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**AutoEye Prototype Applications**

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# **1 INITIAL IDEAS**

## **1.1 Project Description**

Name: Auto-Eye

Logo: Outline of an eye, with a tyre-style interior, mounted on a squared background.

Purpose: Automotive app

Find vehicles for sale based on a user submitted picture/information.

This application will allow people to search for vehicles for sale based on the information they present to the application. This information could include taking a snapshot of a vehicle, or manually inputting information to a search form. The app will take this information and search the server in order to display any vehicles that meet the user's criteria. This information can be viewed across all devices, however the smartwatch app may display limited information due to its capabilities and size.

The photo recognition section of the app will detect key characteristics through heuristic scanning, similar to Amazon's photo search tool (a9.com Inc., no date) or Google's search image tool (Google Inc., 2012). If searching via manual input, the vehicle's make or model will be identified based on information stored in the server's database.

## **1.2 Application Key Features**

### **Smartwatch Functions**

Take snapshot of a vehicle (upload will not be available on this platform).

### **Smartphone Functions**

Take/upload snapshot of a vehicle.

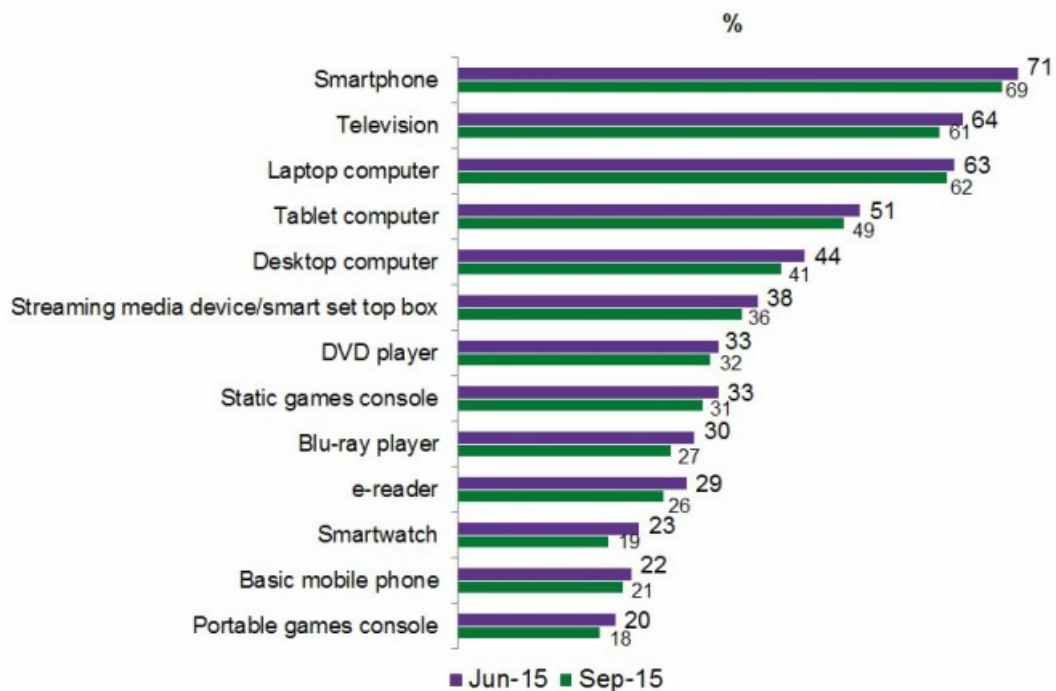
### **Desktop Functions**

Upload snapshot of a vehicle.

## 2 RESEARCH

### 2.1 Statistics

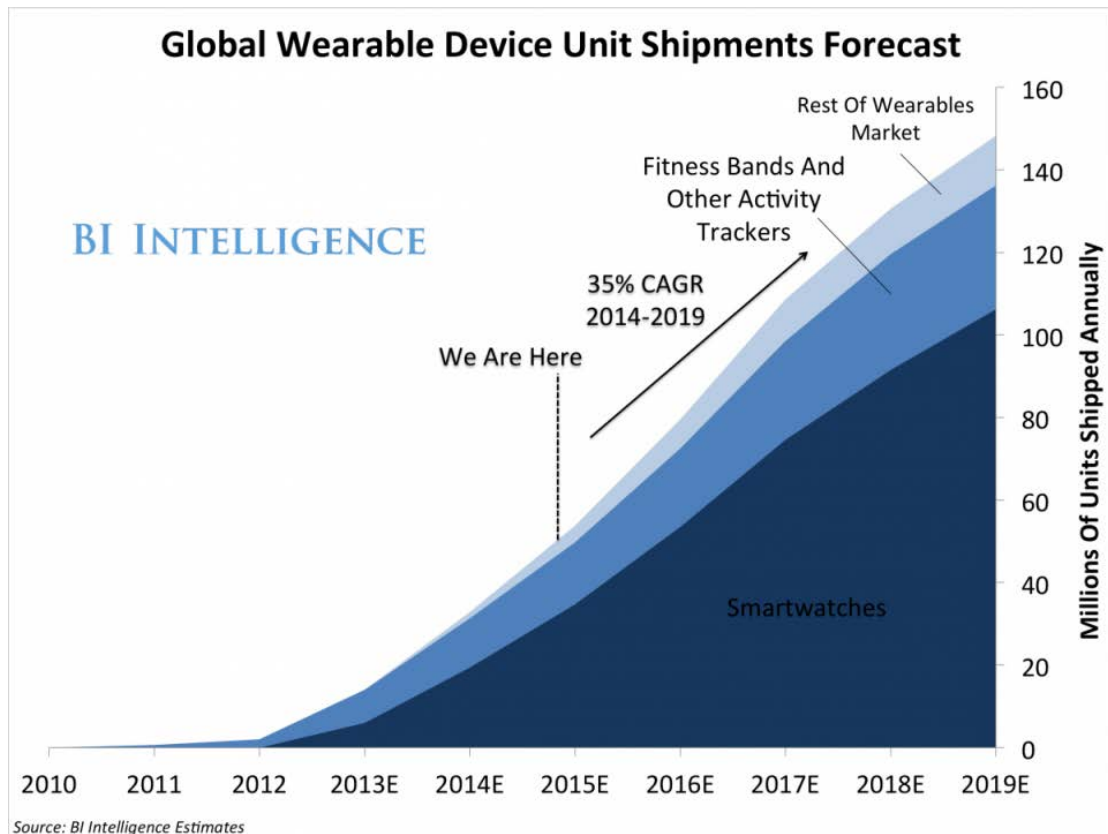
A survey performed by Mintel, identified that plans to purchase a smartwatch have decreased when compared to results from previous surveys. The survey asked 2,000 internet users over 16 years of age, if they had plans to purchase any technology products at any point in the future. The survey was performed in June 2015 and again in September 2015, the initial survey found that 23% were planning on purchasing a smartwatch device, the later study found this had dropped to 19%. See **Figure 1**.



**Figure 1:** "Plans to purchase or upgrade consumer technology products (at any point in the future), June and September 2015" (Mintel, no date)

Business Insider's intelligence suggest that although the global wearable device market shipped less than 40 million units in 2014, it predicts a gradual rise for 2016 and estimates approximately 60 million units will be sold. See

**Figure 2.**

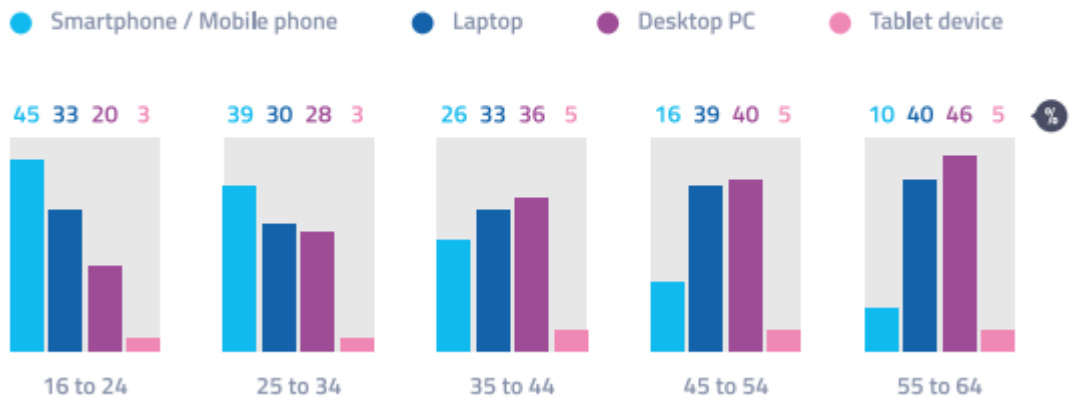


**Figure 2:** “Global Wearable Device Unit Shipments Forecast” (Danova, 2015).

Global Web Index’s quarterly report (Global Web Index, 2016) interviewed 50,000 internet users on current device trends, covering smartphone, tablet, smart TVs and wearable devices. The report found that 16 to 24 and 25 to 34 age ranges are more likely to use smartphone devices, while the 35+ audiences are more likely to use laptop or desktop PC devices. This confirms that smartphones are a main choice of device for the under 35’s, this suggests that the trend will continue to establish smartphones as a user’s primary device. See **Figure 3**.

### DEVICE IMPORTANCE

% of internet users who say the following is their most important internet device



**Figure 3:** “Percentage of internet users who say the following is their most important internet device” (Global Web Index, 2016).

## **2.2 Competitor Research**

Several vehicle sales companies have been explored to identify features and ascertain what makes them popular. The top four results have been identified as Auto Trader (Auto Trader, 2016), Parkers (Bauer Media, 2016), Sunday Times Driving (Sunday Times, 2016) and Motors.co.uk (Cox Automotive, no date). Out of these companies, only Auto Trader and Motors.co.uk fully support smartphone and tablet users via a dedicated Android and iOS application.

Auto Trader is a UK automotive advertiser, it is a classified advertising facility for private and trade sellers of new and used automobiles. Auto Trader's own survey found that 65% of the UK's market for used cars involves cars listed on Auto Trader and that 80% of UK car dealers use Auto Trader to advertise (Auto Trader Group plc, no date).

Motors.co.uk is another UK classified advertising company for private and trade sellers of automotive vehicles. It was launched in 2007 by the Daily Mail and General Trust, the service reaches 4.1 million car buyers each month (Motors.co.uk, no date).

Auto Trader and Motors share several key features which are a prominent reason why both services are successful. The most important feature is their ability to list private and trade information on new and used cars, this is fully supported with detailed selling information such as specifications of cars, descriptions, pricing and seller information. In addition, both services offer the ability to directly contact the seller via email. Auto Trader extends this functionality by providing a confidential phone service, this allows private sellers to mask their phone number and remain private, while still allowing users to contact them via telephone.



### 2.2.1 Motors.co.uk

Motors.co.uk (Motors.co.uk, no date) offers a simplified search box on the main landing page of their website, this allows users quick access to the core function of the service. The easy to use search box asks for a postcode in order to select the distance to the seller, the make/model and price range is also requested. In addition to this they offer a smart search, which allows the selection of extended criteria such as budget, road tax cost, purpose of the car and colour.

The screenshot displays the Motors.co.uk homepage. At the top, the logo 'MOTORS' is accompanied by the tagline 'Search Smart. Buy Right. .co.uk'. A banner indicates '342,396 used cars for sale at Motors.co.uk' and '1,000s of cars reduced by £1,000s - as seen on TV!'. Navigation links include 'Used Cars', 'New', 'Sell', 'Smart Search', 'Reduced Cars', 'Vans', and 'Know How'. A 'Recently Viewed' section is also present. Below the navigation bar, there are social media icons and a 'Sign in or Register' button. The main content area features two search panels. The left panel, titled 'Find it Fast with our Classic Search', includes fields for 'Postcode' (TS10305), 'Distance' (National), 'Make/Model' (BMW M3), and 'Price' (Monthly Cost, 1000 to 10000). It shows 'Cars available based on your criteria' as 29. The right panel, titled 'Or use Smart Search to find your personalised results', includes 'My budget' (Search by Cost Per Month instead, £0K to £40K), 'Road tax' (£0 to £300), 'I want to' (turn heads, go off-road, take the dog, take a pushchair), and 'Colour' (various color swatches). It shows '342,396 cars listed' and a 'Show me my matches' button. At the bottom of the right panel are 'extended smart search' and 'reset' buttons.

**Figure 4:** The home page shows a simple search function. Aside to this is the extended smart search (Motors.co.uk, no date).

The search listings of Motors.co.uk displays the selected criteria in an easy to understand list. The search can be expanded further by selecting additional criteria such as the age or mileage of the vehicle, transmission and colour, as well as many other options. The list can be sorted by various means such as lowest/highest price, or distance to the seller.

Used Cars

New Cars

Postcode

TS103DS

Distance

National

Reset

Search

All Sellers

Car Dealer

Private

All

Recommended

All Cars

Other Options

Make (you can select more than one)

BMW Selected

BMW

M3 Selected

All Trims

Price (Filters Selected)

Price

Monthly Cost

1000

10000

Clear

Exclude "Call For Price"

Body styles

Age & Mileage

Transmission

Fuel Type

Colour

Page 1 of 2

1 2

Lowest price

Here are your personalised results

Save This Search

Be the first to watch this car

Featured Car

View all cars from Green Tree Cars Ltd

Price Reduced

2003 (52) - BMW M3 COUPE 2-Door

£8,495

3.2L | Coupe | Manual | Petrol | 90,427 miles

Reduced by £500 was £8,995

Green Tree Cars Ltd

2.4 miles from TS103DS

01302 515718

Full Details

Report this advertisement

Sold

2002 (02) - BMW M3 3.2 i 2dr

£6,989

3.2L | Coupe | Manual | Petrol | 115,647 miles

UK Car Sales Swansea

2.39 miles from TS103DS

01792 620493

Full Details

Report this advertisement

Finance Available

2002 (02) - BMW M3 M3 2-Door

£6,990

3.2L | Coupe | Manual | Petrol | 119,000 miles

You could finance this vehicle from £126 per month. See more

Mawley Motor Company Ltd

161 miles from TS103DS

01604 321472


**Figure 5:** Post-search listings of BMW vehicles between £1,000 and £10,000 (Motors.co.uk, no date).

The listings of each vehicle display detailed information regarding the selected vehicle. An additional menu to the right gives seller information and contact methods, as well as additional features to enhance the service, such as short lists and sharing.

Green Tree Cars Ltd  
72 miles from TS103BS [view map](#)  
Be the first to watch this car

2003 (52) - BMW M3 COUPE 2-Door

£8,495  
Reduced by £500 was £8,995



01302 515718  
Email dealer

Add to Shortlist Print details

Send to a friend Dealer Address

Ask dealer a question  
View dealer website

**Insure this Car**  
Get an insurance quote for this Car at Confused.com  
[get quote](#)

**Have a vehicle to trade?**  
Enter your registration, postcode and mileage to get started...

**REG NUMBER**

Your postcode TS103BS Vehicle mileage\*

[Get options](#)

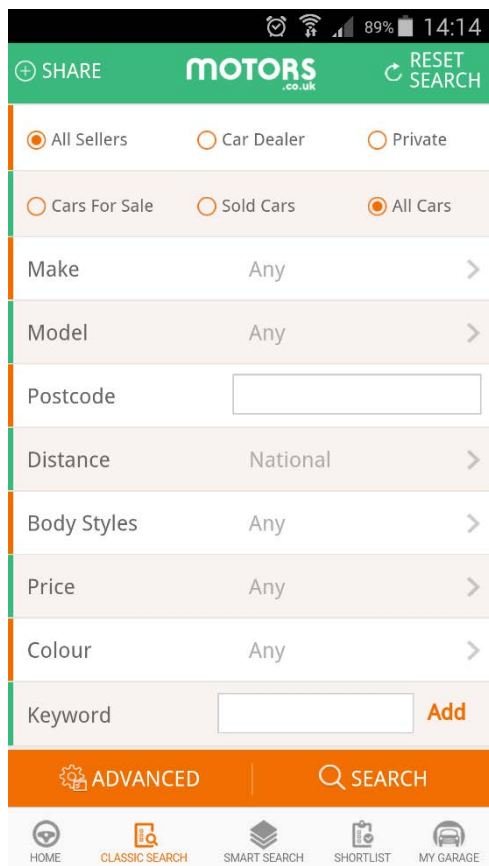
View all 8 images Ask the dealer for more images

3.2 litre	Mileage 090427	Petrol	Jan 2003	Manual	Coupe
MPG 23	Cost to fill £65	Tank range (miles) 318	Insurance group 44	Road tax £290	Seats 5

[Shortlist \(0\)](#)

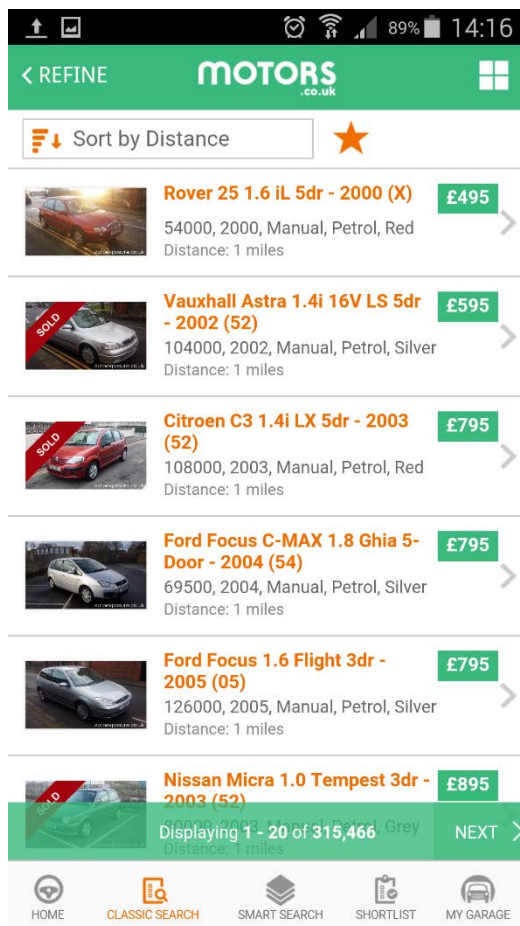
**Figure 6:** Each listing displays key information and seller contact methods.  
(Motors.co.uk, no date).

While Motor's website provides a simple and inviting experience for the user, the company's Android app does not. The app's search function provides the full extended search options and not the condensed and simplified version on the website.



**Figure 7:** Motor's application gives the user quick access to all the app's search functions, but in doing so it loses its simplified feel (Motors.co.uk, no date).

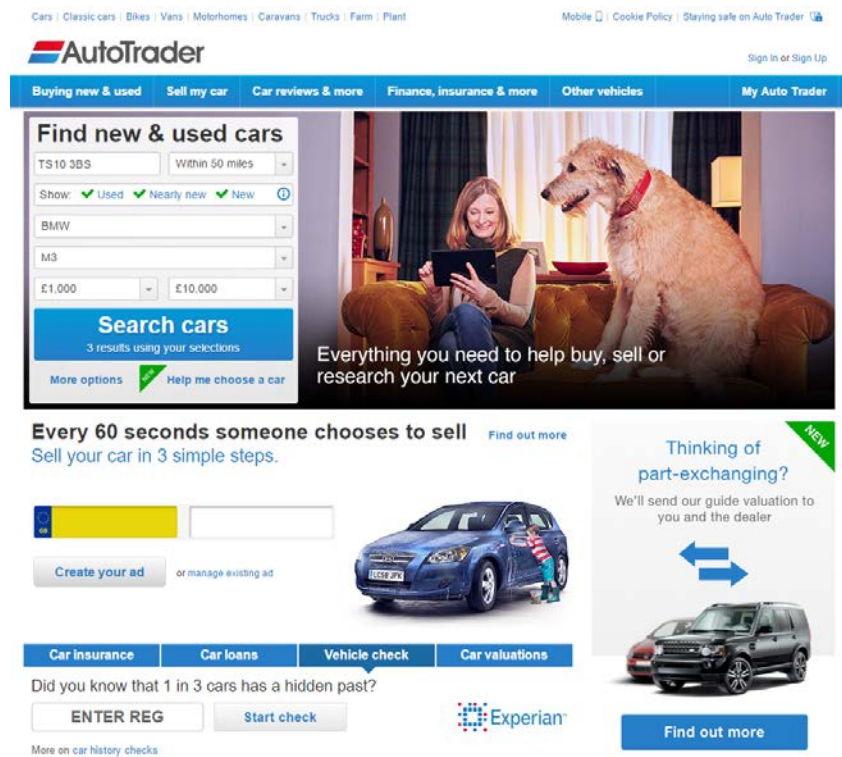
The vehicle listings on the application provide for a more condensed viewing. This provides an easy to use experience for the user, key information is condensed which allows more listings to be displayed.



