

The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink, all set against a dark navy blue base. The triangles are arranged in a way that creates a sense of depth and movement, with some triangles pointing towards the center and others pointing outwards.

STEVEN WALLACE

DE0973

PERSONAL PROJECT 1:
FUTURE MEDIA & COMMUNICATION

CONTENTS

Introduction	4
Initial Idea's	5
Chosen Idea	7
Initial Research	8
Augmented Reality	9
iPad Interface	11
Combining AR in an app	14
Existing Products	15
iOS Guidelines	18
Conclusion of section	20
User Research	21
Persona's	22
Scenario's	25
Customer Journey	27
Mood board	28
Story board	29
Interview	30
Conclusion of section	32
Further Research	33
The Showroom	34
Images I will use	35
3D Model	41
Conclusion of section	42
Design Development	43
Workflow	44



System Architecture	45
Wireframes Version 1	46
Wireframes High Fidelity	51
Concept 1	57
Feedback	67
System Architecture Version 2	68
Concept 2	69
Workflow of steps after app completion	76
Feedback	77
Concept 3	78
Conclusion of section	80
Prototype	81
Proto.io	82
Augment	83
Conclusion of section	85
Branding	86
Concept Video	90
Video Planning	91
Sound Planning	92
Story Board For Video	94
Video Version 1	95
Video Version 2	96
Video Version 3	97
Final Comments	98
Conclusion	99





INTRODUCTION

For the DE0973 Module I am to focus on cutting edge technology's in today's world and predicts where my chosen technology may be going and how it could be used in day-to-day life.

I need to look at companies that are ahead of the game in new technology products, what they are used for and what are the positives and negatives of that current build. My chosen technology; whatever it may be has to used in an innovative way and show in a concept, how this will work.

Independently I need to show how I can plan, organize and manage my research into new knowledge and hopefully see this reflection my final concept. I have to find a design problem and try to resolve this with my idea.

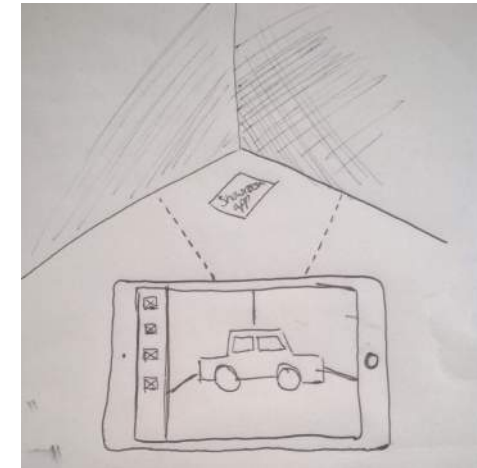
INITIAL IDEAS

I have a few ideas in my head about what I want to do for this project, I sat and brainstormed and these are the top 3 ideas I came up with.

Concept Idea 1

Showroom app - This app would allow the user to build the car you want through an iPad. Working at a dealership I am comfortable with this idea, as I know quite a lot about how things work. Once the car has then been built you could use the iPad's camera and with Augmented Reality technology, see the car the user has just created in the showroom. I may use the existing brochure as a tracker for the augmented car to appear.

It's quite a tailored to the customer app, which lets you try before you buy.

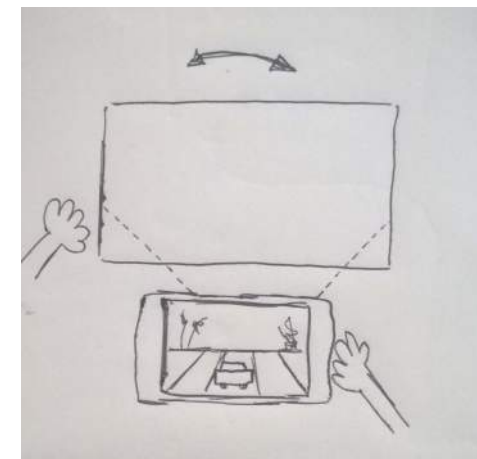


Concept Idea 2

I like the idea of Augmented Reality; I also had another idea about an endless runner game that would use your smartphone.

The way it would work is that you would hold a special piece of card in your left hand and the smartphone in your right hand. By holding the phone in front of the card, using the camera you could see digitally modelled objects that the user would have to avoid.

I was thinking having a car going down a 3-lane road, obstacles would pop up and you would have to move the card left or right to avoid them but at the same time keep looking through the smartphone camera.

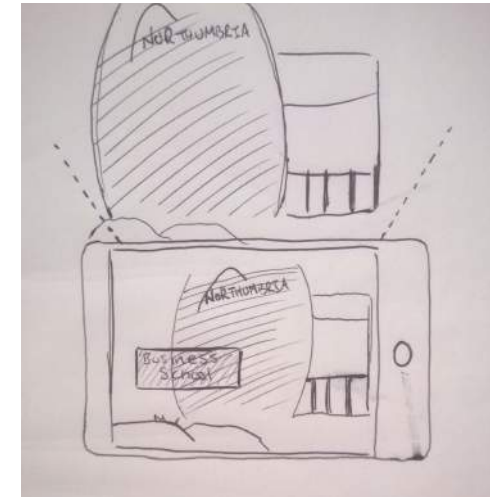


INITIAL IDEAS

Concept Idea 3

Northumbria Campus Map - My third idea would be targeted at new students at university.

What this would do is function like a map by using a Google Map type function that would track your location and by using the smart phones camera different information on each building on campus would be digitally displayed on the screen like the name of it and what sort of course is taught there. This is a digital map so they also cannot get lost, as they wont know the campus very well.



CHOSEN IDEA

PROJECT PROPOSAL FOR SHOWROOM APP

PROBLEM/ OPPERTUNITY

I have identified that when I was working at a dealership people came to buy new cars and didn't really know much about them before hand, they just liked the shape and colours of the cars. This is where dealers can then push for higher spec models and costly extras that may look great in the overall product, meaning they are paying for something that they will never use which is a waste of money.

SCOPE/ AUDIENCE

This app can be used by both dealers and customers but only at the dealership as it is just for the showroom. They already supply iPad's on site which tells you more about the car but by creating your own you can see exactly what you want before you drive one off the forecourt.

TECHNOLOGY

Using an iPad, design an app which people can then create their cars from scratch. I am also thinking of incorporating Augmented reality into the app; by using of the iPad's rear camera, the user will then see their car they have just created in the space of the showroom, being able to walk around it while still looking through the iPad. The brochure or a special piece of card will act as a 'hotspot' similar to IKEA's catalogue app.

INNOVATION

This is innovative because there isn't really anything like this in the dealership world. They supply iPad's to use but I feel as if they can be incorporated a lot better and I see this as a great solution which I think can work as it is more personal to the customer, its like try before you buy, just like in a clothes shop where you try something on, here you get to see the car through a screen in front of your eyes to decide whether you like it or not and make a decision to purchase.

VALUE

The value will be for the customers; they will benefit from this app the most. You will no longer get the hassle of a dealer when you walk onto the forecourt and get 'pushed' into buying a car, instead you can freely walk into a showroom, pick up the iPad and design a car yourself then see what it looks like. It is freedom that I want to emphasize in this project.

VISION

My vision is to create a professional product that has a purpose. Its purpose is to move a step further away from the traditional paper brochure as one day it will become obsolete and I see this idea as a successor.

The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink. A large, dark blue, multi-faceted shape is positioned in the center, serving as a backdrop for the text.

INITIAL RESEARCH

RESEARCH - AUGMENTED REALITY

I need to look at current technology that is very cutting edge. The first thing that came into my head was to look at some of the biggest companies in the world. Then decide for myself, which technology I would like to use in one of my concepts.

Augmented Reality

Augmented reality (AR) is a real time, direct or indirect, way of seeing a physical, real-world environment in which objects are displayed from a computer-generated sensory input such as sound, video and graphics. From this, a view of reality is modified (possibly even diminished rather than augmented) by a computer through a screen such as Smart Glasses, Smartphones and tablets etc. This can improve the users perception of reality however it can also show how a virtual can replace the real world environment with a digital one because artificial information about the environment can be overlaid on the real world.

Examples

Nokia (now HERE) City Lens -

This a mobile application created by Nokia and Microsoft. Available on Windows Phone, this displays dynamic information by using the phones camera about the users current location. It displays information about points of interest and where to eat. Virtual signs are placed on the corresponding building bringing the virtual world and real world together.



RESEARCH - AUGMENTED REALITY

Examples

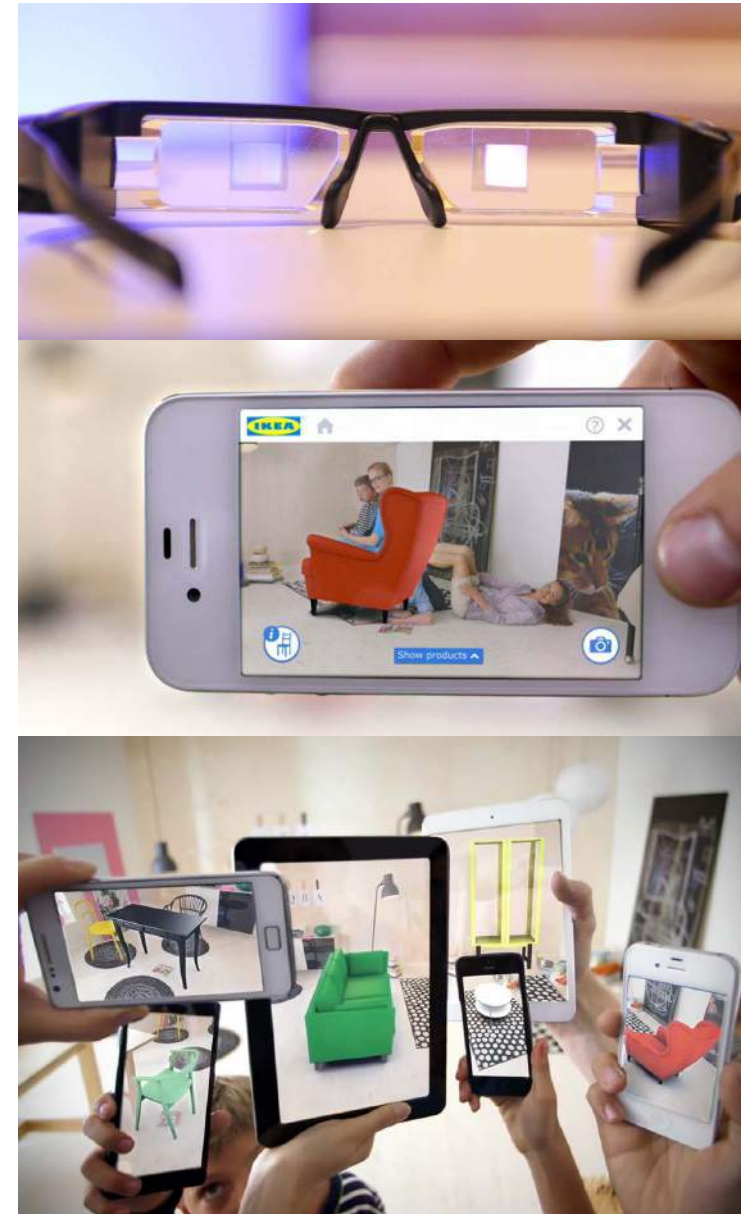
Epson BT-200 Smart Glasses -

The Epson Moverio BT-200 enables a new way to interact with augmented reality applications. With a variety of built in sensors like gyro, accelerometer, camera and compass they deliver a very innovative way to deliver a unique UI experience. Also with the use of binocular dual displays 3D app development can be designed. This could be useful if I decide to drastically change from an iPad to Smart Glasses.

For the UI the 'black' is transparent, meaning that the user's physical environment can be displayed in the background while the digital environment is layered on top of that, which means that finally digital and physical design can come together in reality.

IKEA Catalog -

This application allows the user to download the full IKEA catalog and place selected items into your own room at home by using augmented reality. This is trying before you buy and it's a great example of how this technology can be used by customers. You use the physical catalog like a 'hotspot' so the digital furniture can be displayed digitally on the smartphones screen. While giving the illusion that the product you may want to buy is in your own house.



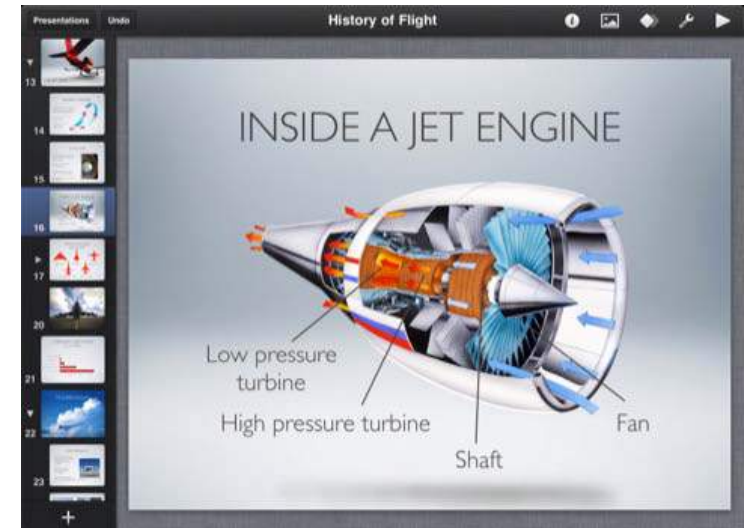
RESEARCH - IPAD INTERFACE

I will be using an Apple iPad as my main device so it would be a good idea to find out what makes a great iPad UI especially when it comes to creation tools within an app.

Keynote App

Keynote is a presentation app that is very powerful and looks great on a mobile device. You can add text, shapes, tables and charts with only a few taps of the finger, meaning the workflow is very simple and not very confusing.

The user interface is very easy to understand and get around. The overall app is very clean and simple. Most functions appear at the edge of the screen to keep the main focus (the current slide) in the centre of the screen. The navigation is easy and follows a cohesive flat design throughout and icons play a heavy part in this design which always work well as the screen is not cluttered with text and also there is a limited colour scheme here, I should take note of this because less is more.

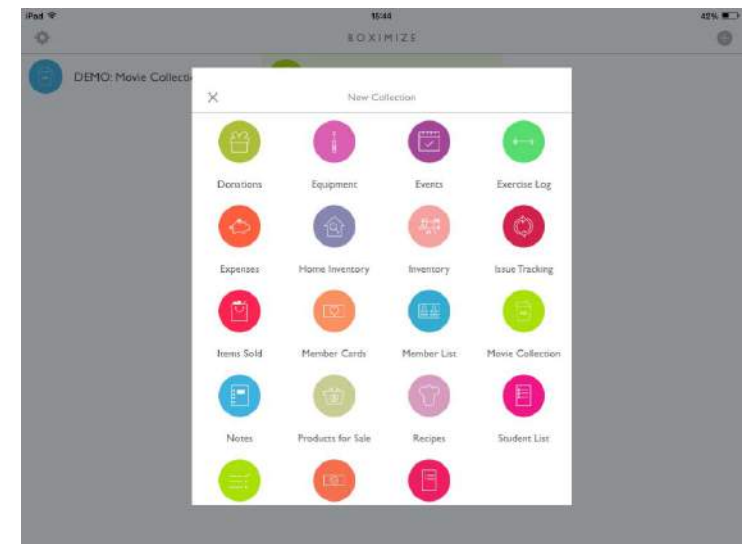
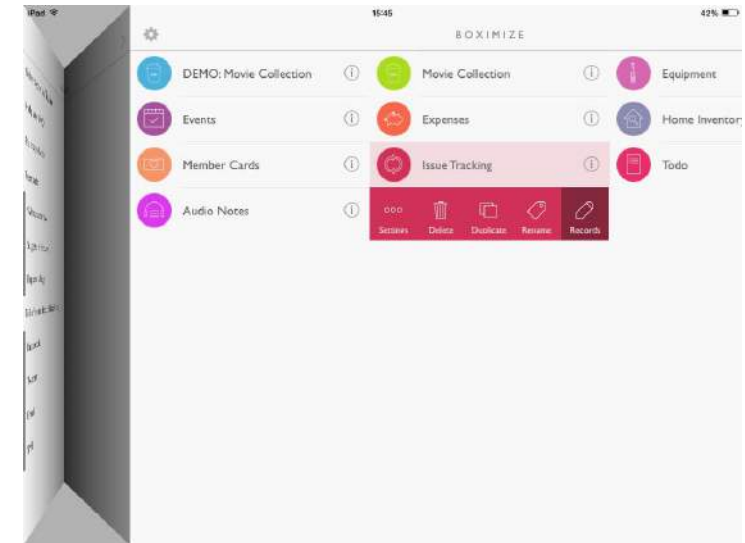


RESEARCH - IPAD INTERFACE

Boximize App

This app heavily relies on structure in order to be successful. Its main function is to take notes but the overall design is beautiful. It is a great example of flat design that includes some nice 3D transitions.

It is a creation tool and that is what I'm looking for, it has icons but is very text orientated (Due to it being a note taking app). However this app has so much freedom that you overlook all this text and see a versatile, organized and rich product that has a great user interface.

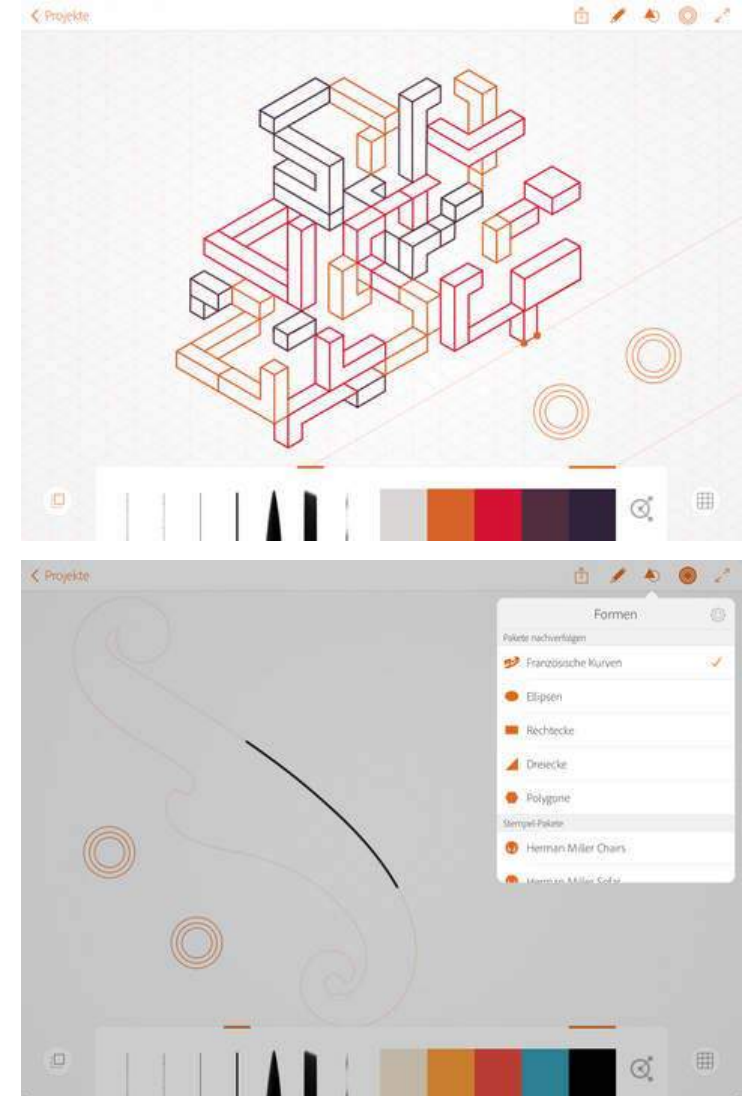


RESEARCH - IPAD INTERFACE

Adobe Line App

Adobe always creates great design tools and this is a mobile version of illustrator. It allows the user to draw geometric shapes, perspective views and lines.

I am interested in the clean user interface and the flexibility in which the app focuses around. The main interface is placed at the bottom of the screen with a flat design pattern and the rest of the screen is left clear to see your designs. I will take this on board, as this seems to be the best and simplest way for users to be familiar with a creation tool. All of this fits into the design of iOS 8.



RESEARCH - IMPLIMENT AR INTO AN APP

I found an online tutorial from Instructables.com and what it taught me was very useful. I used my iPad and installed an app called "Junaio", it is a 3D augmented reality web browser. With this app you can play AR games, have 360-degree view all by using your devices camera.

I installed "Metaio Creator" onto a laptop then downloaded my own QR code from this application; this is what will be used to make my AR image appear in virtual reality. I made this QR code a tracker so that the 3D object that I will create will follow, or be a hotspot for it. I added a 3D model of 2 hearts that were already installed.

<http://www.instructables.com/id/Creating-your-Augmented-RealityAR/>

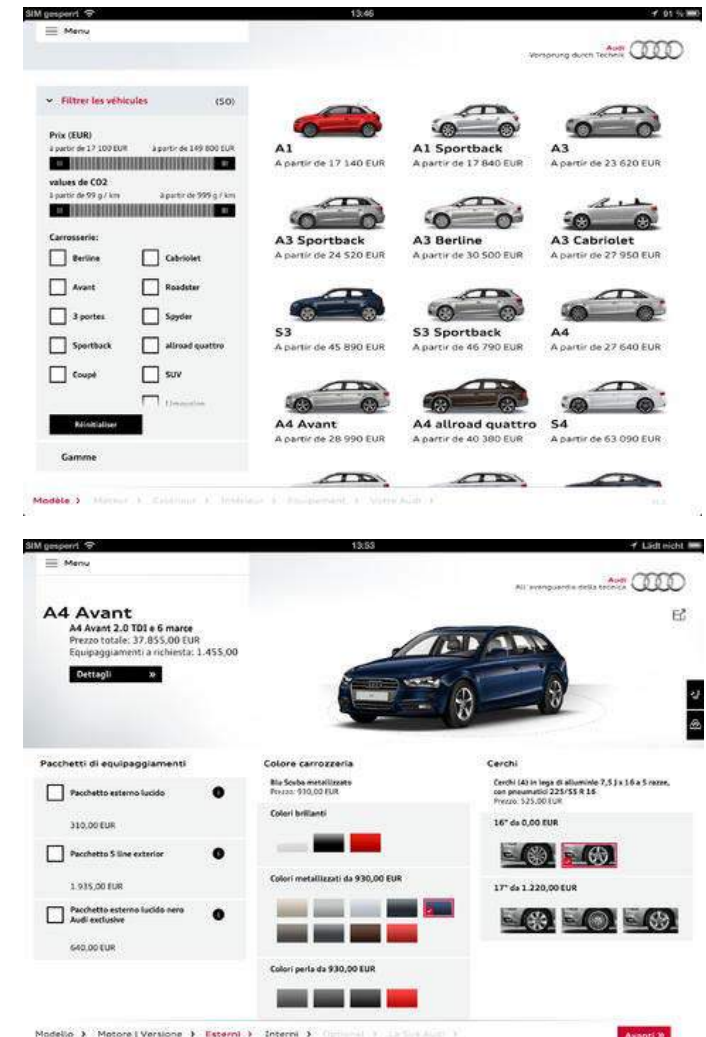


RESEARCH - EXISTING SIMILAR PRODUCTS

Audi Configurator

This app lets the user create any Audi car from their current line up. All you simply have to do is select a model and choose the accessories that fit that user. This does sound very similar to my idea however once created the user can only save the file as a PDF and then ask for assistance from the dealer. There is no 3D option to view the cars as they are all in 2D images, for my idea I would like full 3D render in an augmented reality view.

This app is seen as the leader in terms of the configurator apps/ websites and personally I don't like the user interface, as it feels cluttered when I was using it, especially the main navigation along the bottom of the screen; it feels like the text has been made so small it is barely visible. The limited colour scheme is nice, but that is about it. Also if you take note from the screen shots the car is not the main focus point, it is mainly text based.

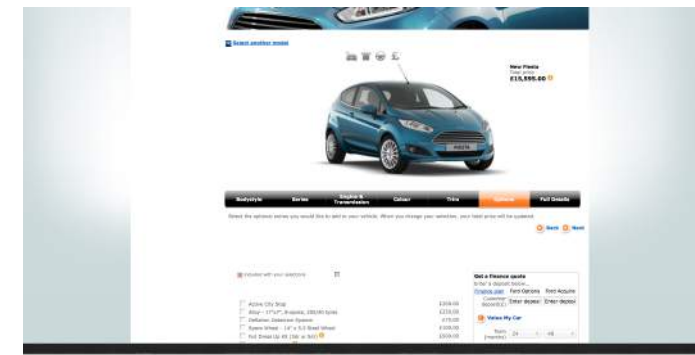
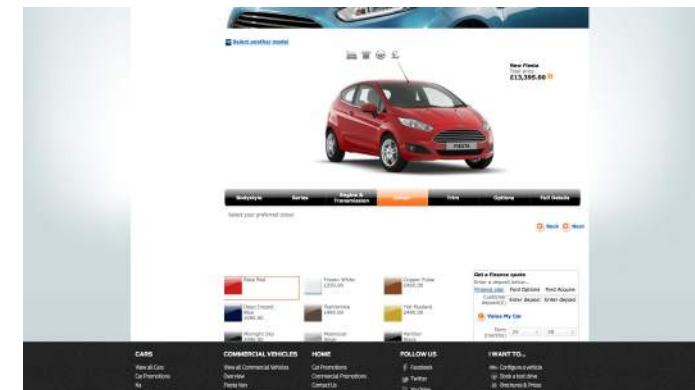
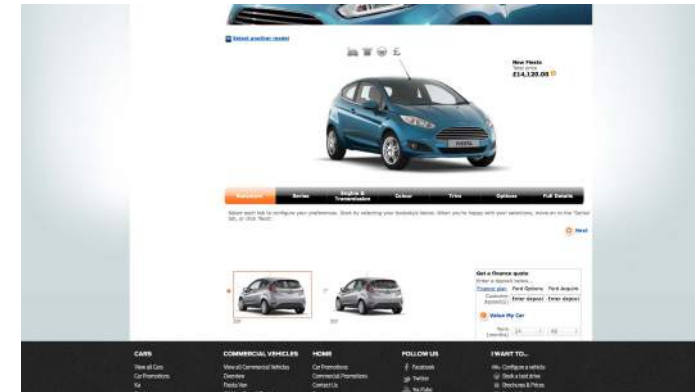


RESEARCH - EXISTING SIMILAR PRODUCTS

Ford Configurator Website

I didn't want to just look at applications that configure cars. There are also websites that are available for vehicle customization. I clicked on Ford's website and this builder was available, at the moment it feels very 'clunky' unclear and it looks like it is just floating on the page. The overall customization is ok but it is limited in terms of viewing angles and specifications.

