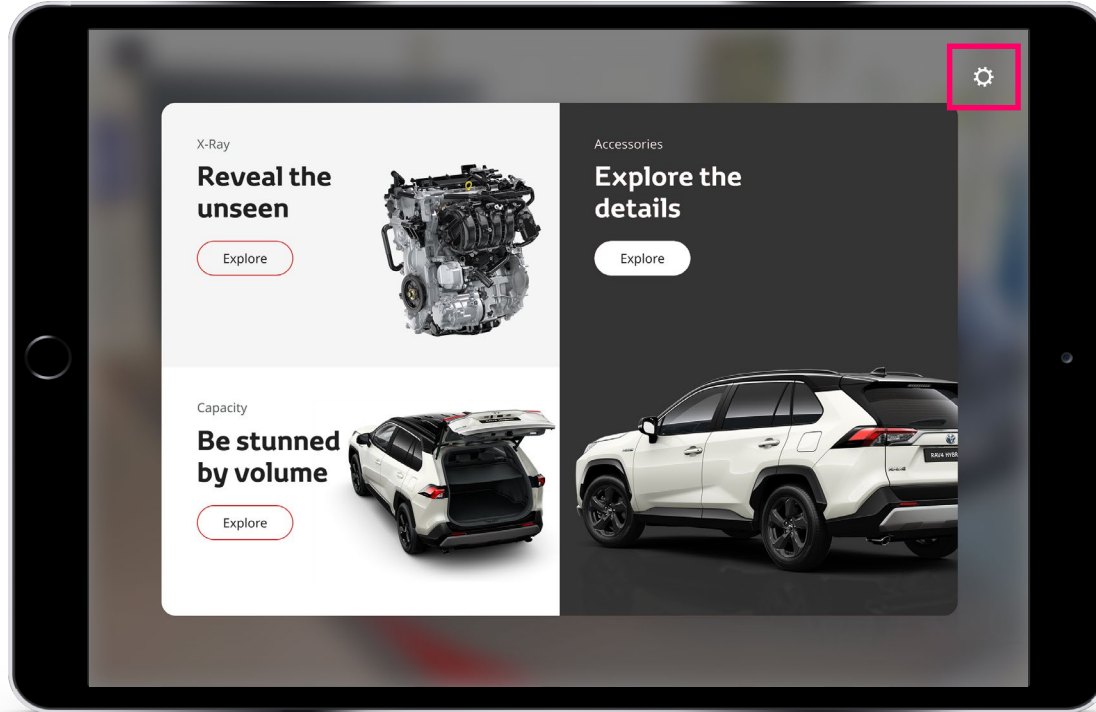
/APP USER FLOW //MODEL SELECTION

- After you selected / created your profile you can select the vehicle you would like to show

# /APP USER FLOW //MODEL SELECTION

- Based on your selection the model data will be downloaded

# /APP USER FLOW //EXPERIENCE SELECTION PAGE

- After the model data has been downloaded you enter the experience selection page

- Here you have three different experiences to choose from
  - Reveal the unseen
  - Explore the details
  - Be stunned by volume

- Selecting the ⚙ icon opens the configuration menu

/APP USER FLOW //EXPERIENCE SELECTION PAGE
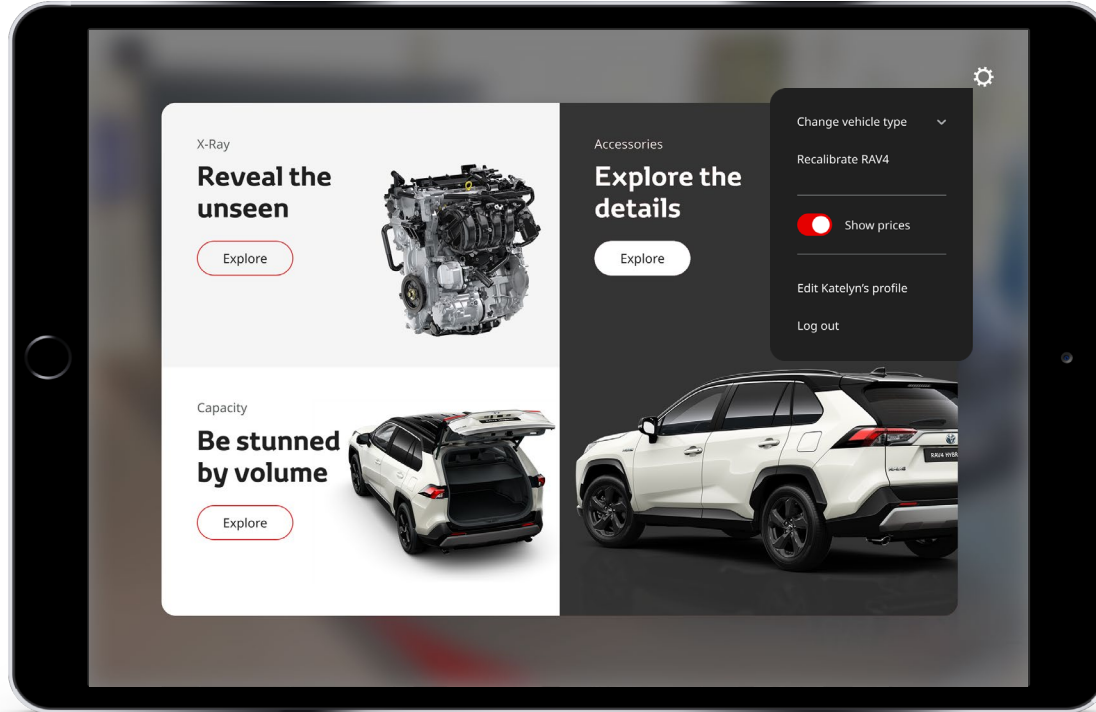
- In the configuration menu you have the following options
    - Change vehicle type
    - Recalibrate the current model
    - Hide / show prices in detail menu
    - Edit your profile
    - Log out from your profile