**Figure 8:** The listings on the application provide many more results on screen than the desktop website, while still keeping information easy to view (Motors.co.uk, no date).

## 2.2.2 Auto Trader

Auto Trader (Auto Trader Limited, 2016) emphasises the simplicity of its search engine by placing it prominently at the top of the service's pages. The initial options allow the user to input their postcode or city / town, select the make and model of the car, as well as the user's price range. Clicking the 'more options' button takes the user to an advanced search page, which includes several more options.



The screenshot displays the Auto Trader website's homepage. At the top, there is a navigation bar with links for 'Cars', 'Classic cars', 'Bikes', 'Vans', 'Motorhomes', 'Caravans', 'Trucks', 'Farm', and 'Plant'. Below this is the 'AutoTrader' logo and a 'Sign in or Sign Up' link. A secondary navigation bar contains links for 'Buying new & used', 'Sell my car', 'Car reviews & more', 'Finance, insurance & more', 'Other vehicles', and 'My Auto Trader'.

The main search area is titled 'Find new & used cars'. It includes a search bar with 'TS10 3BS' and 'Within 50 miles'. Below the search bar are filters for 'Show: Used', 'Nearly new', and 'New'. The 'Make' is set to 'BMW' and the 'Model' to 'M3'. The price range is set from '£1,000' to '£10,000'. A 'Search cars' button is prominently displayed, with a note that '3 results using your selections' are available. Below the search bar are links for 'More options' and 'Help me choose a car'.

To the right of the search bar is a large image of a woman sitting on a sofa with a dog, with the text 'Everything you need to help buy, sell or research your next car'.

Below the search area, there are several promotional banners. The first banner is titled 'Every 60 seconds someone chooses to sell' and 'Sell your car in 3 simple steps'. It includes a 'Create your ad' button and a link to 'Find out more'. The second banner is titled 'Thinking of part-exchanging?' and 'We'll send our guide valuation to you and the dealer'. It includes a 'Find out more' button. The third banner is titled 'Did you know that 1 in 3 cars has a hidden past?' and 'Start check'. It includes a 'Find out more' button.

**Figure 9:** Auto Trader's initial page is simple and easy to use, providing the user quick and easy access to the search capabilities (Auto Trader Limited, 2016).

Auto Trader's post-search listings display several results on one page, which can be sorted via various options such as price, distance, mileage and age. The results have the option to change search parameters, so the user can update their search as they go. Each car's listing displays key information and includes images to give the user quick access to visuals.

3 cars found Reset search

Within 50 miles ▼

TS10 3DS

Car type Used, Nearly new, New

Make BMW ▼

Model M3 ▼

Model Variant ▼

Price £1,000 to £10,000 ▼

Age over 10 years old ▼

Mileage Any ▼

Body type Convertible ▼

Fuel type Petrol ▼

Engine Size Any ▼

Fuel consumption Any ▼

Acceleration 0-60 (0-60mph) ▼

Gearbox Manual ▼

Drivetrain Rear Wheel Drive ▼

CO<sub>2</sub> emissions 255 g / km ▼

No. of doors 2 doors ▼

Seats Any ▼

Insurance group Any ▼

Annual tax Any ▼

Colour Any ▼

Private & trade Trade Adverts ▼


More options

More details

Add here any specific features or


Page 1 of 1

Sort by: Price (Lowest) ▼




**BMW M3 3.2 i 2dr**  
"19" ALLOYS, FULL HISTORY!"  
£8,795  
Trade seller, distance: 35 miles  
2004 (04 reg) | Convertible | 121,712 miles | Manual | 3.2L | Petrol  
CALL NOW ON 0191 270 0011 "12 MONTHS WARRANTY" "12 MONTHS AA COVER" "BEST PART EX PRICES" "PAD" "LOW RATE FINANCE WITH NO DEPOSIT" "FULL SERVICE AND MOT INCLUDED", 4 seats, BLACK, ...  
Appletree Cars Ltd

Report this advert Check its history Insurance Get quote



**BMW 3 SERIES 3.2 M3 2d 338 BHP**  
BLACK LEATHER / XENONS / FSH  
£9,750  
Trade seller, distance: 40 miles  
2004 (04 reg) | Convertible | 86,000 miles | Manual | 3.2L | Petrol  
STUNNING CONDITION THROUGHOUT, FULL BLACK HEATED LEATHER, FULL SERVICE HISTORY, BI XENON HEADLIGHTS, 4 seats, SILVER, "A VERY NICE EXAMPLE, FULL SERVICE HISTORY, SERVICED @ 1K, 1.5K, ...  
See all 40 cars from T C & C Ltd T/A Trade Cars & Commercials  
RAC BuySure TCS&C

Report this advert Check its history Insurance Get quote



**BMW 3.2 M3 2d 338 BHP**  
FULL DOCUMENTED SERVICE RECORD  
£9,995  
Trade seller, distance: 45 miles  
2004 (04 reg) | Convertible | 85,000 miles | Manual | 3.2L | Petrol  
FINANCE FROM AS LITTLE AS 4.9 FLAT RATE AND AVAILABLE WITH ZERO DEPOSIT AND NO REPAYMENTS FOR 2 MONTHS. 4 seats, BLACK, Full BMW & Specialist Service History With 11 Stamps In ...  
See all 44 cars from Silverlink Specialist Cars

Report this advert Check its history Insurance Get quote

**Figure 10:** Auto Trader lists each result in a sorted list, which can be altered to sort by other key categories (Auto Trader Limited, 2016).

Each vehicle's listing has identifying titles which include key information, such as the price and make / model of the vehicle. The related images are in a prominent position, as is the seller contact information. There is less emphasis on the vehicles description, as is evident from the lack of styling on text. This suggests that information is second to the looks of the car and essential information (price, make / model, etc.).



[Back to search results](#)
Share this car

**£9,750** **BMW 3 SERIES 3.2 M3 2d 338 BHP**  
 BLACK LEATHER / XENONS / FSH

[Check this car's past](#)
[Get insurance quote](#)

**Trade Seller**  
 ★★★★★ 4.9 (23 reviews)  
 40 miles from TS10 3BS

(07545) 586151  
 (01661) 829056

[Visit website](#) [Email dealer](#)

[Save ad](#)
[Print](#)
[Compare](#)
[Report ad](#)

Expert rating ★★★★★  
 No expert review for this model

Owner rating ★★★★★ 4.3 (20)  
[Read owner reviews for Bmw M3](#)

**Key Facts**

2004 | Convertible | 86,000 miles | Manual | 3.2L | Petrol

STUNNING CONDITION THROUGHOUT, FULL BLACK HEATED LEATHER, FULL SERVICE HISTORY, BI XENON HEADLIGHTS, 4 seats, SILVER, \*\*\*A VERY NICE EXAMPLE, FULL SERVICE HISTORY, SERVICED @ 1K, 13K, 26K, 36K, 48K, 55K, 67K, 79K & 85K, JULY 2017 M O T, RAC EXTENDED WARRANTIES AVAILABLE FOR 6, 12 & 24 MONTHS WHICH WILL INCLUDE A FREE 12 MONTHS RAC BREAKDOWN COVER\*\*\* The exterior is in very nice condition finished in metallic silver, black soft top roof, 19" multi spoke alloy wheels, rear spoiler, bi xenon headlights, front fog lights and rear parking sensors!!! The interior features sports seats trimmed in very clean full black leather, black floor carpets, dark silver dashboard trim, black roof lining, aluminium foot pedals and carpet over mats!!! The specification comprises of power hood, automatic xenon headlights, sport button, multifunction steering wheel, cruise control, harmon kardon audio system, dual climate control with air conditioning, electric windows x4, remote central locking, 6 speed gearbox, CD / Radio player, electric mirrors and more !!! Overall a very clean and tidy car, not to be missed. Please view our website for more photos! All vehicles are 82 point checked to comply with RAC standards, HPI checked & Mileage checked. RAC extended warranties available

**Part-exchange your car**

Start a conversation with this dealer about part-exchanging your car using an Auto Trader guide valuation. [Read more.](#)

[Find car](#)

[Just see my car's value](#)

**More cars from this dealer**

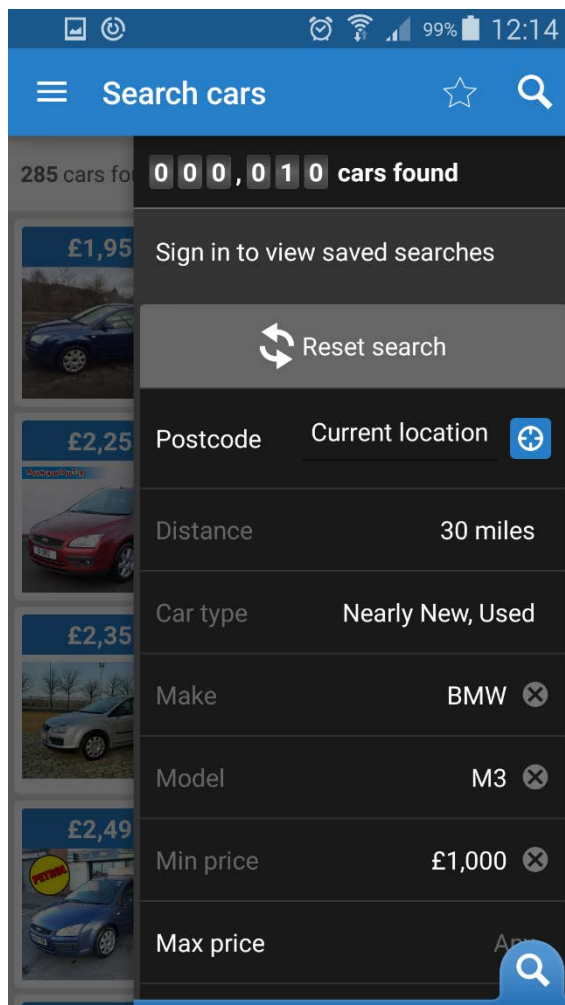
**BMW 5 SERIES**  
 2007 (07 reg), Saloon  
 £7,500

**BMW 1 SERIES**

**Figure 11:** Each vehicle's listing has a prominent title and image gallery. Contact information is uniquely styled to draw attention (Auto Trader Limited, 2016).

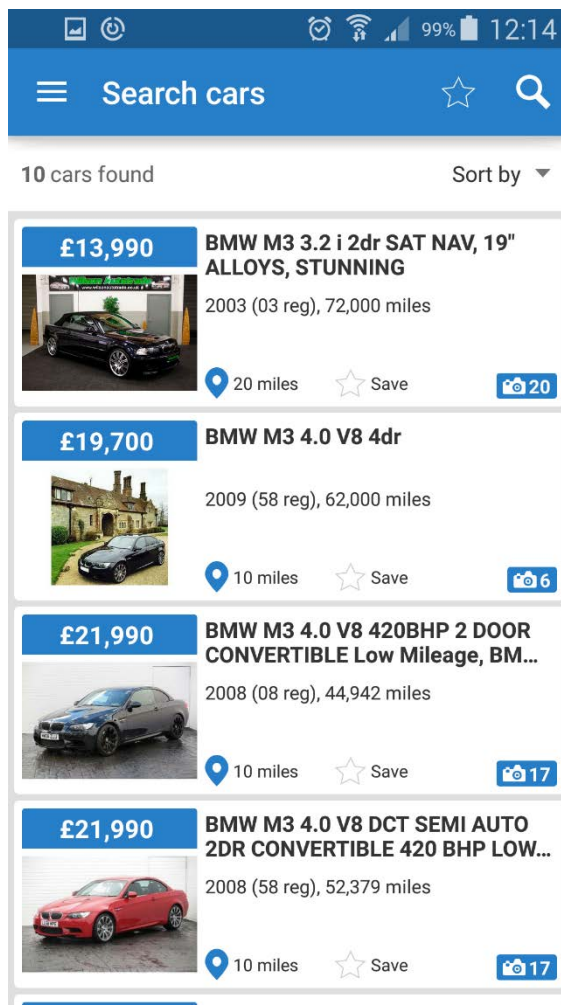
The Auto Trader website provides a simple and effective user experience and is easy to use, the Android app seems to adopt this same methodology. The app jumps straight into the search and listing functions, the main menu is by default not displayed until the user clicks the menu button, as is the same with the search function. This seems to establish a simplistic design and function.





**Figure 12:** The search ability of the app provides the same options to that of the desktop website. In order to access the higher search functions, the user must swipe up to scroll the options. (Auto Trader Limited, 2016).

The vehicles listings offer a basic overview in a singular column of data, this helps to support the device. Similar to the main website, the listings can be sorted via several keys. The app's sign in function adds options to save searches and favourite cars.



**Figure 13:** The listing view of the Auto Trader app lists results in a single column, which is app appropriate (Auto Trader Limited, 2016).

### **2.2.3 Camera Usage**

While researching how the camera function can be used on devices I came across many results, however only one example seemed appropriate for the project. The various camera applications found allowed the user to upload a picture, or take a snapshot via their phones camera, the data received was then processed by the application and the results displayed. Many of the apps used Google search (Google Inc., 2016) to display the results, but only one application gave the user feedback while processing.

CamFind (CamFind, no date) is a visual search engine that identifies key characteristics of an object. During processing the application displays the relevant steps the algorithm has taken in order to achieve identification. This application has been favoured over the other Google based applications due to it having the potential to be integrated in a customised listing style; this means that results can be filtered to only detect vehicles, as well as giving the option to match against existing vehicles on the database.

When integrated into the project, this technology would allow vehicles to be found based on common characteristics. These characteristics will include: vehicle colour, type of vehicle (motorbike, car, van, etc.), style of vehicle (compact, hatchback, estate, etc.), and manufacturer badge.

#### **2.2.3.1 CamFind Process**

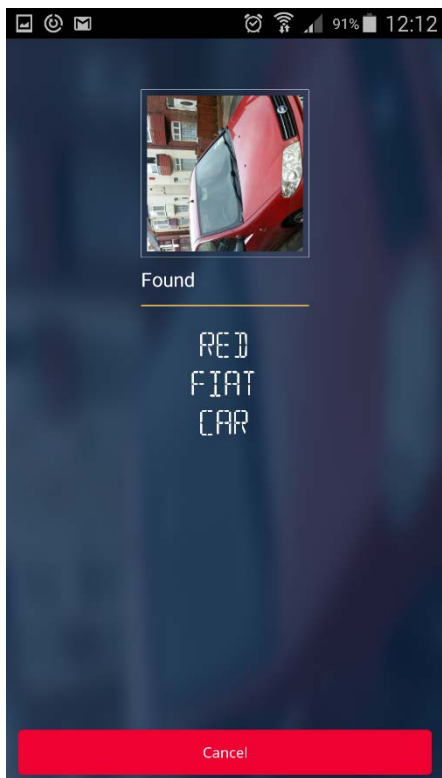
Step A – The user takes a snapshot of a vehicle via their device (**Figure 14**).

Step B – The application attempts to identify key characteristics of the object (**Figure 15**).

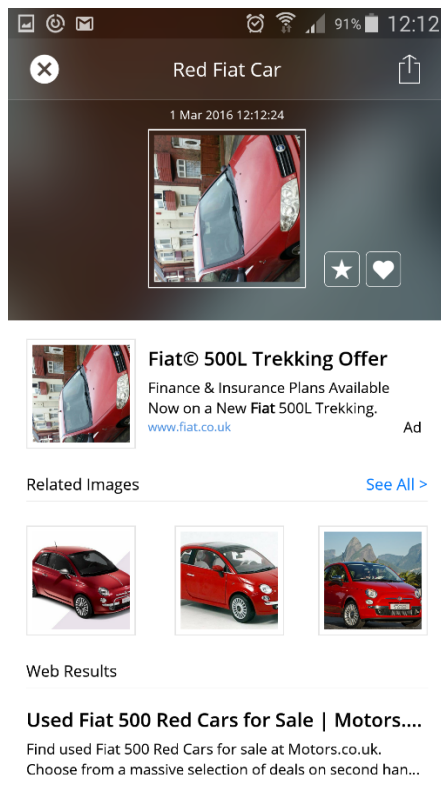
Step C – Results are displayed based on the given information (**Figure 16**).



**Figure 14:** The CamFind app allows the user to take snapshots using their device's camera.



**Figure 15:** The submitted image is processed by algorithms which detect key characteristics.



**Figure 16:** The completed process displays search results based on the processed information.

## **2.3 Target Audience**

Based on the initial ideas and product / competitor research, several actors and tasks have been identified. These tasks will be associated to the actors to identify their purpose.

### **2.3.1 Actors**

- Automotive Consumer
- Automotive Seller
- Smartphone User
- Smartwatch User
- Desktop User

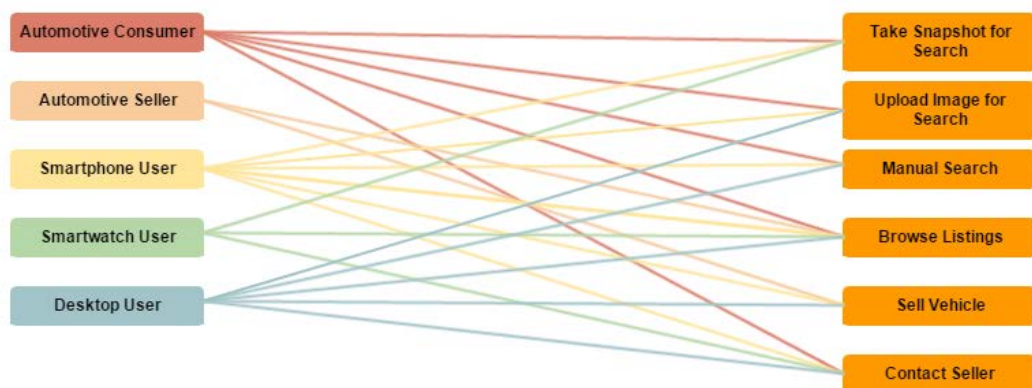
### **2.3.2 Tasks**

- Take snapshot for search
- Upload image for search
- Manual search
- Browse listings
- Sell vehicle
- Contact seller

### **2.3.3 Task Actor Association**

- Take snapshot for search
  - Automotive Consumer
  - Smartphone User
  - Smartwatch User
- Upload image for search
  - Automotive Consumer
  - Smartphone User
  - Desktop User
- Manual Search
  - Automotive Consumer
  - Smartphone User
  - Desktop User
- Browse listings

- Automotive Consumer
- Automotive Seller
- Smartphone User
- Smartwatch User
- Desktop User
- Sell vehicle
  - Automotive Seller
  - Smartphone User
  - Desktop User
- Contact seller
  - Automotive Consumer
  - Smartphone User
  - Smartwatch User
  - Desktop User



**Figure 17:** A visual representation of the task to actor association.

### 2.3.4 Needs and Characteristics

Each actor has been associated with the task they may want to perform; this has been kept as simple as possible in order to establish a clear purpose for the application. The identified actors reflect the purpose of the application and expand to cover the various platforms which the actors may be using. The tasks clearly outline the functions of the application and explain which actors are likely to use each task.

## **2.4 Design Consideration**

### **2.4.1 File Formats and Compression**

In order to provide fast loading without compromising quality, each image within the application will be PNG format; this ensures that transparency is supported and provides a moderate file size. To further the efficiency of these images, they will be run through a compression method to a medium effect, this will reduce their file size without removing too many colours within the image.

Additionally, HTML objects will be considered for usage where appropriate. This method can replace certain basic shapes that would normally be created with images. Using HTML is much faster than requiring an image to be loaded.

### **2.4.2 Platform Consideration**

In order to achieve responsive application support, each of the three specified platforms must be considered when creating the prototypes. The specified platforms include smartphone, smartwatch and desktop devices.