The interface is basic but it serves its purpose which is a good thing as it keeps things simple unlike the Audi Configurator but it needs a grid pattern layout or similar in order for it to be less confusing and time consuming.



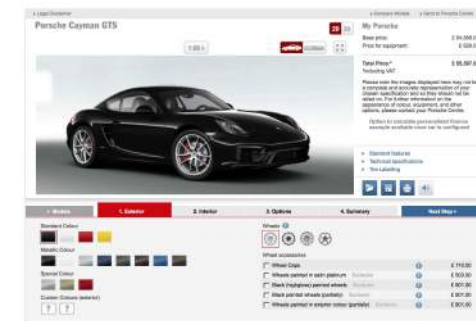
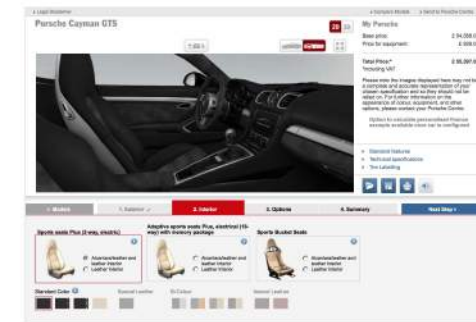
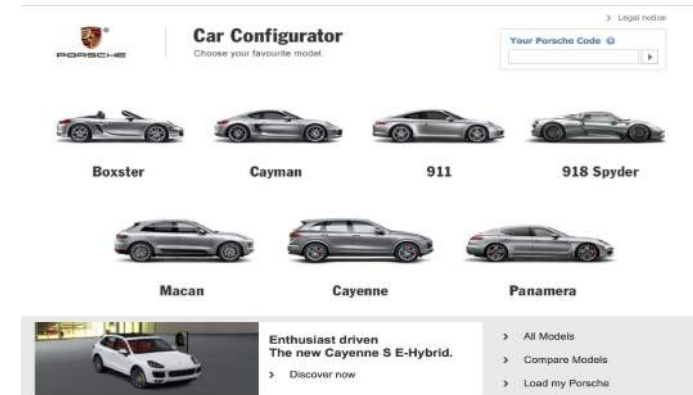
RESEARCH - EXISTING SIMILAR PRODUCTS

Porsche Configurator Website

This is also another web based configurator however this is very slow and the overall user experience was poor in my opinion because I got bored of the constant loading times. Once loaded though I was surprised at the quality, it was worth the wait.

An option of 2D and 3D visuals are available which is different to the other two I have looked at. The layout is the same as Ford's and to be honest I don't like it too much, its clear but I keep thinking to myself this can be done so much better.

The customization is very heavy and there is lots to do, which is what I want to try and do, once the user has finished again they cant do anything apart from print off a PDF and take it to a dealer for further assistance.



RESEARCH - IOS GUIDELINES

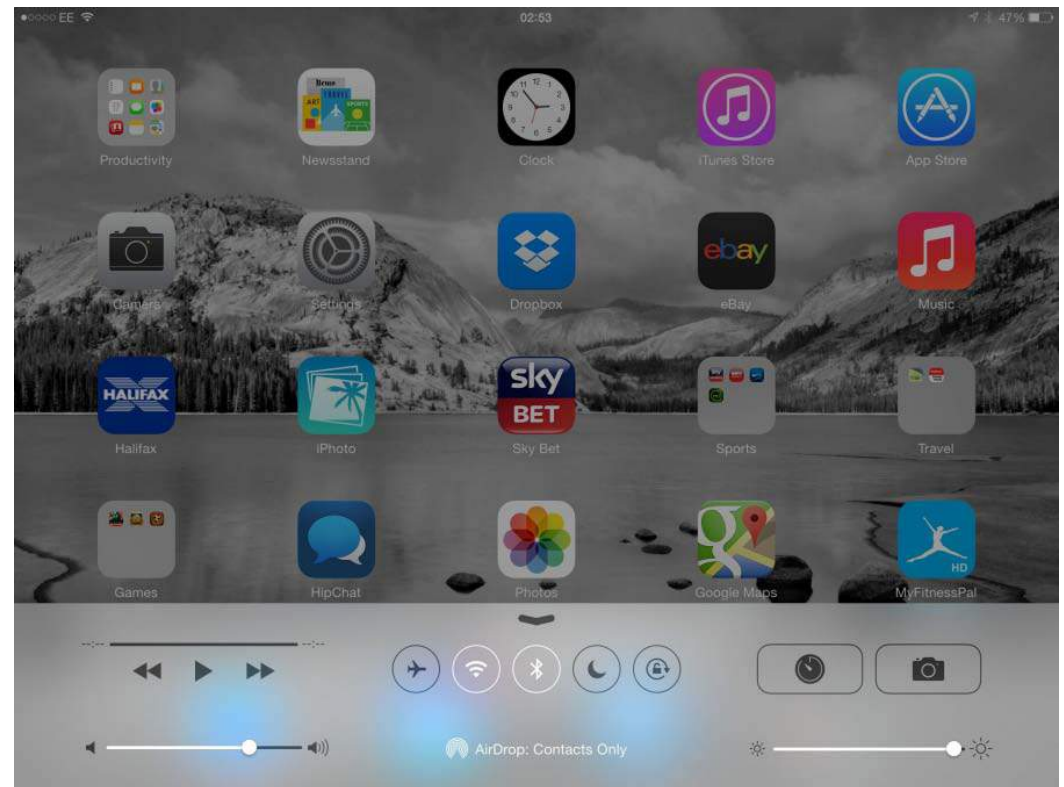
As I am going to focus on an iPad application for my project I need to look at some of the guidelines Apple has put forward in order to make my app look to a high standard but also to make sure it functions correctly.

IOS embodies these three themes:

Deference. The UI helps people understand and interact with the content, but never competes with it.

Clarity. Text is legible at every size, icons are precise and lucid, adornments are subtle and appropriate, and a sharpened focus on functionality motivates the design.

Depth. Visual layers and realistic motion impart vitality and heighten people's delight and understanding.



RESEARCH - IOS GUIDELINES

The advice given from Apple was very helpful, I need to let translucent UI elements hint at the content behind them, this could be used for my main interface as i am thinking of using an overlay of the camera for my main UI. Negative space makes important content and functionality more noticeable and easier to understand. Negative space can also impart a sense of calm and tranquillity, and it can make an app look more focused and efficient.

I need to think twice before permanently hiding the status bar at the top of the iPad. Because the status bar is transparent, it's not usually necessary to hide it. Permanently hiding the status bar means that users must switch away from your app to read the time or to find out whether they have a Wi-Fi connection.

Consider hiding the status bar—and all other app UI—while people are actively viewing full-screen media. If you hide the status bar, be sure to let people retrieve it (and the appropriate app UI) with a single tap. Unless you have a compelling reason to do so, avoid defining a custom gesture to redisplay the status bar because users are unlikely to discover such a gesture or to remember it.

Choose a status bar content colour that coordinates with your app. The default appearance displays dark content, which looks good on top of light-coloured app content. The light status bar content looks good on top of dark-coloured app content.

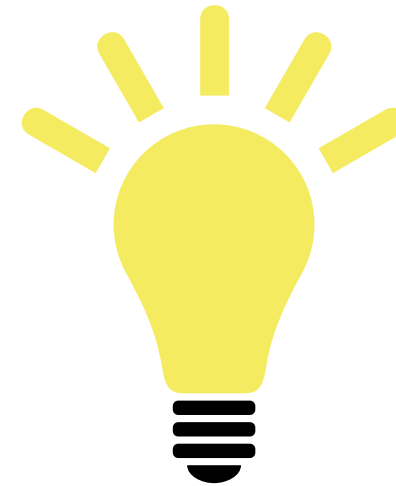
CONCLUSION OF SECTION

From my initial research I can see that although my idea may not be entirely new as other companies have already build a car configurator, but I want to create a unique buying experience that differentiates my idea from what is already available. Car configuration is a good tool but I don't feel like it has reached its full potential yet.

Augmented reality is really powerful and I think that I can implement this into a configurator to make my idea stand out from the crowd. Looking through the iOS guidelines and how to layout my application; it needs to be clean and utilise the space I have to offer.

I strive towards the blurred transparency design of iOS 8 and the layout of the Keynote Application.

Further research is needed so i understand the types of users and also interviewing my work colleague, Jake so I know more about the car buying process and if i have a legible idea.



The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink. A large, dark blue, multi-faceted shape is positioned in the center, serving as a backdrop for the text.

USER RESEARCH

RESEARCH - PERSONA'S



ROB SMITH
FORD SALESMAN

"BROCHURES ARE LIKE BOOKS,
THEY FEEL OLD FASHIONED"

ABOUT

AGE: 36
OCCUPATION: CAR SALESMAN
LOCATION: DARLINGTON
STATUS: MARRIED

Rob works for Ford as a salesman at his local dealership. He is very committed to his job and loves what he does. He loves technology and finds it great how iPad's have been incorporated into the workplace. Sometime's he finds it hard to explain to customers about different specification models because there are so many to choose from and he ideally wants to find the right one for the customer.

A digital learning tool would be ideal for Rob to use in the workplace as this would make not only his job easier but the relationship between the employee and customer will grow stronger as they are having fun while learning with an application.

GOALS

- To provide for his family
- Be the best salesman he can be
- Keep up to date with the technology advancements in society

INTERNET USAGE

- | | |
|-------------------------|-------------|
| - Internet experience: | 10 + Years |
| - Primary uses: | Work |
| - Favourite sites: | Auto Trader |
| - Hours online per day: | 5 |
| - Computer: | Acer Aspire |

RESEARCH - PERSONA'S



SAMANTHA YEOMAN

FULL TIME PARENT

"BEING A PARENT IS HARD AND
MONEY IS ALWAYS AN ISSUE"

ABOUT

AGE: 27
OCCUPATION: FULL TIME PARENT
LOCATION: NEWCASTLE - UPON - TYNE
STATUS: SINGLE

Samantha is a single mother of three, she loves her kids and they are her world. She finds technology great as she is very sociable and it's the easiest way for her to keep informed with all her friends.

Money has always affected the way she lives her life, she can't afford luxuries and is always saving where she can. A car is very important to her, she takes her kids to school 5 days a week and is heavily reliant on it, she wants a car that is reliable but does not want something to fancy and get pushed into buying it.

GOALS

- To provide for her family
- Get back into work and find a job

INTERNET USAGE

- Internet experience: 6 Years
- Primary uses: Social
- Favourite sites: Facebook, Twitter
- Hours online per day: 7
- Computer: iPad, PC

RESEARCH - PERSONA'S



JOHN VALLACK
CAR DESIGN ARTIST

"THE DESIGN'S YOU CREATE ARE
YOUR MOST TREASURED
POSETIONS "

ABOUT

AGE: 43
OCCUPATION: CAR DESIGN ARTIST
LOCATION: STOCKTON
STATUS: MARRIED

John is an experienced car concept artist and his career spans nearly 20 years. He understands that as a designer you can express yourself in any way, shape or form and they may have little meaning but it can to many, especially John, become very personal and the end result can have sentimental value.

His digital experience isnt great but it eager to learn design tools. John knows that computers are the way forward and design is getting more digitally based every day so would like to advance his work further.

GOALS

- Gain higher recognition for his art
- Take a further leap into the digital world and connect to the internet of things.

INTERNET USAGE

- Internet experience: 3 Years
- Primary uses: Blogging
- Favourite sites: Tumblr
- Hours online per day: 2
- Computer: PC

RESEARCH - SCENARIO'S

WORKER FOCUSED

Rob is hard at work at the dealership. He is the only sales member of staff today and there are a lot of customers queuing to see him about buying a brand new car. Each sale takes around two hours to complete and he simply has to tell each customer to be patient and wait or come back another day. This is very bad customer service and should not happen.

There is an issue with staffing on this day but it is still an issue that can affect them at any time. Some customers realise that Rob is busy and they will wait however other customers simply want to be seen there and then and if they don't get what they want they will go elsewhere - fact.

If customers had something to do while there was no need for a salesman to be around for a period of time things would go a lot smoother and customers would not leave. Time is money in business and at the moment customers are walking out the door, per person that is at least £10,000.

RESEARCH - SCENARIO'S

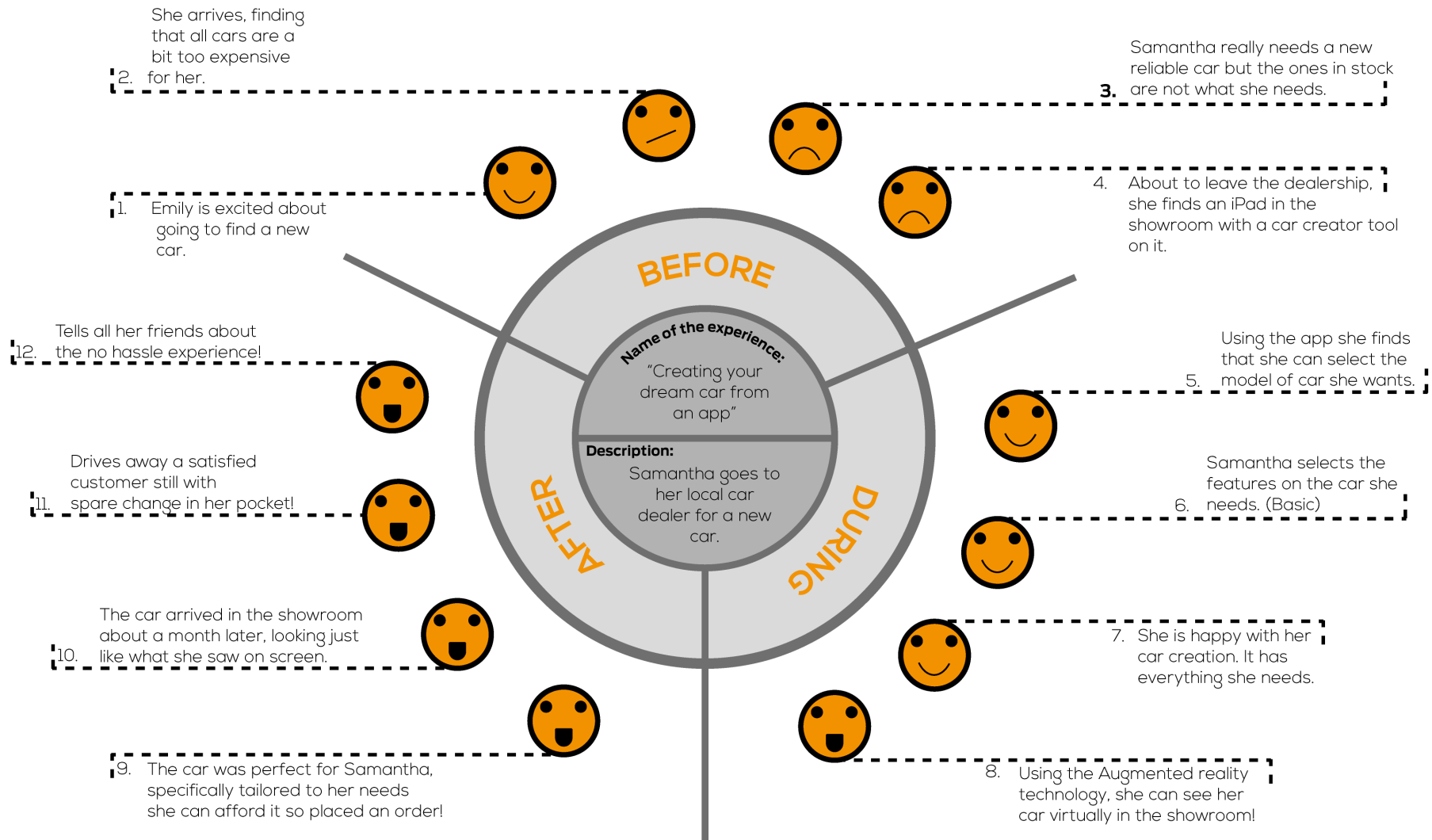
CUSTOMER FOCUSED

Samantha is in need of a new car, yesterday she was driving along the road and the engine management light appeared on her dashboard. When her car arrived at the garage on the back of a recovery truck she soon found that her beloved car was at the end of its life.

The next day she walked to the car dealership with no idea of what car she had in mind, discussing with the salesman it was very clear that the cars available on site are too expensive for her and they have many extras or 'gadgets' she does not even know how to use; and to top it off the colours of the cars available are not to her taste!

A new car would be easier to afford as Samantha would like to go on a finance scheme to help her with her money troubles but she cannot afford any of the cars that are currently available. She leaves the dealership disappointed that she cannot get a car to suit her needs; she feels that there is no value for the customers, as she cannot get what she wants.

RESEARCH - CUSTOMER JOURNEY MAP

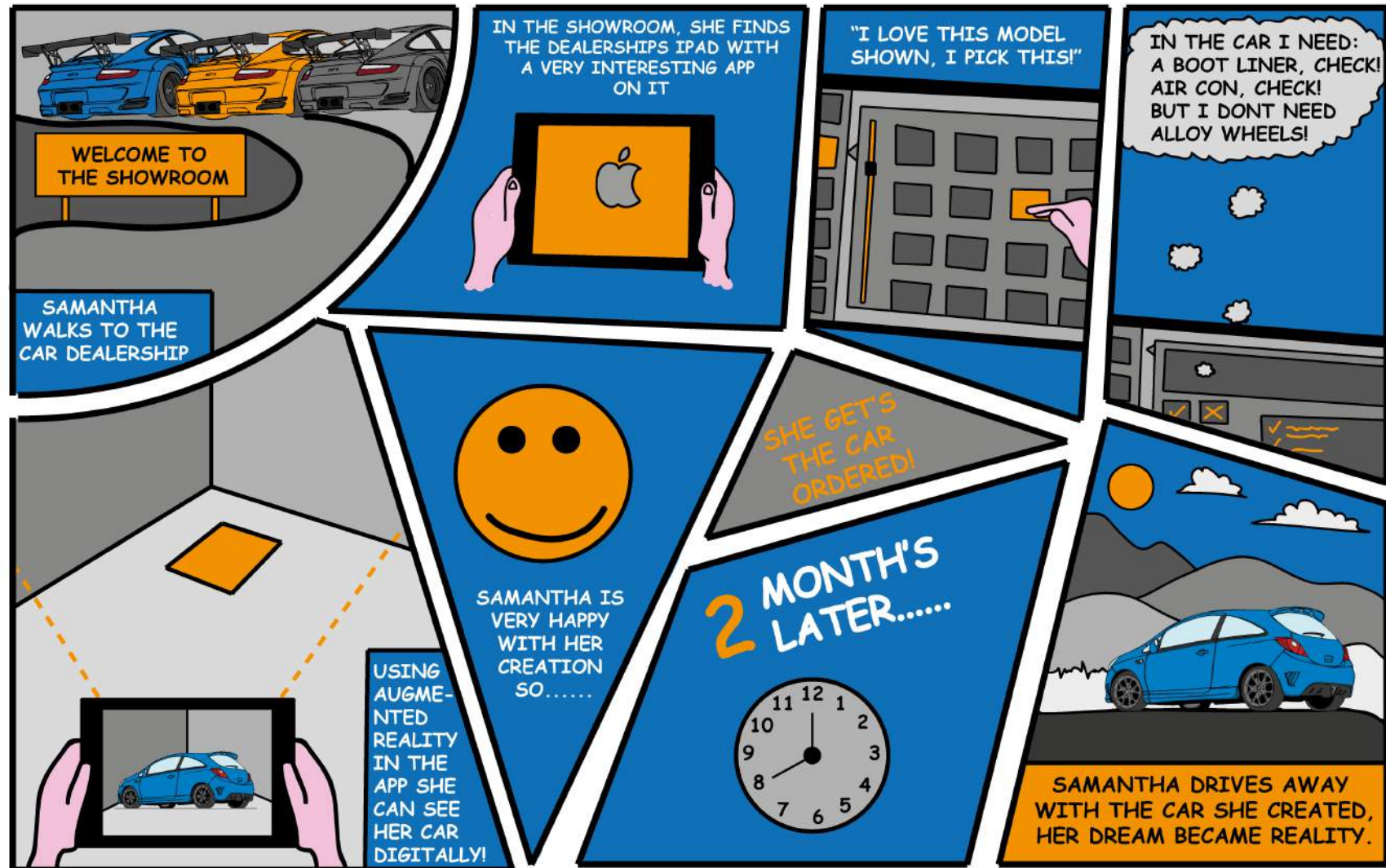


RESEARCH - MOOD BOARD

My mood board is a clear visualisation of what I want my personal project to be. It would be right for me to stick with a Ford orientated app as I feel as if I can work with the dealership I get employed from for constant feedback and advice. The official Ford Blue, Greys and Orange will be my main colour scheme as I think it would be best to keep in with the whole Ford brand and theme, also I will be using the 'Ford Antenna' typeface because this is what they use. I want a good looking flat designed app that stands out from its competitors, and of course be very user friendly.



RESEARCH - STORY BOARD



RESEARCH - INTERVIEW



Hi Steven what would you like to know?

How do you feel about the current way that car dealerships work, in terms of putting the customer first?



Well currently there are only 2 salesmen on site so we do our best to accompany each customer when are where we can. If customers have to wait with nothing to do but stand around until they see us, they tend to come back later on in the day or not at all, which is what we do not want.

If the customers had something to do while they wait, do you think this would make the whole car buying experience more valuable to them?



Personally yes, when customers come to spend a lot of money on a car we want them to get the best deal that suits them and just looking through a brochure or seeing similar models on site is good but its not perfect.

Do you think an experience where customers get to create and see their own cars before they buy them is a good idea to combat this issue?



Its a great idea Steven, after all the customers car is for them, not myself. If we could offer the chance to the customer to see their own car before they buy it on site the overall car buying experience would become a lot more customer focused and interactive with the way we currently operate.



RESEARCH - INTERVIEW (CONTINUED)



I am thinking of an Augmented Reality solution to this problem, where a 3D model is displayed on an iPad screen, where the 3D model is built from the users selection. How do you feel about this?

We already have iPad's in the showroom but they are not much use at the moment. They only show specifications of cars in a type of slideshow. Your idea is an extension of what Ford already offers which I feel could be very useful to us as customers can see their car visually rather than on text.



Should I try and keep the application as personalized to the customer as possible?

I think it is important to do so. Make decision choices easy to understand as if I was not there to help them.



Would you be happy with an application that took up a space of a standard car in the showroom?

Space is not really an issue. We have plenty here on site and it is just there for a car to be parked in. An interactive space would work because all the hardware and space you need is here waiting to be used.

Thanks for your time Jake. I will continue to show you the development work as I progress.



CONCLUSION OF SECTION

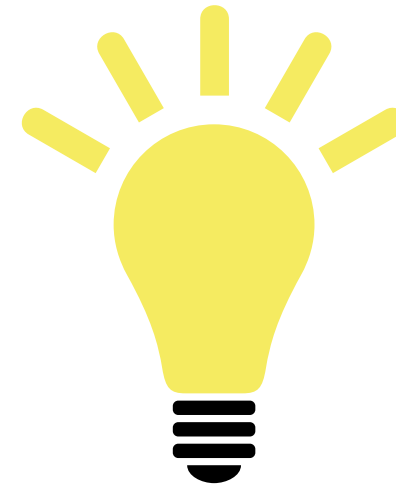
From my user research I have identified users that would benefit from my application and how they would use it if it were placed in a car dealership showroom.

The storyboard really helped me visualise how my app has identified how the user could use it on their own to create what they want.

My app needs to have its own style, be unique.

I don't want to stick with the templates off the Internet of iOS 8 to design my app, yes in the end it might look like a 'current' app but current to me does not stay forever, I will instead embrace it and create something different while still following these guidelines.

This is where I gained access to Ford's dealership hub; exclusive for the car dealers I have accessed the typeface "Ford Antenna" and images that I could possibly use.



The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink. A large, dark blue, multi-faceted shape is positioned in the center, serving as a backdrop for the text.