- Tab on the ⚙ icon again to close the menu

/APP USER FLOW //CALIBRATE YOUR MODEL
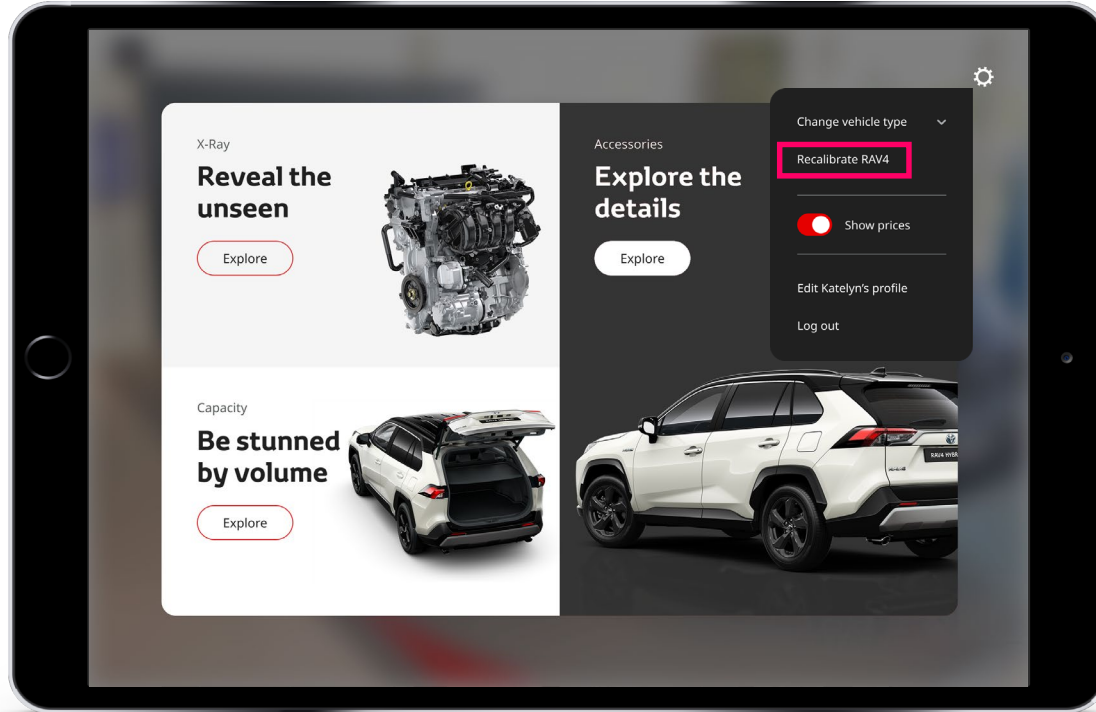
- Before exploring the functions of the app, it is recommended that you first calibrate the model

- The calibration stores the position of the car and its surrounding to improve the tracking quality