Smartphone applications are expected to be responsive, many having portrait and landscape features. Using the research for the Auto Trader and Motors applications, it was discovered that Motors locks the orientation of the device to portrait. When further comparing the two applications, Motors seem to display information more efficiently than Auto Trader's, this also helps to support the simplicity of the design. After careful consideration it has been decided that the prototype developed for smartphone will be portrait only, this will help present information to users in a concise format and completely remove the risk of constrained content when switching to landscape.

When considering the desktop application, the resolutions used for devices are usually much larger than that of smartphones. This allows information to be presented in larger sections which can sometimes clutter the viewing of websites. To counter this, the prototype will make full use of the space in a



user friendly way, it will do so by combining features together in order to reduce the amount of pages used. For example, the search function will be placed on the landing page, this will emphasise the application's purpose and ensure that valuable content is above the fold of the application.

The smartwatch has considerably less space available than smartphone and desktop, maintaining a high-standard of information will be difficult on this device.

The smartwatch application has considerably less space than that of other devices, as such less information is able to be presented to the user. In order to keep a high quality user experience, information will need to be condensed in all aspects of the application. As a result, the application will employ condensed information: the landing page will display key features, among these there will be a dedicated button to evoke the snapshot feature, additionally the amount of vehicles listed will be reduced to one.

### **3 FEEDBACK AND EVALUATION**

#### **3.1 Questionnaire Criteria**

In order to gather feedback on initial ideas and research, a questionnaire has been created and sent to several academic students.

Questions include:

- Would you be interested in an app which allowed you to search for new and used vehicles for sale?
- How likely are you to use a snapshot feature, which displayed similar vehicles based on the photo you provide?
- Would a manual search option appeal to you in place of the photo function? For example, searching for the make and model of a vehicle.
- The smartphone app will display only in portrait mode in order to display information concisely, do you think this is acceptable?
- When searching for a vehicle, what information would you like to find? (Multiple choice question)
- Looking at the logo above, how well do you think this suits the app?
- How well do you think that the colour style of the logo will suit the app?
- How likely are you to use this app on a smartwatch?
- How likely are you to use this app on a smartphone?
- How likely are you to use this app on a desktop computer?

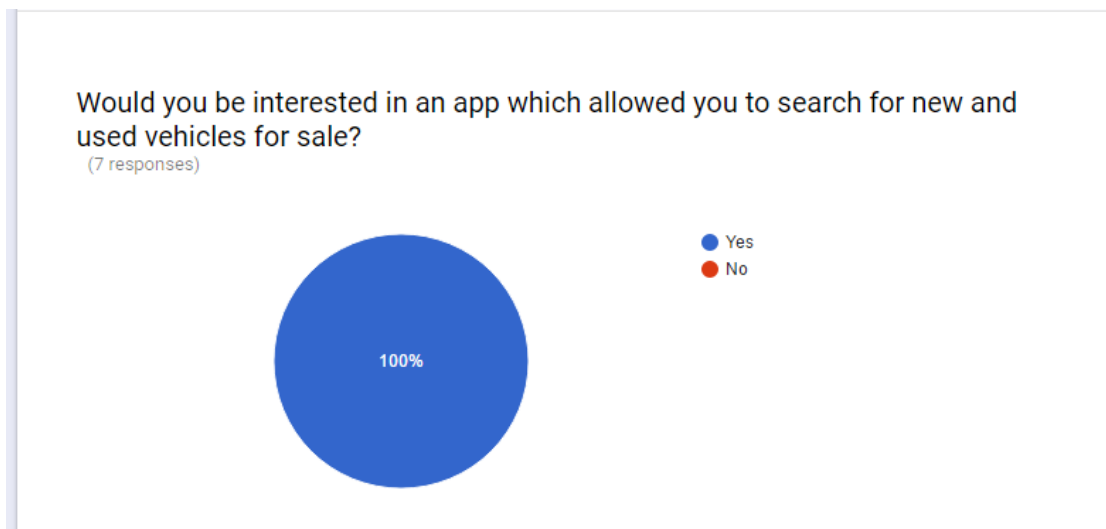
### 3.2 Questionnaire Results and Evaluation

The questionnaire was sent to 20+ persons, of those 7 responded. Much of the results are positive and confirm that my initial research and design are appropriate.

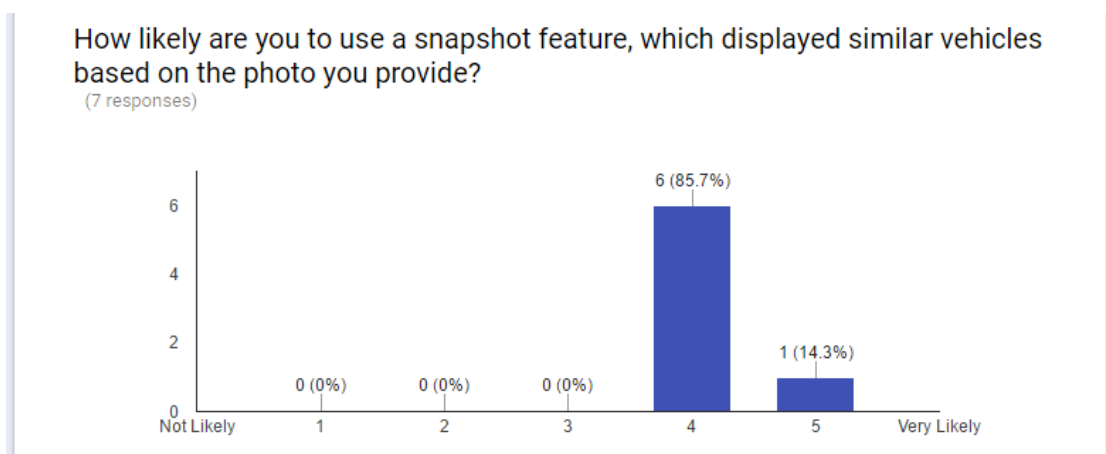
An initial logo was created with a basic style, in order to give respondents a visual representation of what the app was aimed at. 100% of respondents said that the logo suited the app well, while the colour style was rated 3.7 out of 5 overall; this suggests that the colour scheme needs improvements. This is supported by the one comment which was received, which suggested that the logo background colour may need attention. See **Figure 25**, **Figure 26** and **Figure 30**.

One question's responses stood out among the rest, people were asked if they would be likely to use the app on a smartwatch. Over 85% of respondents suggested that they would not use this app on a smartwatch. This seems to reflect the findings of Mintel's survey on "Plans to purchase of upgrade consumer technology products" (Mintel, no date), which suggested that only 19% of people planned to purchase a Smartwatch. These responses suggest that the smartwatch app will not be the main emphasis for the audience. See **Figure 27**.

As a result of this feedback, the colour scheme of the app will be looked into in more depth and more inviting colours will be chosen. As much of the feedback is positive and few comments were received, I am unable to improve upon feedback.

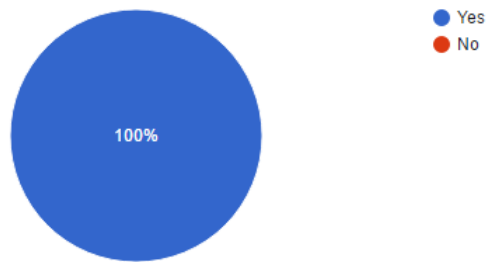


**Figure 20:** Would you be interested in an app which allowed you to search for new and used vehicles for sale?



**Figure 21:** How likely are you to use a snapshot feature, which displayed similar vehicles based on the photo you provide?

Would a manual search option appeal to you in place of the photo function?  
For example searching for the make and model of a vehicle.  
(7 responses)



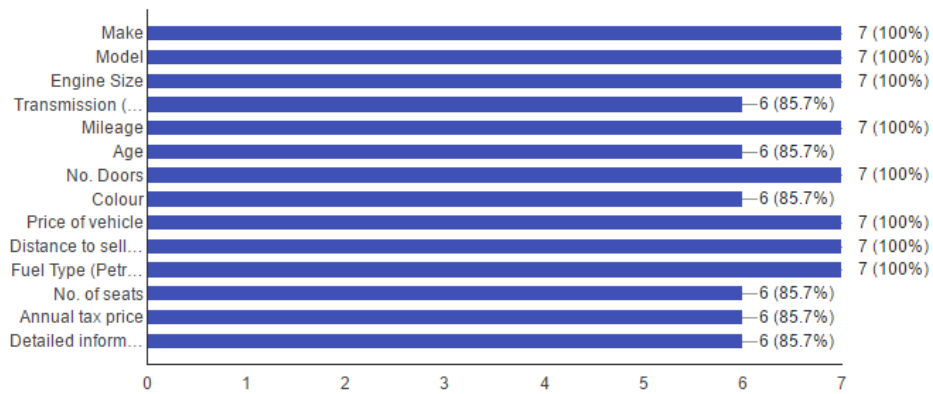
**Figure 22:** Would a manual search option appeal to you in place of the photo function? For example, searching for the make and model of a vehicle?

The smartphone app will display only in portrait mode in order to display information concisely, do you think this is acceptable?  
(7 responses)



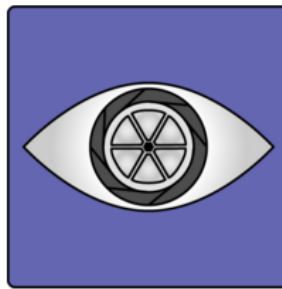
**Figure 23:** The smartphone app will display only in portrait mode in order to display information concisely, do you think this is acceptable?

When searching for a vehicle, what information would you like to find? (Tick appropriate)  
(7 responses)

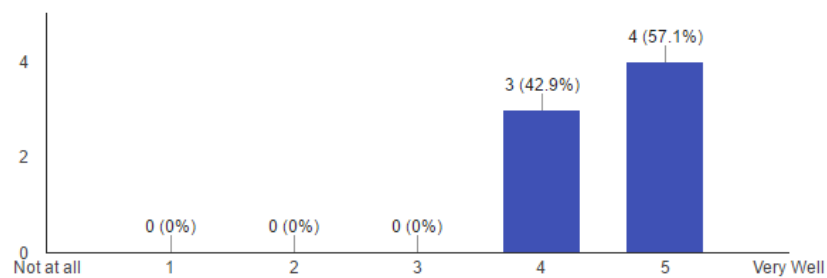


**Figure 24:** When searching for a vehicle, what information would you like to find?

AutoEye Logo

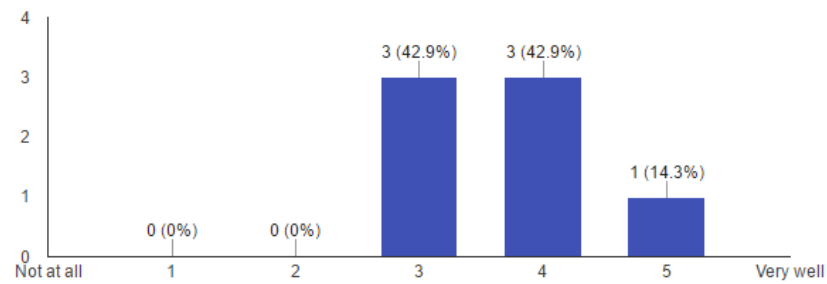


Looking at the logo above, how well do you think this suits the app?  
(7 responses)



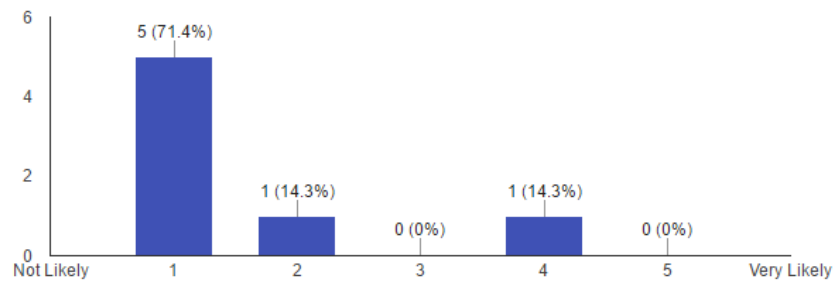
**Figure 25:** Looking at the logo above, how well do you think this suits the app?

How well do you think that the colour style of the logo will suit the app?  
(7 responses)



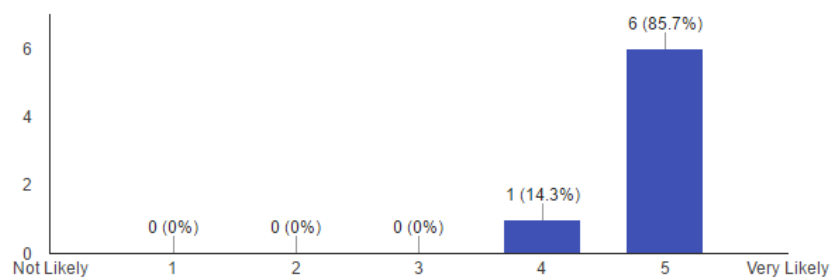
**Figure 26:** How well do you think that the colour style of the logo will suit the app?

How likely are you to use this app on a Smartwatch? (7 responses)



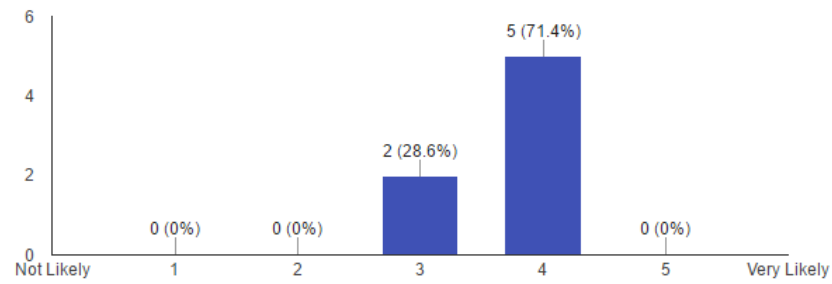
**Figure 27:** How likely are you to use this app on a smartwatch?

How likely are you to use this app on a smartphone? (7 responses)



**Figure 28:** How likely are you to use this app on a smartphone?

How likely are you to use this app on a desktop computer? (7 responses)



**Figure 29:** How likely are you to use this app on a desktop?

Do you have any further comments or suggestions? (1 response)

Logo: Consider adding some better shading into the wheel, also the background in the square may need reviewing as the contrast between the wheel and the background makes them appear to merge. The wheel and eye part just doesn't stand out.

General concept: Great idea overall, the content listed for what to be able to filter/search for is spot on, I cannot think of anything extra at present that I would have added to that list, but I would certainly use most, if not all of those filter types when searching.

**Figure 30:** Do you have any further comments?



## **4 IMPACT ON DESIGN**

### **4.1 How has the competitor research impacted the design?**

Of the competitors researched, it was found that each application / website has a clutter-free design; this seems to put more emphasis on the core functions. This is especially noted on the front page of their websites, which display the search function as a prominent section of the website; this emphasises the purpose of the application / website. Similarly, their applications show the listing page when loading instead of a home page with various options; this further suggests that their focus is functionality and enforces the main purpose of the application.

The approach to functions seems to be of great importance in applications of this genre, as such the same importance will be given when designing the prototype. The search will be a prominent core feature which will be accessible throughout the website and application, it will be included on the landing page to establish this feature to users. Additionally, to support the simplicity of the prototypes, a simple navigation method will be presented, this will include clearly defined and explanatory links such as: Home, Browse, Search, Favourites and Sell Auto.

### **4.2 How has the target audience impacted design?**

The actors and tasks have been kept as simple as possible, this helps to establish a straightforward progression for each task within the application. Adhering to this simplicity, actors should be able to complete their task within as fewer steps as possible, the straight-forward navigation will support the users with the completion of their task, ultimately improving the user's experience. Clear functions with a simple approach will prevent the application from being too complicated.

#### **4.3 How has design considerations impacted design?**

There are various platforms and devices on the market, each has its own features and resolutions. For example, smartwatches and smartphones are portable, while desktops are not, as such it likely won't be possible to take a snapshot via a desktop application. To compensate for this, the upload feature will be added to ensure that desktop users are able to search via images. Additionally, manual search functions allow users to search regardless of device capabilities, this ensures that the app is considered on each platform and will expand the support for various devices.

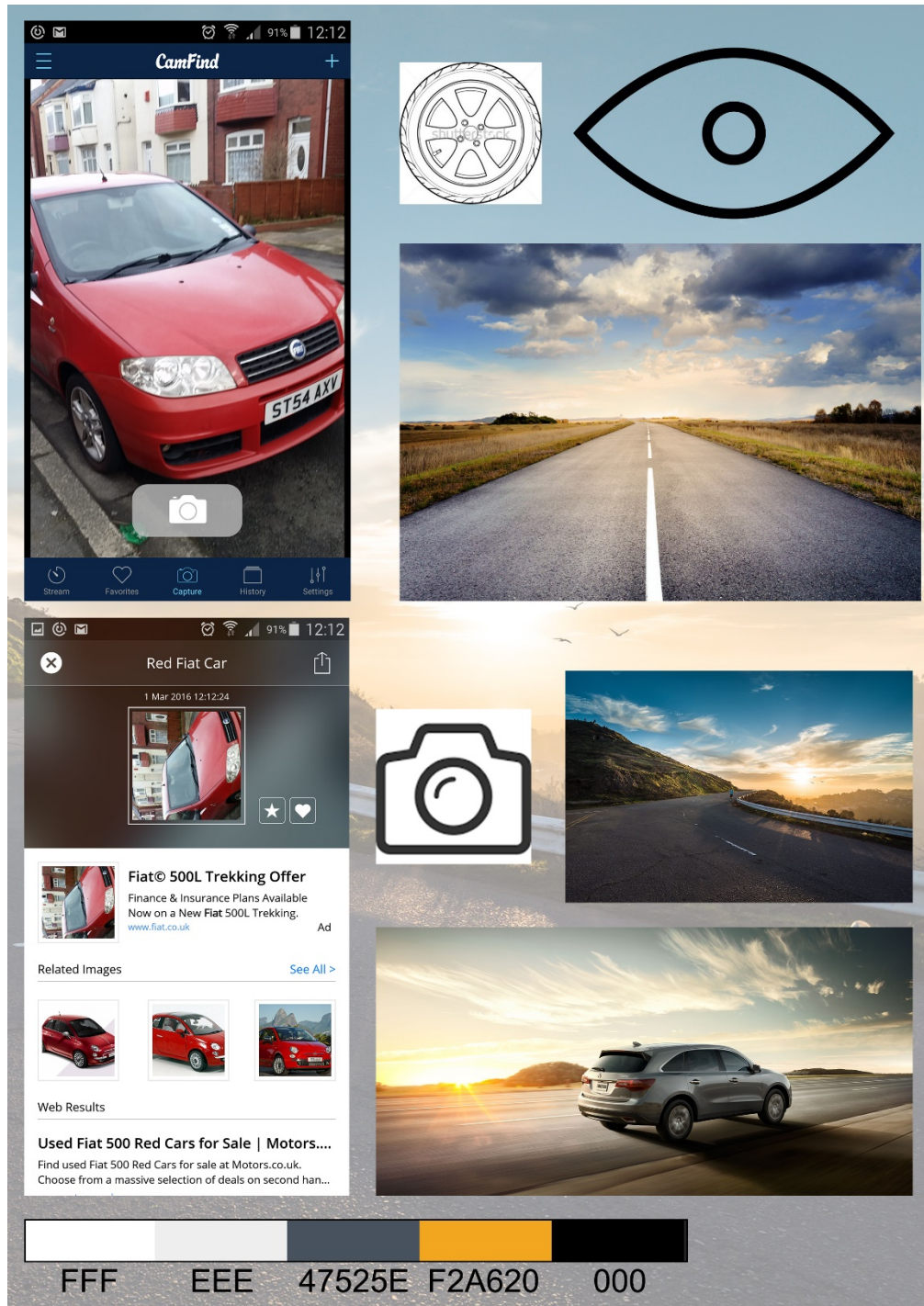
#### **4.4 How has feedback impacted the design?**

The feedback received from the questionnaire was mostly positive and reinforces the initial research and ideas. The main concern was that of the colour scheme, it was suggested that the purple background didn't seem to match with the application's purpose and that the contrast wasn't as suitable as it should be. In order to facilitate this feedback, more time will be invested into developing suitable colour schemes and styles.