FURTHER RESEARCH

RESEARCH - THE SHOWROOM

For my app to work I need a specific amount of space. I am using my local Ford Dealership's showroom as this space. It is quite large so I have a bit of room to play around with. These images are of the space where my augmented car will be shown.



RESEARCH - IMAGES I WILL USE

I need to have images of each model car in order for my app to look authentic. I have been given these images, however for my concept I am focusing on the Ford Fiesta.



RESEARCH - IMAGES I WILL USE

I am employed by a Ford dealer so because of this I have access to all of the official colours, typeface and car imagery.

I need to collect all of the images that will be in my app to make it feel like the real thing. For my record all of the relevant files (images) will be documented here. First of all are the collections of the body paint, these are to the right.



MIDNIGHT SKY



COPPER PULSE



FROZEN WHITE



HOT MAGENTA



PANTHER BLACK



HOT MUSTARD



MOONDUST SILVER



RACE RED



DEEP IMPACT BLUE



FASHIONISTA



BLUE CANDY

RESEARCH - IMAGES I WILL USE

Body paint colours:



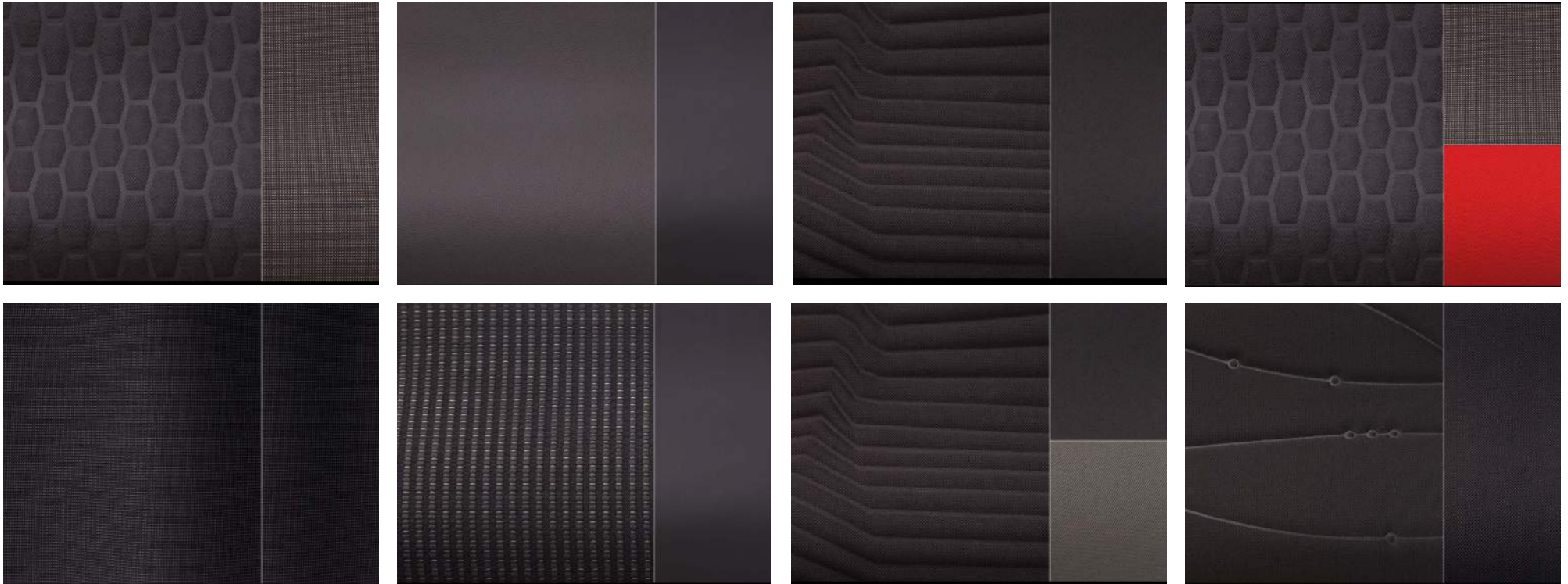
RESEARCH - IMAGES I WILL USE

Different Alloy Wheels:



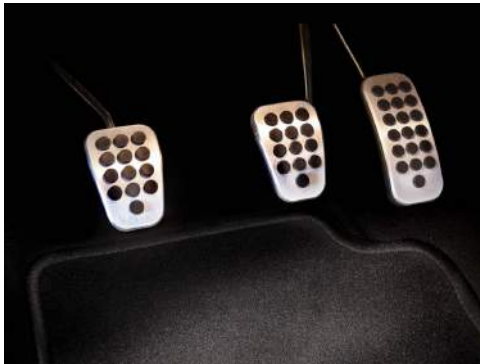
RESEARCH - IMAGES I WILL USE

Upholstery:



RESEARCH - IMAGES I WILL USE

Extra's:



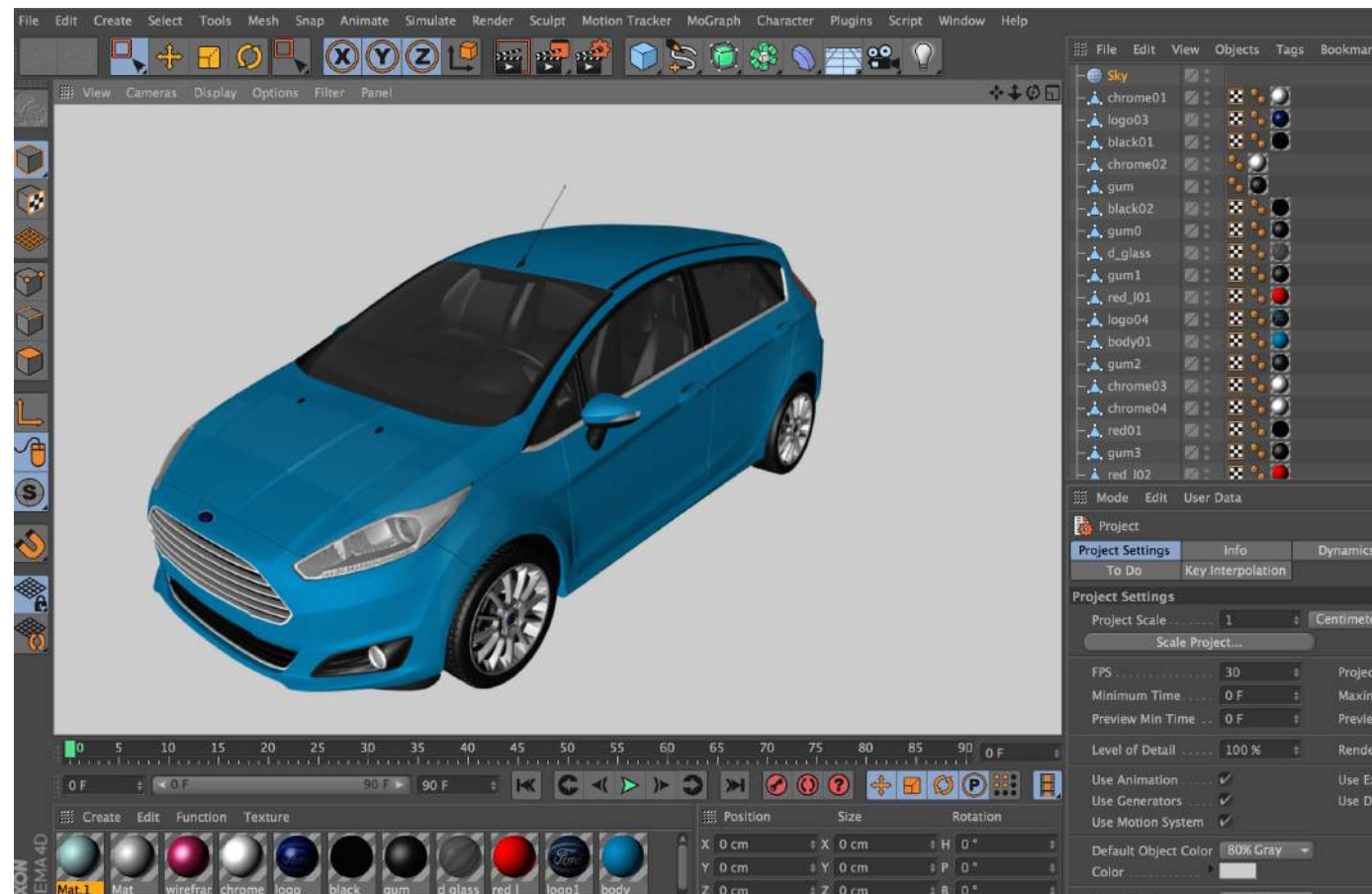
3D MODEL

As I want to implement Augmented Reality into my app I need to find a suitable 3D model for this to work. I searched the Internet and eventually found a perfect model for me to use in my project.

The model cost around £60 and the link to the model I used is here:

<https://www.cgstud.io/3d-model/ford-fiستا-2013-5door-38617>

As I have a 3D model now, I need a certain program to open and use the file. I have opted for Maxon Cinema 4D as it comes with a free student license that I can use to my advantage to create animations etc.



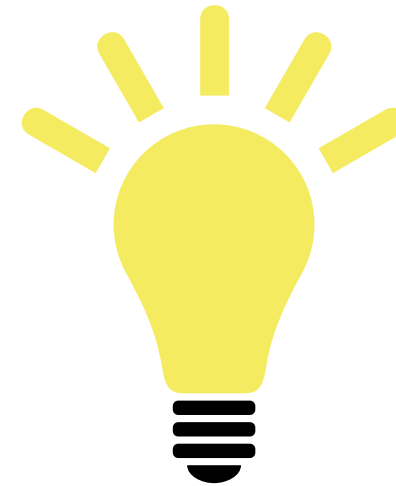
CONCLUSION OF SECTION

Looking through Ford's library of images I have found exactly what I need in order to configure a vehicle. From this I then looked at my local Ford dealer and examined the space in which my app could be used.

I found that all technology and space is already available, this gives me a push to think that my app does fit here and could work.

Designing a workflow and system architecture diagram I sorted the different pages that my app would need. This will help me in the design development stage.

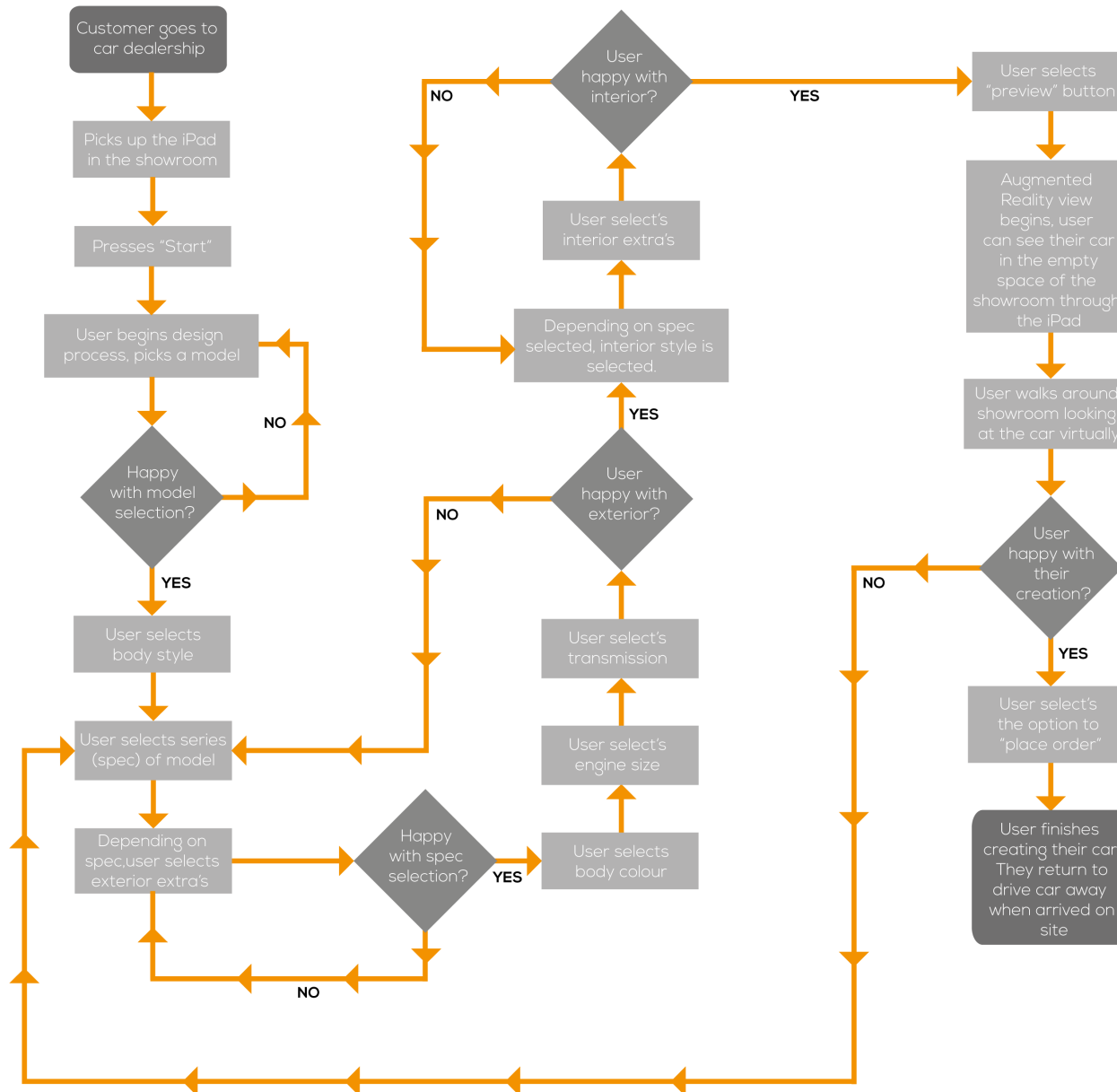
Also Maxon Cinema 4D is a great application to design my 3D that I will augment. Currently all research I have carried out has been successful and I think that my app could come together quite nicely. From feedback and discussions I need to focus on the customers user experience and overall buying experience.



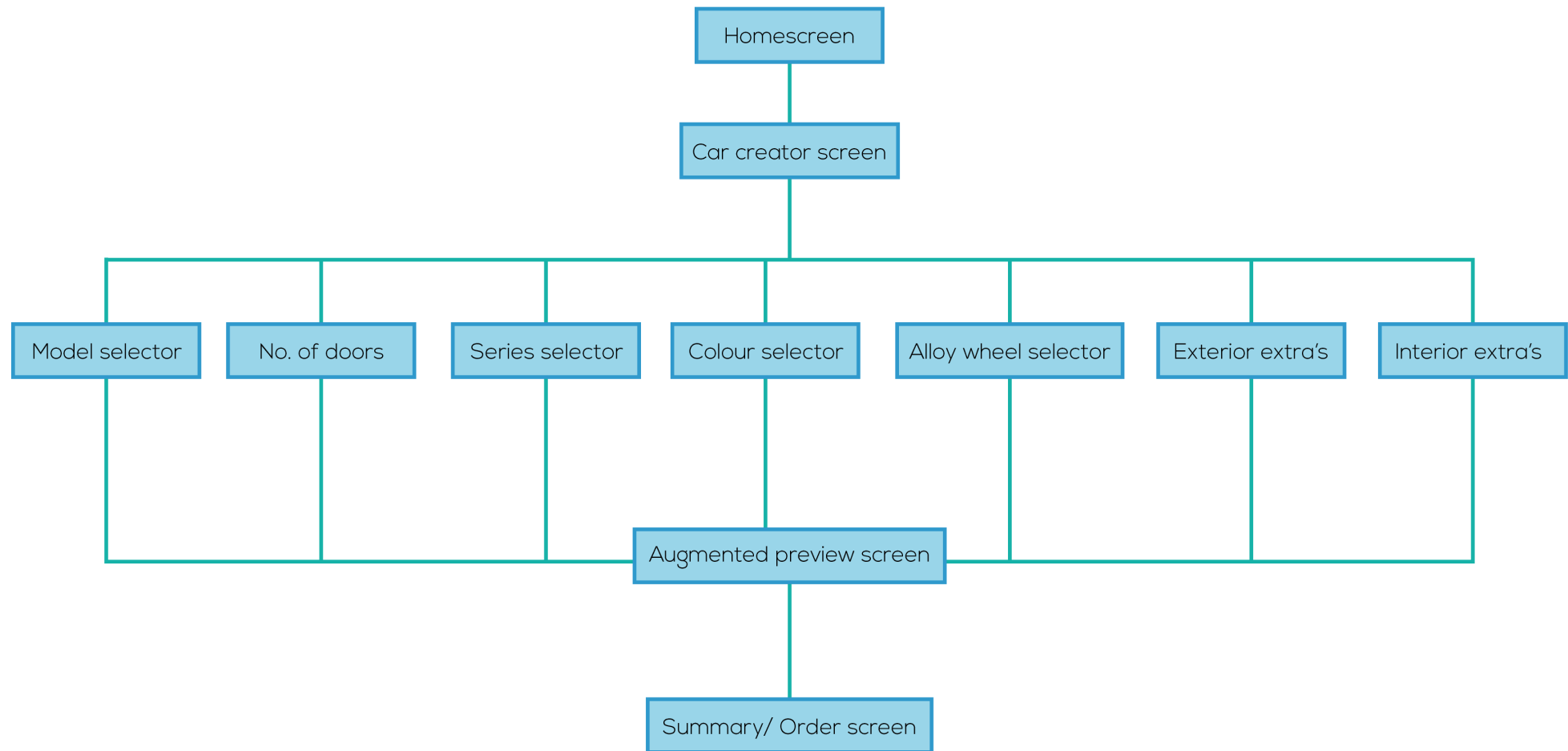
The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink, arranged in a way that creates a sense of depth and movement. A large, dark blue, multi-faceted shape is positioned in the center, serving as a focal point for the text.

DESIGN DEVELOPMENT

RESEARCH - WORK FLOW



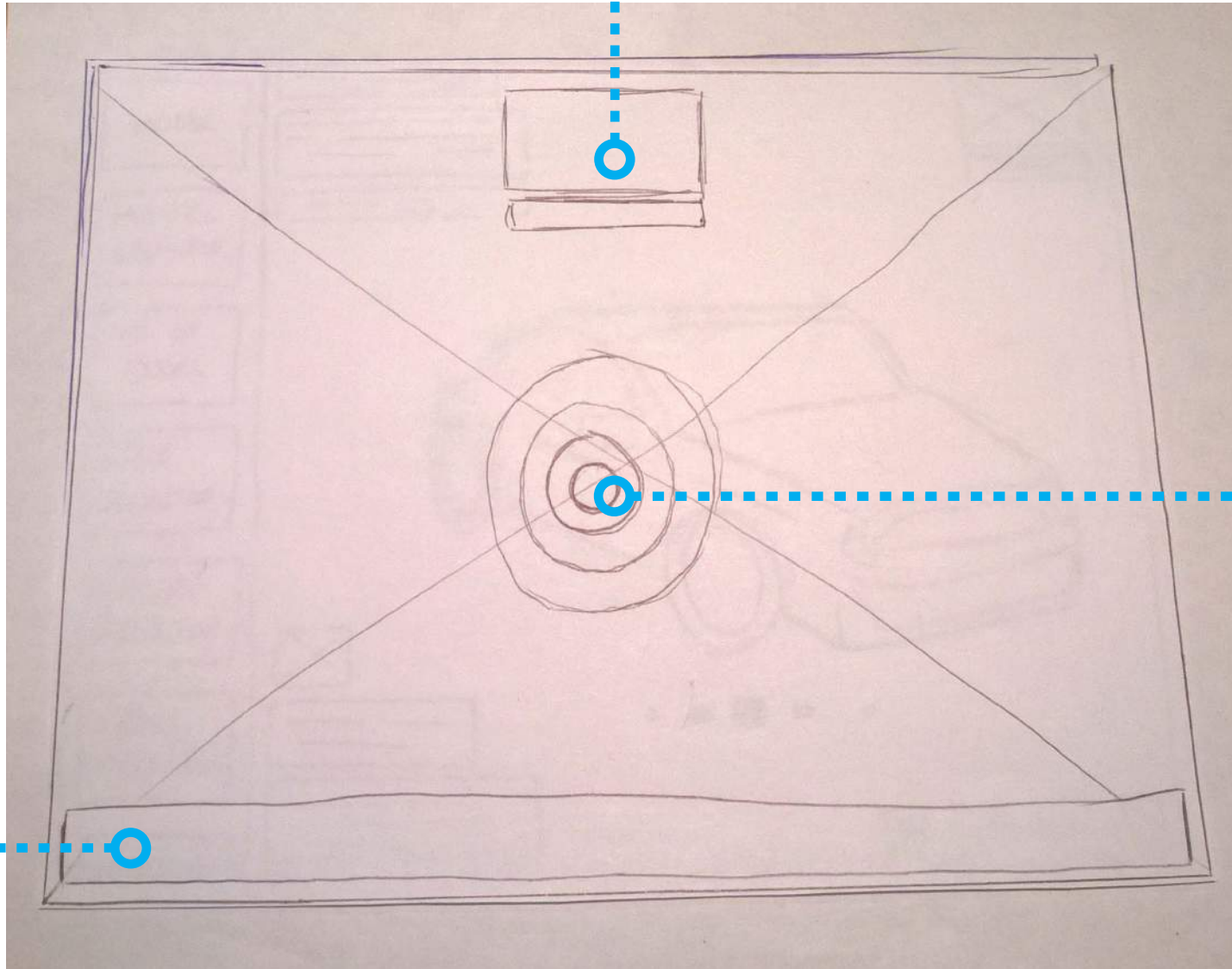
RESEARCH - SYSTEM ARCHITECTURE



WIREFRAMES VERSION 1

HOMESCREEN

Ford logo, name of app



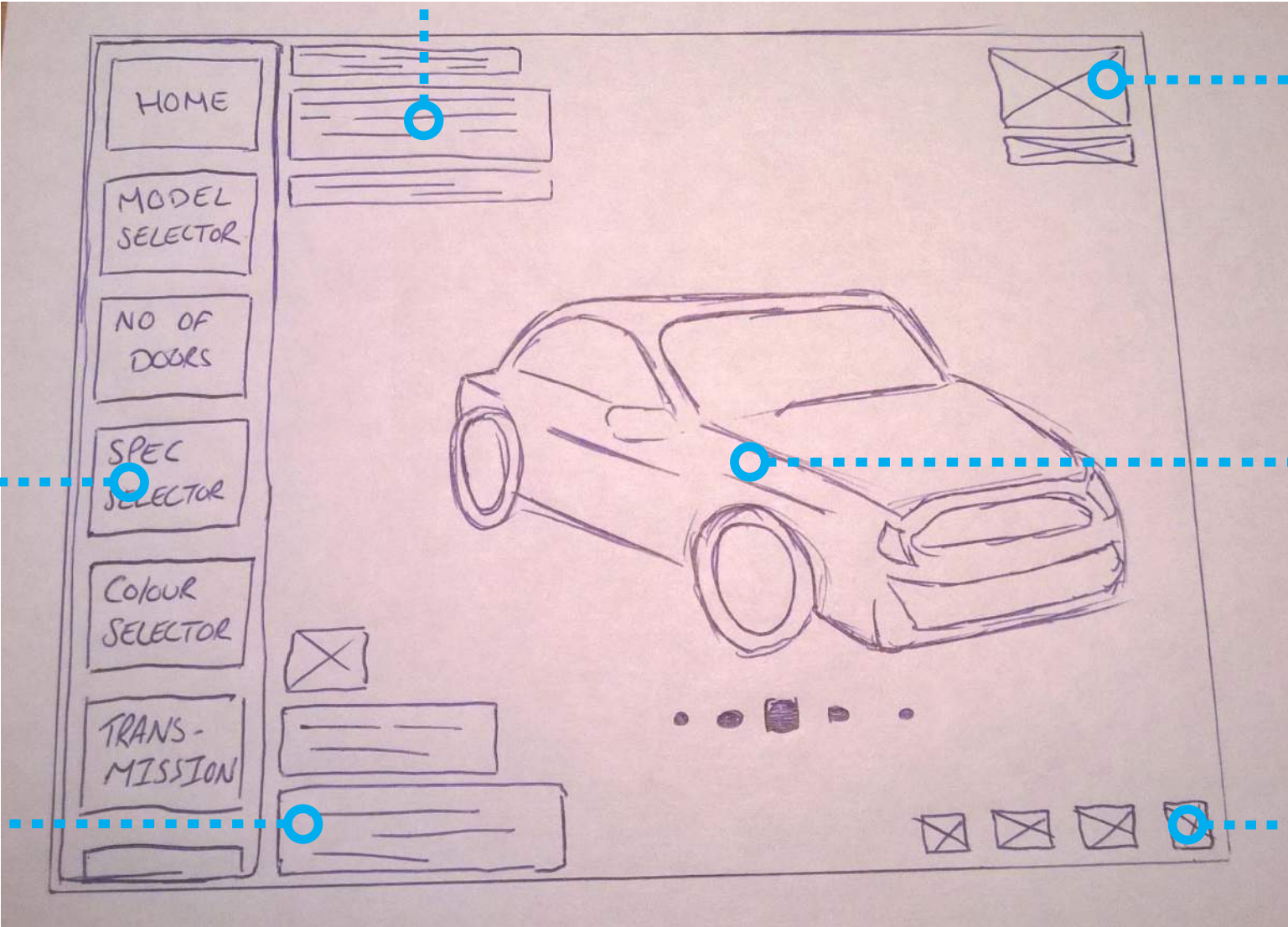
Touch to start.
Also large
image of a
Ford car is
displayed in the
background

Slogan

WIREFRAMES VERSION 1

CAR CREATOR SCREEN

Text, make of model.