- To do this, first open the trunk door of the car

- position yourself in a 45° angle in the front of the car

- and select Recalibrate from the settings menu
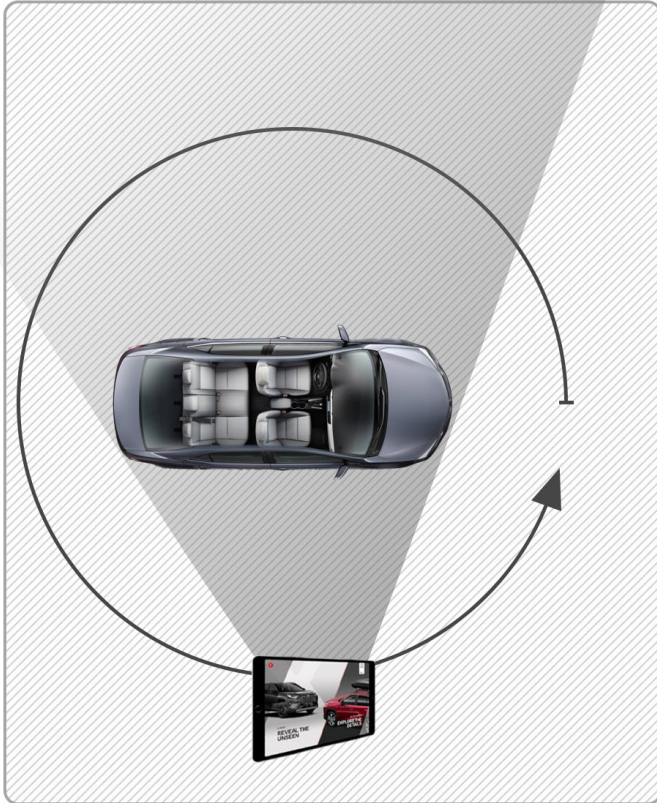
/APP USER FLOW //CALIBRATE YOUR MODEL

- Now the 3D model appears on the screen

- For the initial tracking process, the 3D model must be aligned on the car

- Angle and distance to the car are important for the alignment

/APP USER FLOW //CALIBRATE YOUR MODEL

- If the tracking is successful, the 3D model snaps to the car and you can start the calibration process

- Make sure that every angle is captured correctly - this is indicated by the green lines on the screen

/APP USER FLOW //CALIBRATE YOUR MODEL

- To ensure that every angle is explored, make a complete circle around the car

- Please make sure that the car is visible on the iPad all the time

/APP USER FLOW //CALIBRATE YOUR MODEL
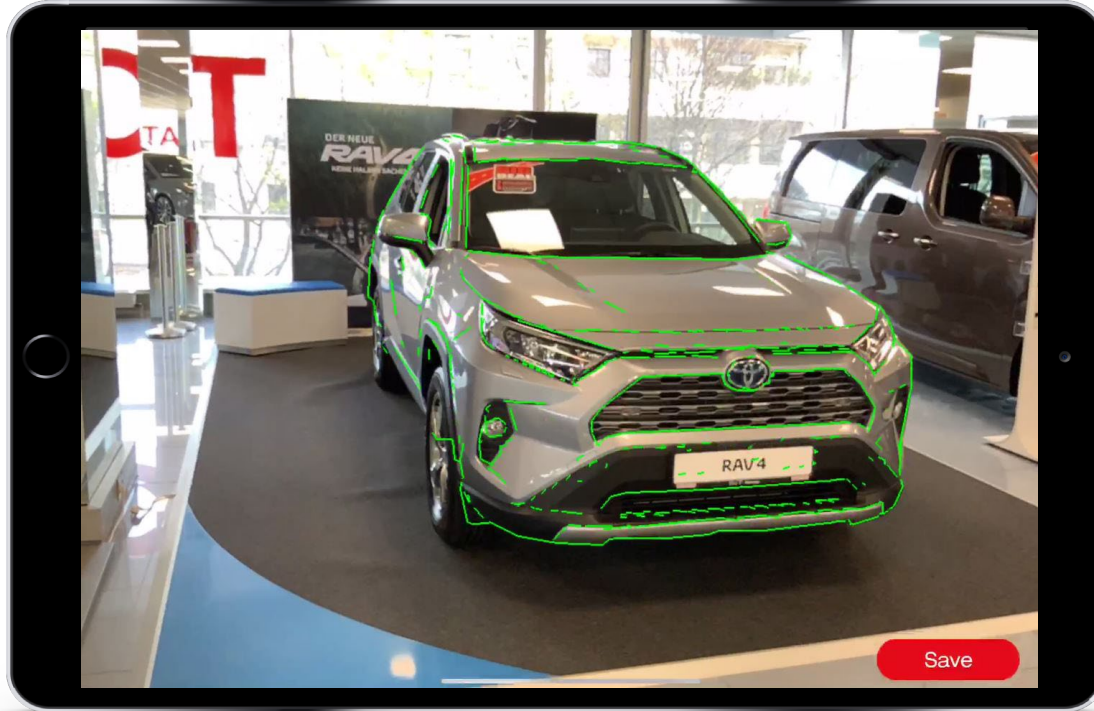
- Once you have completed a full circle around the car select the "Save" button

- Now the app has saved tracking templates that will stabilize the tracking

NOTE: If the car is moved or the surrounding of the car is changing, it is recommended to repeat the room setup