Feedback for Smartwatch usage found that few would want to use the device to access this application. From the research it could be suggested that the market for smartwatch devices seems to be relatively minor, especially when considering the limitations of this device. The recommendation to a company would be not to develop an application for this device, it would not be cost effective to develop such an application for the platform and would provide a very small user-base. As this is a requirement, a prototype for the device will be created regardless.

## 5 DESIGN

### 5.1 Moodboard



**Figure 31:** This moodboard was created to support the design process of the AutoEye project.

## **5.2 Wireframe**

Wireframes and detailed wireframes were created to establish the layout and initial design of each device's prototype. They are available for viewing within [Appendix A - Wireframes](#).

## REFERENCES

51 State Autos (no date) *Dodge | Charger - 51st state autos*. Available at: <http://51stateautos.com/dodge-charger/> (Accessed: 24 February 2016).

A9.com Inc. (no date) *Visual search*. Available at: <http://a9.com/whatwedo/visual-search/> (Accessed: 14 February 2016).

AutoScout 24 (2016) *AutoScout24 - used car finder – Android Apps on Google play*. Available at: [https://play.google.com/store/apps/details?id=com.autoscout24&hl=en\\_GB](https://play.google.com/store/apps/details?id=com.autoscout24&hl=en_GB) (Accessed: 24 February 2016).

Auto Trader Group plc (2016) *Auto trader – Android Apps on Google play*. Available at: [https://play.google.com/store/apps/details?id=uk.co.autotrader.androidconsumersearch&hl=en\\_GB](https://play.google.com/store/apps/details?id=uk.co.autotrader.androidconsumersearch&hl=en_GB) (Accessed: 24 February 2016).

Auto Trader Group plc (no date) *About us*. Available at: <http://about-us.autotrader.co.uk/> (Accessed: 26 February 2016).

Auto Trader Limited (2016) *Alfa Romeo 147 1.6 T.Spark 5dr 12 MONTHS M.O.T.* Available at: [http://www.autotrader.co.uk/classified/advert/201603222206387?sort=default&postcode=TS10%203BS&onesearchad=used%2Cnearlynew%2Cnew&make=alfa\\_romeo&search-target=usedcars&searchcontext=default&radius=1500&page=8&logcode=p](http://www.autotrader.co.uk/classified/advert/201603222206387?sort=default&postcode=TS10%203BS&onesearchad=used%2Cnearlynew%2Cnew&make=alfa_romeo&search-target=usedcars&searchcontext=default&radius=1500&page=8&logcode=p) (Accessed: 30 March 2016).

Auto Trader Limited (2016) *Alfa Romeo Giulietta 2.0 JTDM-2 Sportiva 5dr One private owner, leather*. Available at: <http://www.autotrader.co.uk/classified/advert/201603151997483?postcode=PR3%200LS&search->

target=usedcars&page=26&make=alfa\_romeo&sort=pricedesc&searchcontext=default&onsearchad=used%2Cnearlynew%2Cnew&radius=1500&logcode=p (Accessed: 5 April 2016).

Auto Trader Limited (2016) *Alfa Romeo Giulietta 2.0 JTDM-2 Veloce TCT 5dr 20000 MILES ONLY*. Available at:

[http://www.autotrader.co.uk/classified/advert/201511238925602?page=38&searchcontext=default&postcode=PR3%200LS&search-target=usedcars&sort=pricedesc&make=alfa\\_romeo&radius=1500&onsearchad=used%2Cnearlynew%2Cnew&logcode=p](http://www.autotrader.co.uk/classified/advert/201511238925602?page=38&searchcontext=default&postcode=PR3%200LS&search-target=usedcars&sort=pricedesc&make=alfa_romeo&radius=1500&onsearchad=used%2Cnearlynew%2Cnew&logcode=p) (Accessed: 5 April 2016).

Auto Trader Limited (2016) *Auto Trader UK - New & used cars for sale*.

Available at: <http://www.autotrader.co.uk/> (Accessed: 26 February 2016).

Auto Trader Limited (2016) *BMW 3 SERIES 2.0 320d ES 4dr*. Available at:

<http://www.autotrader.co.uk/classified/advert/201602090866689?postcode=TS10%203BS&make=bmw&search-target=usedcars&sort=default&onsearchad=used%2Cnearlynew%2Cnew&radius=30&page=4&searchcontext=default&logcode=p> (Accessed: 30 March 2016).

Auto Trader Limited (2016) *Fiat Abarth 500 1.4 t-jet 3dr hatchback VERY RARE, FSH, FINANCE & P EX*. Available at:

<http://www.autotrader.co.uk/classified/advert/201603172057662?radius=1500&make=fiat&page=1&postcode=ts103bs&sort=default&model=abarth&search-target=usedcars&onsearchad=used%2Cnearlynew%2Cnew&logcode=p> (Accessed: 5 April 2016).

Auto Trader Limited (2016) *Honda civic 1.8 i VTEC EX 5dr OPEN EVERYDAY THROUGH EASTER*. Available at:

<http://www.autotrader.co.uk/classified/advert/201603262356668?make=honda&page=71&searchcontext=default&sort=priceasc&postcode=TS10%203BS&model=civic&onsearchad=used%2Cnearlynew%2Cnew&search-target=usedcars&radius=1500&logcode=p> (Accessed: 30 March 2016).

Auto Trader Limited (2016) *Honda jazz 1.4 i VTEC ES 5dr \*\* FULL SERVICE HISTORY \*\**. Available at:

<http://www.autotrader.co.uk/classified/advert/201604042605732?postcode=TS10%203BS&search-target=usedcars&page=1&make=honda&sort=default&price-from=5000&searchcontext=default&onesearchad=used%2Cnearlynew%2Cnew&radius=1500&logcode=p> (Accessed: 5 April 2016).

Bauer Media (2016) *New and used car reviews, cars for sale, valuations, and advice | Parkers*. Available at: <http://www.parkers.co.uk/> (Accessed: 26 February 2016).

CamFind (no date) *Visual search & image recognition API powered by CloudSight*. Available at: <http://camfindapp.com/> (Accessed: 14 February 2016).

CarMax (2016) *CarMax - used car Superstore – Android Apps on Google play*. Available at: [https://play.google.com/store/apps/details?id=com.carmax.carmax&hl=en\\_GB](https://play.google.com/store/apps/details?id=com.carmax.carmax&hl=en_GB) (Accessed: 24 February 2016).

Clipart (2010) *Car OR truck tire line art stock vector*. Available at: <http://clipart.me/premium-miscellaneous/car-or-truck-tire-line-art-147783> (Accessed: 21 March 2016).

Cox Automotive (no date) *Buy and sell new & used cars safely*. Available at: <http://www.motors.co.uk/> (Accessed: 26 February 2016).

Danova, T. (2015) *Apple watch will control nearly Half of the entire Smartwatch market by 2017*. Available at: <http://uk.businessinsider.com/wearable-computing-market-statistics-2015-1?r=US&IR=T> (Accessed: 26 February 2016).

Global Web Index (2016) *GWI device Q1 2016 summary*. Available at:  
[http://www.globalwebindex.net/hubfs/Reports/GWI\\_Device\\_-\\_Q1\\_2016\\_-\\_Summary.pdf?t=1456495790917&utm\\_campaign=Insight+Reports&utm\\_source=hs\\_automation&utm\\_medium=email&utm\\_content=22032064&\\_hsenc=p2ANqtz-9AC7BYCYYJbL5TfSdv0\\_mw6LJM7uOc1Qsc2r6ipsJKbrtJ4bh2wKyMR\\_DfnsFoxFzYrpEmTAF3oL0rtVVWrAgfjvqm3A&\\_hsmi=22032064](http://www.globalwebindex.net/hubfs/Reports/GWI_Device_-_Q1_2016_-_Summary.pdf?t=1456495790917&utm_campaign=Insight+Reports&utm_source=hs_automation&utm_medium=email&utm_content=22032064&_hsenc=p2ANqtz-9AC7BYCYYJbL5TfSdv0_mw6LJM7uOc1Qsc2r6ipsJKbrtJ4bh2wKyMR_DfnsFoxFzYrpEmTAF3oL0rtVVWrAgfjvqm3A&_hsmi=22032064) (Accessed: 26 February 2016).

Google Inc (2012) *How search works - the story – inside search – Google*. Available at:  
<http://www.google.com/insidesearch/howsearchworks/thestory/index.html> (Accessed: 22 March 2016).

Google Inc (2016) *Motors.co.uk car search – Android Apps on Google play*. Available at:  
[https://play.google.com/store/apps/details?id=com.motors.activities&hl=en\\_GB](https://play.google.com/store/apps/details?id=com.motors.activities&hl=en_GB) (Accessed: 26 February 2016).

Google Inc (no date) *Material icons - Google design*. Available at:  
<https://design.google.com/icons/> (Accessed: 2 April 2016).

LifeOfBun (2013) *The psychology of colors*. Available at:  
<http://lifeofbun.com/2013/06/13/the-psychology-of-colors/> (Accessed: 16 February 2016).

Mintel Academic (no date) *Login to Mintel reports - Mintel group Ltd*. Available at: <http://academic.mintel.com/display/741606/?highlight> (Accessed: 24 February 2016).

Mintel Academic (no date) *Login to Mintel reports - Mintel group Ltd*. Available at: <http://academic.mintel.com/display/757045/> (Accessed: 24 February 2016).



Mintel (no date) *Digital Trends Summer - UK - June 2015*. Available at: <http://academic.mintel.com/display/741606/?highlight> (Accessed: 26 February 2016).

Mintel (no date) *Digital Trends Winter - UK - December 2015*. Available at: <http://academic.mintel.com/display/757045/> (Accessed: 26 February 2016).

Motors.co.uk (2003) *I got my #SmartFinger out and found this BMW M3 for sale on motors.co.uk*. Available at: <http://www.motors.co.uk/car-38487281/0/srf> (Accessed: 26 February 2016).

Motors.co.uk (no date) *Ownership - motors.co.uk media centre*. Available at: <http://media.motors.co.uk/ownership/> (Accessed: 26 February 2016).

National Numbers (no date) *Free number plate search App for Android Smartphones*. Available at: [http://www.nationalnumbers.co.uk/android\\_app.htm](http://www.nationalnumbers.co.uk/android_app.htm) (Accessed: 24 February 2016).

Office For National Statistics (2016) *Household expenditure on motoring for households owning a car, by gross income decile group, 2014 - office for national statistics*. Available at: <http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/adhocs/005237householdexpenditureonmotoringforhouseholdsowningacarbygrossincomedecilegroup2014> (Accessed: 26 February 2016).

Office for National Statistics (2015) *Internet Access - Households and Individuals 2015*. Available at: [http://www.ons.gov.uk/ons/dcp171778\\_412758.pdf](http://www.ons.gov.uk/ons/dcp171778_412758.pdf) (Accessed: 24 February 2016).

Office for National Statistics (no date) *Household expenditure on motoring for households owning a car, by gross income decile group, UK, 2014*. Available at: <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of->

information/what-can-i-request/published-ad-hoc-data/econ/january-2016/household-expenditure-on-motoring-for-households-owning-a-car.xls (Accessed: 24 February 2016).

Office for National Statistics (no date) *Number of households owning one or more car*. Available at: <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/travel/january-2013/car-ownership-by-age-of-household.xls> (Accessed: 24 February 2016).

Pixabay (2016) *Free image on Pixabay - road, asphalt, space, sky, clouds*. Available at: <https://pixabay.com/en/road-asphalt-space-sky-clouds-220058/> (Accessed: 2 April 2016).

Sotola, R. (no date) *Radial tubeless motorcycle tyre symbols*. Available at: <http://www.dreamstime.com/stock-photo-radial-tubeless-motorcycle-tyre-symbols-illustration-web-image32477200> (Accessed: 21 March 2016).

Staco, M. (no date) *Login to Mintel reports - Mintel group Ltd*. Available at: [http://academic.mintel.com/display/761754/?\\_\\_cc=1&highlight](http://academic.mintel.com/display/761754/?__cc=1&highlight) (Accessed: 24 February 2016).

Sunday Times (2016) *2013 (63) - Toyota AYGO 1.0 VVT-I MOVE 5Dr \*Full service History\**. Available at: <http://www.driving.co.uk/> (Accessed: 26 February 2016).

TinEye (no date) *TinEye reverse search engine*. Available at: <http://tineye.com/> (Accessed: 14 February 2016).

flaticon (2010) *Eye with white pupil outline*. Available at: [http://www.freepik.com/free-icon/eye-with-white-pupil-outline\\_746866.htm#term=eyeoutline&page=1&position=11](http://www.freepik.com/free-icon/eye-with-white-pupil-outline_746866.htm#term=eyeoutline&page=1&position=11) (Accessed: 21 March 2016).

pexels.com (no date) Available at: <https://static.pexels.com/photos/51110/road-dawn-mountains-sky.jpeg> (Accessed: 2 April 2016).

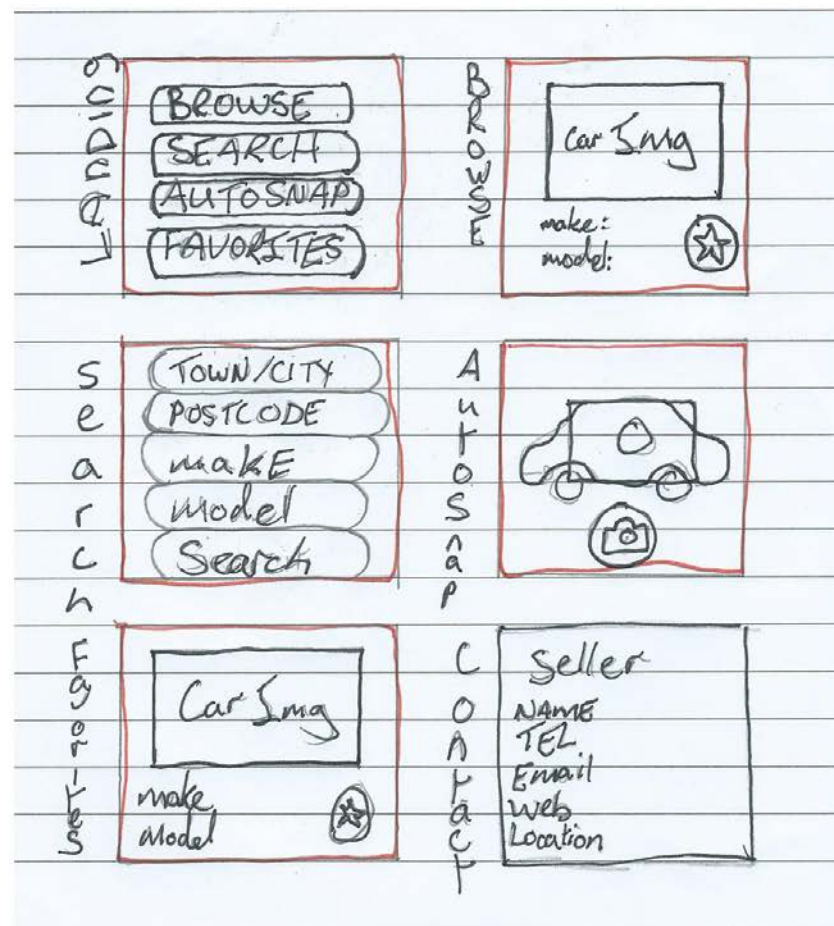
veryshareimg (2016) *Veryshareimg.com car driving on road*. Available at: <http://veryshareimg.com/car-driving-on-road.html> (Accessed: 4 April 2016).