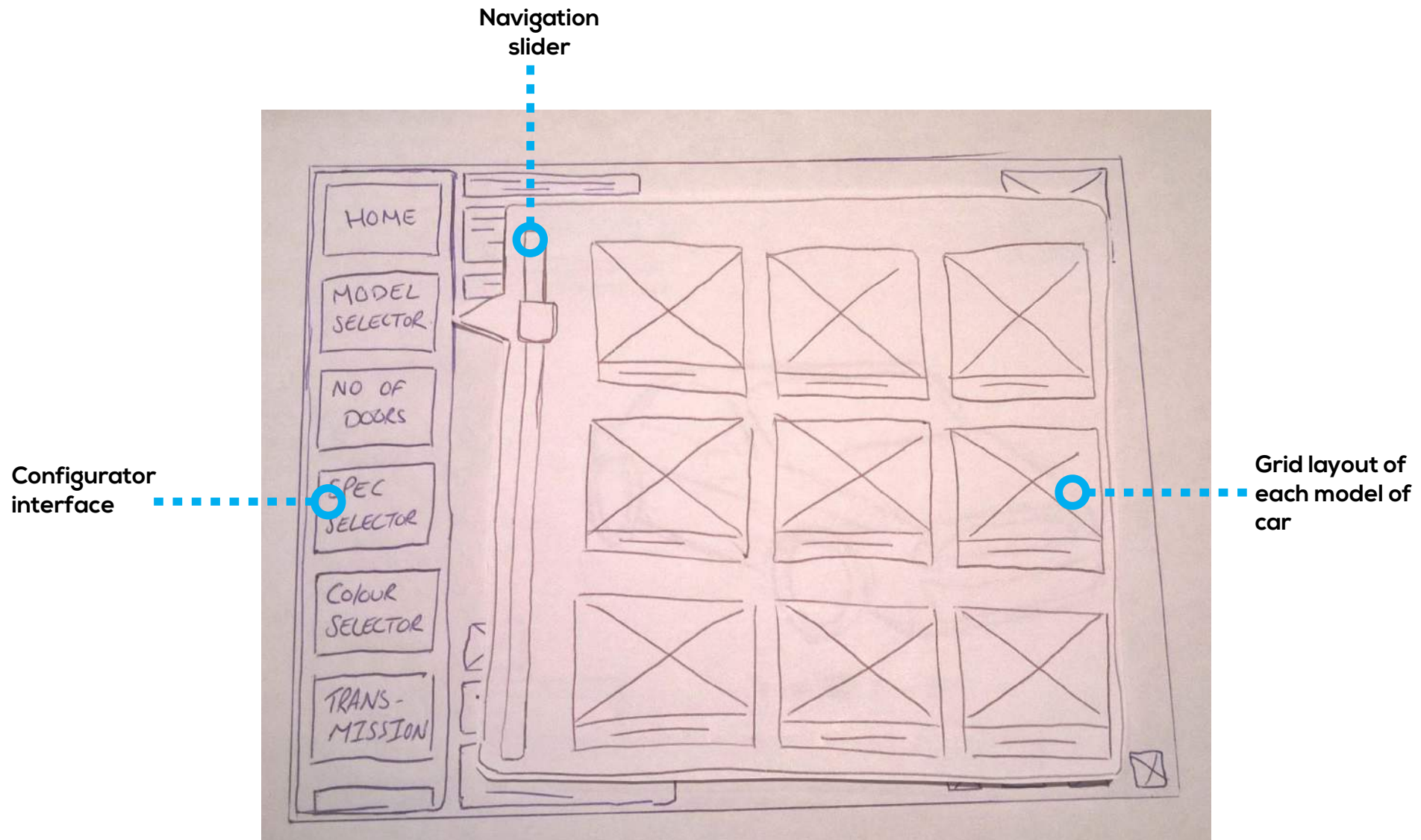
Ford logo

Image of car model, overlay of camera

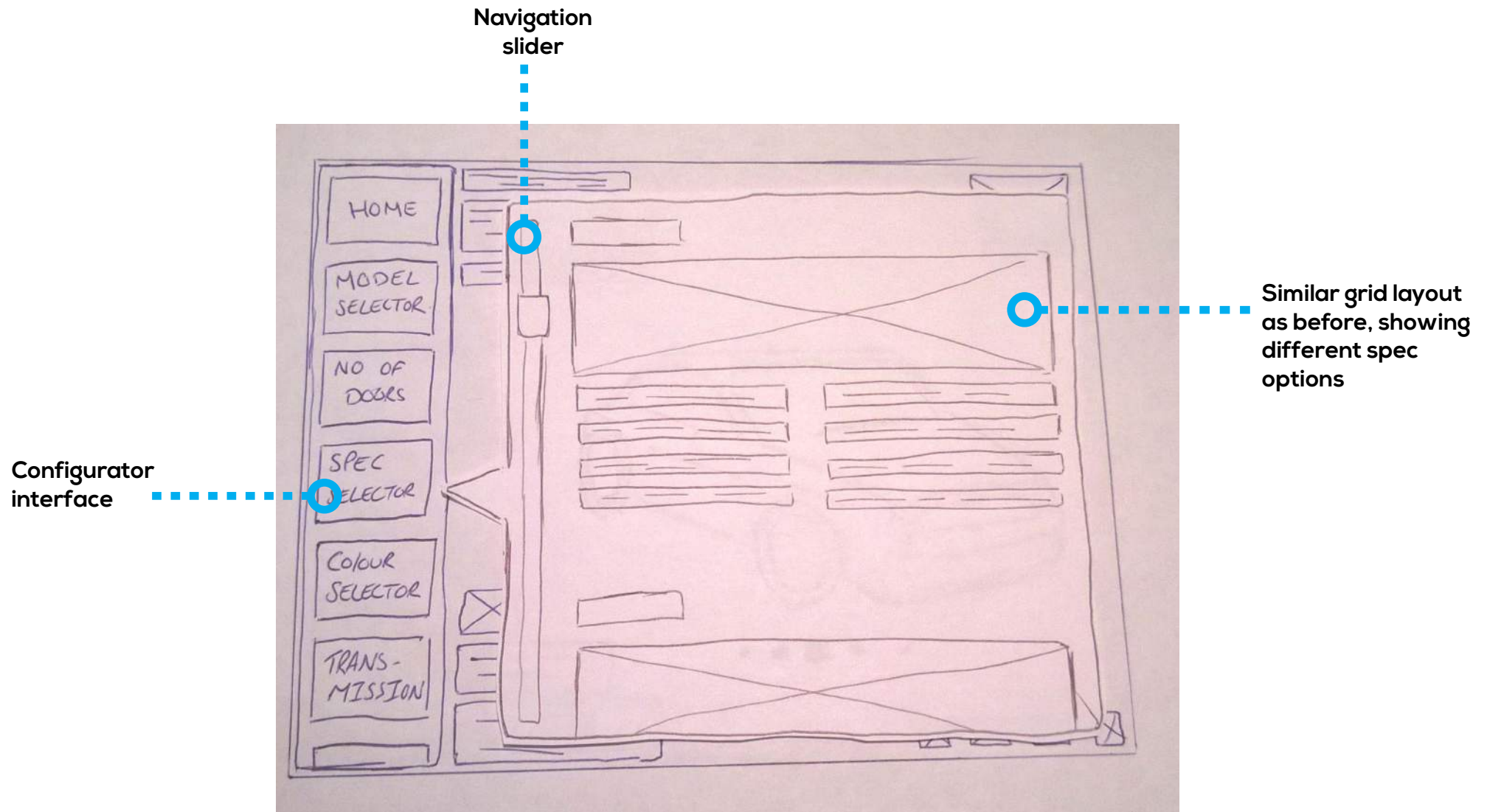
Social media links to share creation

WIREFRAMES VERSION 1

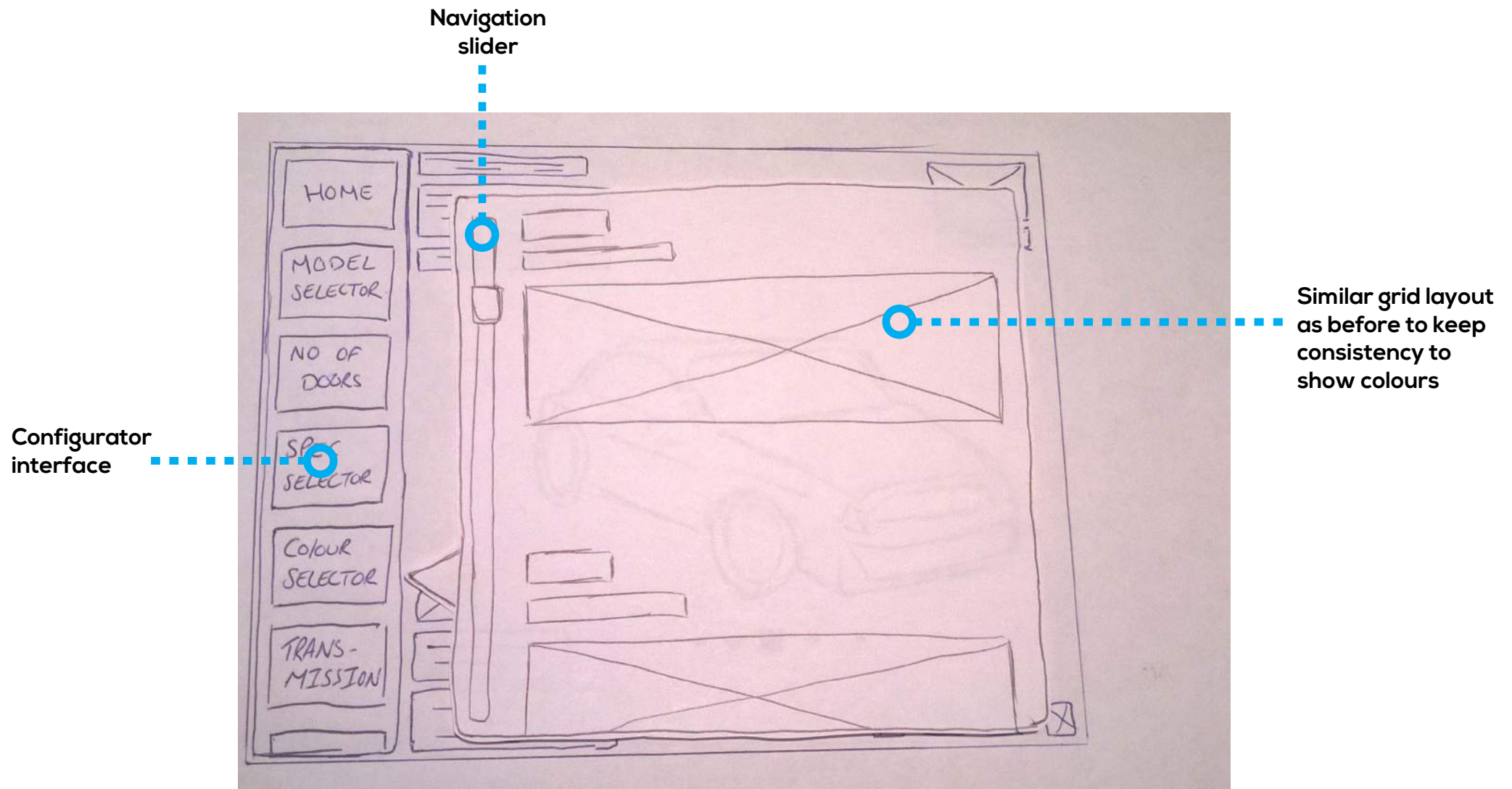
MODEL SELECTOR



WIREFRAMES VERSION 1



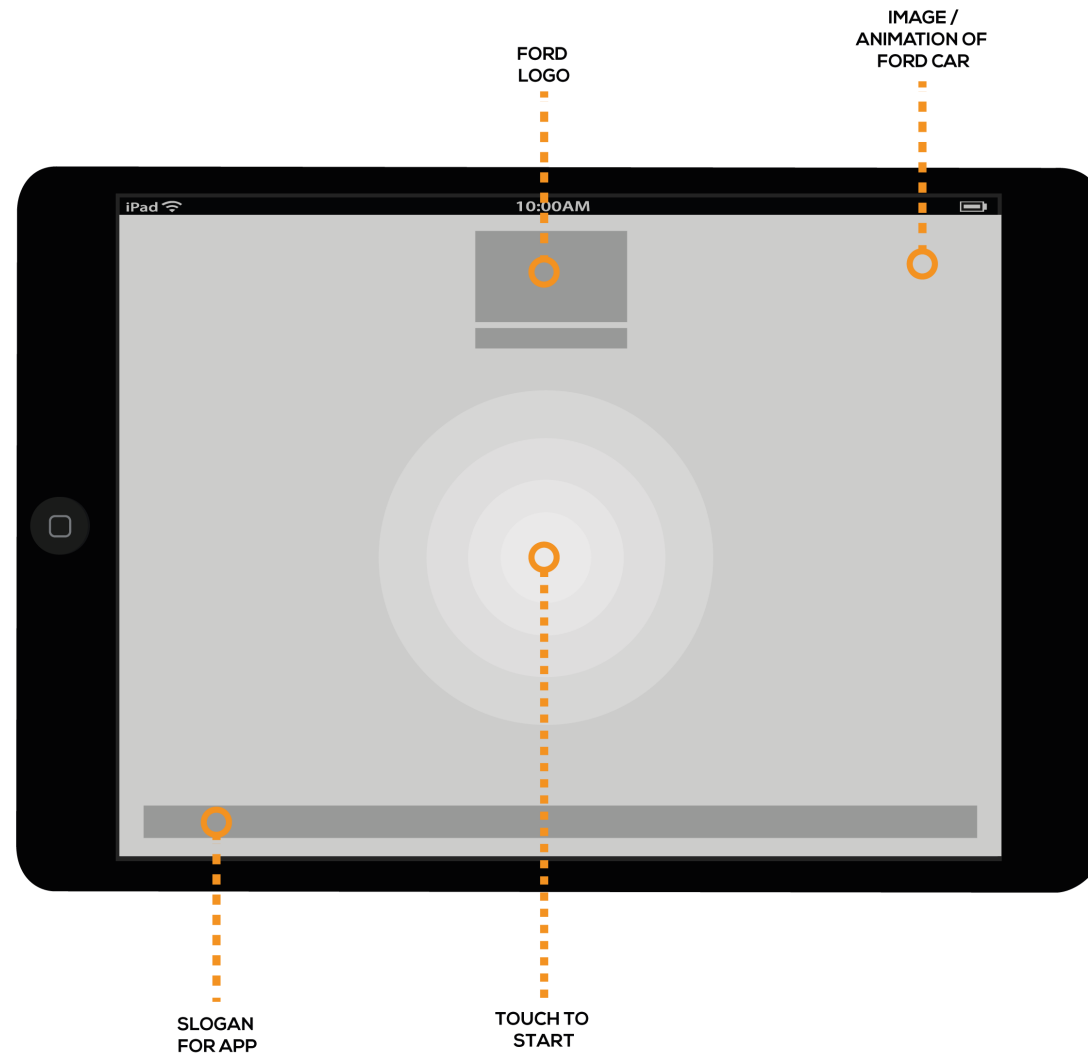
WIREFRAMES VERSION 1



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

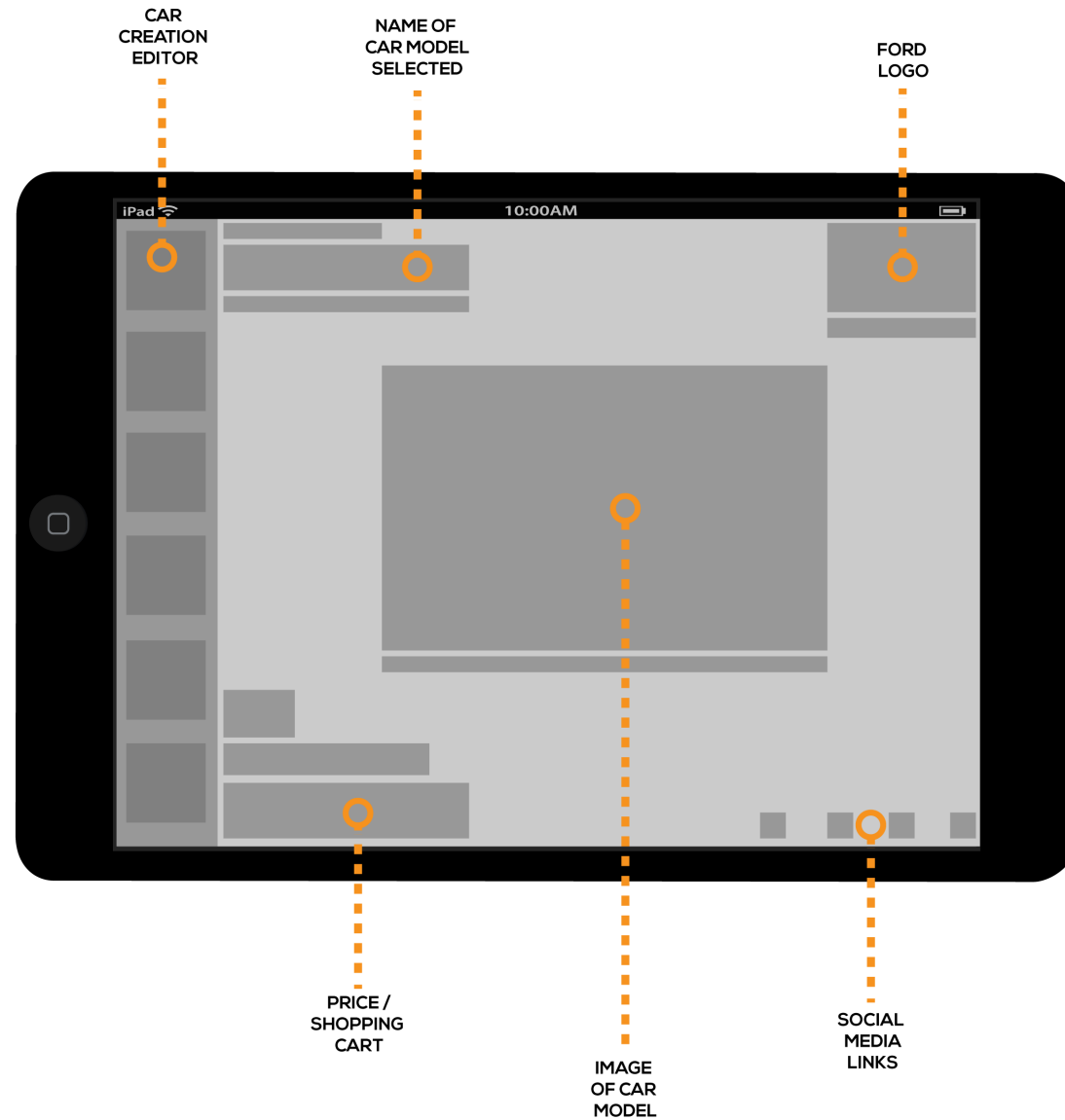
HOME SCREEN



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

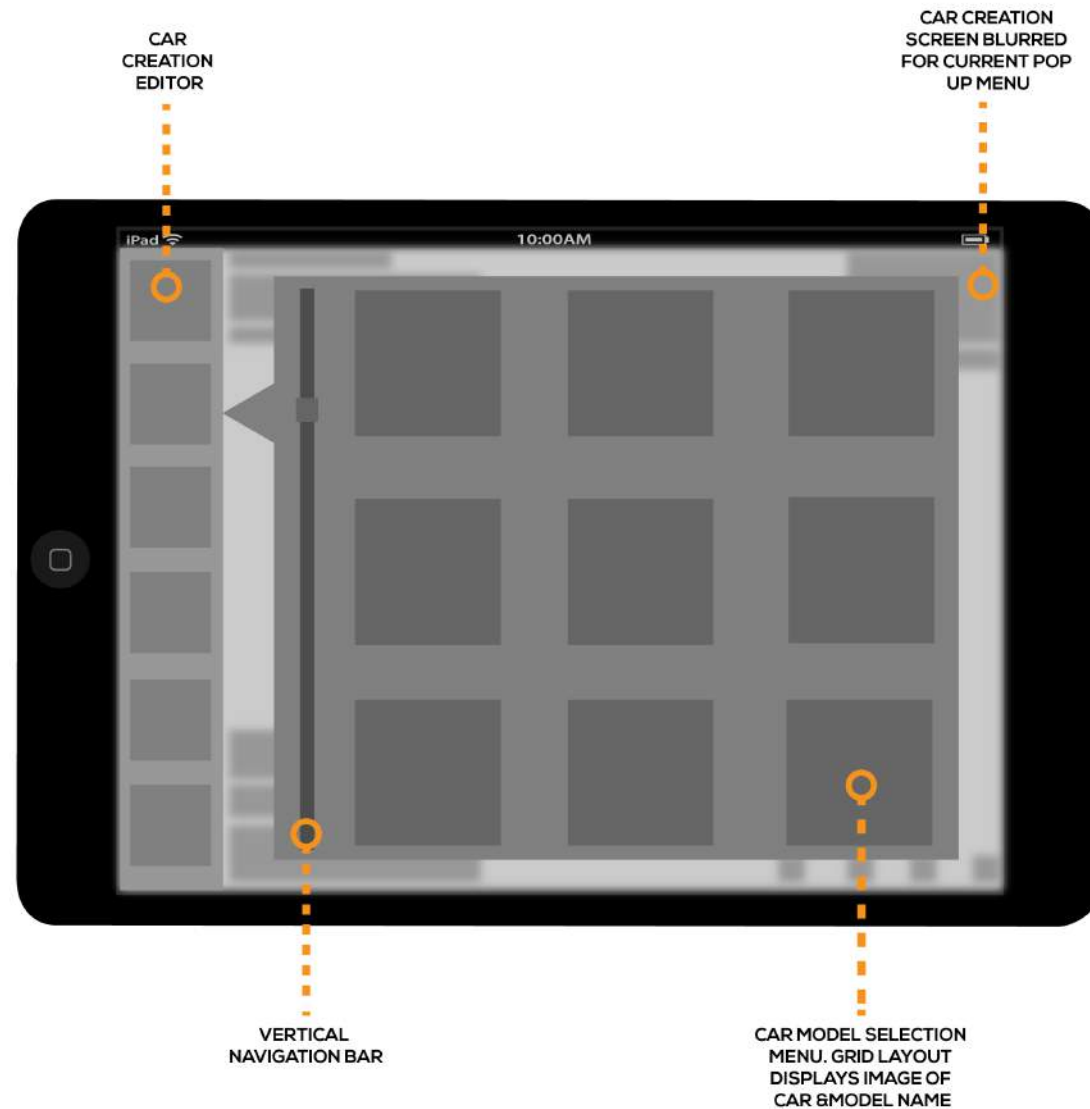
CAR CREATOR SCREEN



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

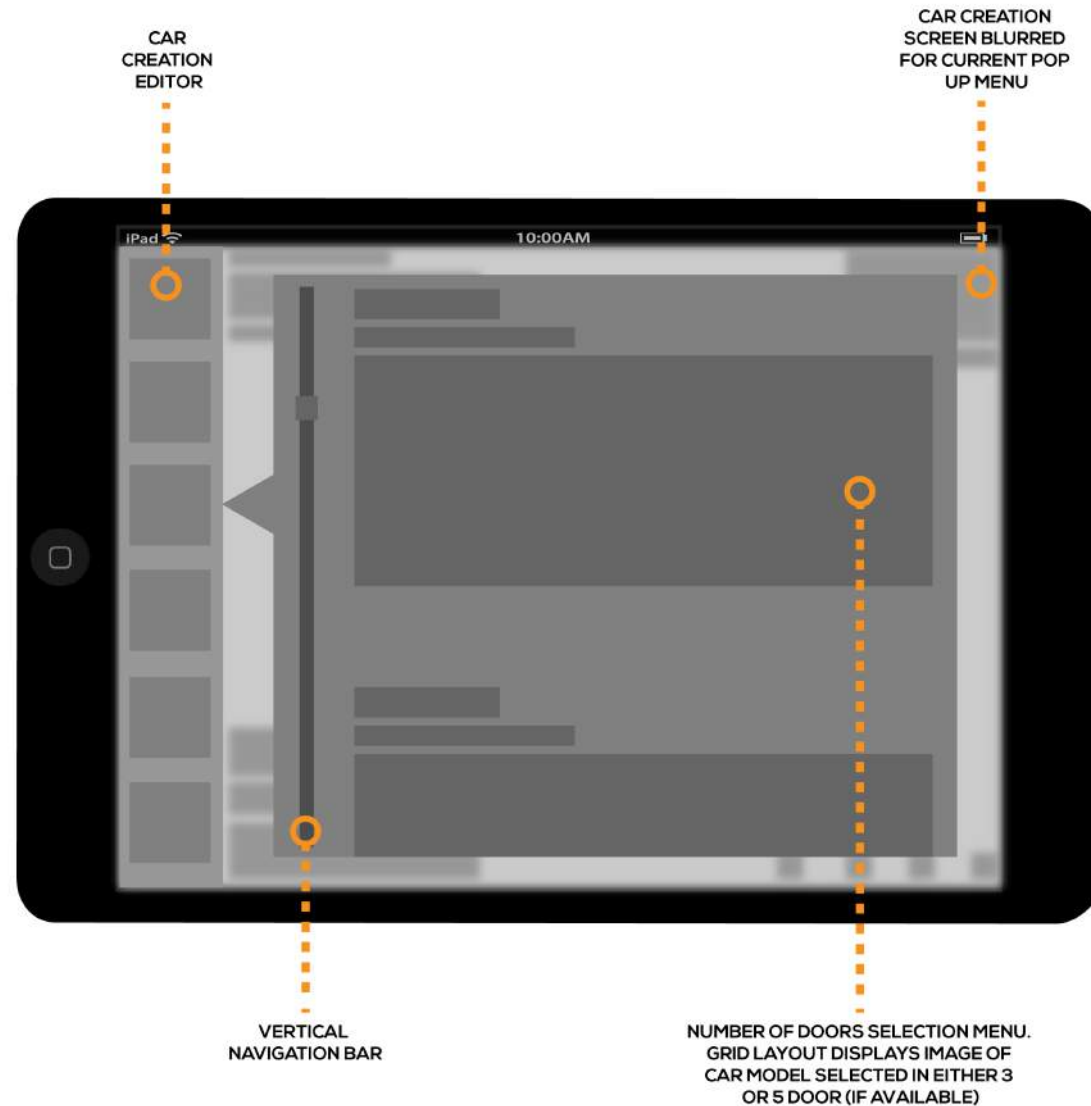
CAR CREATOR SCREEN - FORD MODEL SELECTOR