/APP USER FLOW //REVEAL THE UNSEEN EXPERIENCE

- In "Reveal the unseen" you can explore various "hidden" parts of the vehicle

- Select an option from side panel to show:
  - Engines
  - Safety Features

- To go back to the experience selection page click the ⌂ icon

/APP USER FLOW //EXPLORE THE DETAILS EXPERIENCE
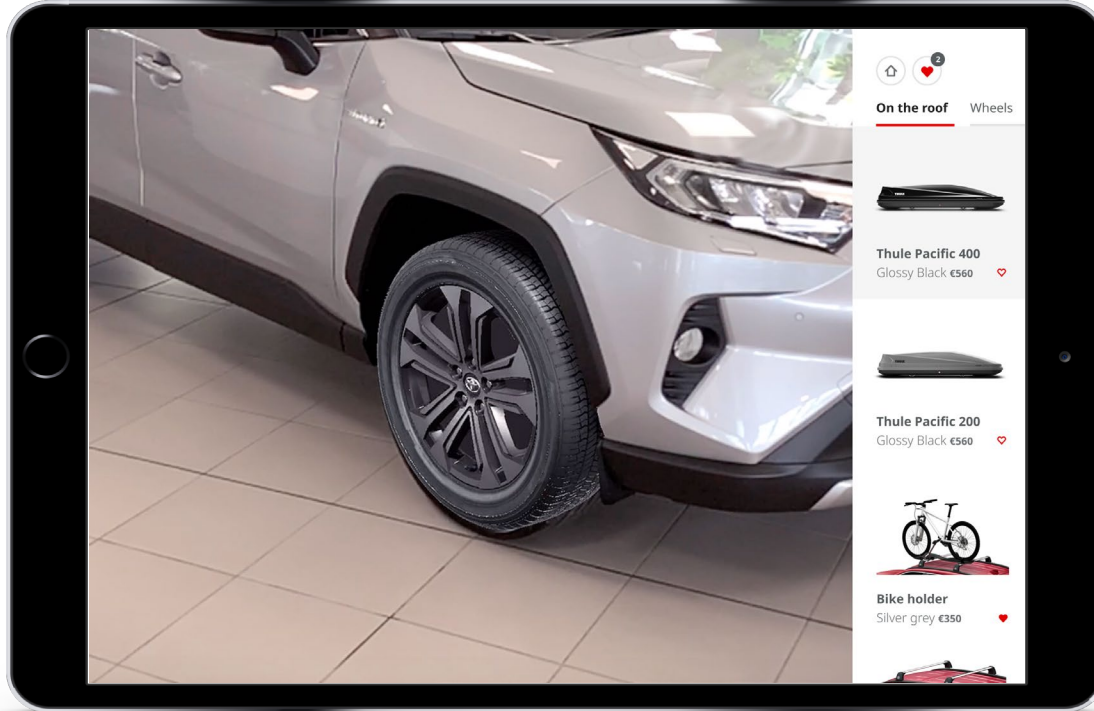
- In "Explore the details" you can view all available accessories

- The accessories are divided by different tabs
  - One the roof
  - Wheels
  - Side
  - Front

- Just select a tab to show the accessories from that section

- To go back to the experience selection page click the ⌂ icon

# /APP USER FLOW //EXPLORE THE DETAILS EXPERIENCE
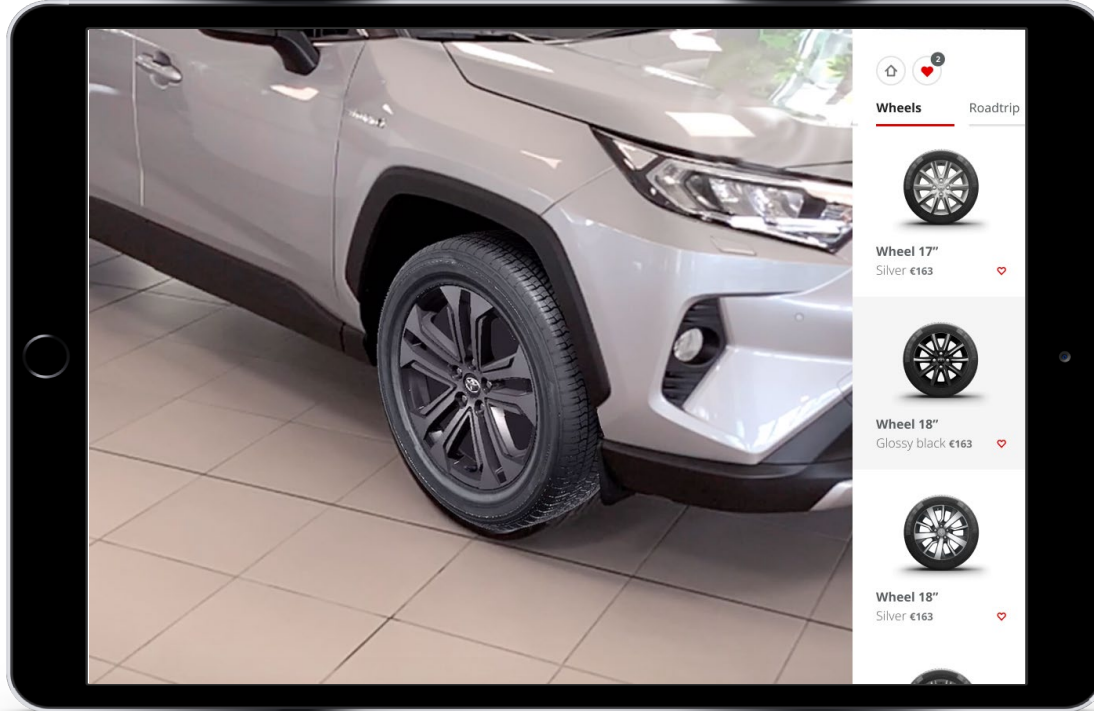
- ▪ Now tab on an accessory that you would like to see