## APPENDIX A – WIREFRAMES

### SMARTWATCH WIREFRAME

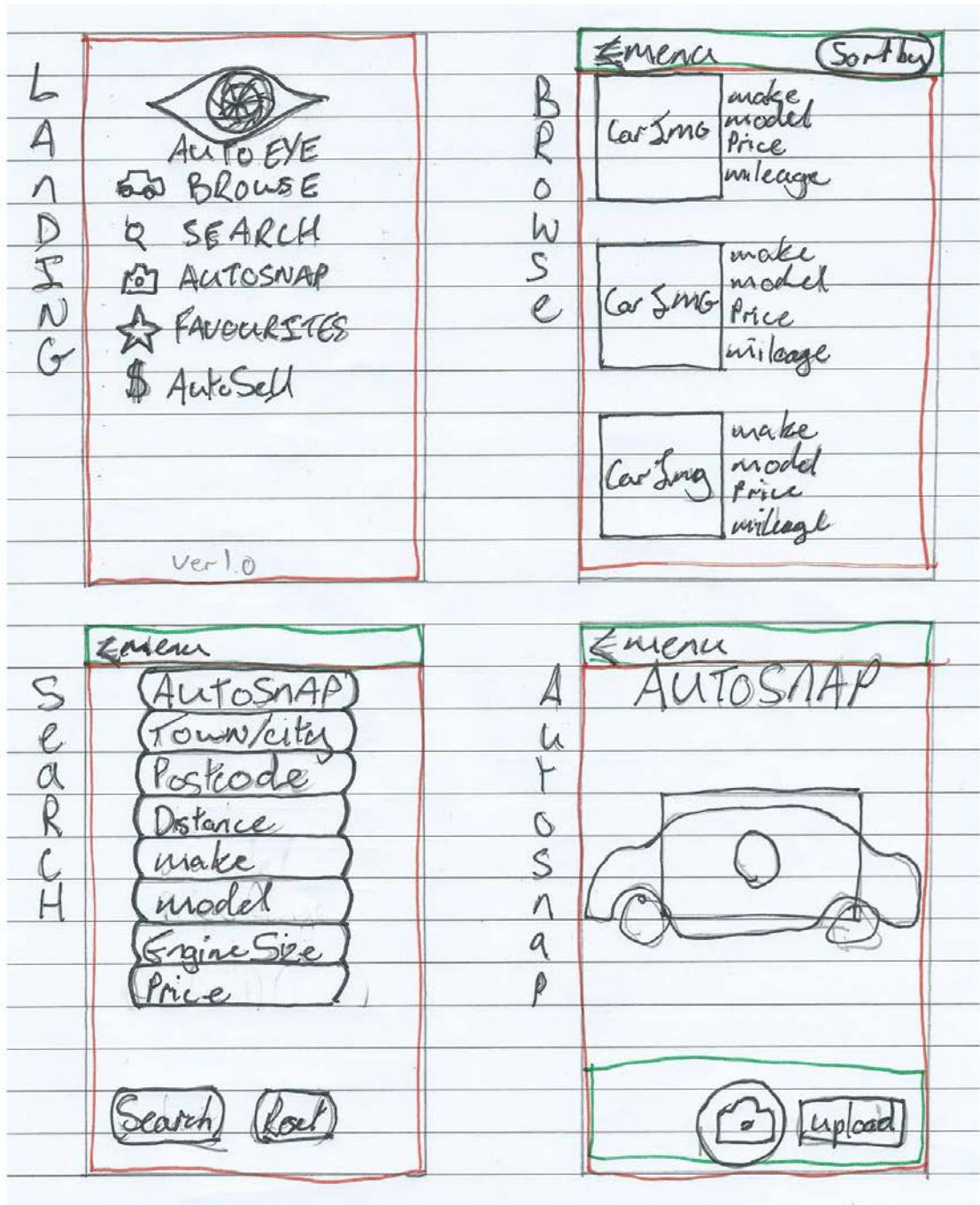
# Smartwatch Wireframe

Landing, Browse, Search, Autosnap,



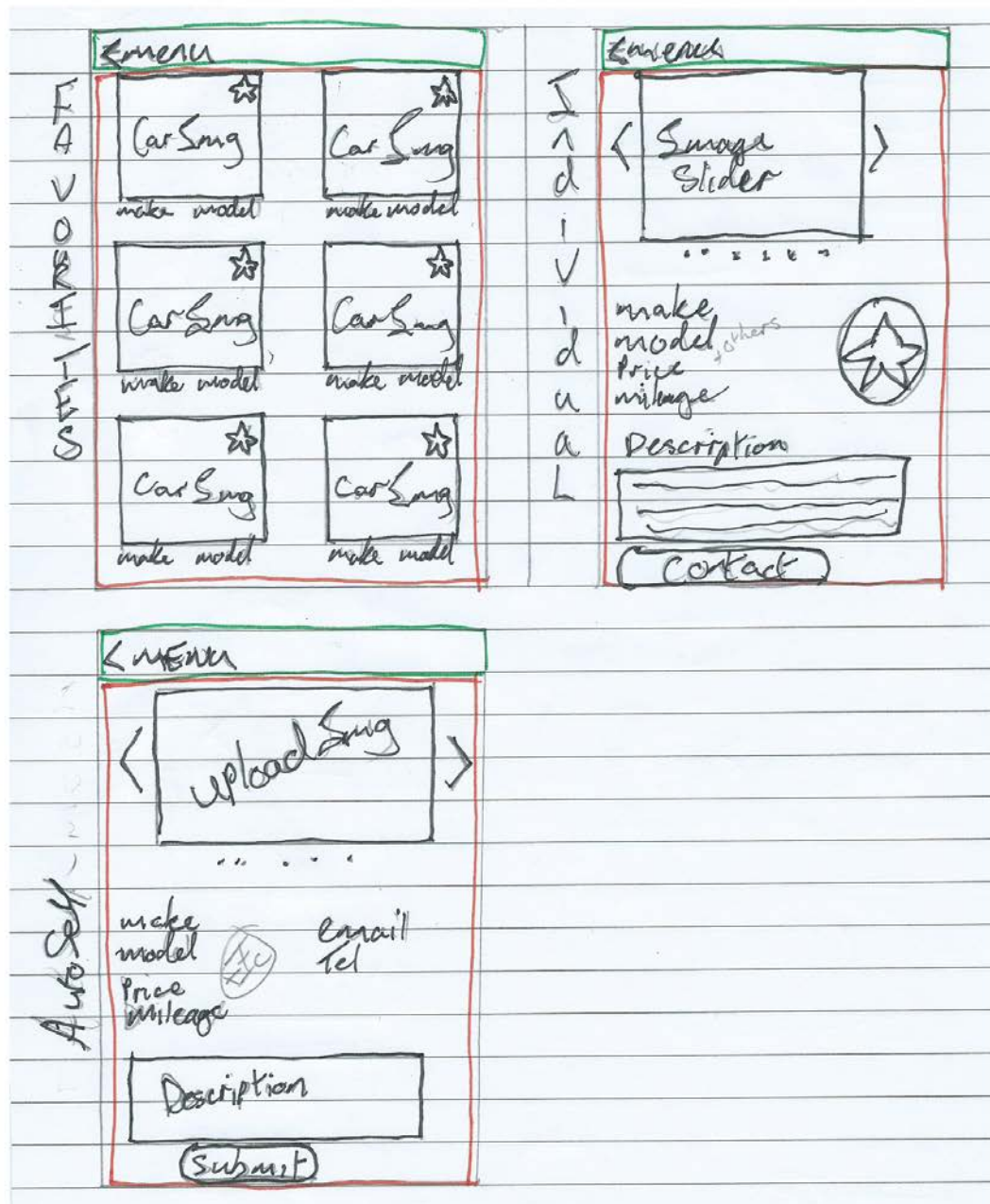
# Smartphone Wireframe

Landing, Browse, Search and Autosnap



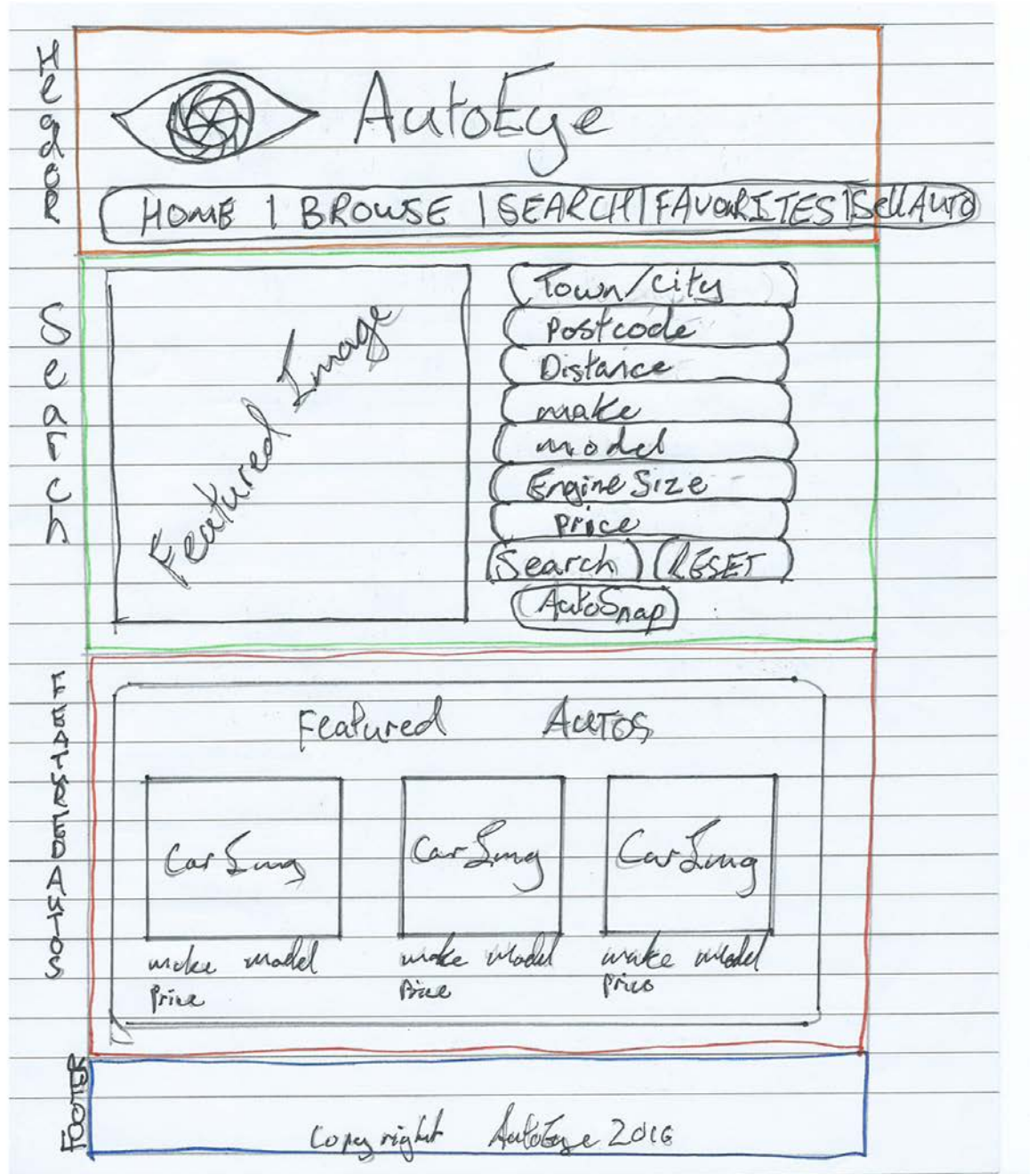
# Smartphone Wireframe

Favourites, Individual Listing and AutoSell






# Home





# Browse

HEADER	 AutoEye																				
	(HOME / BROWSE / SEARCH / FAVORITES) Sell Auto																				
SEARCH	{ Town/city }		{ Postcode }																		
	{ make }		{ model }																		
	{ Price }		{ Distance }																		
	{ Price }		{ Engine Size }																		
	{ Submit }		{ Reset }																		
			{ AutoSnap }																		
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Page No.	<div>&lt; 1 2 3 4 5 6 &gt;</div>																				
Footer	Copyright AutoEye 2016																				

# Search

HEADER



AutoEye


(HOME | BROWSE | SEARCH | FAVORITES | Sell Auto)

Search

Town/City	Postcode	Distance
Make	Model	Engine Size
Transmission	Mileage	Age
No. Doors	Color	Price

(Search) (Reset)

AutoSnap

 AutoSnap


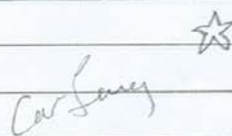
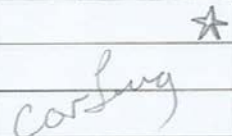
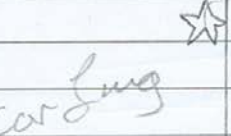
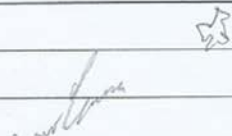
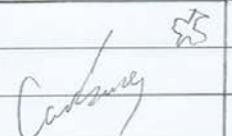

Upload an image to find similar

(Browse) | filename | (Submit)

FOOT

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# Favourites

Favourite	 AutoEye		
	(HOME BROWSE SEARCH FAVORITES Sell No.)		
Favourite Listings			
	make Model	Make Model	Make Model
			
	Make Model	Make Model	Make Model
Page No.	<div>&lt; 1 2 3 &gt;</div>		
Footer	Copyright AutoEye 2016		

# AutoSell

**U**  
**e**  
**d**  
**e**  
**r**

# Auto Eye

(HOME | BROWSE | SEARCH | FAVORITES | SELL Auto)

---

**A**  
**d**  
**a**  
**d**  
**i**  
**n**  
**g**  
**s**

*More Info  
Sales*
Upload

---

**I**  
**n**  
**f**  
**o**

Make		Model	Price
Engine Size		Transmission	
Age		Mileage	
No. Doors		Color	

**D**  
**e**  
**s**  
**c**  
**r**  
**i**  
**p**  
**t**  
**i**  
**o**  
**n**

Description

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**I**  
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**o**  
**r**  
**m**  
**a**  
**t**  
**i**  
**o**  
**n**

Town/City	Postcode
Seller Tel	Seller Email



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**C**  
**o**  
**p**  
**y**  
**r**  
**i**  
**g**  
**h**  
**t**

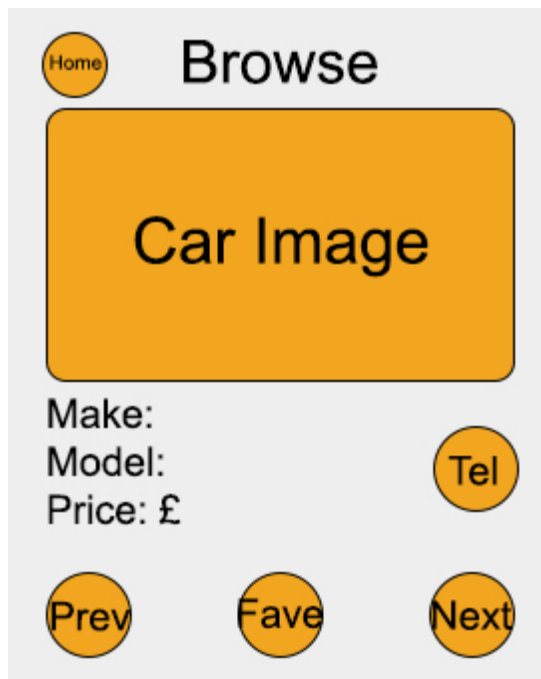
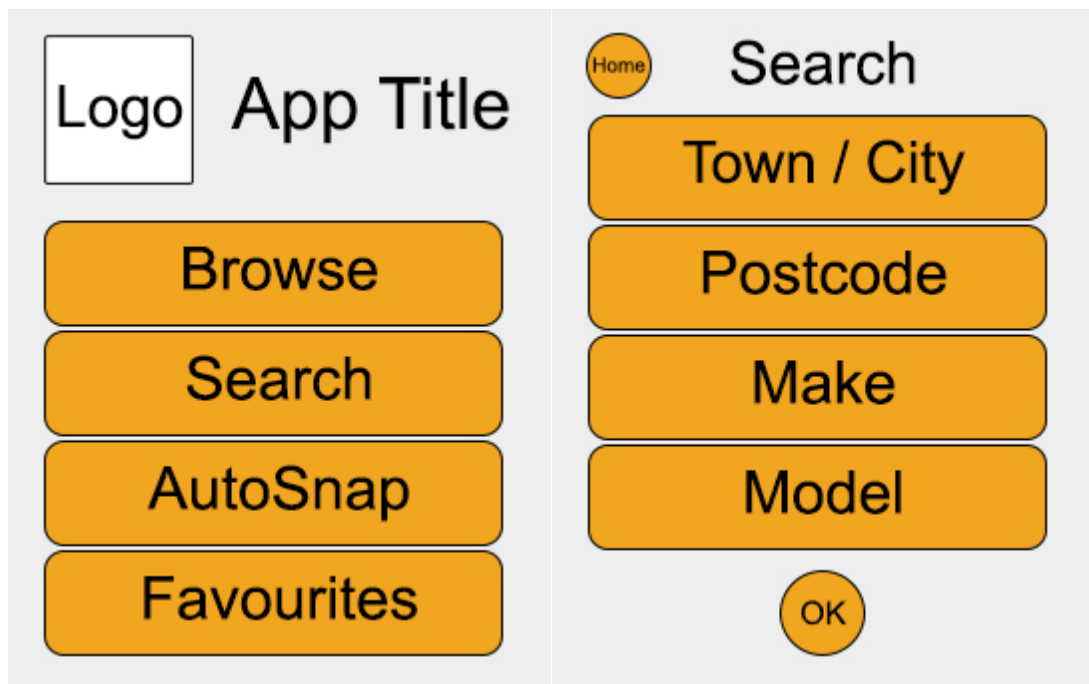
Copyright AutoEye 2010



# Individual Listing

Header	 (HOME   BROWSE   SEARCH   FAVORITES   SELL AUTO)											
Image Slider	<div>&lt; Car Image Slider &gt;</div> <div>• • • • •</div>											
Title	<table><tr><td>make</td><td>model</td><td rowspan="5">price</td></tr><tr><td>Engine Size</td><td>Transmission</td></tr><tr><td>Age</td><td>Mileage</td></tr><tr><td>No. Doors</td><td>Color</td></tr><tr><td colspan="2"></td></tr></table>	make	model	price	Engine Size	Transmission	Age	Mileage	No. Doors	Color		
make	model	price										
Engine Size	Transmission											
Age	Mileage											
No. Doors	Color											
Info	<p>Description</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Town/city Postcode Distance</p>											
Contact	<div>Contact Seller </div>											
Foot	Copyright AutoEye 2016											

# SMARTWATCH DETAILED WIREFRAME



# SMARTPHONE DETAILED WIREFRAME



A vertical app interface mockup on a background image of a road and sky. It features a yellow square logo placeholder at the top, followed by the app title, and a vertical stack of five yellow rectangular buttons.

Logo

App Title

Home

Search

AutoSnap

Favourite

AutoSell

Home

Back

# Page Title



< 1 2 3 4 >

Make  
Model  
Location  
Engine  
Transmission  
Mileage  
Age  
Doors  
Colour

Price £000

Favourite

Phone

Email

Description:

Home

Back

# Page Title

Sort Button

Car Image

Make  
Model  
Price  
Distance

Favourite  
Contact

Car Image

Make  
Model  
Price  
Distance

Favourite  
Contact

Car Image

Make  
Model  
Price  
Distance

Favourite  
Contact

Car Image

Make  
Model  
Price  
Distance

Favourite  
Contact

# DESKTOP DETAILED WIREFRAME

LOGO

APP TITLE

Home | Browse | Search | Favourites | AutoSell

Town/City

Postcode

Distance

Make

Model

Engine Size

Price

Search

FEATURED IMAGE

FEATURED  
VEHICLE

MAKE MODEL PRICE  
[CLICK FOR MORE INFO](#)

FEATURED  
VEHICLE

MAKE MODEL PRICE  
[CLICK FOR MORE INFO](#)

FEATURED  
VEHICLE

MAKE MODEL PRICE  
[CLICK FOR MORE INFO](#)

Copyright © AutoEye 2016



Search

FEATURED IMAGE

PAGE NUMBER

SORT BY

VEHICLE  
IMAGE

MAKE MODEL

£0000

Location, 0 miles (DISTANCE)

YEAR | MILEAGE | TRANSMISSION | ENGINE SIZE | NO.DOORS |  
COLOUR

Air-Conditioning, Alarm, Alloy Wheels (16in), Computer (Driver Information  
System), Electric Windows (Front/Rear), In Car Entertainment ...

[CLICK FOR MORE INFO](#)

VEHICLE  
IMAGE

MAKE MODEL

£0000

Location, 0 miles (DISTANCE)

YEAR | MILEAGE | TRANSMISSION | ENGINE SIZE | NO.DOORS |  
COLOUR

Air-Conditioning, Alarm, Alloy Wheels (16in), Computer (Driver Information  
System), Electric Windows (Front/Rear), In Car Entertainment ...

[CLICK FOR MORE INFO](#)

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>



FEATURED  
IMAGE

## AutoSnap

Upload your image below.

## **APPENDIX B – PROTOTYPES**



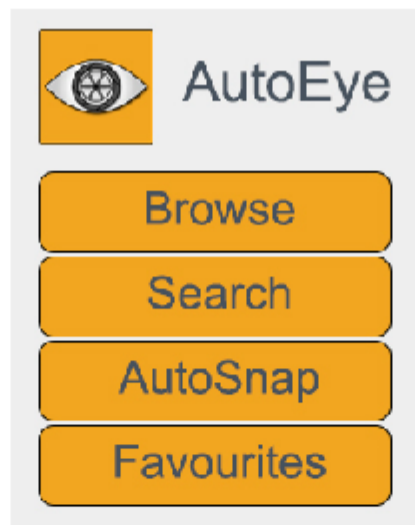


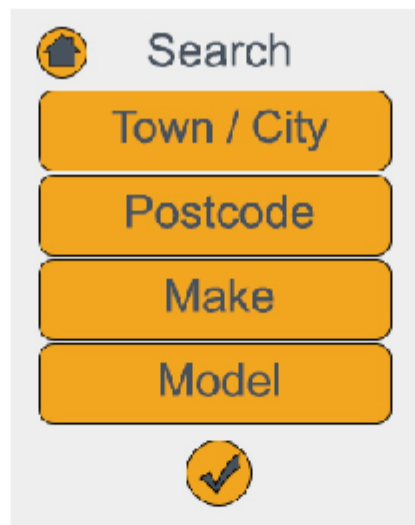
# AutoEye - Smartwatch Prototype

13 Screens

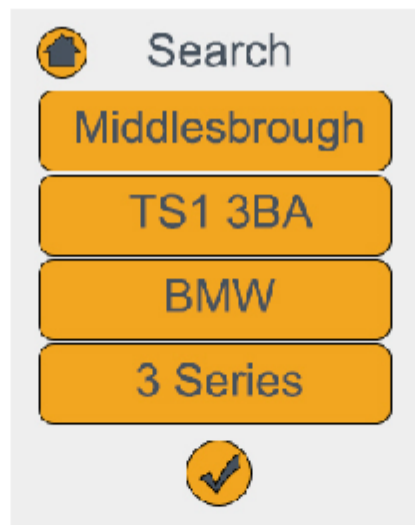


Rick R.



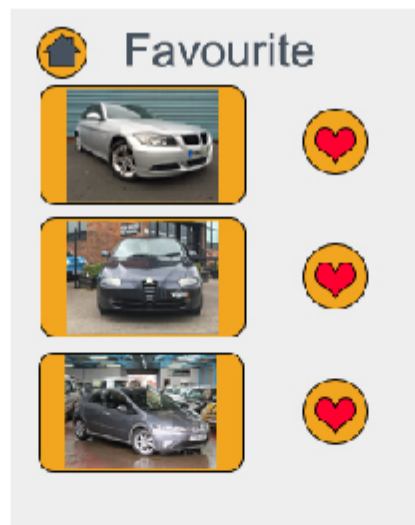


A vertical stack of UI elements on a light gray background. At the top is a circular icon with a house symbol. Below it is the word "Search". This is followed by four orange rounded rectangular buttons with black text, stacked vertically: "Town / City", "Postcode", "Make", and "Model". At the bottom is a circular icon with a checkmark symbol.



The image shows a smartwatch prototype screen with a light gray background. At the top, there is a circular icon containing a house symbol, followed by the text "Search". Below this, there is a vertical list of four orange rounded rectangular buttons. The buttons contain the text "Middlesbrough", "TS1 3BA", "BMW", and "3 Series" from top to bottom. At the bottom of the screen, there is a circular icon containing a checkmark symbol.