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

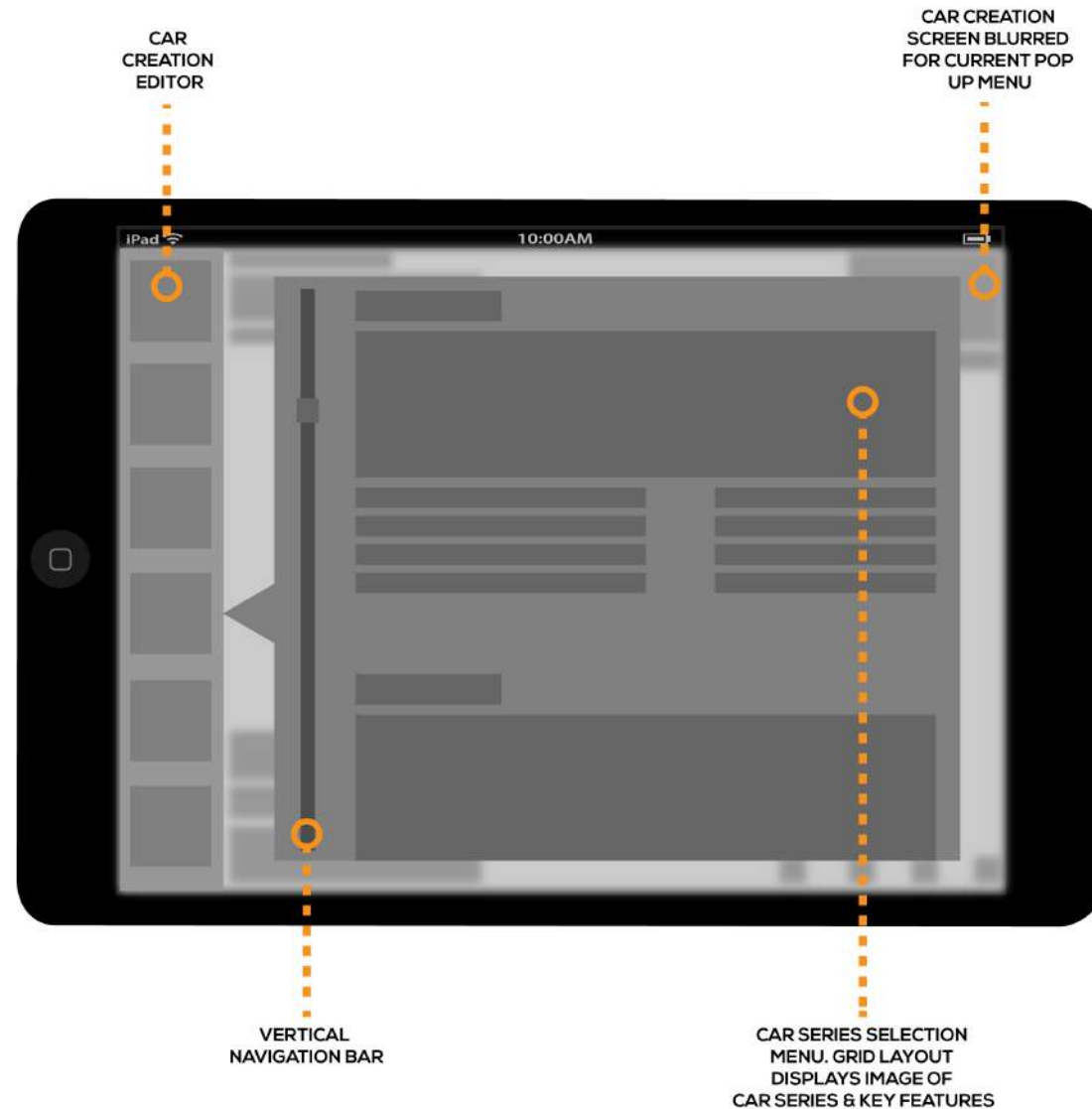
CAR CREATOR SCREEN - NUMBER OF DOORS SELECTOR



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

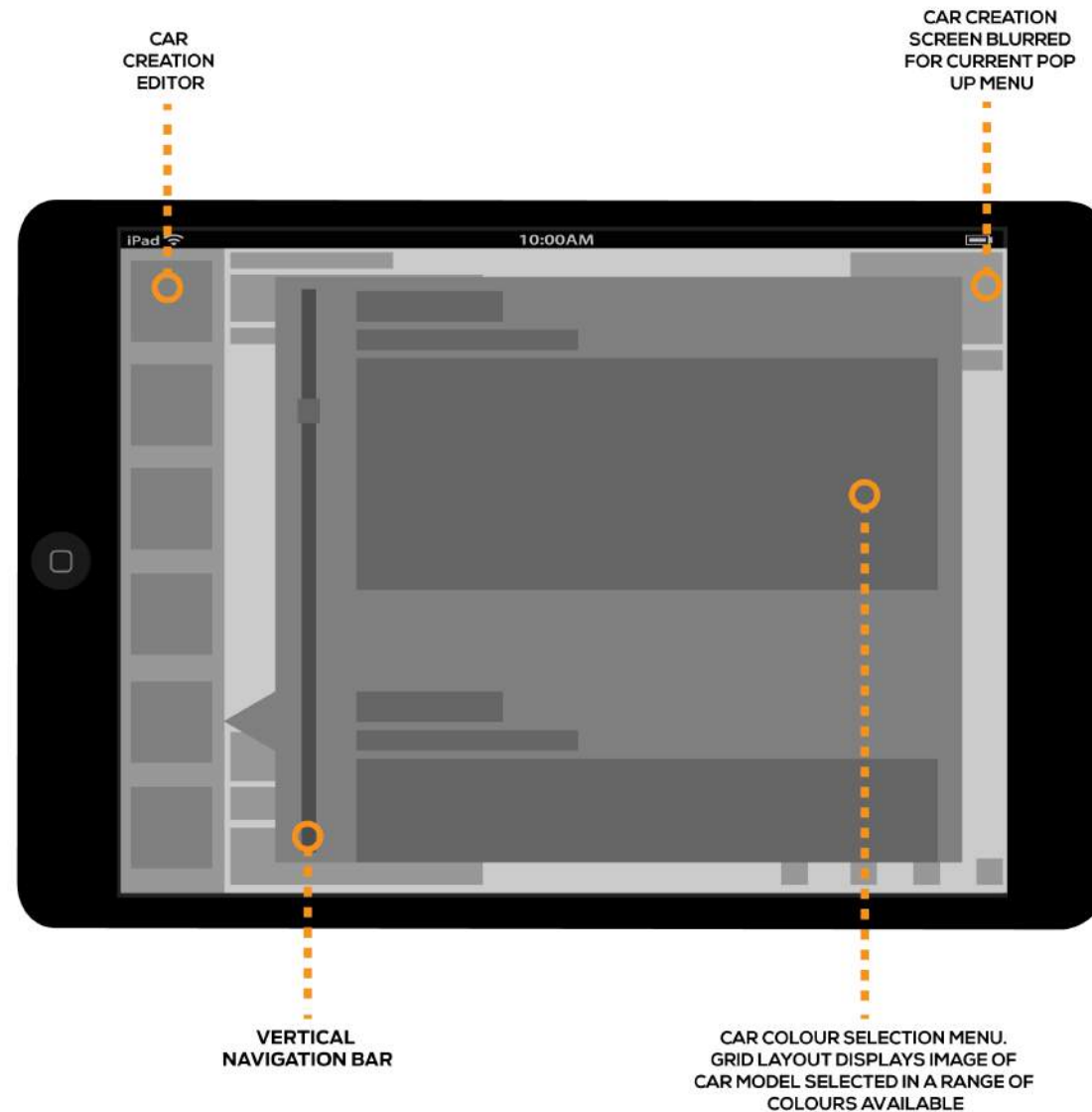
CAR CREATOR SCREEN - SERIES SELECTOR



WIREFRAMES - HIGH FIDELITY

FORD SHOWROOM APP

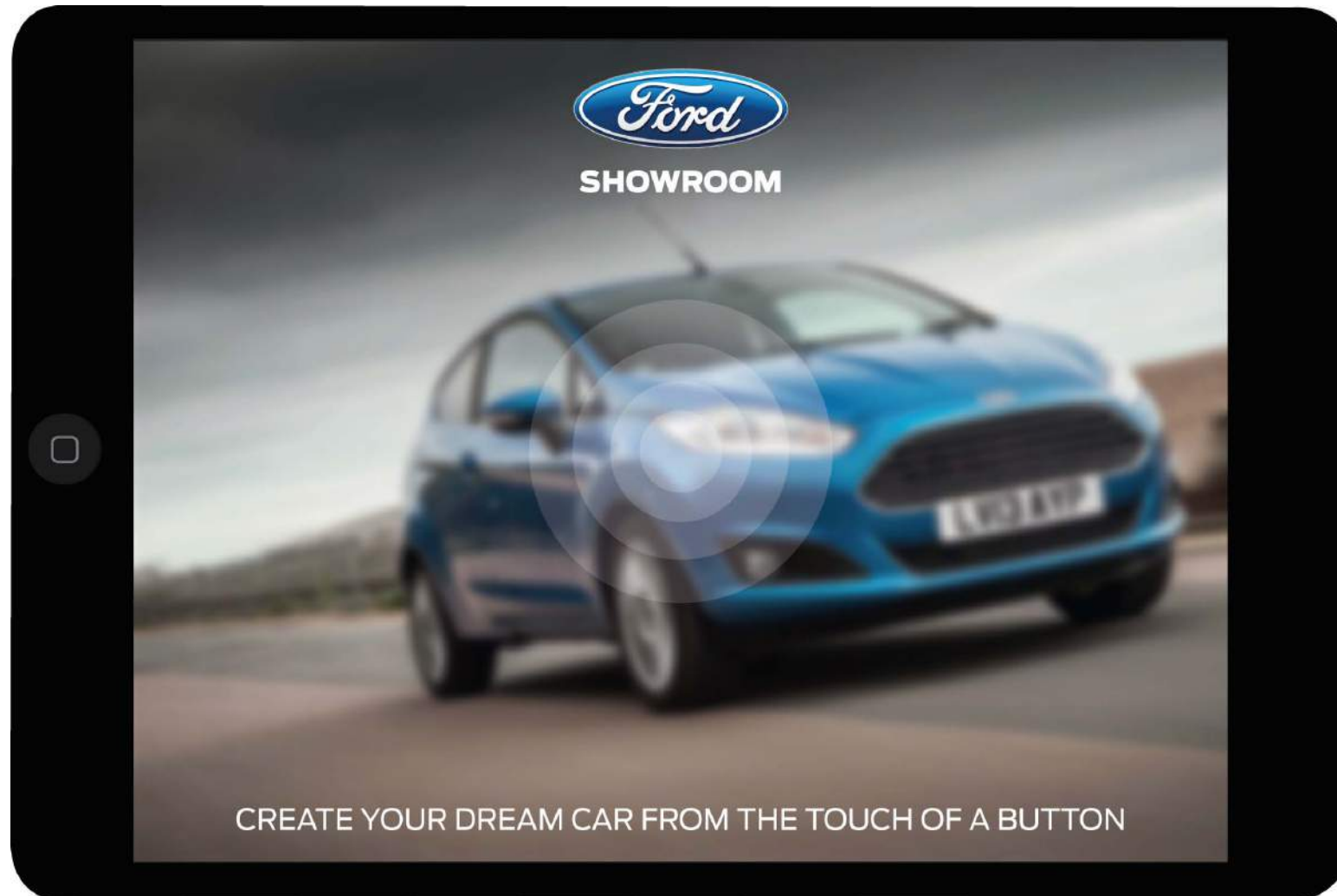
CAR CREATOR SCREEN - COLOUR SELECTOR



CONCEPT 1

FORD SHOWROOM APP

HOME SCREEN



CONCEPT 1

FORD SHOWROOM APP

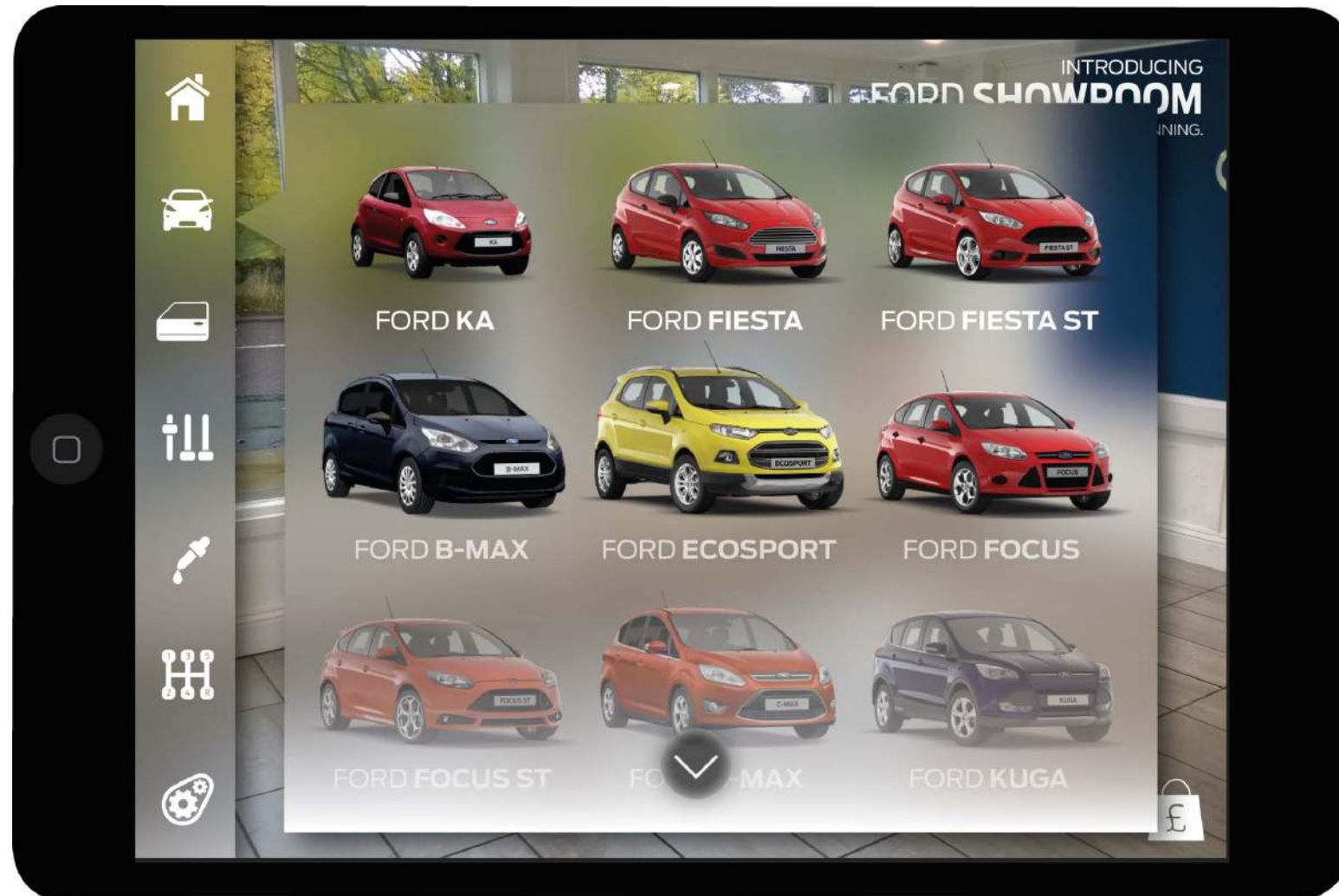
CAR CREATOR SCREEN



CONCEPT 1

FORD SHOWROOM APP

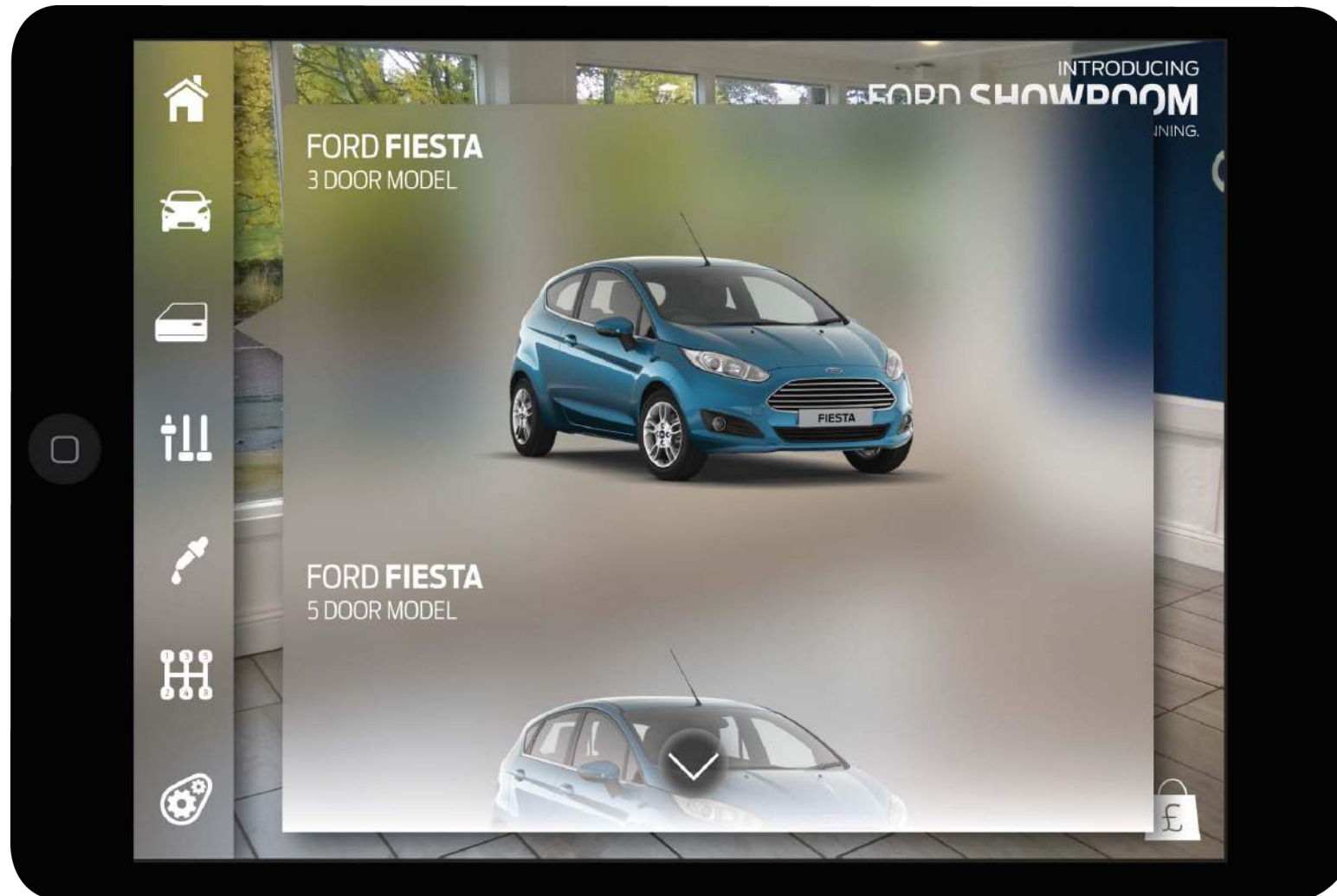
CAR CREATOR SCREEN - FORD MODEL SELECTOR



CONCEPT 1

FORD SHOWROOM APP

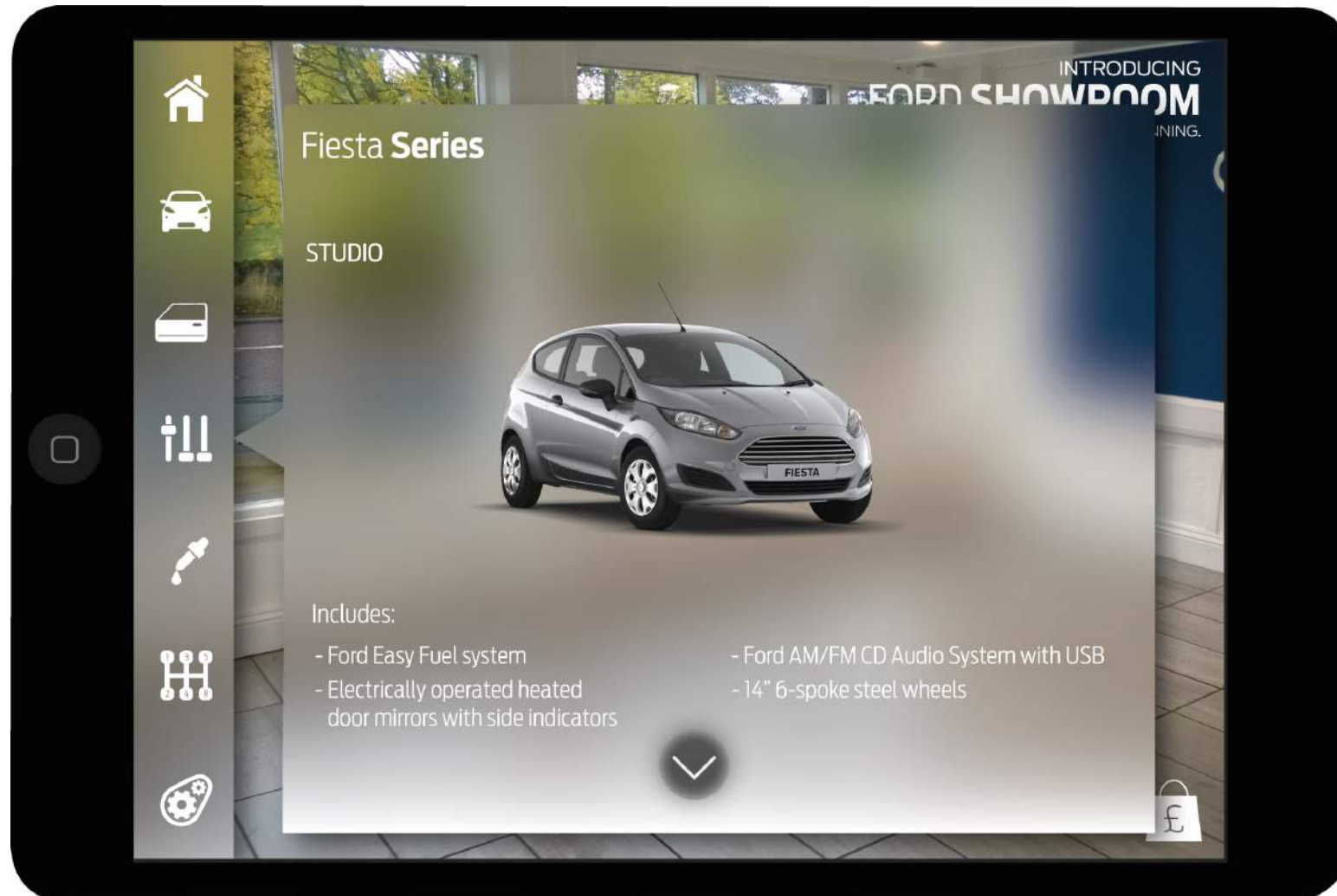
CAR CREATOR SCREEN - NUMBER OF DOORS SELECTOR