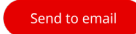- ▪ Or scroll down to see all available accessories

/APP USER FLOW //FAVORITE ACCESSORY PAGE

- To add an accessory to the favorite page double tab on the icon

- Now the heart icon turns from ♡ to ❤

- The ❤ displays the number of accessories you have saved

- To enter the favorite page select the ❤ icon

/APP USER FLOW //FAVORITE ACCESSORY PAGE
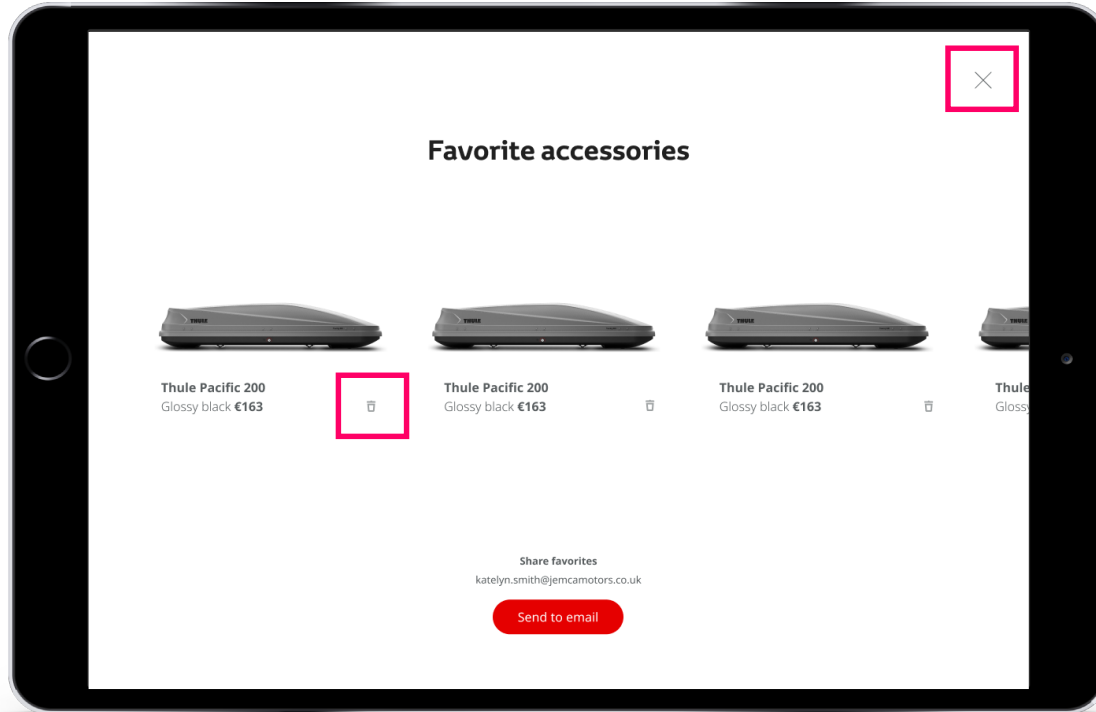
- On the favorite page you can see a summary of all selected accessories

- To remove accessories select the 🗑 icon

- To send the selected accessories to your email address select the **Send to email** button