## Contact

**Seller:**

Seller Name

**Web:**

www.website.com

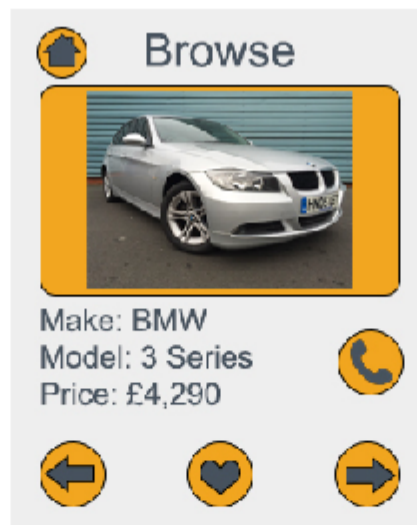
**Tel:**

01642-012345

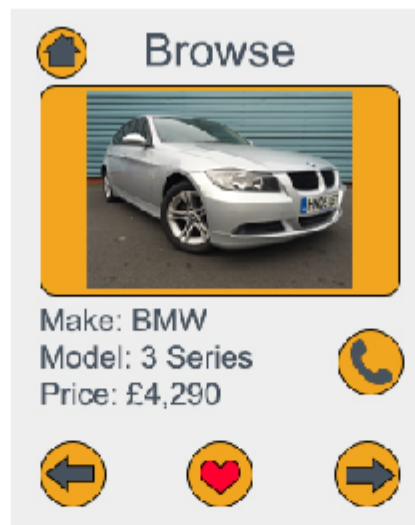
**Email:**

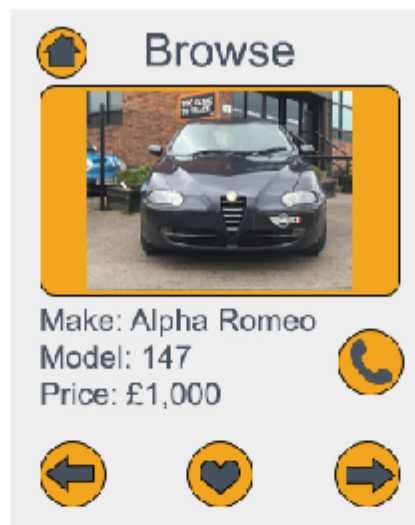
seller@website.com

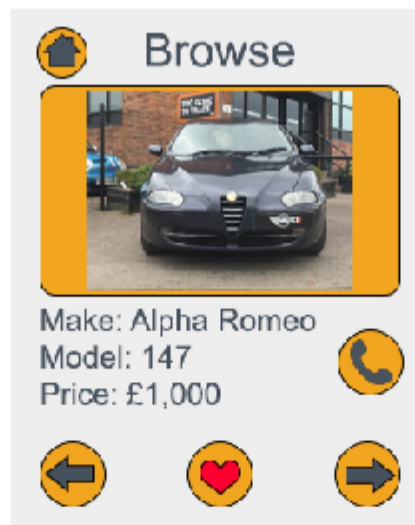


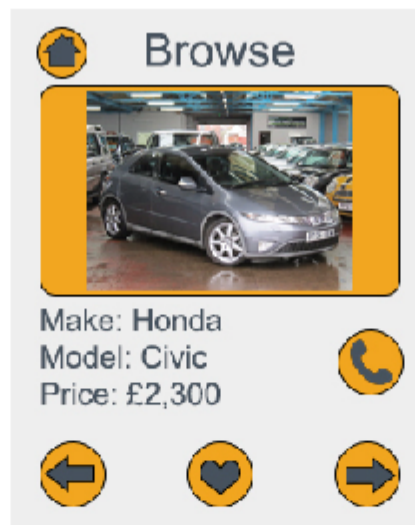


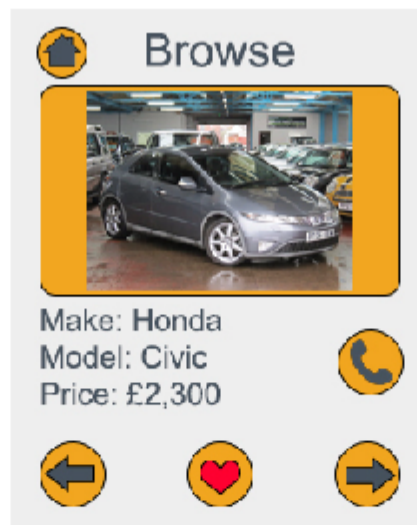


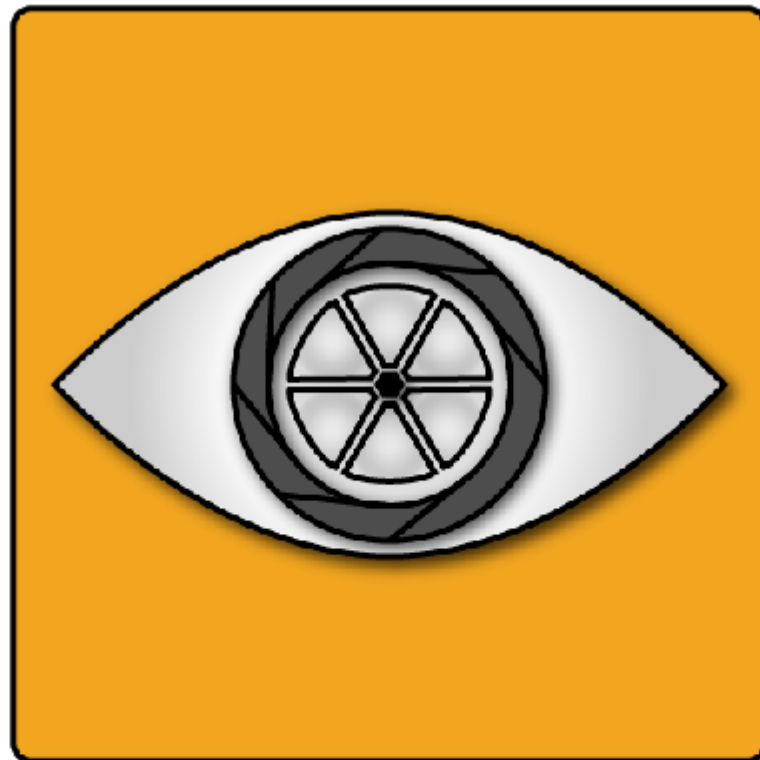














# AutoEye - Smartphone Prototype

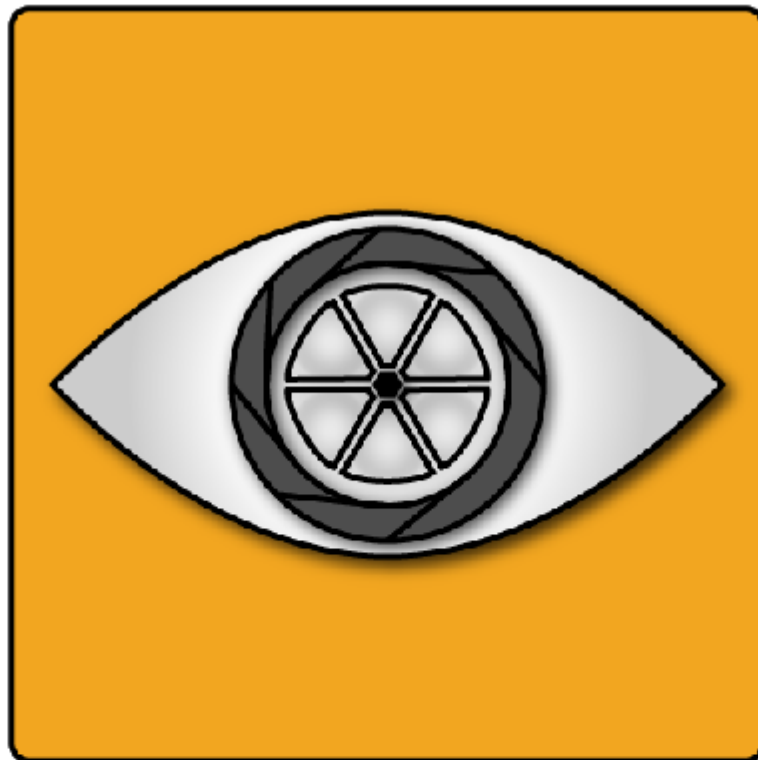
12 Screens

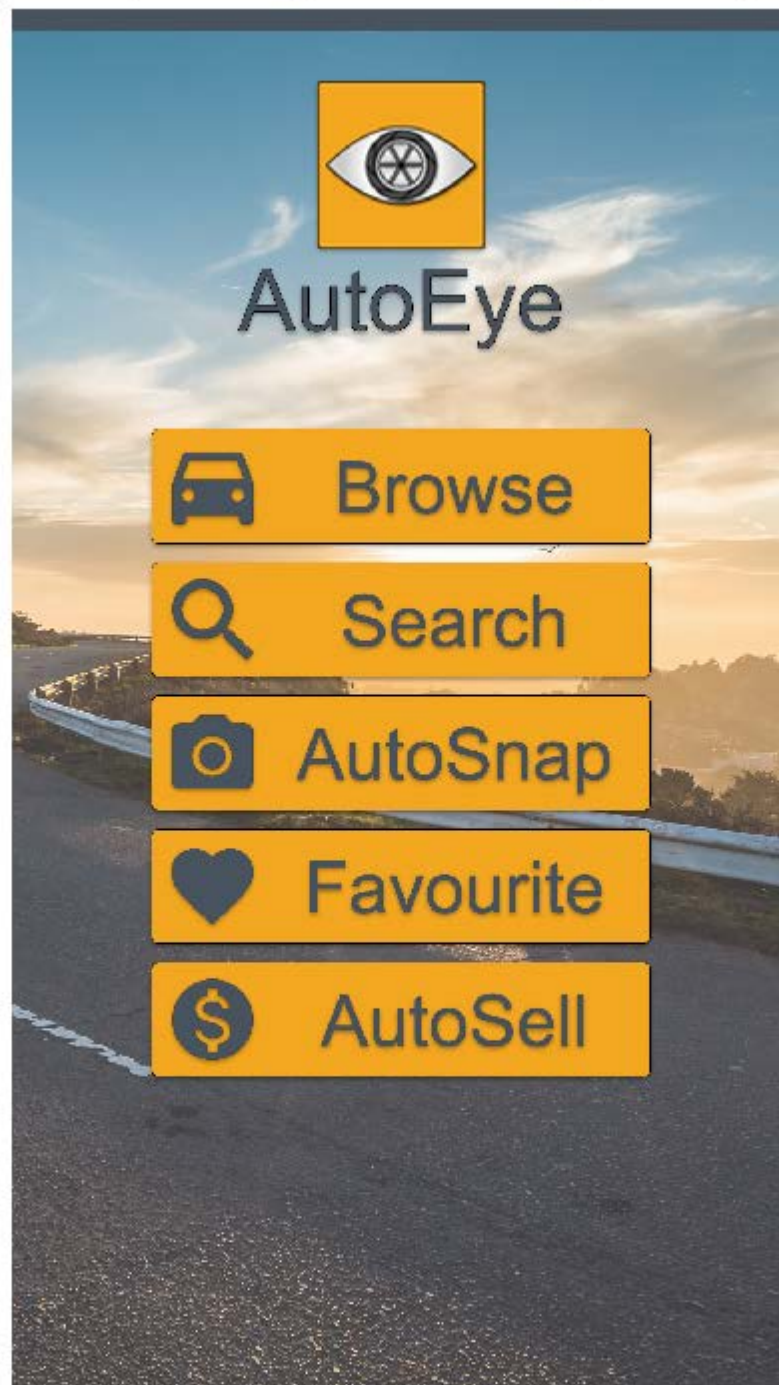


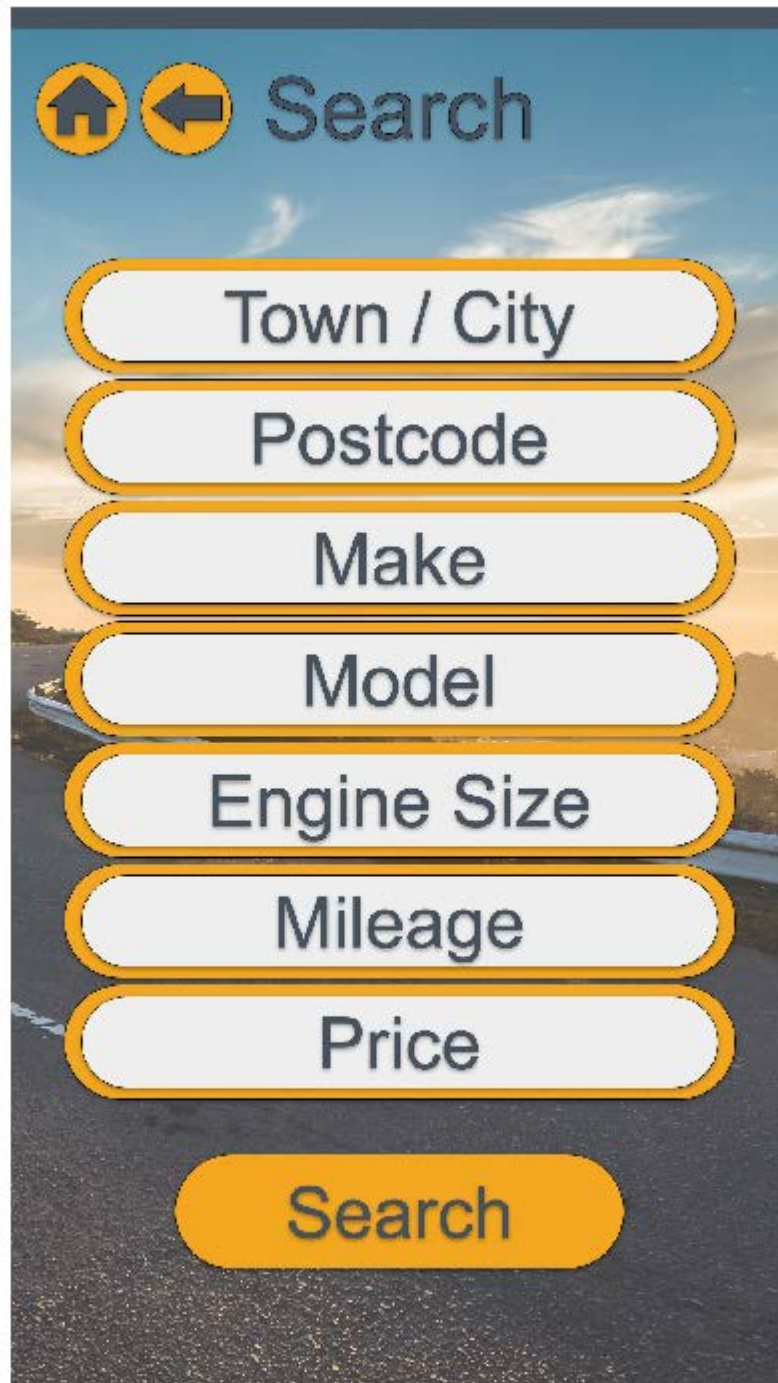
Rick R.