CONCEPT 1

FORD SHOWROOM APP

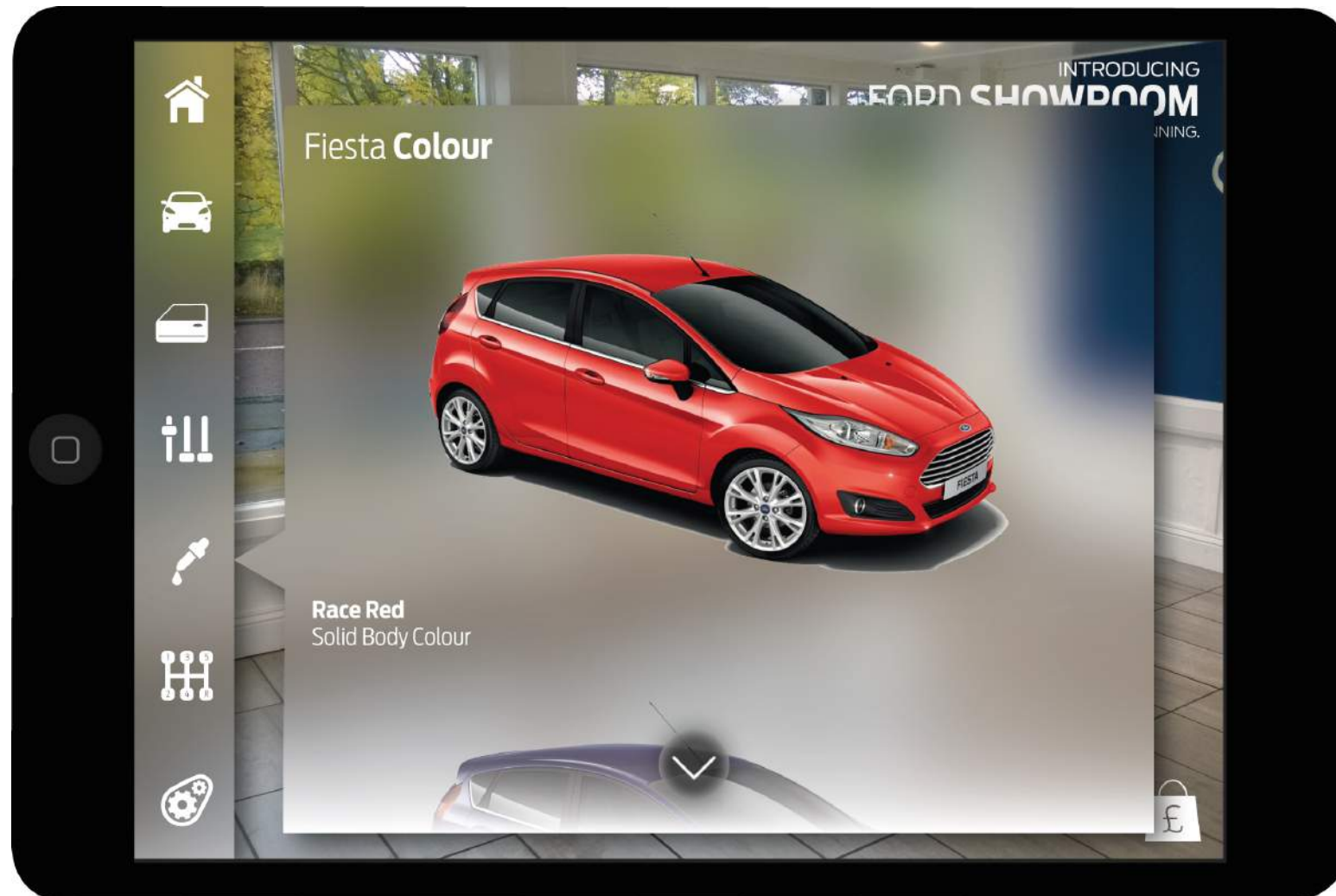
CAR CREATOR SCREEN - SERIES / SPEC SELECTOR



CONCEPT 1

FORD SHOWROOM APP

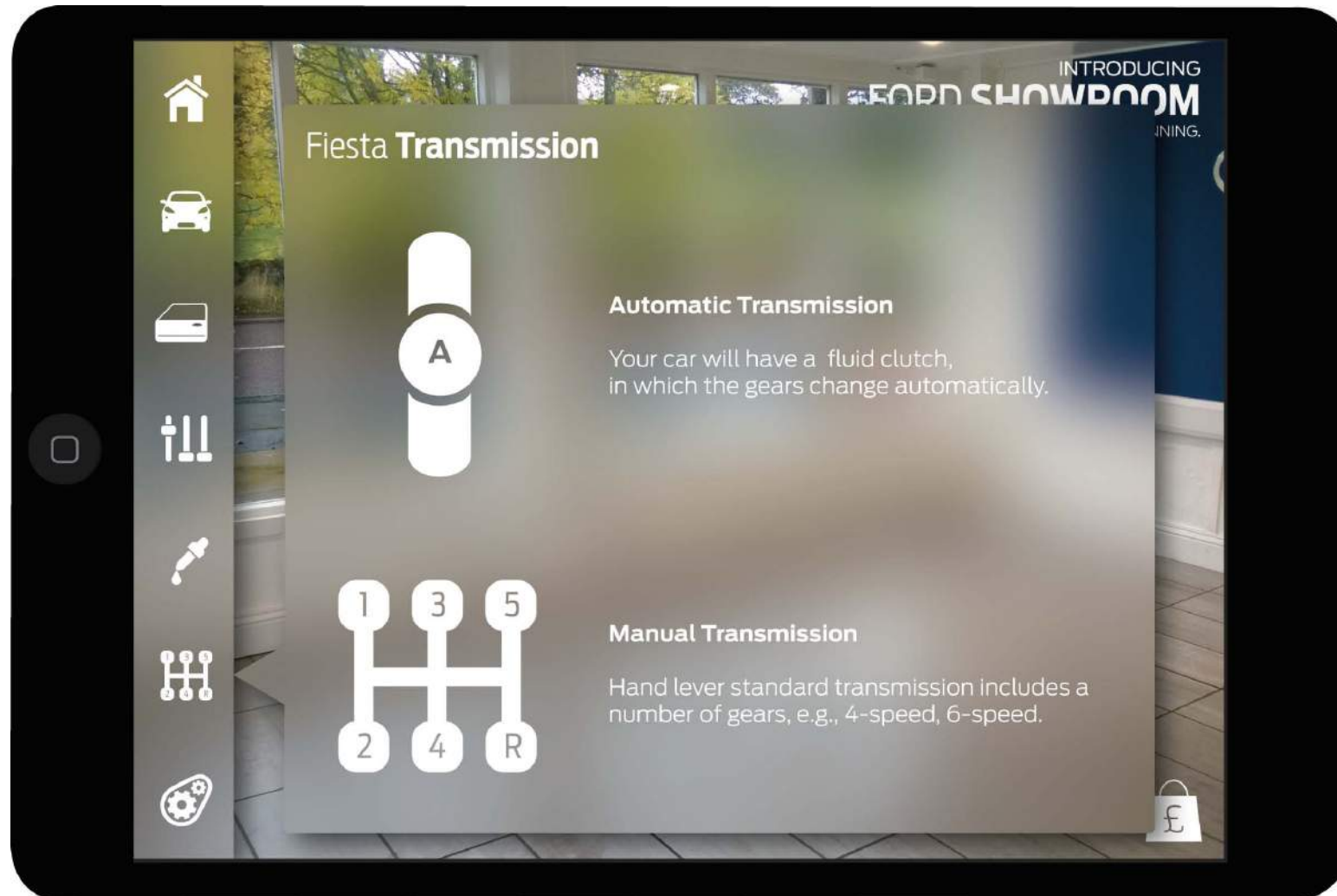
CAR CREATOR SCREEN - COLOUR SELECTOR



CONCEPT 1

FORD SHOWROOM APP

CAR CREATOR SCREEN - TRANSMISSION SELECTOR



CONCEPT 1

FORD SHOWROOM APP

CAR CREATOR SCREEN - ENGINE SELECTOR



CONCEPT 1

FORD SHOWROOM APP

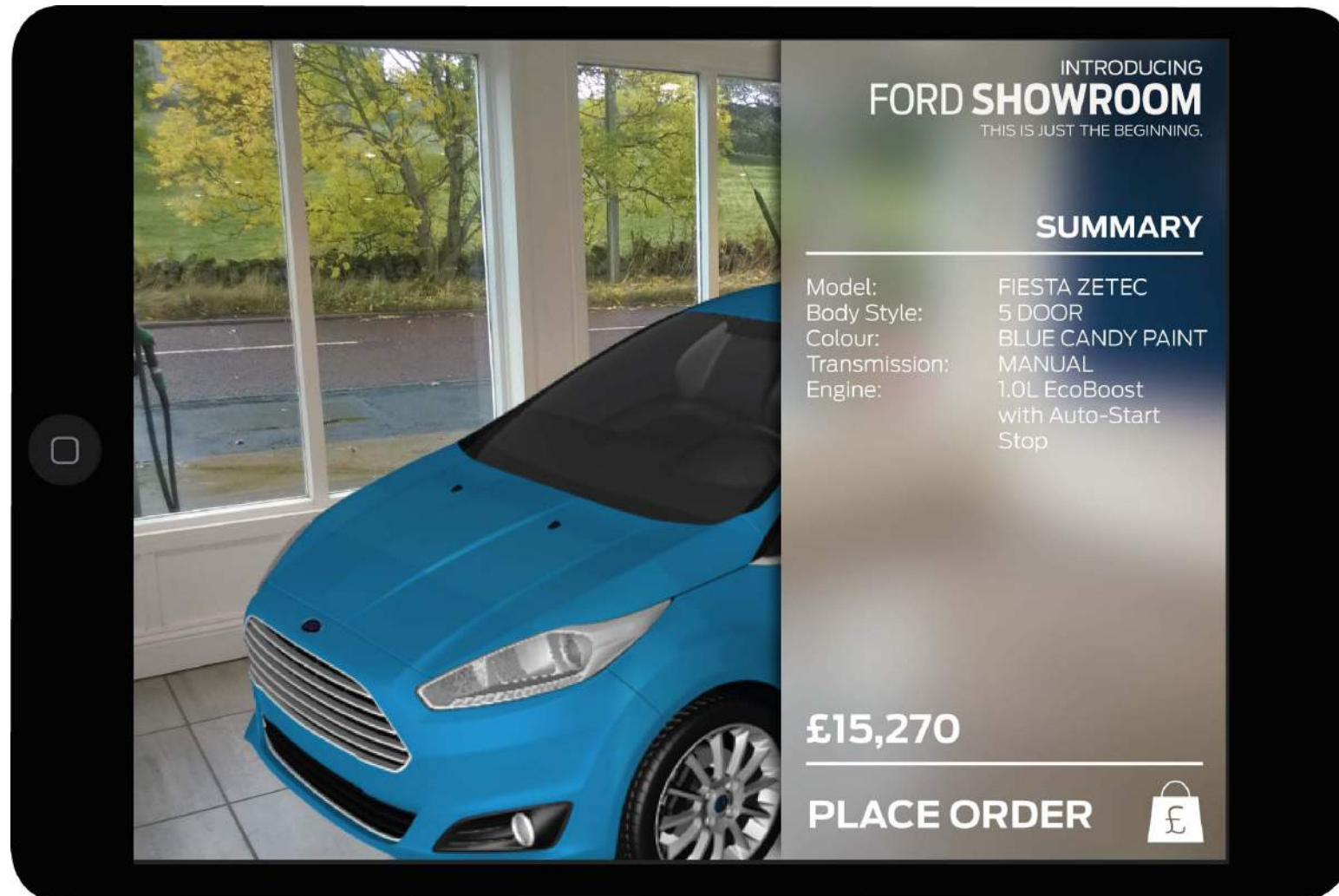
CAR CREATOR SCREEN - AUGMENTED 3D MODEL



CONCEPT 1

FORD SHOWROOM APP

ORDER SCREEN

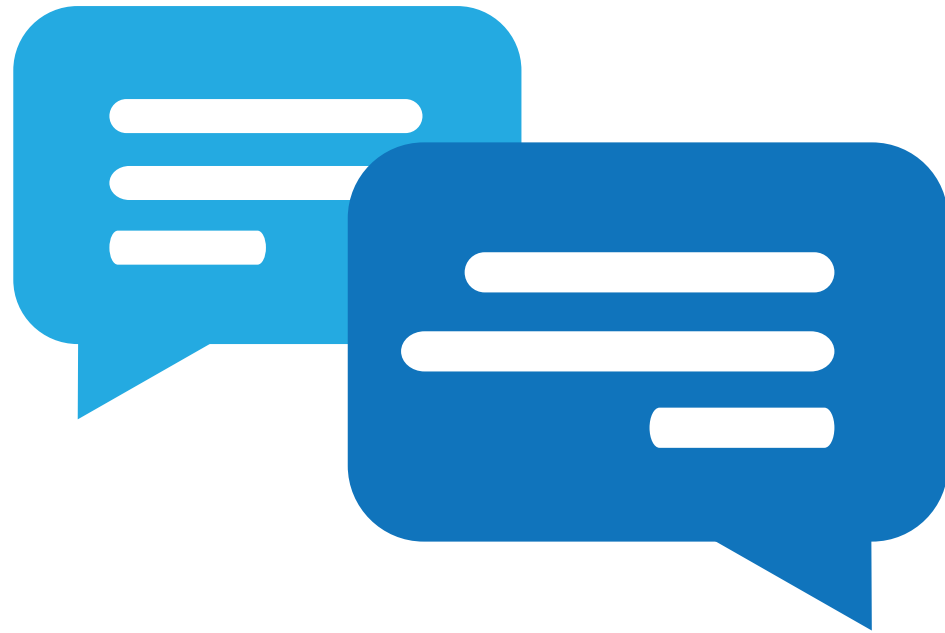


FEEDBACK

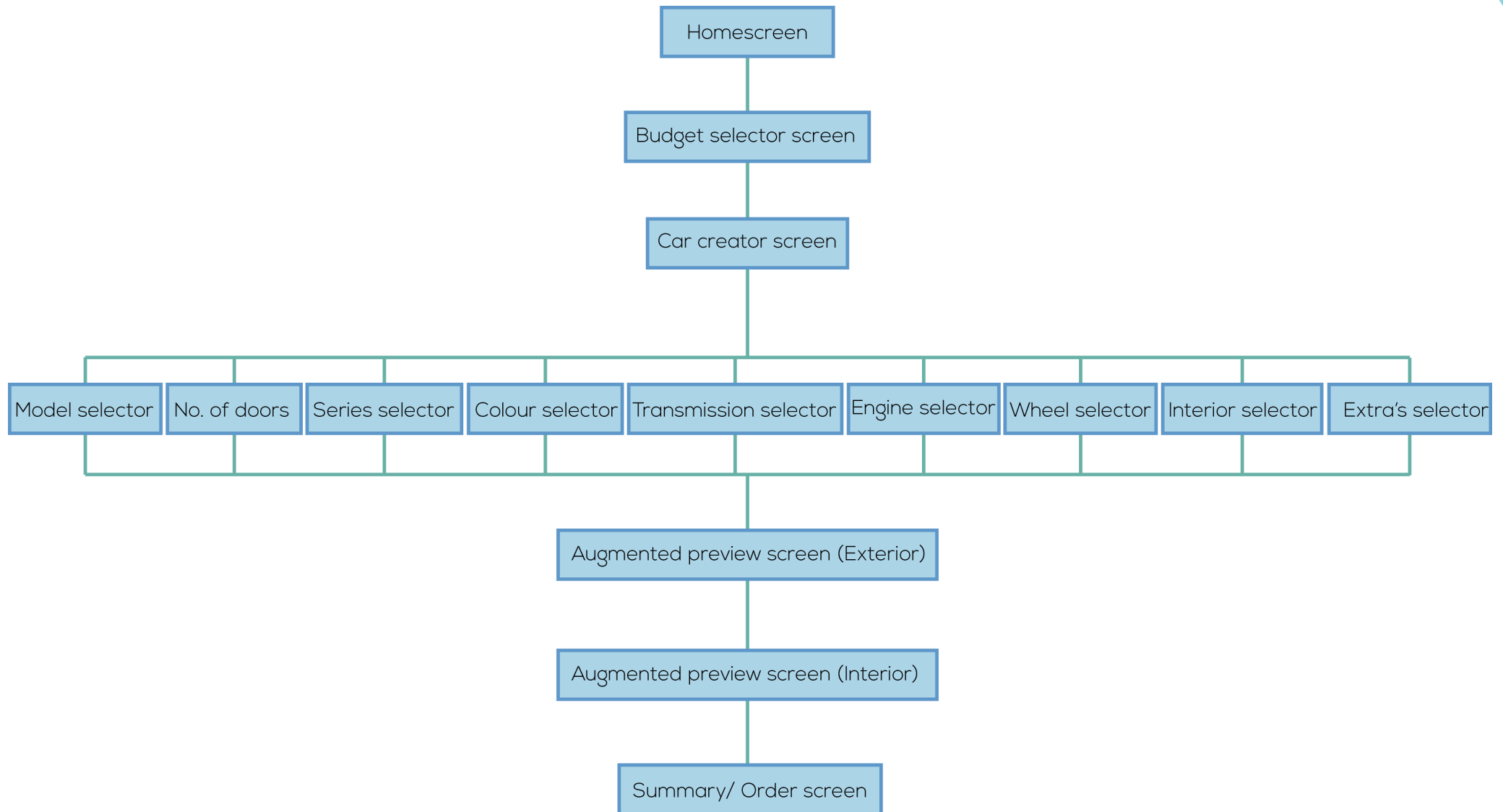
After my interim presentation on the 13th of November I was given great feedback, the interface was received positively but there are always ways to improve my project.

I have defined a specific user and it is customer focused to an extent. I identified that budgeting is an issue with real customers and it would be great for me to implement something to help the customers get what they want in their selected price range. To make my project even more customers focused maybe I can make the app that does this.

Also it was noted that 'Concept 1' focused more on the outside of the car, perhaps in 'Concept 2' I could implement the interior more.