- Go back to explore the details page by selecting the ✕

/APP USER FLOW //BE STUNNED BY VOLUME
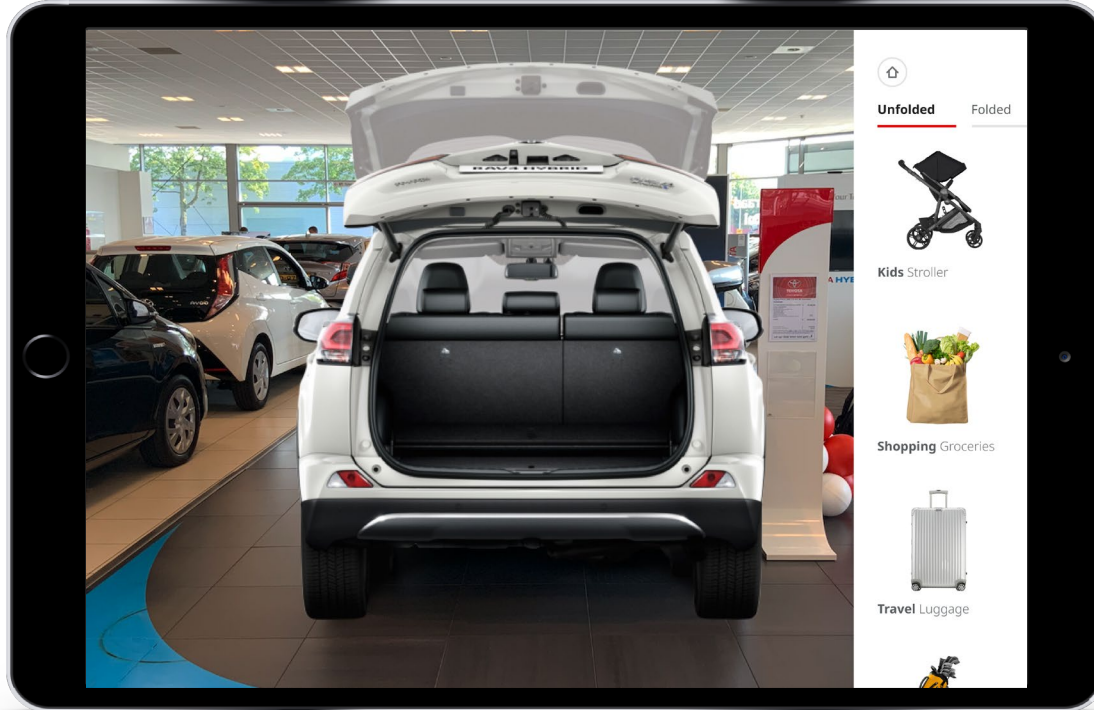
- In "Be stunned by volume" you can explore various luggage and packing scenarios

- Here you have two different experiences to choose from
    - Unfolded
    - Folded

- The unfolded tab shows all luggage scenarios that fit in the trunk with unfolded seats

- The folded tab shows all luggage scenarios that fit in the trunk with folded seats

- For this you need to manually fold the seats of the car to create the correct visual impression