  Search

Town / City

Postcode

Make

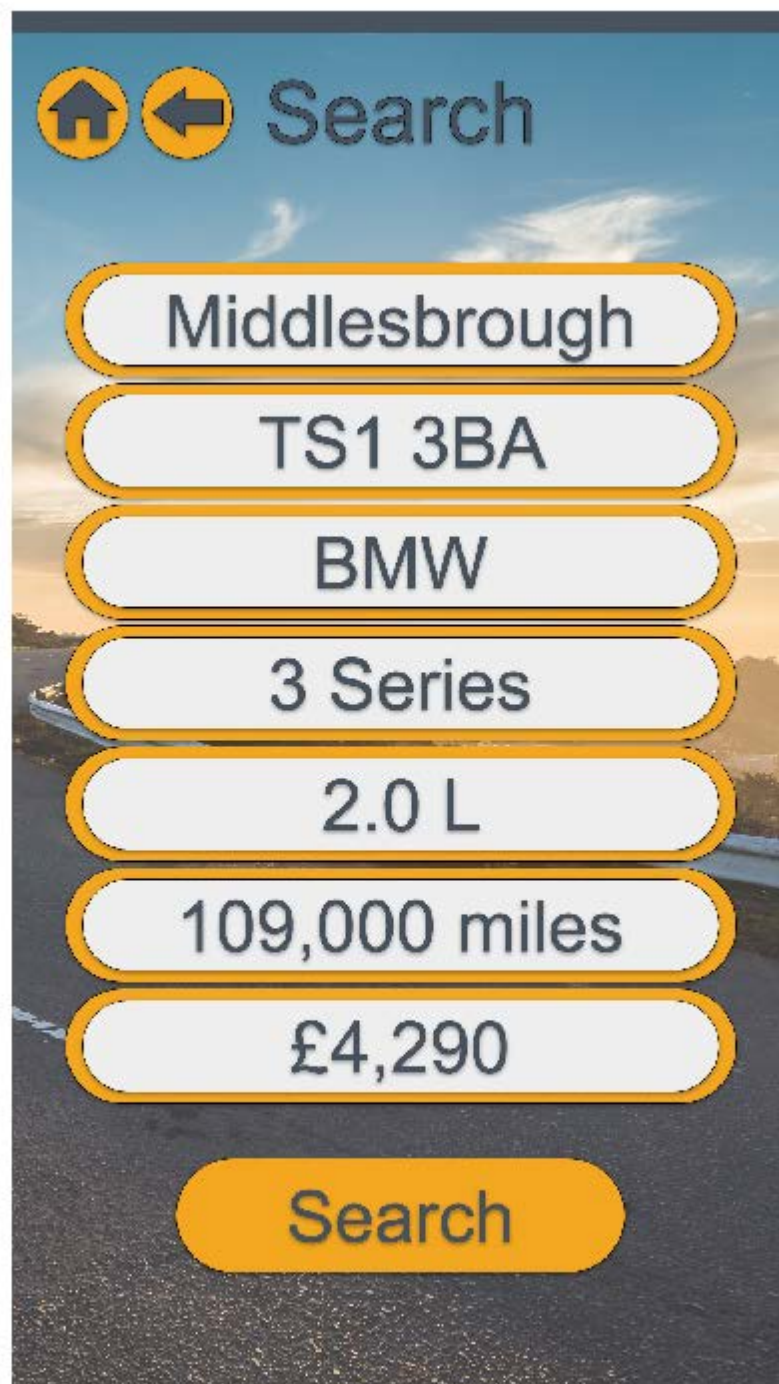
Model

Engine Size

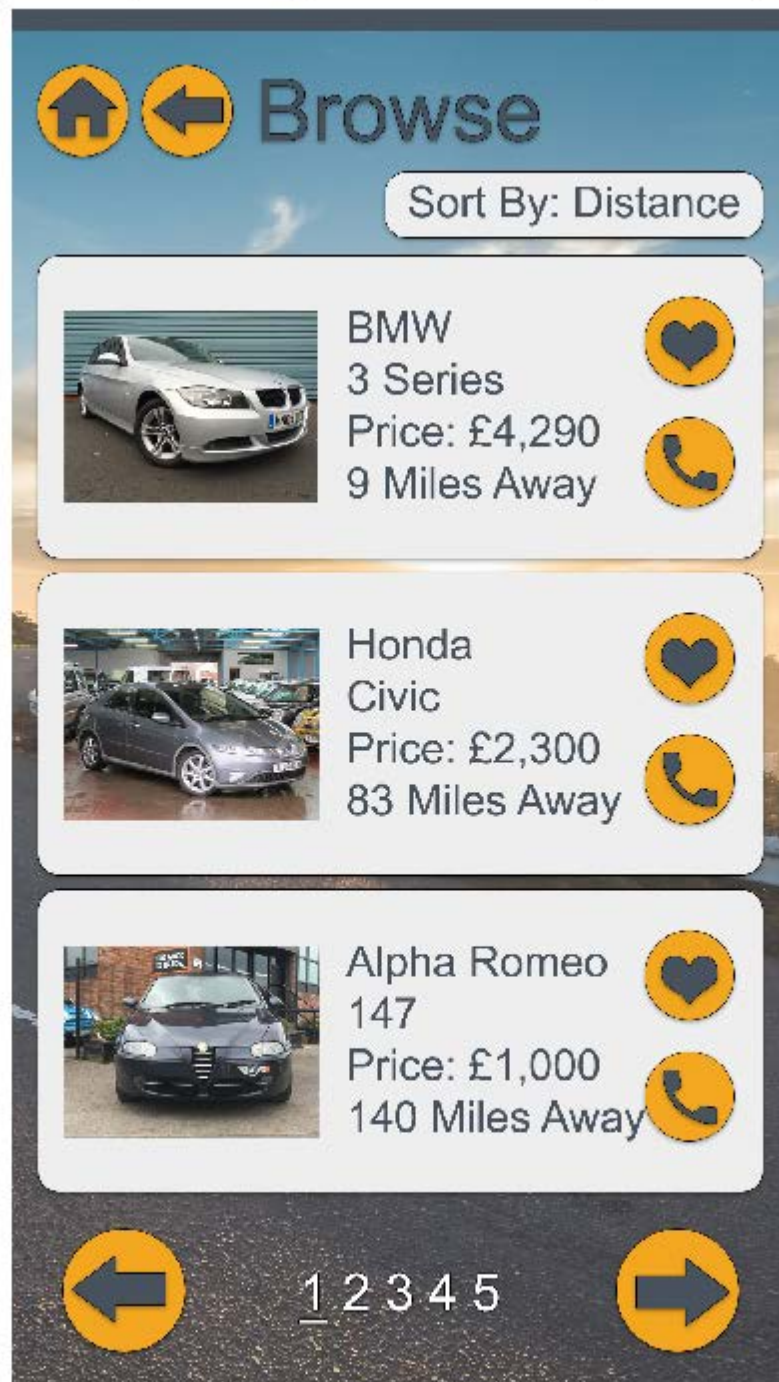
Mileage

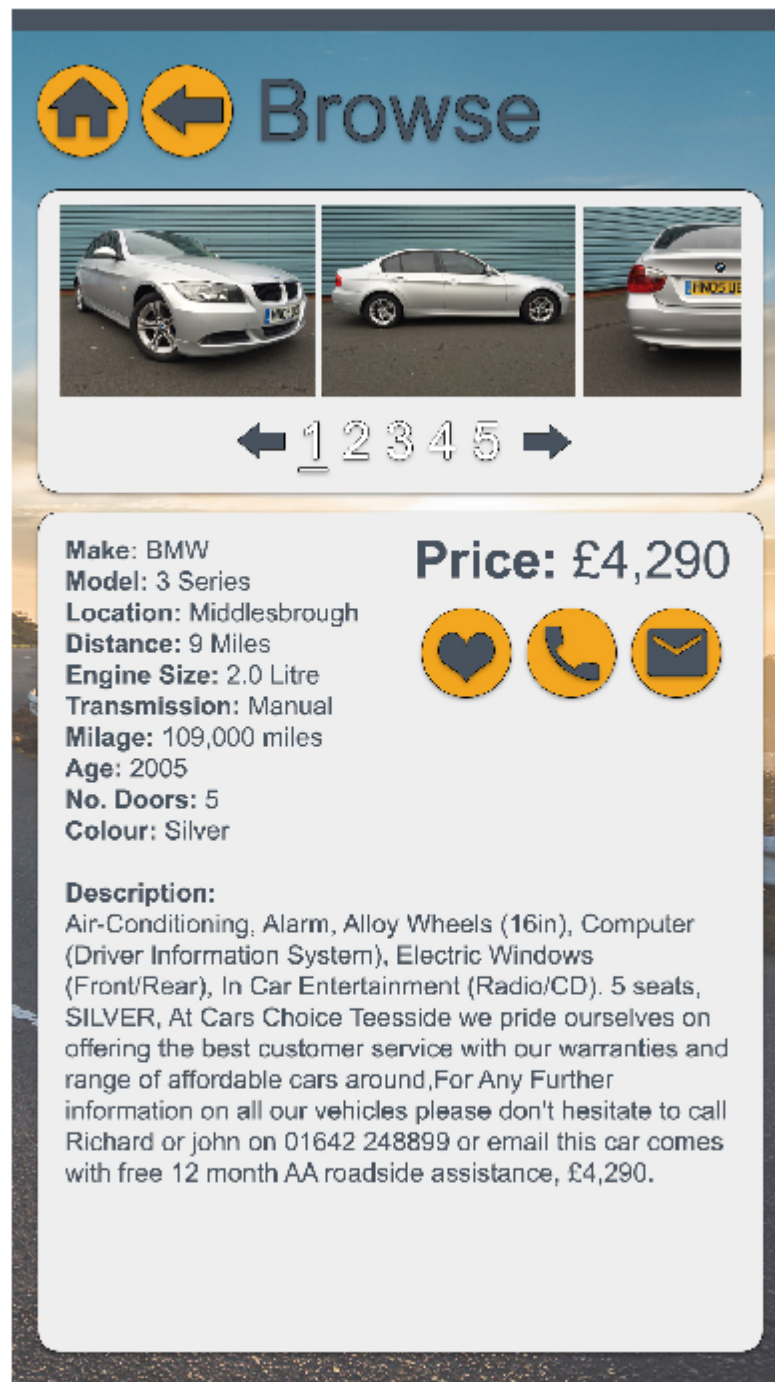
Price

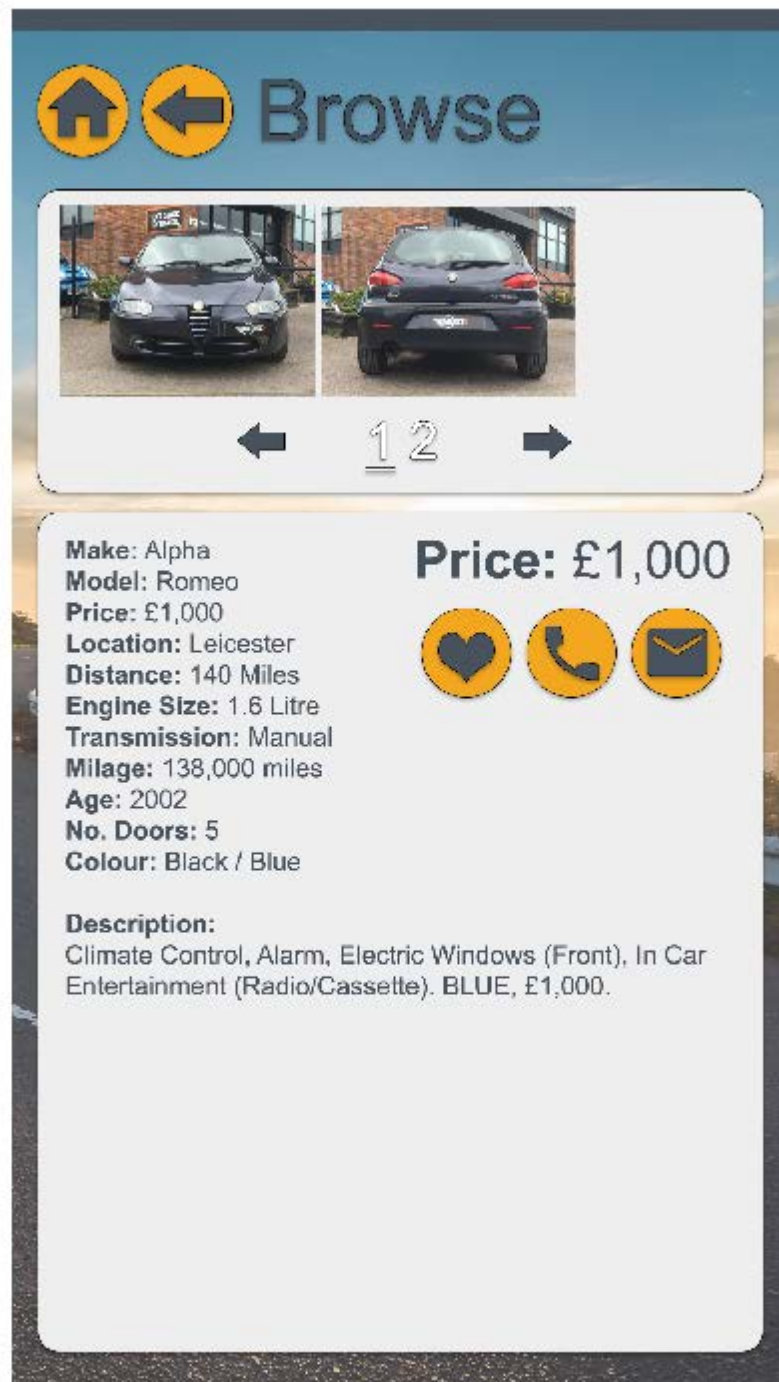
Search

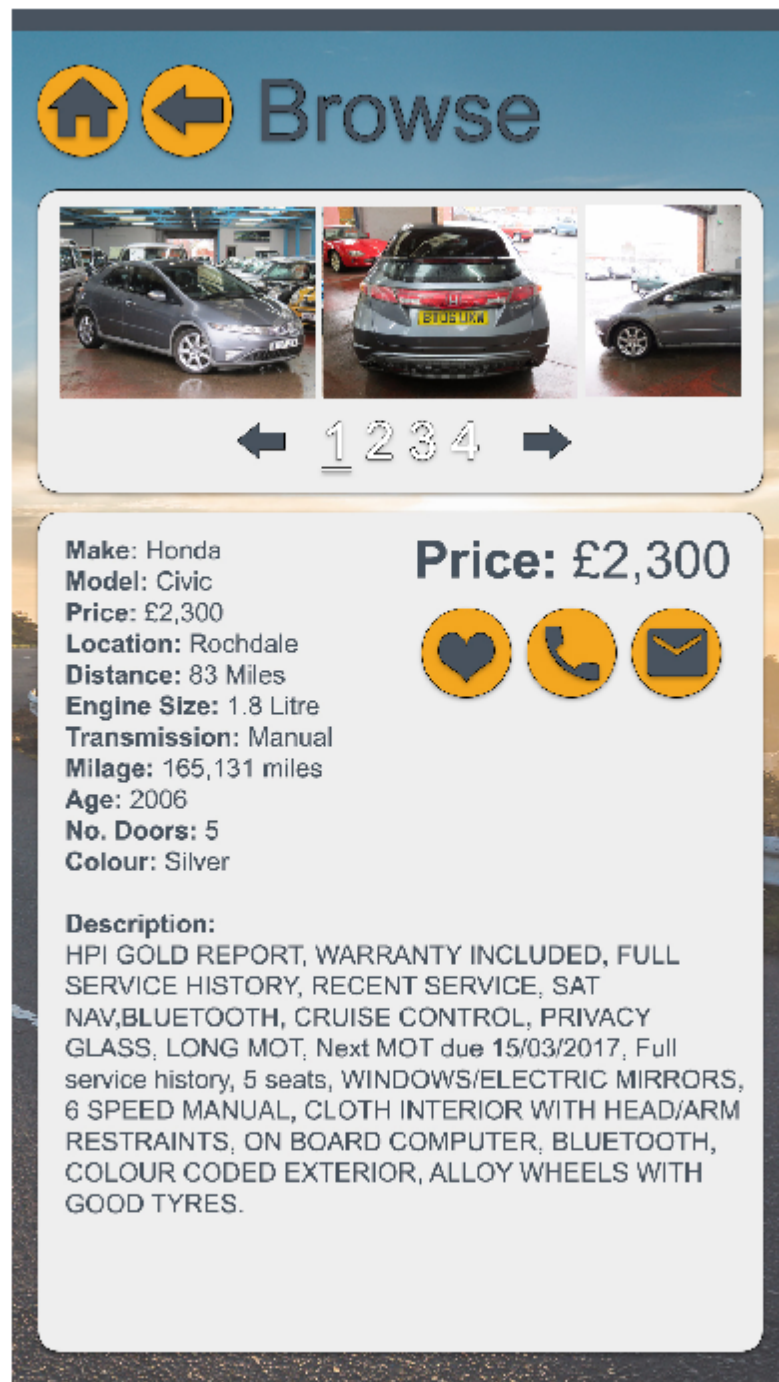




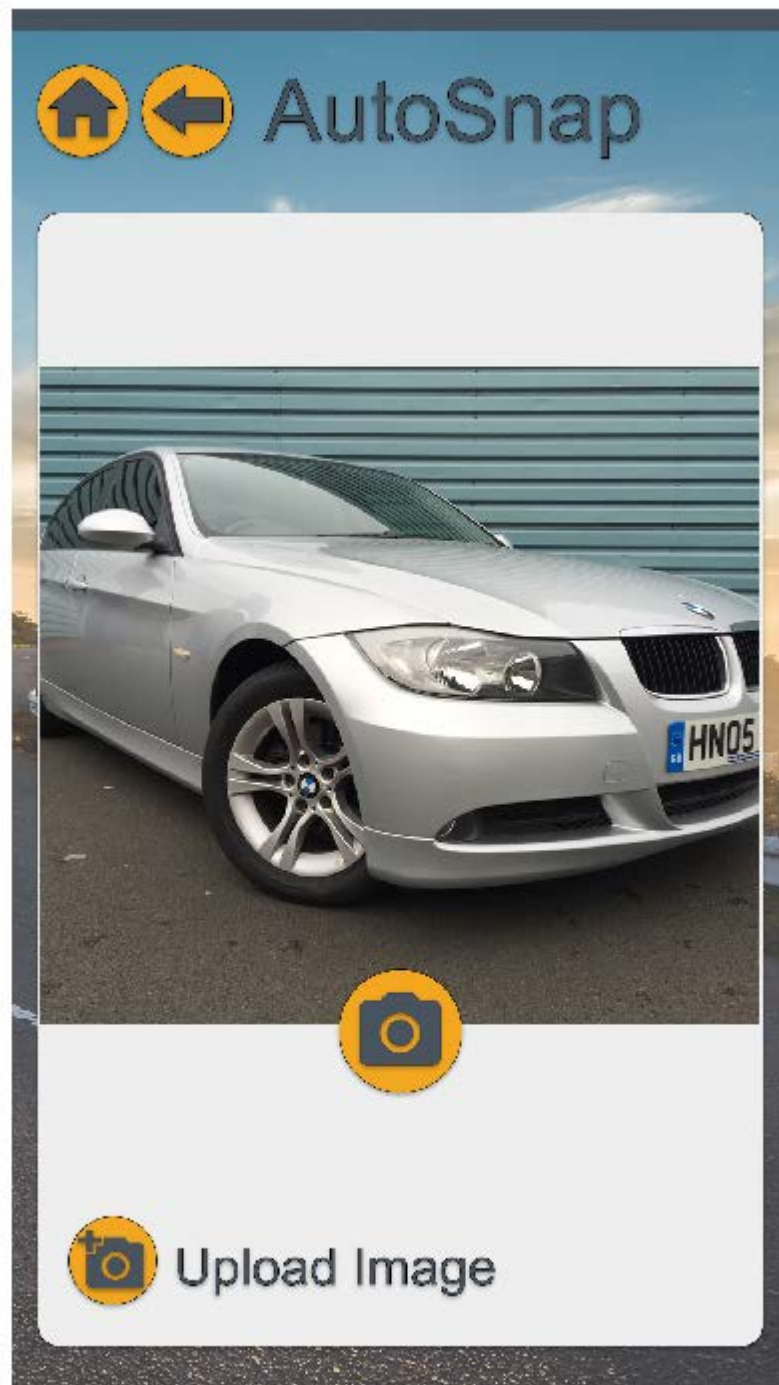


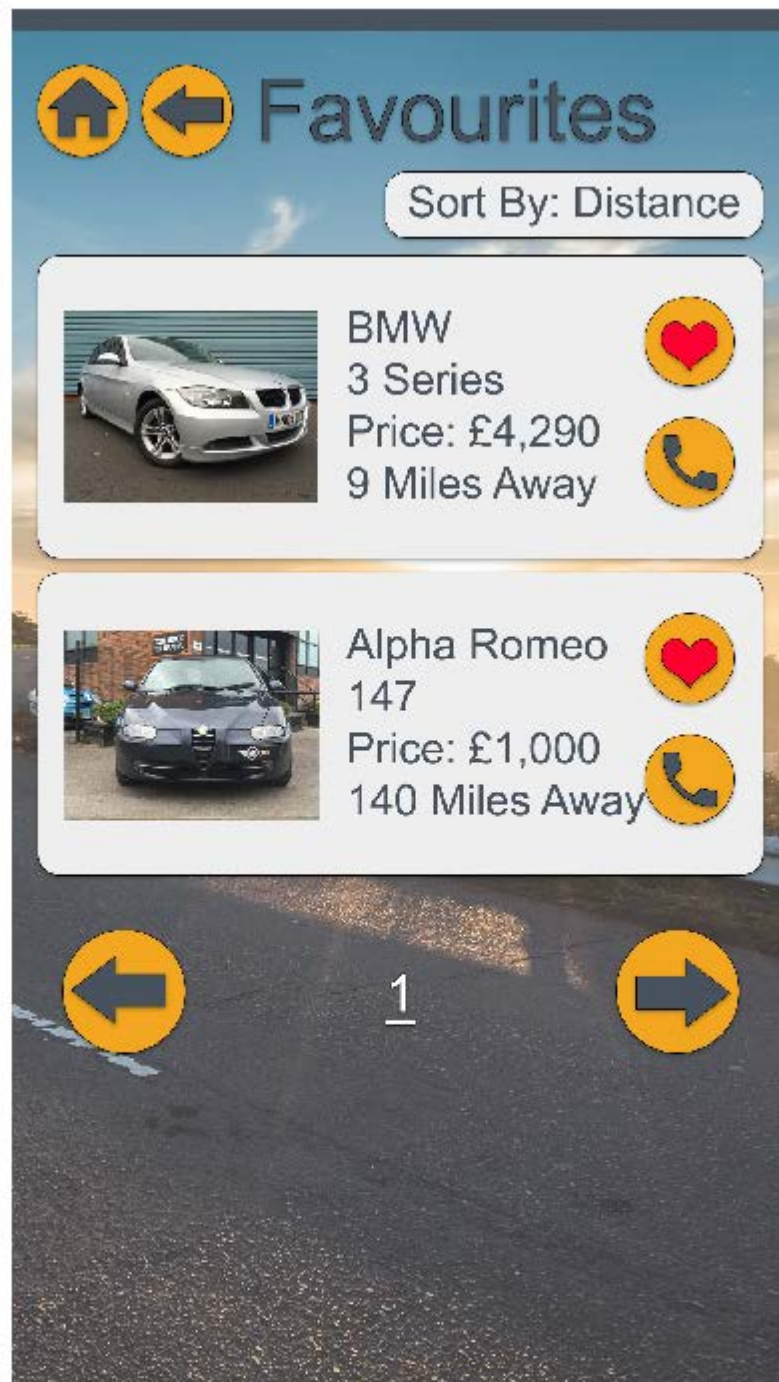


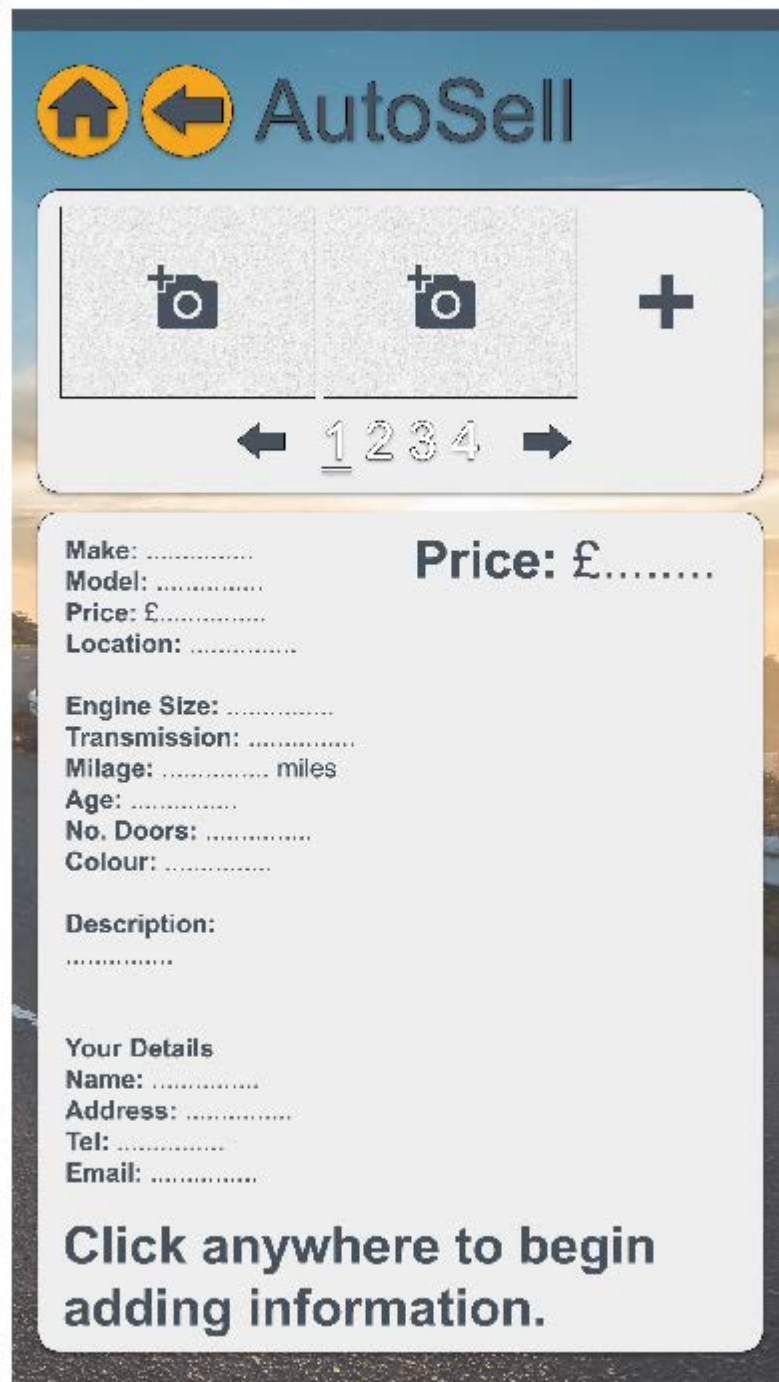














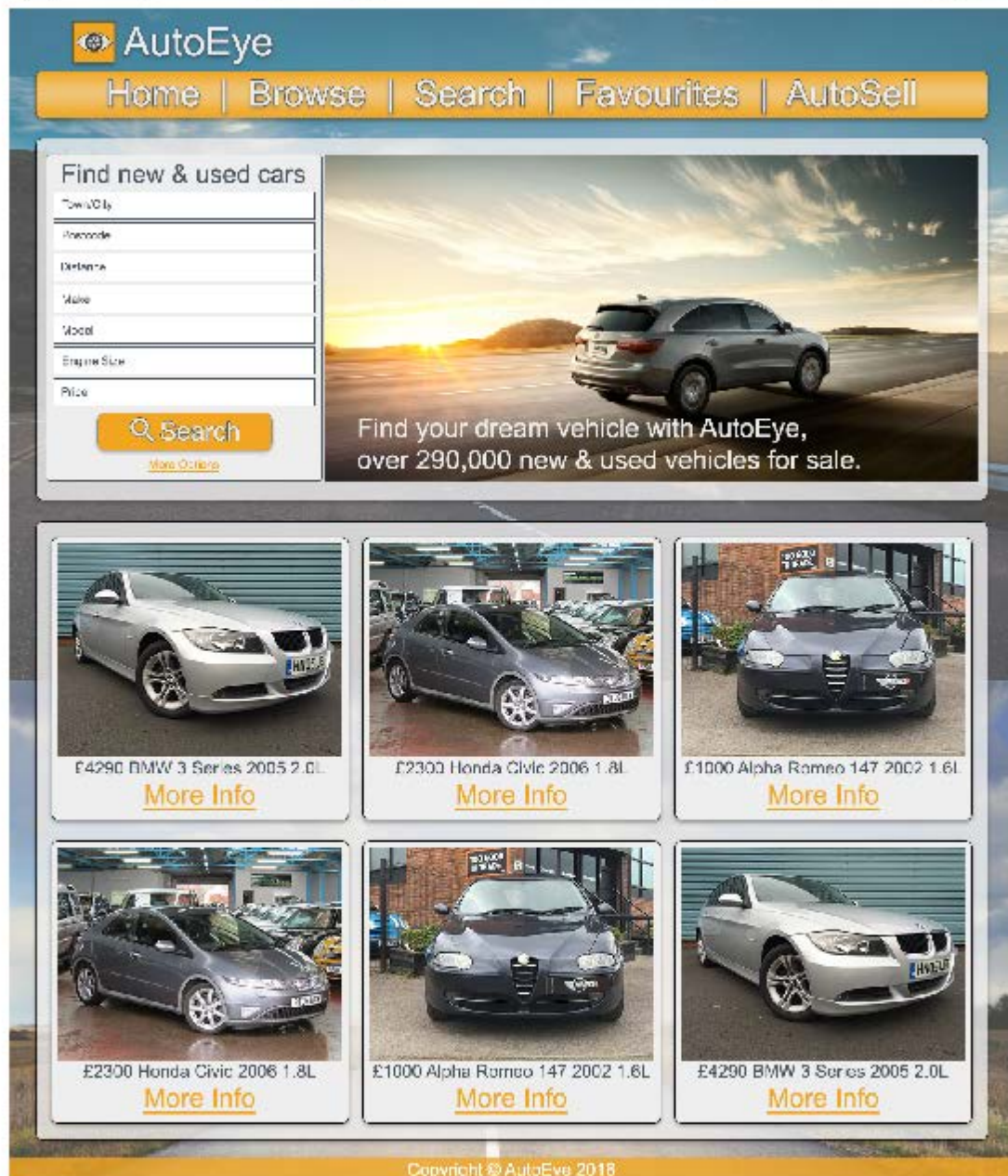
# AutoEye - Desktop Prototype

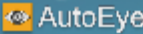
8 Screens



Rick R.







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Find new & used cars


[Search](#)



Find your dream vehicle with AutoEye, over 280,000 new & used vehicles for sale.

Page 1 of 5

[View all results](#)




**Alpha Romeo 147**

**£1000**  
Leicester, 140 miles

2006 | 138,000 miles | Manual | 1.8L | 5 Door | Black / Blue

Climate Control, Alarm, Electric Windows (front), In-Car Entertainment (Radio/Cassette), BLUE, £1,200...

[More info](#)




**Honda Civic**

**£2300**  
Leicester, 101 miles

2008 | 105,181 miles | Manual | 1.8L | 5 Door | Silver

HIT GOLD REPAIR, WARRANTY PROVIDED, FULL SERVICE HISTORY, RECENT SERVICE SAT NAV BLUETOOTH, CRUISE CONTROL...

[More info](#)




**BMW 3 Series**

**£4290**  
Middlesbrough, 9 miles

2000 | 139,000 miles | Manual | 2.0L | 5 Door | Silver

Air Conditioning, Alarm, Alloy Wheels (16in), Computer/Driver Information System, Electric Windows (front/rear), In-Car Entertainment...

[More info](#)




**Alpha 9000**

**£4599**  
Derbyshire, 60 miles

2007 | 90,159 | Automatic | 1.8L | 5 door | Midnight Blue

12 mo-the MOT! Full service history, Black Full leather interior, Cruise Control, Dual Zone Automatic Climate Control, 12in. Touchscreen, Alloy...

[More info](#)



**Honda Jazz**

**£6000**  
Whitby, 28 miles


2006 | 52,302 | Manual | 1.4L | 5 Door | Silver

Very well looked after example! 1.4 litre car records 11.1 mpg - running costs 11.1! Excellent Value for Money! 11.1! Auto Climate Control...