SYSTEM ARCHITECTURE VERSION 2

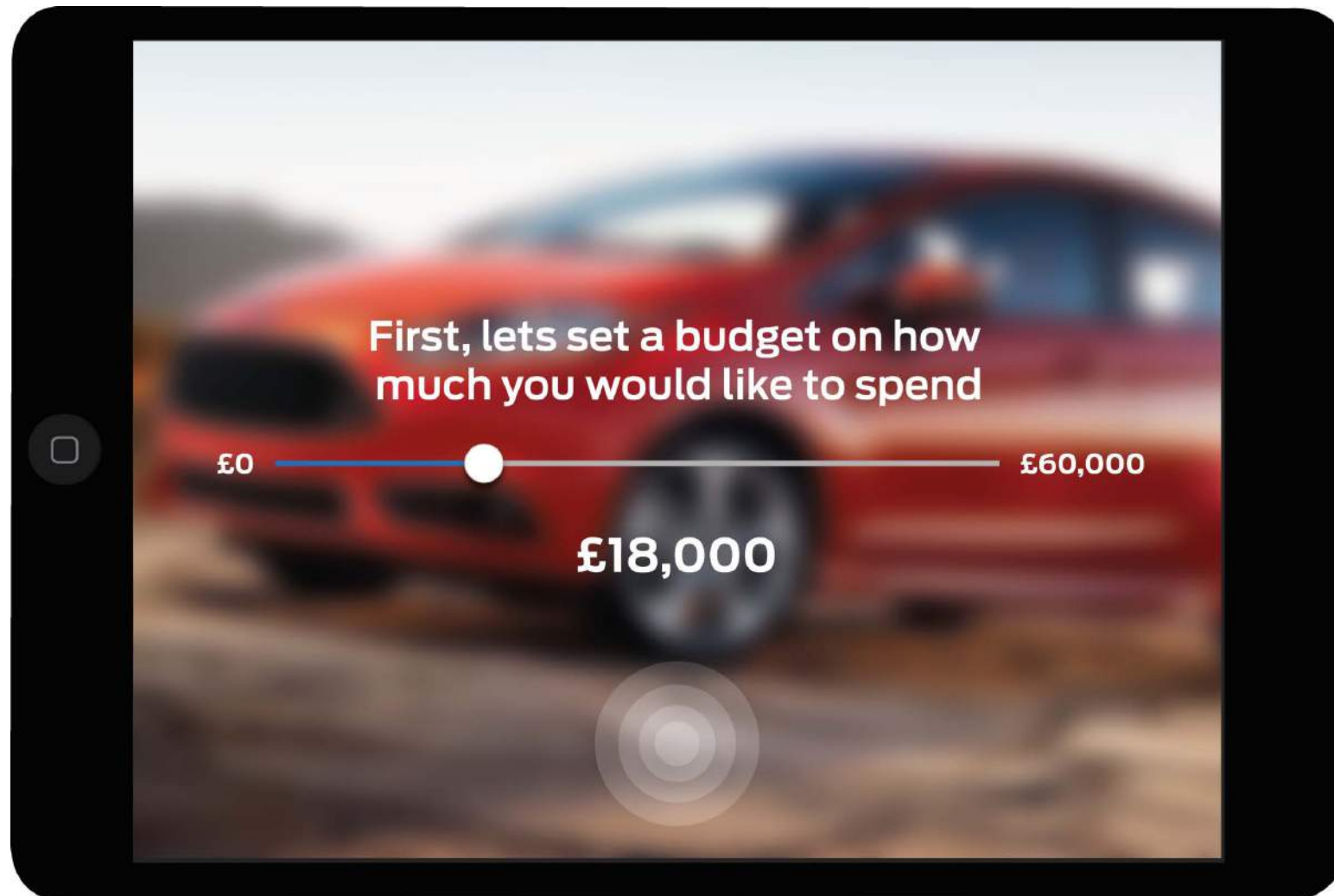


CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

BUDGET SELECTOR SCREEN



CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

CAR CREATOR SCREEN



CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

ALLOY WHEEL SELECTOR

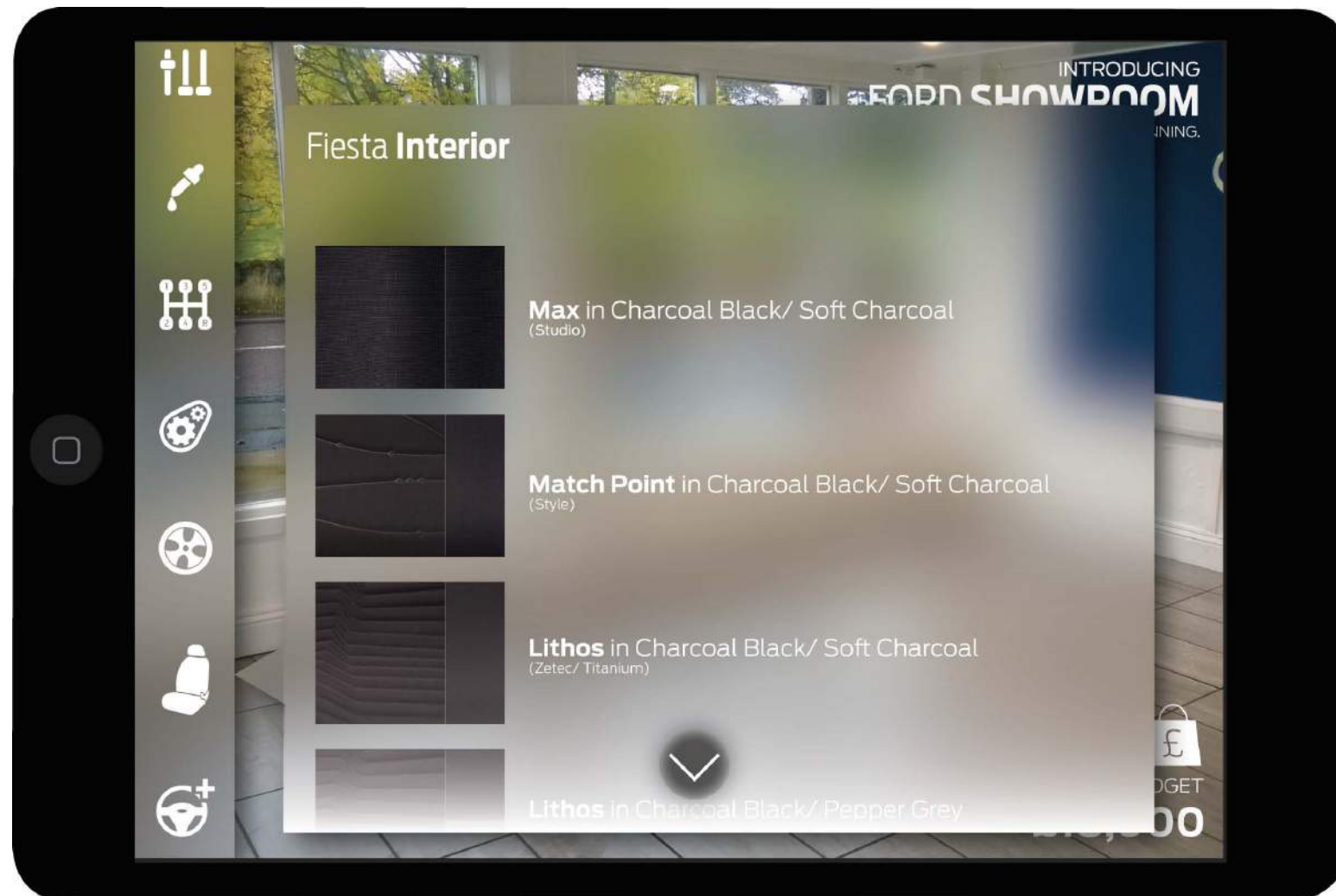


CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

INTERIOR SELECTOR

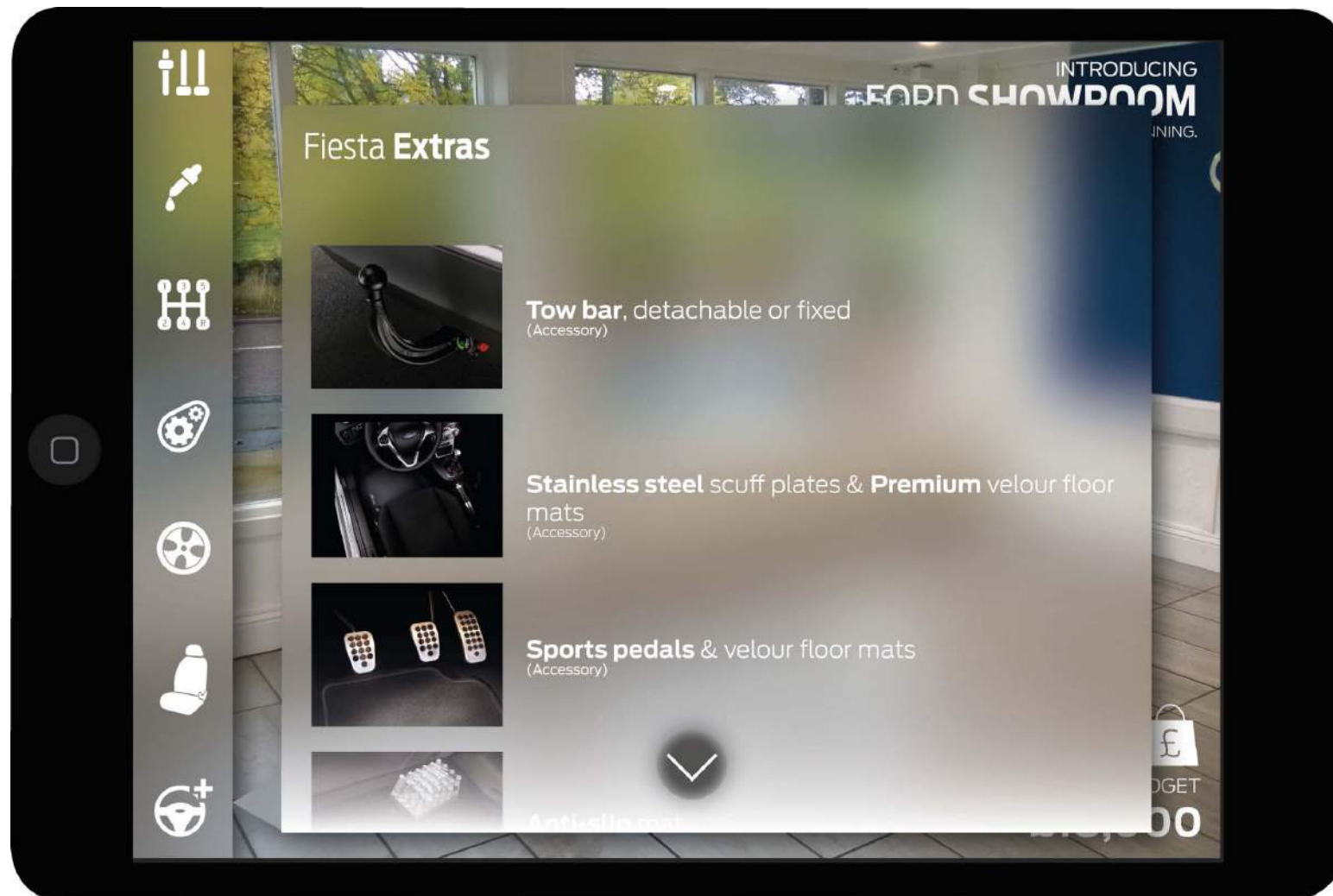


CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

EXTRAS SELECTOR

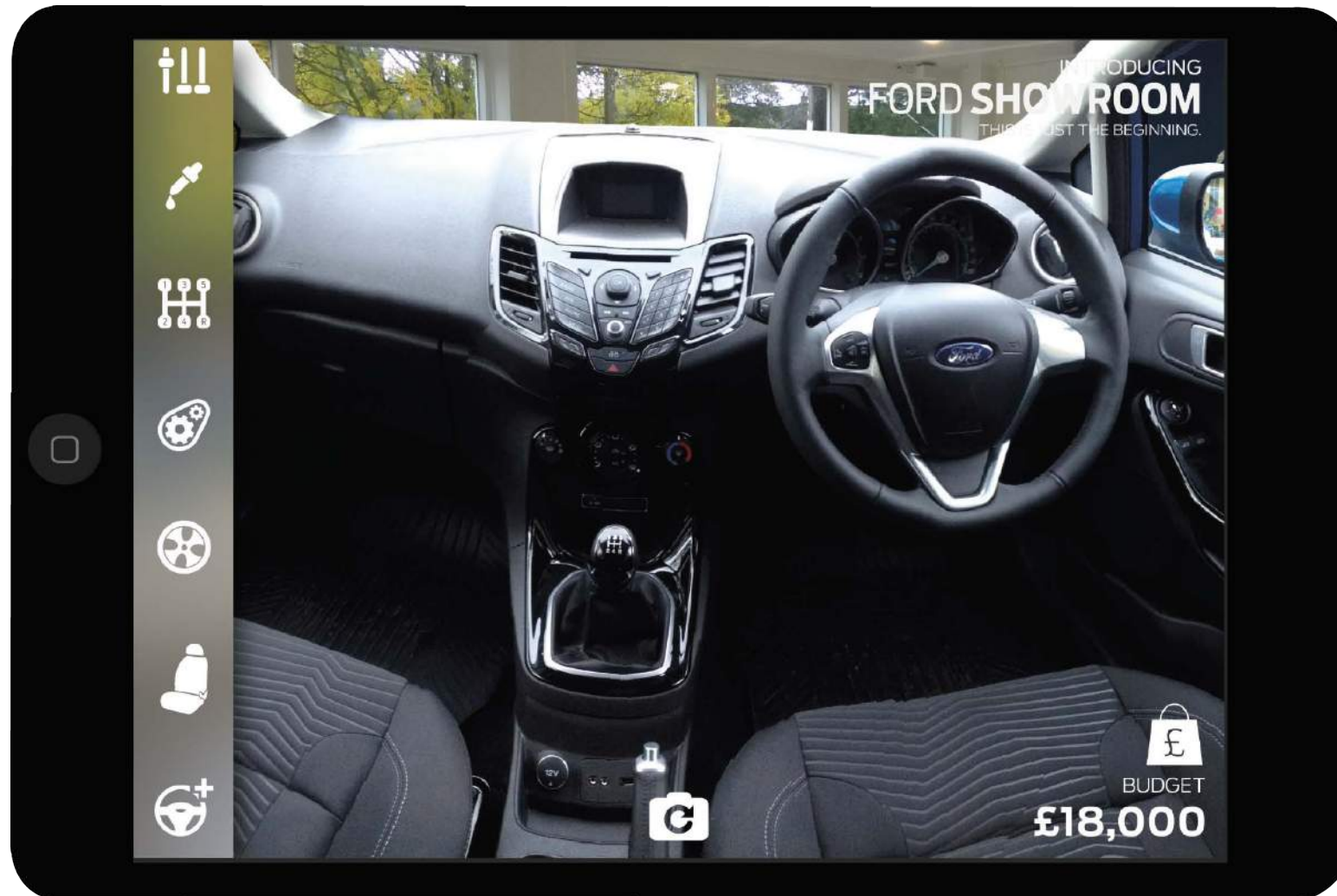


CONCEPT 2

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

INTERIOR VIEW

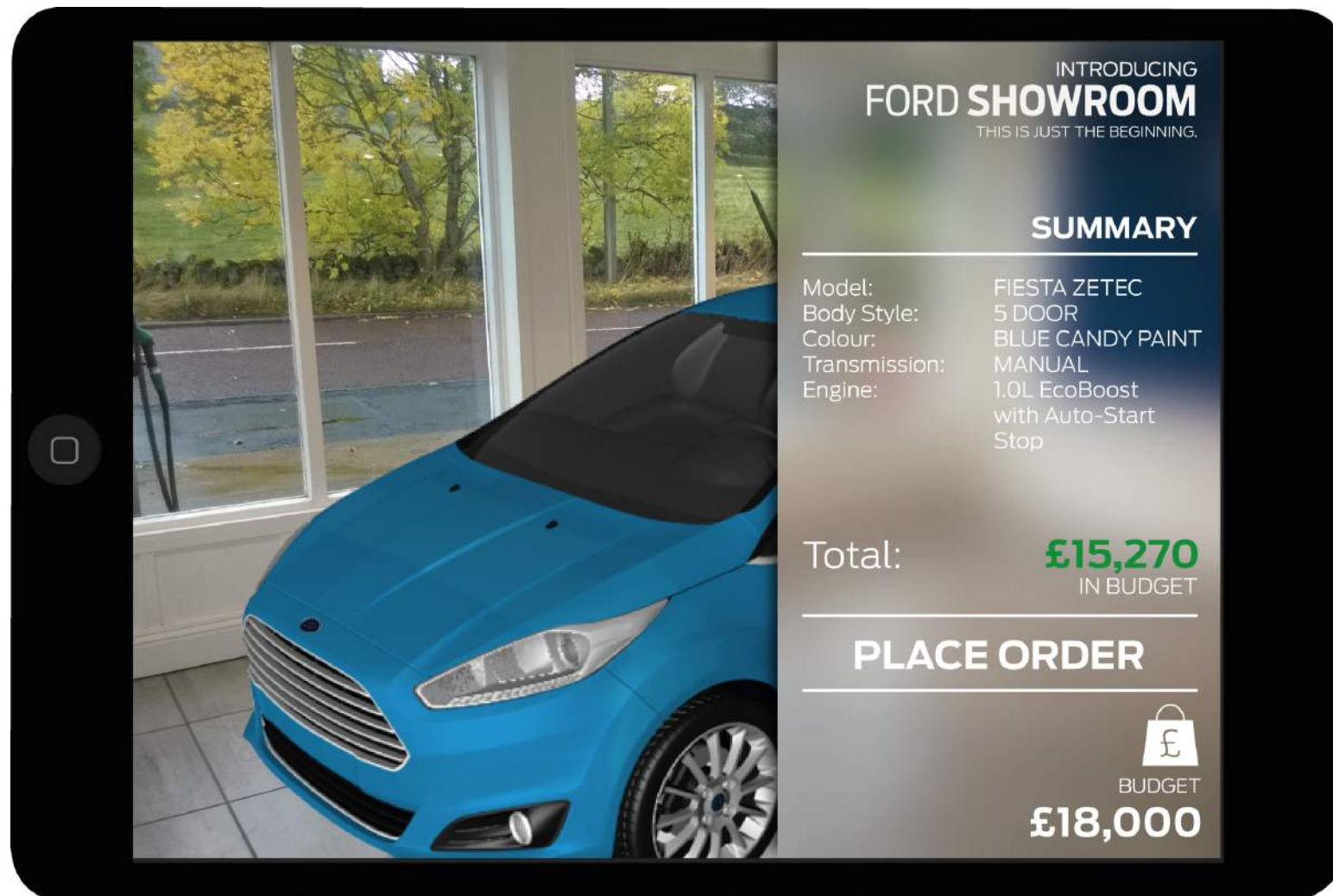


CONCEPT 2

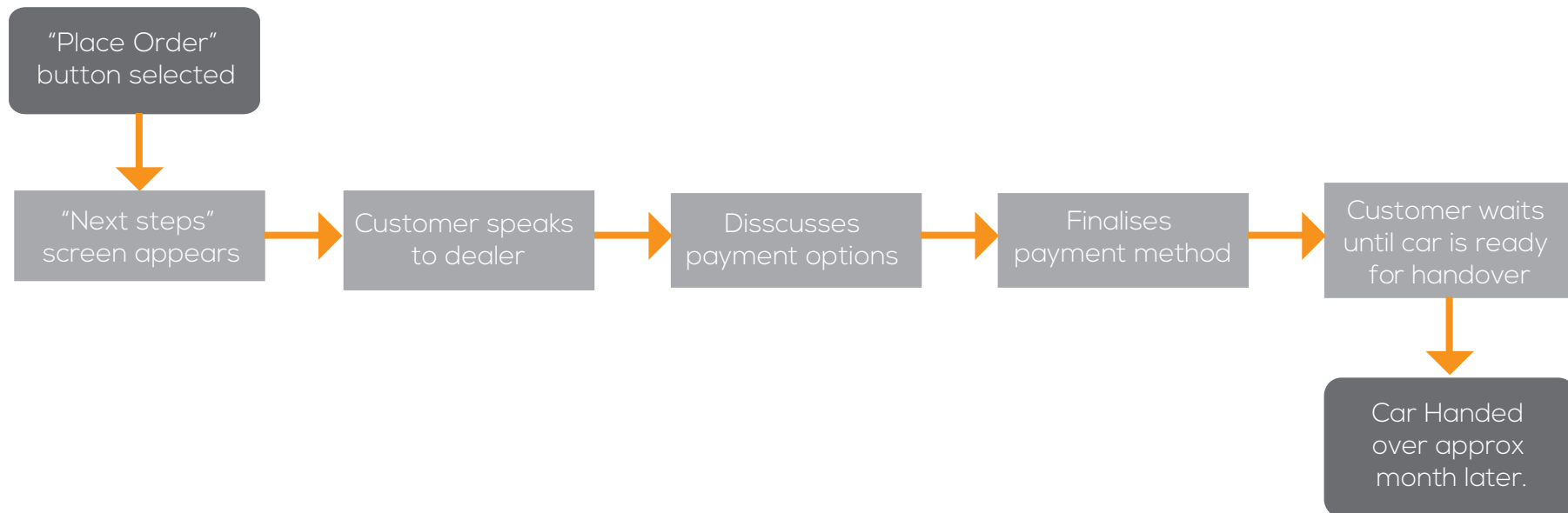
FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 1" BUT WITH NOTICABLE IMPROVEMENTS

ORDER SCREEN



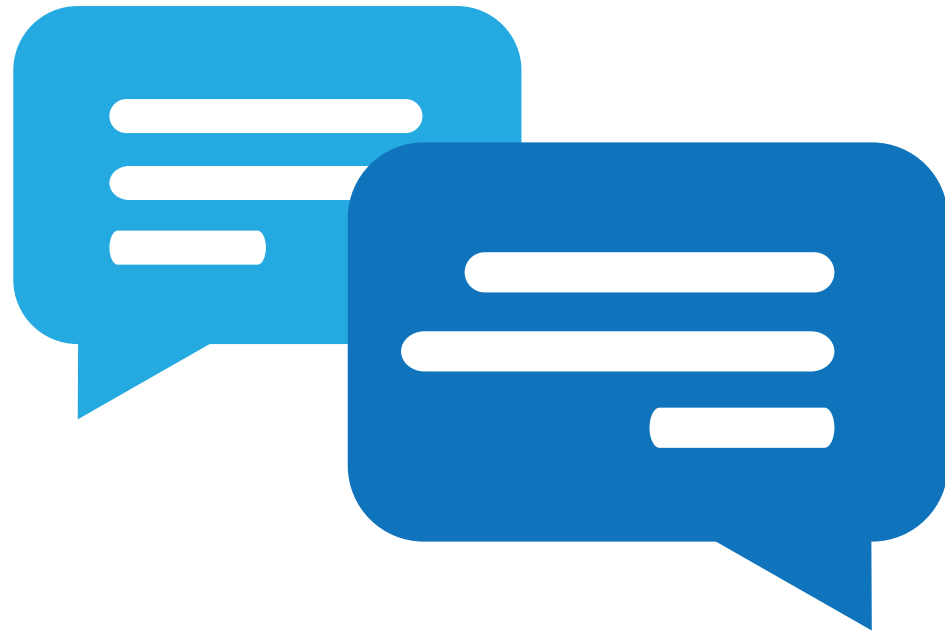
WHAT HAPPENS AFTER THE "PLACE ORDER" BUTTON IS SELECTED? - WORKFLOW



FEEDBACK

The feedback on concept 2 was a lot more positive this time round. I had taken on board the comments from the last review and improved on my design. The app feels like it is coming together nicely and it is starting to look very professional.

The next steps I need to take are improving the budget setting option to make the app even more personalized to the user. £18,000 was seen as "just a number". What I need to identify is how much a month this narrows down to etc. Basically all the "small print" of the car buying process that needs to be included. I will look to my work colleague Jake for this information.

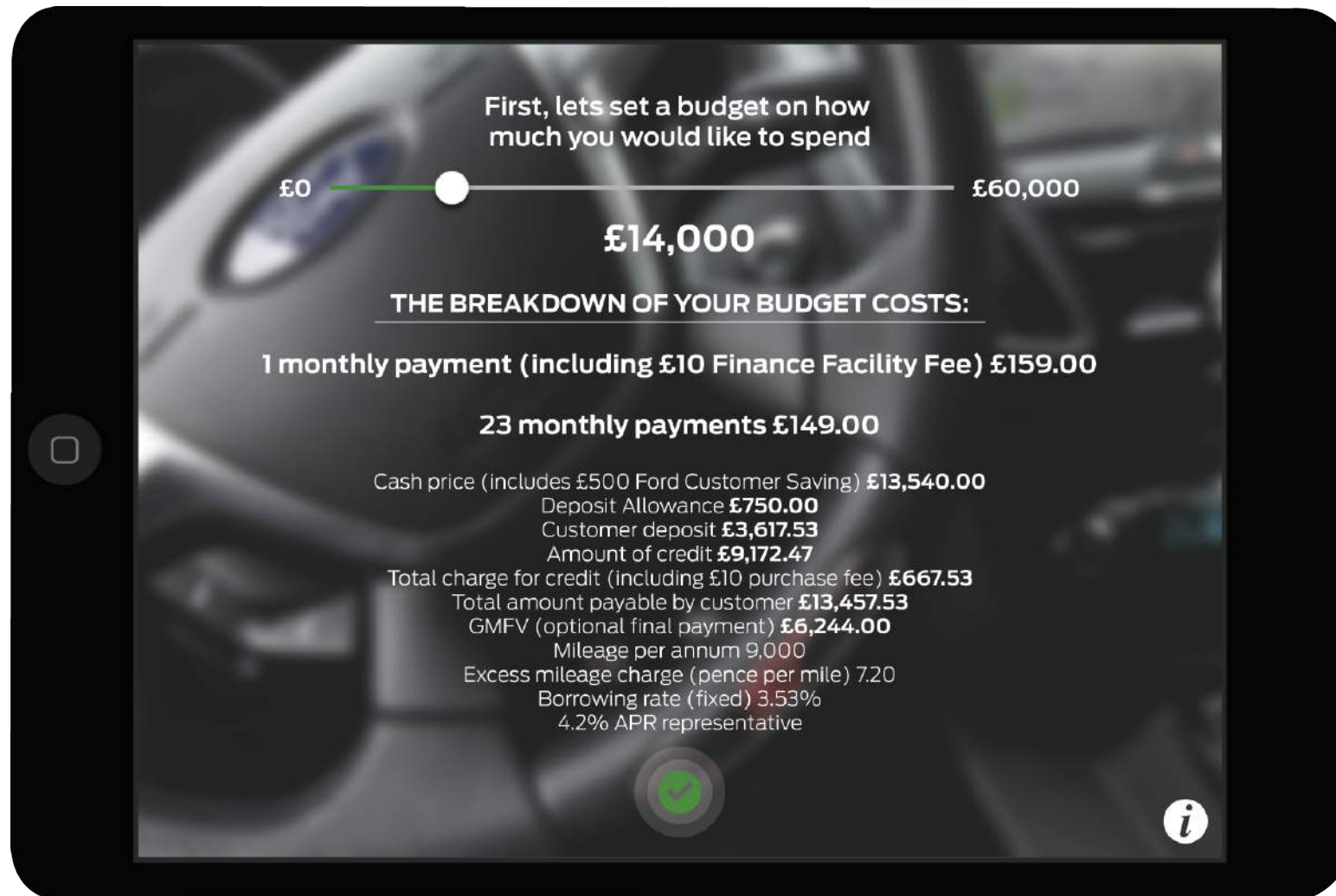


CONCEPT 3

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 2" BUT WITH NOTICABLE IMPROVEMENTS

BUDGET SELECTOR SCREEN

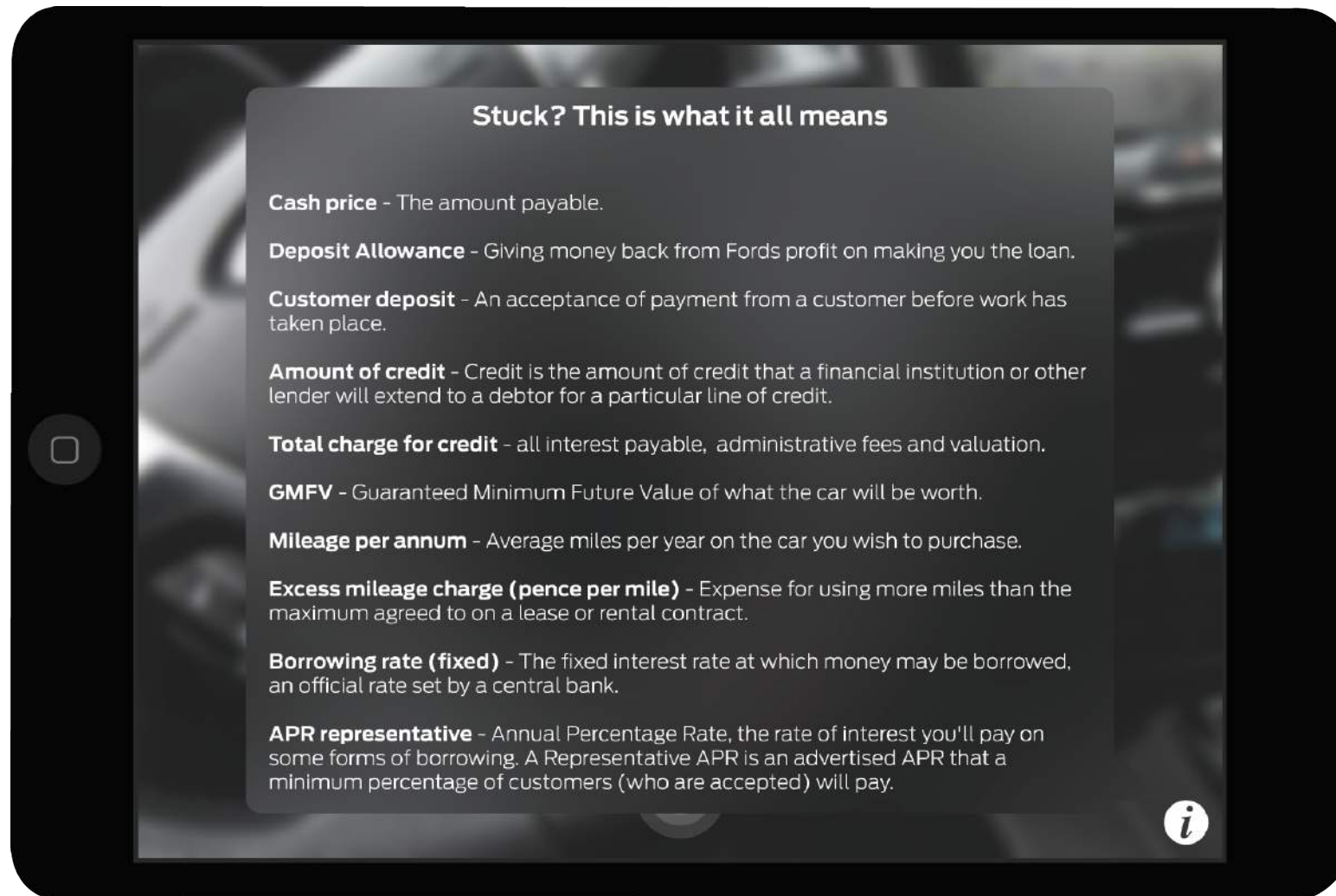


CONCEPT 3

FORD SHOWROOM APP

FOLLOWING THE SAME LAYOUT AS "CONCEPT 2" BUT WITH NOTICABLE IMPROVEMENTS

BUDGET SELECTOR SCREEN - INFORMATION PANEL



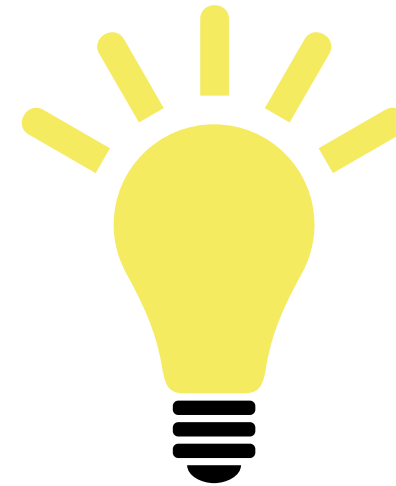
CONCLUSION OF SECTION

The design steps I have taken in order to achieve what I have are very important to me, they show how my idea has evolved from text to visuals.

I think by doing iteration after iteration of concepts has helped me iron out a lot of issues in my design and I'm very happy with my results that I have achieved.