- To go back to the experience selection page click the ⌂ icon

/FAQ //Overview

- Recommended Room Dimensions

- How to start tracking

- Change accessory pricing and availability

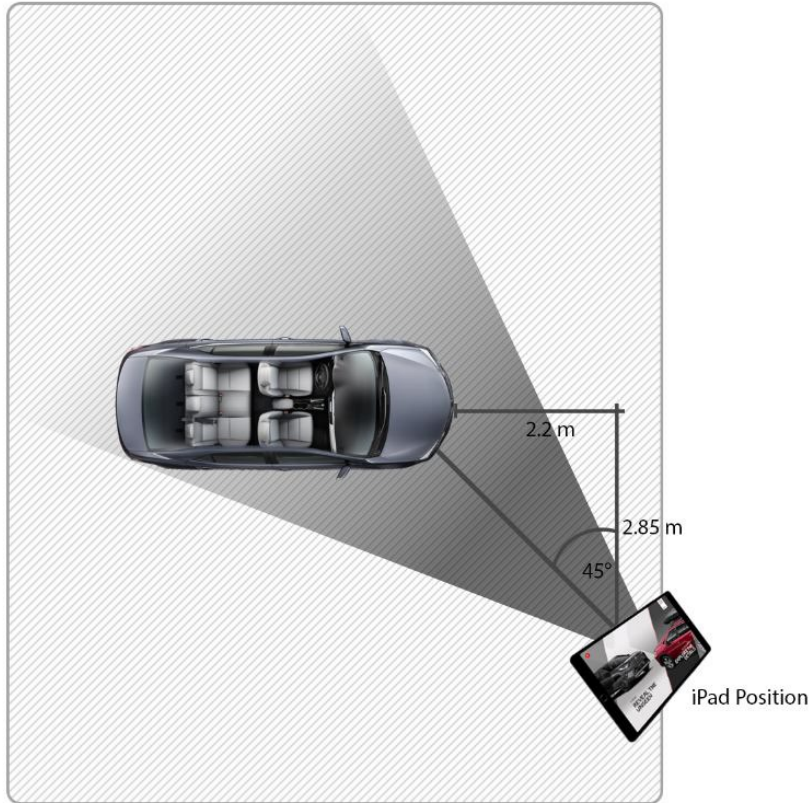- What to do if tracking is lost

- Support Contact

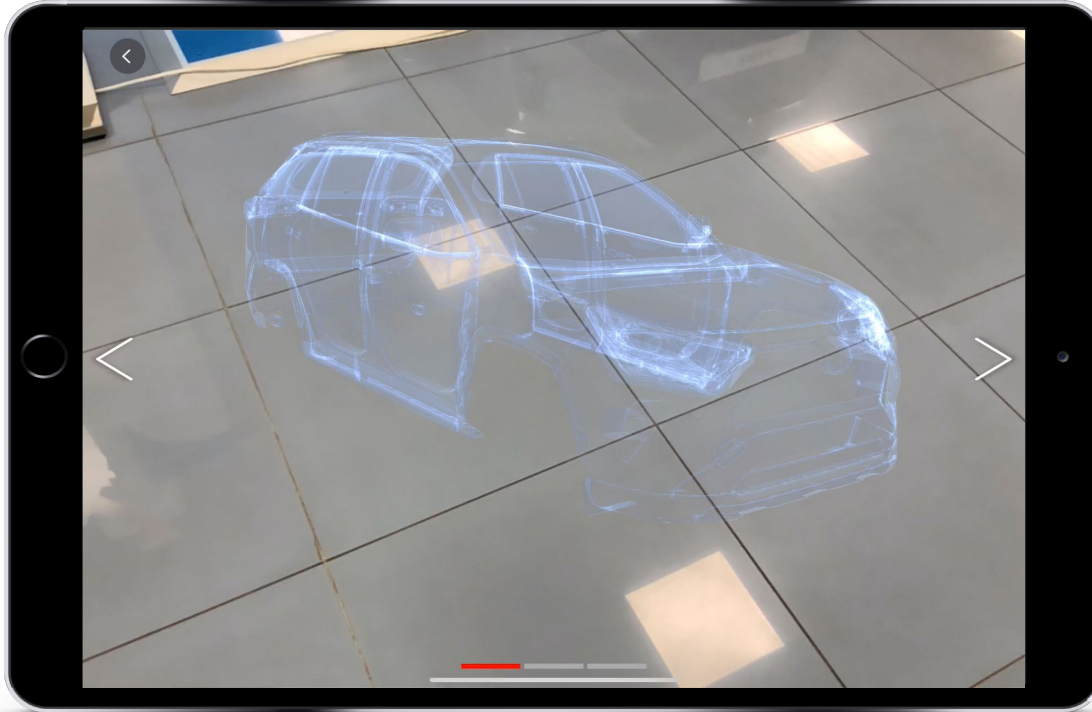# /FAQ //RECOMMENDED ROOM DIMENSIONS
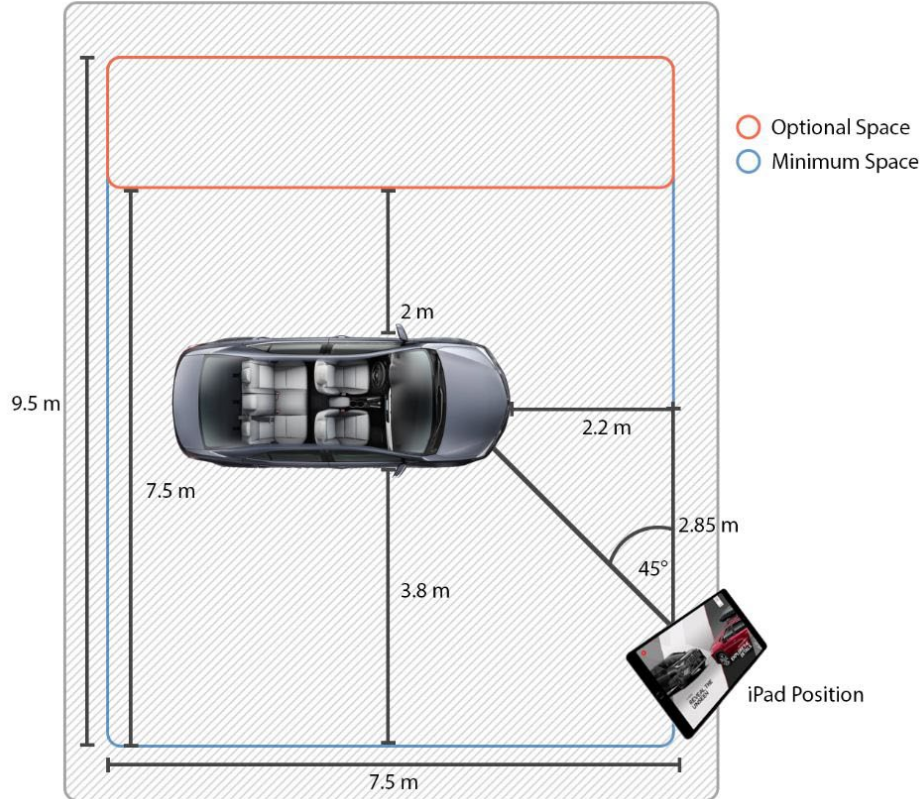
- The minimum room setup: 7.50 m x 7.50 m