[More info](#)

« 1 2 3 4 5 »

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 AutoEye


Home | Browse | Search | Favourites | AutoSell


### Search

Town/City	Engine Size
Post code	Transmission
Distance	Mileage
Make	Age
Model	No. Doors
Price	Colour


Search

Find a vehicle to suit your needs with our simple search.



 AutoSnap

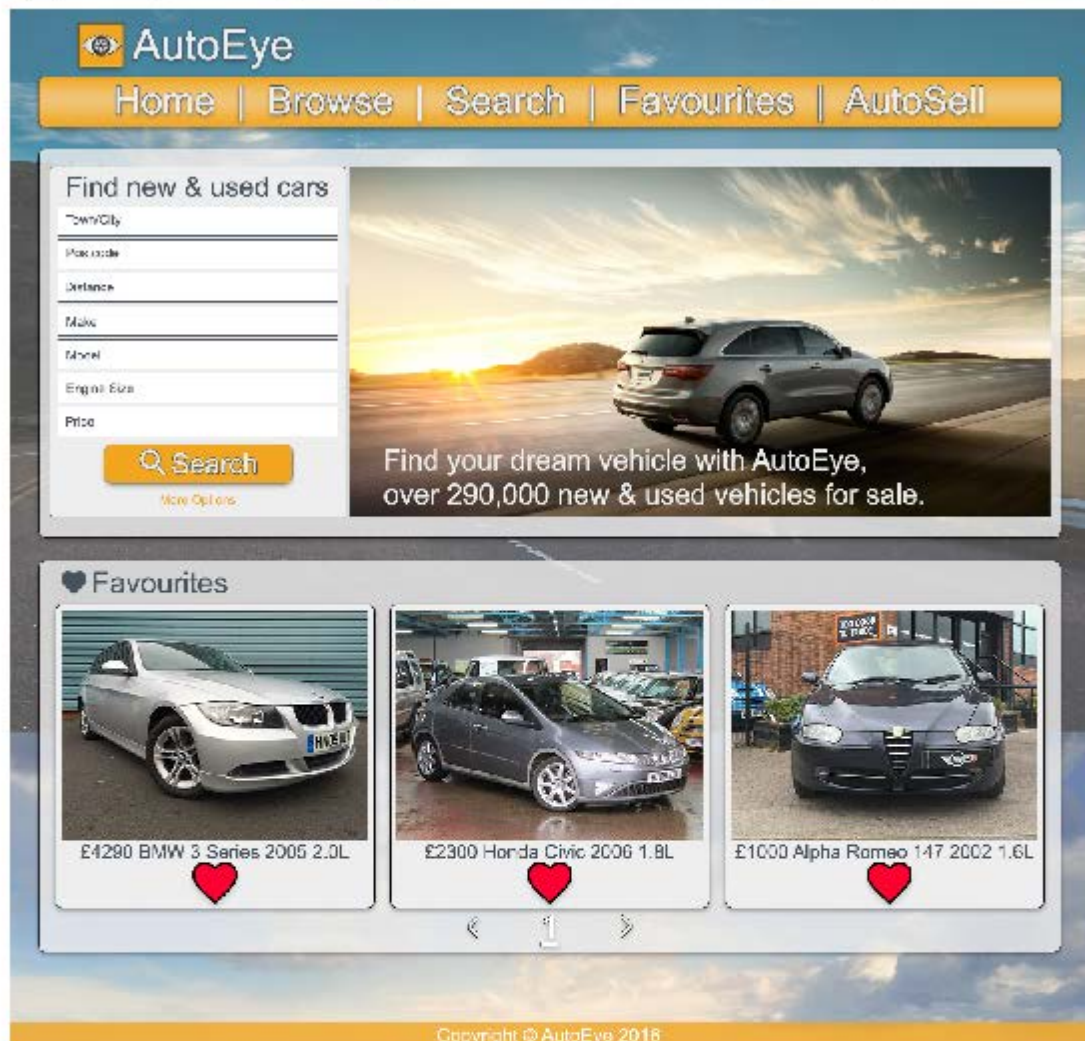
Simply upload an image of your vehicle below and we'll do the rest.

 Add Image

Submit

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**AutoSell**

Fill in your vehicles details below.

Town/City	Engine Size
Postcode	Interior colour
Distance	Mileage
Misc	Age
Model	Vin Number
Price	Colour



With over 3 million visitors in the UK, list your vehicle for FREE today!


**AutolImage**

Sell your vehicle 6x faster with images! Simply upload up to SIX images of your vehicle and we'll do the rest.

 Add Image	 Add Image
 Add Image	 Add Image
 Add Image	 Add Image

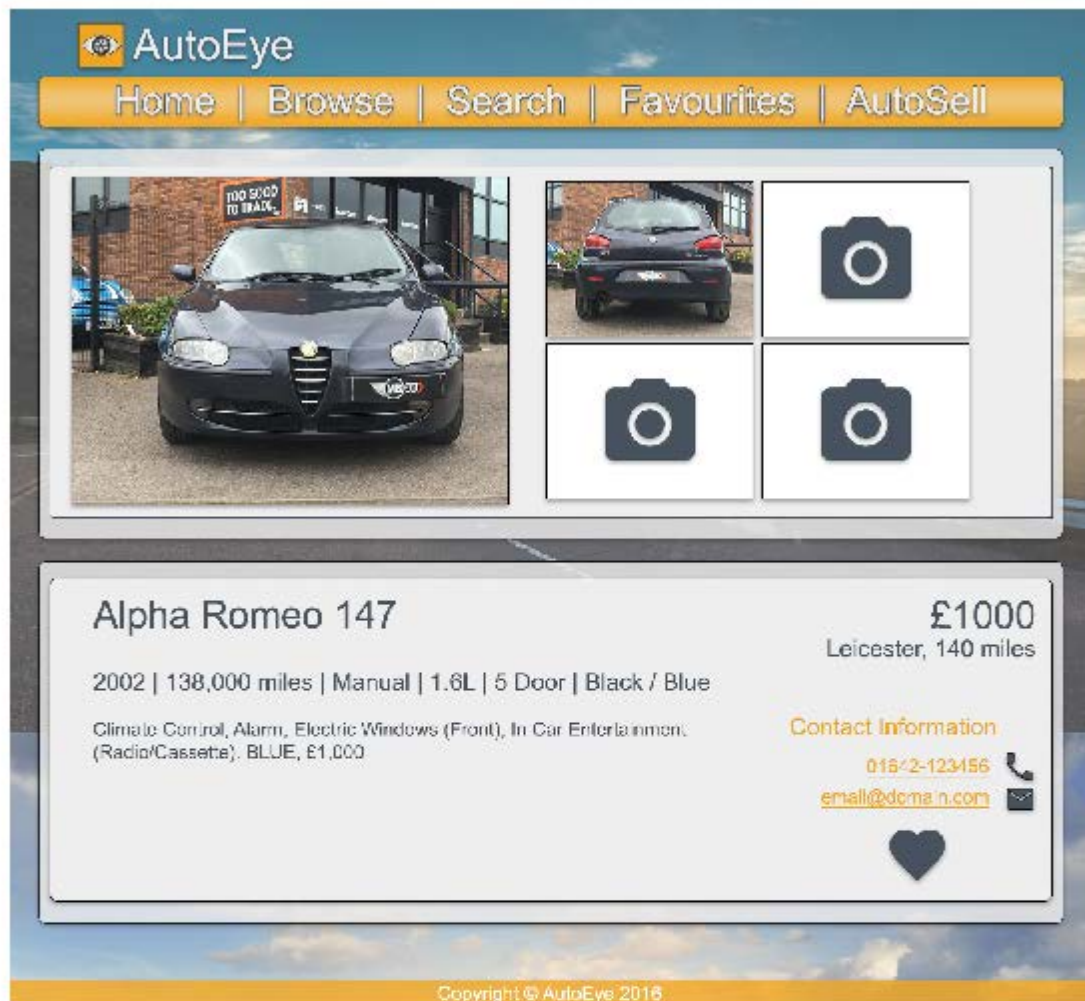

**Additional Details**

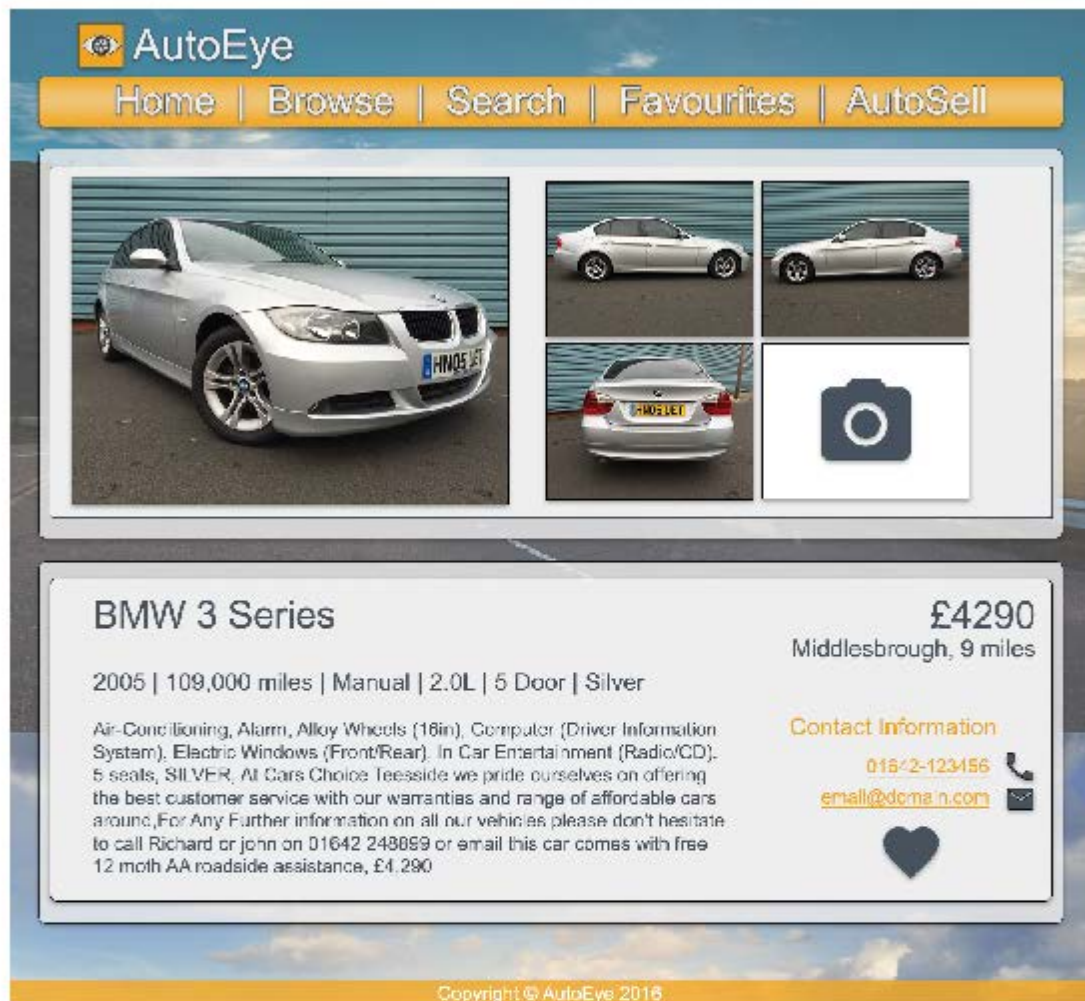
Complete your details below and click the List Now button to begin selling your vehicle. Please ensure all fields are completed and correct.

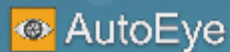
Telephone	Sub title
Address Line 1	Address Line 2
Town / City	Postcode
Phone	Email



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## Honda Civic

**£2300**

Rochdale, 83 miles

2006 | 165,131 miles | Manual | 1.8L | 5 Door | Silver

HPI GOLD REPORT, WARRANTY INCLUDED, FULL SERVICE HISTORY, RECENT SERVICE, SAT NAV, BLUETOOTH, CRUISE CONTROL, PRIVACY GLASS, LONG MOT, Next MOT due 15/03/2017, Full service history, 5 seats, WINDOWS/ELECTRIC MIRRORS, 6 SPEED MANUAL, CLOTH INTERIOR WITH HEAD/ARM RESTRAINTS, ON BOARD COMPUTER, BLUETOOTH, COLOUR CODED EXTERIOR, ALLOY WHEELS WITH GOOD TYRES.

### Contact Information

01642-123456

[email@domain.com](mailto:email@domain.com) 