By keeping in contact with the Ford dealer and tutors/ peers I have been given feedback through most steps of the design process and I have used this to my very best advantage. My app does have its own style, keeping a link to Ford's own style but mixing it with Apple's iOS 8, I feel this works well because it looks clean, easy to understand and fits the iPad size well.

I need to now prototype my concept to make it look like the real thing on a screen and not just a series of screenshots.



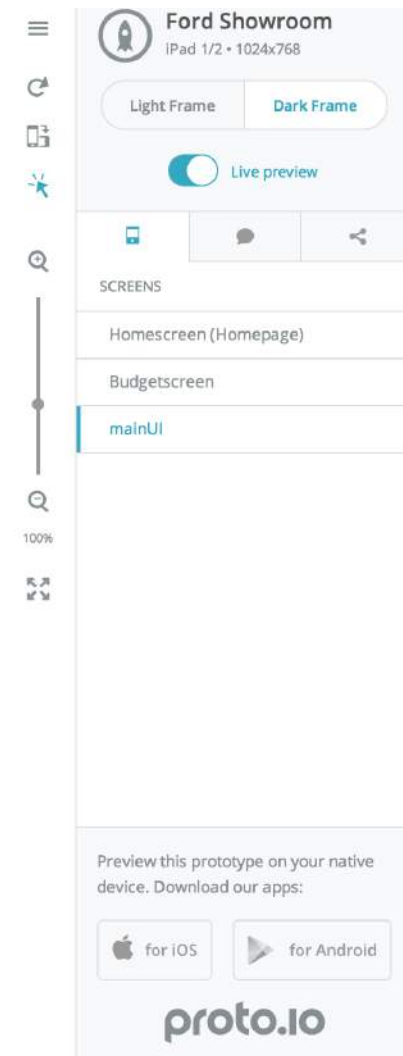
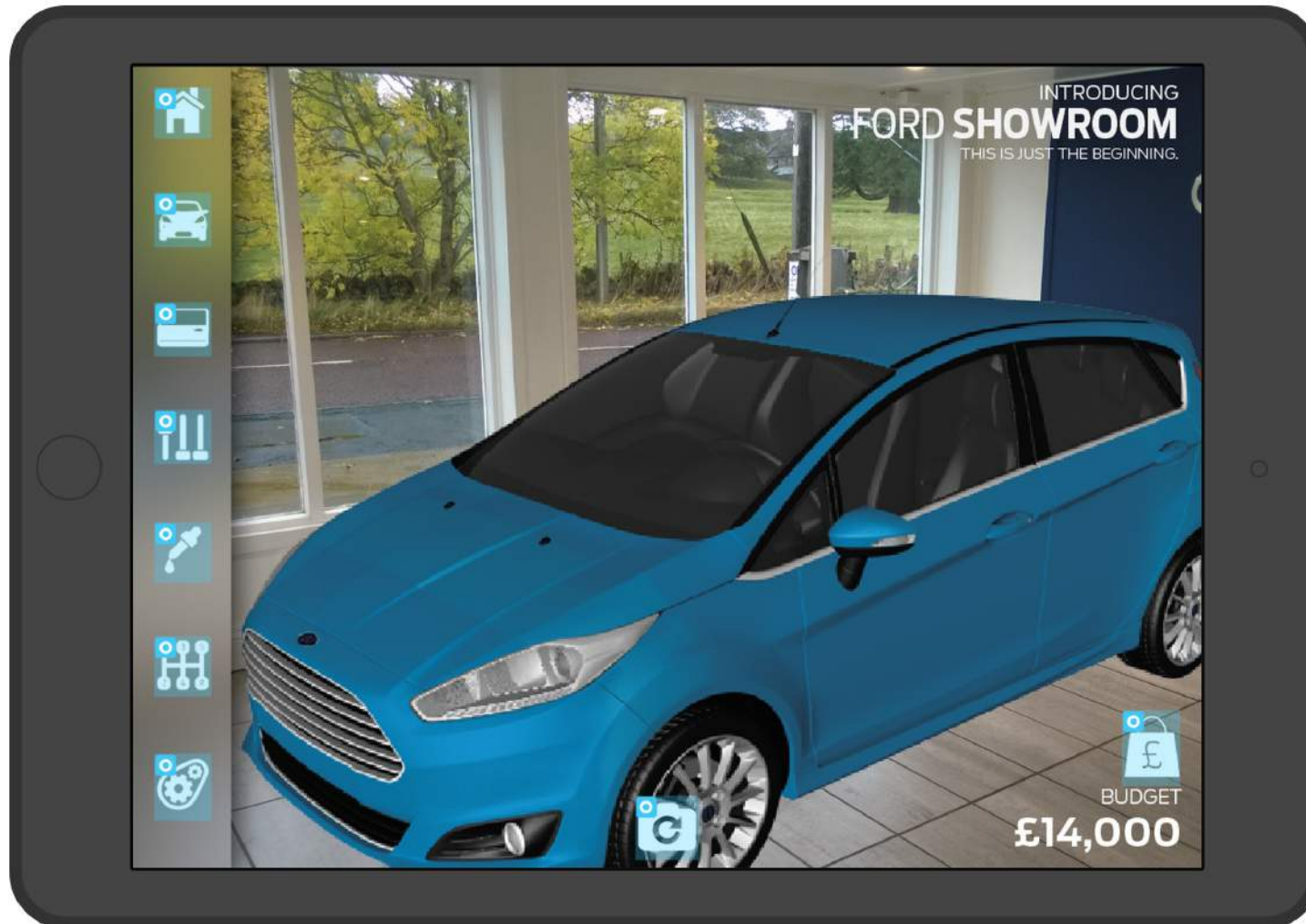
The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink, arranged in a way that creates a sense of depth and movement. The word "PROTOTYPE" is centered in the middle of the image, overlaid on a dark, irregular polygonal shape.

PROTOTYPE

PROTO.IO

I need to test my app in terms of functionality so I know if my app works, as it should. In 'Proto.io' I uploaded each of my screens to show navigation and an overall work flow of how it functions. Making each button an interaction the user can easily go work through the process, with this being a prototype there is a few bugs and not all functions are working BUT as this is a prototype I have seen for myself that this design works.

Proto.io link: <https://fordshowroom.proto.io/player/?id=81f9368b-aef4-4bb1-9b89-440f65191a6b>
Login: ste.wallace@northumbria.ac.uk PW: northumbria

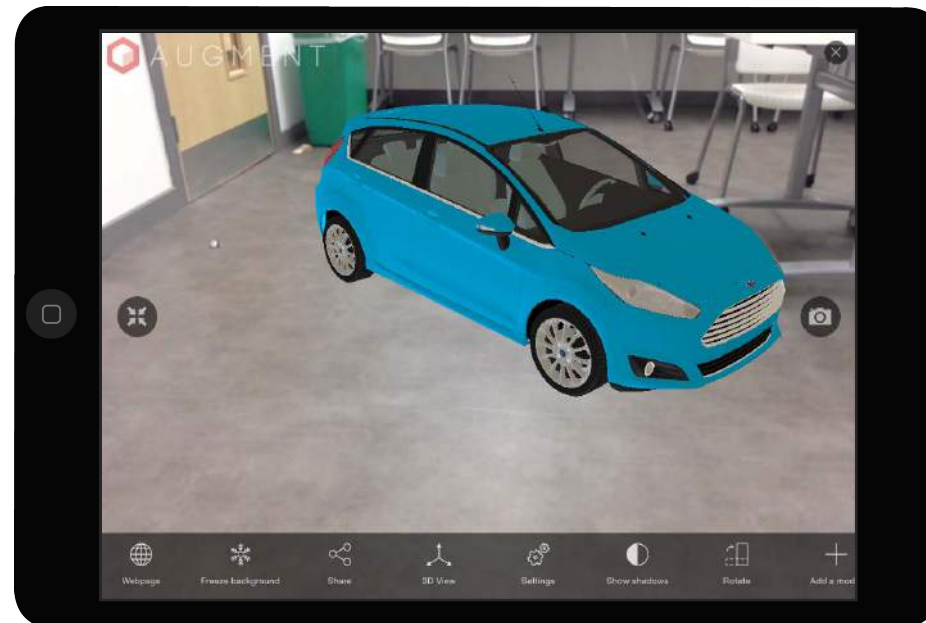


AUGMENT - 3D AUGMENTED REALITY

I tested my app functionality in Proto.io but this didn't allow me to test the Augmented Reality side of my app. So I decided to find a solution, 'Augment' is a free application that is available for iPad.

I needed to upload my 3D model of the Ford Fiesta in which I will be using (still a work in progress for correct colours) to the application by installing a export plug in for Maxon Cinema 4D. Which then gave me

access to view my 3D model in full Augmented view. The results were really impressive. I feel that my app idea is becoming more possible each time I prototype. The image below is over the iPad screen.



AUGMENT - 3D AUGMENTED REALITY

While using 'Augment' I needed to test my app in a similar space in which it will be used in real life, since I did not have access to the showroom at the time I found a similar space at university. The image below shows how Augmented reality really works, on screen the user can see the model on screen while in real life the car is not actually there.

To get the model onto the app the polygon count of the original model was very big, too big in fact for the apps limitations. In Cinema 4D it was possible to reduce the polygon count.

Original polygon count of 3D model: **459,263**

Augment's recommended polygon count: **125,000**

After polygon reduction in Cinema 4D: **142,901**

Once this reduction was complete, the model could now be placed on the iPad, the image right demonstrates this.

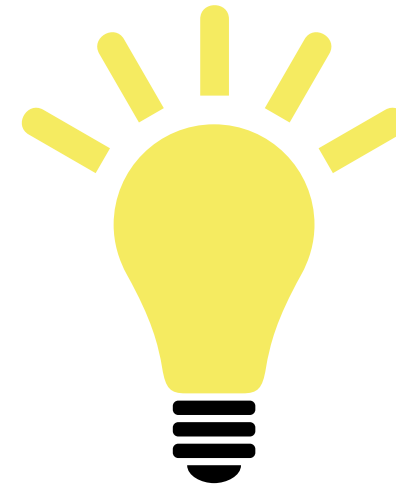


CONCLUSION OF SECTION

After prototyping my design it is clear to me that my idea does work and could possibly be made if I took this project onto Semester 2.

Prototyping did not prove too difficult, as the tools I used were quite easy to use, there was just a few hurdles I had to overcome in order to get the augmented reality working.

I did not stumble across any issues in functionality when prototyping, everyone who tested the app found it working well even though it was not 100% fully functional (due to some limitations of Proto.io).



The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink, all set against a dark navy blue base. The triangles are arranged in a way that creates a sense of depth and movement, with some triangles pointing towards the center and others pointing outwards. The word "BRANDING" is centered in the middle of the image, written in a bold, white, sans-serif font. The overall composition is modern and visually striking, with a focus on geometric shapes and a vibrant color palette.

BRANDING

BRANDING

I want my application to feel authentic and designed to a professional quality. Because I am restricted to the style of Ford this helped me create an identity for my application.

Sticking with the iOS 8 Guidelines that I had previously looked at (Page 15) I stuck with the name of "Ford Showroom" as it is simple and straight to the point. Using the existing logo and typeface that Ford use I was able to create my app icon.

I wanted my icon to put across a 'cold metal' feel so this represents the cars that the app can create. To the left is the icon I designed, from feedback people are very happy with the way it looks as it feels like it could belong in the Apple App Store. "Ford Showroom" is now the true Identity of my application.



FORD SHOWROOM

AUGMENTED REALITY CAR CREATOR



Go Further

FORD SHOWROOM

AUGMENTED REALITY CAR CREATOR



Go Further

The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink, all set against a dark navy blue base. In the center of the image, there is a large, dark blue, multi-faceted shape that resembles a stylized star or a cluster of triangles. The text "CONCEPT VIDEO" is centered within this dark shape.

CONCEPT VIDEO

VIDEO PLANNING

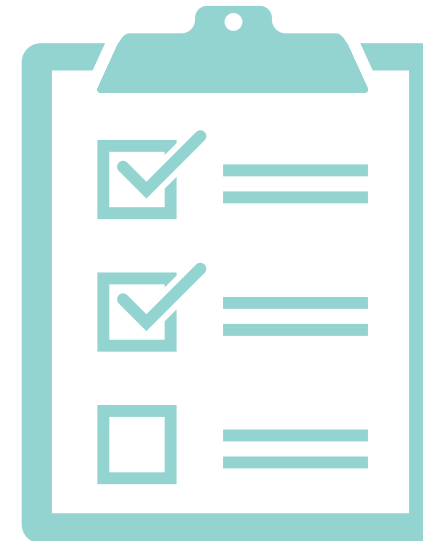
I need to show the main features of my app off in and around 1 minute. This is not really a lot of time to squeeze everything in so i need to be selective. The main features I need to show are:

- Home screen
- Budget Selector
- Main Interface
- Model Selector
- Colour Selector
- 3D Augmented view
- Interior view
- Total screen
- What happens after a month (car is driven out of showroom)

From this I can build a storyboard of a kind of play through of how the user would typically use the app. At the start I would also like to demonstrate what goes into making the app possible such as:

- Augmented Reality
- Physical Ford car brochures
- Ford styling

I need to define the future of car brochures, as they become obsolete this could be the application that takes over.

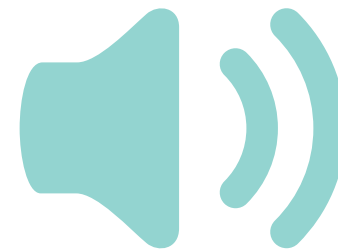


SOUND PLANNING

Sound is a very important factor to my concept video, as the tone of music depicts what type of app i am trying to perceive. I need to think of something simple but powerful. To show that my app is a very simple idea but it is a powerful tool as it can show the future of car brochures and the whole car buying experience.

Possible backing tracks:

- "Cloudier App" backing track
- "Elbow - One Day Like This"
- "Super Pop Happy Song (Royalty Free Music)"



SOUND PLANNING

I will be using my voice as a voice over for the video. The basis of what I will be speaking is:

"The new Ford Showroom iPad concept combines fantastic in depth customization of any new Ford vehicle combined with Apple's iOS 8 and Augmented Reality technology."

"Giving you a new and exciting way to make what car you want, in your price range, directly in the Ford dealership."

"Tap on the navigation to create the look you want."

"Select the 3D model view to see your car magically appear before your eyes as if it was really in the showroom, or select the interior view to see yourself inside your own creation."

"Once you're happy with your car, and it's in your budget, select 'Place Order'"

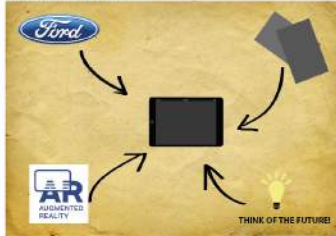
"This will let the dealer know what car you want and will order it for you."

"It's your car, so you create it, with the Ford Showroom iPad app."



STORY BOARD FOR VIDEO

1. birds eye view, ipad is placed on a table. Each object appears with an arrow drawn towards the ipad. Shows what will go into the app.



2. Zoom into iPad,, Loading image of Ford Showroom app.



3. First screen appears. Animated iPad screen, user uses 'tap' gesture.



4. Budget selector works. Animated slider for user. All numbers are calculated accordingly. Animated green 'Select' button. Ford Showroom shown in back.



5. Showing off the main interface. scrolling UI.



6. User selects Ford Fiesta, showing navigation.



7. User selects Number of doors, in this case; 5 Doors.



8. User selects the car series, in this case; Zetec.



9. user presses Augmented 3D view. Animation of spinning car. Color changing as swiping gesture is performed.



10. Zoomed out to show how the augmented car in physical space. While car is spinning around.



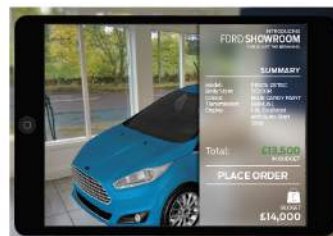
11. user presses interior view to display the inside of the car.



12. Final look at users chosen car. As they are happy with the result.



13. Under your budget? then the user goes ahead and places the order.



15. Users car is in the showroom and drives it away. A very happy customer!



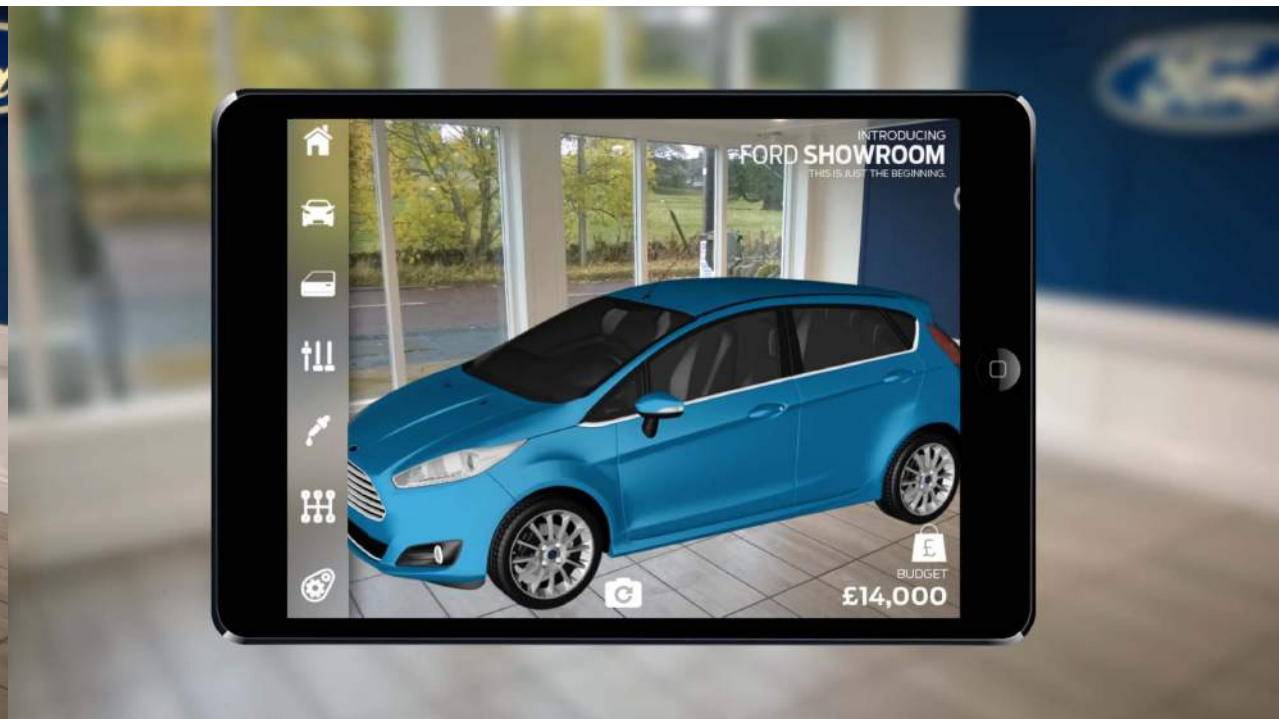
VIDEO VERSION 1

The animation of the video went quite well in Adobe After Effects, as I was able to really show how my app could flow together and how the user could use gestures to navigate around.

There was not really anything wrong with the video side however as this version did not have a voice over yet, it just included a backing track. The backing track was "Elbow - One Day Like This" and from feedback it just did not fit the style of my app.

I needed something mid paced and a little less distracting as the music took the concentration away from the video.

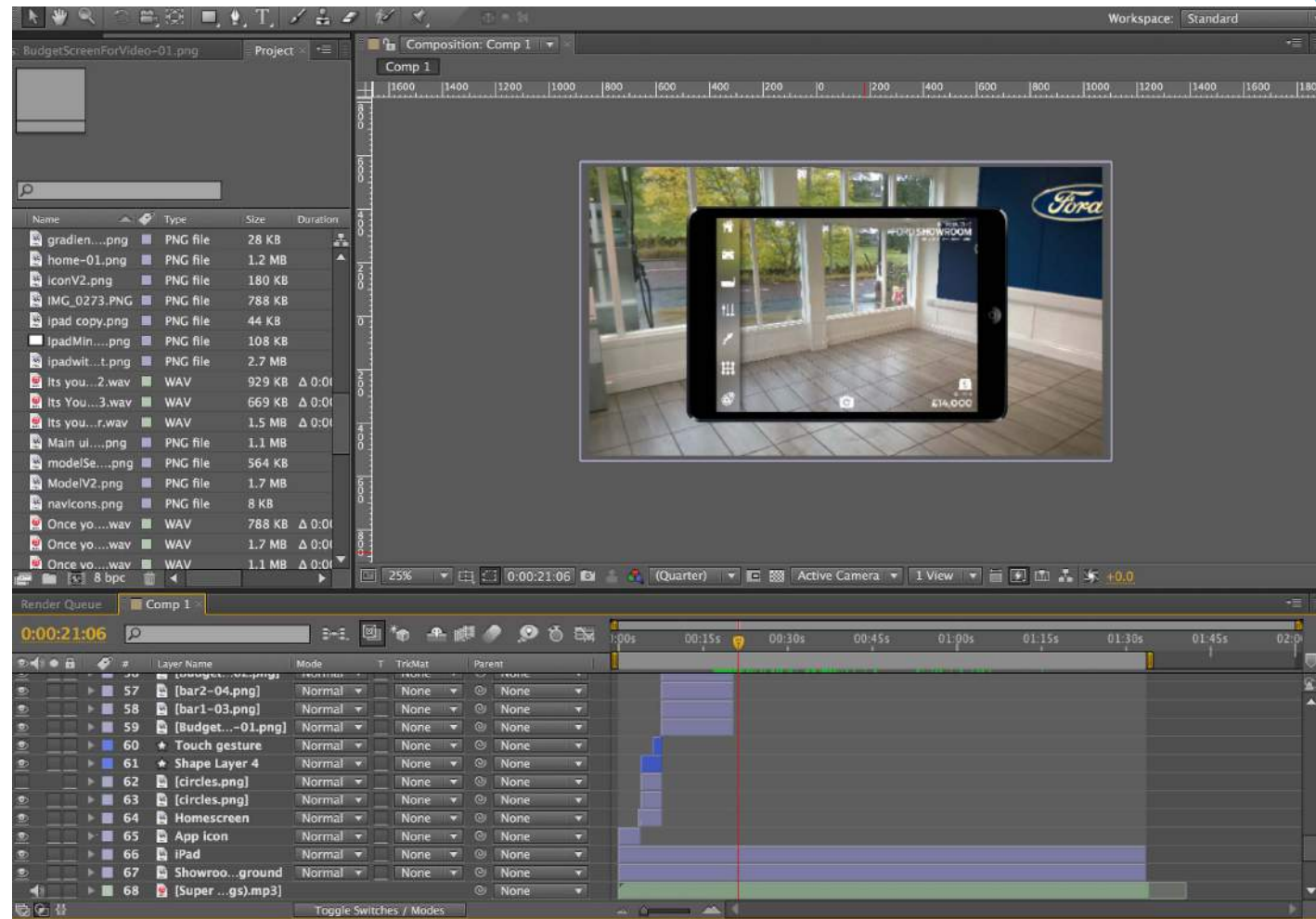
The style of the video is a little different from my proposed storyboard as the iPad is in the centre of the screen, this was because I felt that while i was animating, the main focus should be on the iPad interface and not the empty showroom; and after all my app is a camera overlay so you can still see the showroom in the background.



VIDEO VERSION 2

Version 2 received more positive views, the new sound track "Super Pop Happy Song (Royalty Free Music)" fitted the video so much better as it was mid paced and keeps the audience enthusiastic about my concept.

This version also included my voice overs i had recorded and they liked my enthusiasm however some of the speech was a little quiet and included a lot of white noise, It was recommended that i go into Ableton Live 9 and fix this issue.



VIDEO VERSION 3

For version 3 i went into Ableton Live 9 and edited each track that i recorded for the voice over.

I used the Audio Effect “Bass Roundup” and edited each level so that my voice was a lot clearer and louder.

I also used the “Soft Reducer” effect that allowed me to reduce the white noise sound so it was about 90% reduced. This, in the end made my audio sound so much clearer and the overall impression that my video was created to a professional quality.

From feedback the audience that I tested it on from version 1 were very impressed in the steps I took to acheive the final concept video.



The video is available at this link: https://www.youtube.com/watch?v=hh_pzJnCH2U OR Find the video attached with this document

The background is a complex, abstract geometric pattern composed of numerous triangles of various sizes and colors. The colors include shades of green, yellow, orange, blue, teal, purple, and pink. A large, dark blue, multi-faceted shape is positioned in the center, serving as a backdrop for the text.

FINAL COMMENTS

CONCLUSION OF PERSONAL PROJECT 1

At the end of this project, I am pleased with how well it all went. From the start i had a clear idea of what i wanted to acheive and how i was going to do it. My target audience had been defined at an early stage so it made my project a lot more focused on a specific group.

That said, i have had many obstacles to overcome such as aquiring a 3D model and learning a completely new software program to use.

I am proud of my project because what i had in my mind as an idea has become a concept and looks like it could work. From feedback users are very pleased with it and think it is a 'cool' idea and could be the possible future of a car brochure. Sticking close to the Ford dealership has allowed me to constantly deliver an app that suits what they want.

I think I have stuck with the guidelines of Ford's own style and made it look like an official product directly from them.

As always, there is room for improvement. If i carried on this project into Semester 2 I would try to make this concept a real working app.