- The optimal room setup: 9.50 m x 7.50 m

- Recommended Room requirements

/FAQ //How to start tracking

- Position yourself in a 45° angle to the front of the car

/FAQ //How to start tracking

- Now the 3D Model appears on the screen

- For the initial tracking process the 3D Model needs to be aligned on top of the car

- Angle and distance to the car are important for the alignment

Note: The arrows on the left and right side let you choose different starting positions, depending on your position

/FAQ //How to start tracking

- If the tracking is successful, the 3D model snaps to the car and the UI menu will be visible

/FAQ //Change accessory pricing and availability

The pricing, translation and the availability of accessories are set via TME's CARDB.

All suggestions and changes have to be addressed to TME.
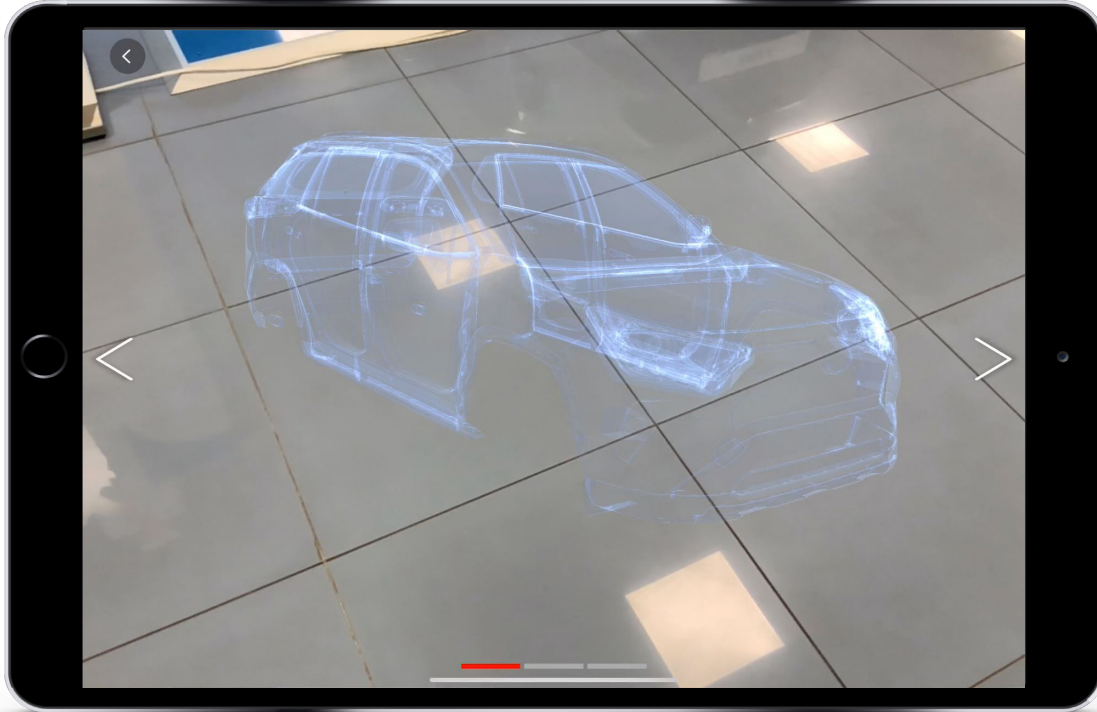
/FAQ //What to do if tracking is lost

If the tracking is lost or the model is not positioned correctly, you have two ways to solve it

A:

▪ Keep the iPad pointed to the car and move to a different positon until the model snaps back to the correct position

/FAQ //What to do if tracking is lost

B:

- Go to the settings menu and choose recalibrate to perform the initial setup again

/FAQ //What to do if tracking is lost

- Avoid objects between
  iPad and car
  (e.g. Display stand,
  people stand in front of the car)

- Avoid placing the iPad closer
  than 50 cm to the car

- Trunk and doors should be
  closed

/FAQ //Support Contact

- For any assistance send an E-mail to:
  3DEXCITE.PoSSupport@3ds.com