Interaction design **Car hire Websites**

Dan Basacik, December 2021

Objectives

O1 Build on the flow diagram you created in the previous project and sketch the screens and screen states for users flowing through your desktop app Address all the issues and user goals identified in your research and analysis Learn how to use sketching as a tool for problem solving Learn how sketching is a vital step before prototyping or digital wireframing

05 Develop great material for your portfolio

Tasks

- **01** Create a list of screens to design based on your flow diagram
- **02** Make sure to include screen state when the state differs significantly based on users' actions
- **04** Assume that you won't get it right the first time. Keep iterating until you're happy that the flow works
- **05** Finalise the sketches and photograph them.

03 Sketch each screen until you have completed the flow. Make note of any issues or inconsistencies that become apparent: you can tackle these in the next iteration

Homepage - search form

	BROWSER GRID	Main site navigation indicates we are
$000 \langle \rangle$ = $L090$	LOG IN FIND A BEANCH HELP	Search form near the top of the home convention. Default values in the sear now should be:
HIAT DODD HIPT DIAL		 Pick-up location based on GPS/IP d
HIRE ACAR HIRE A VAN		 Drop off location same as pick up
Pick up Location Date Time	Drop off Location Date Time	Large 'Find cars' call to action (CTA)
Ladymedd, Guidford, UK.	Ladymead, Guildford, UK. FIND CARS	Option for imagery below this - acco international or national coverage of size and reputation.
		Significant previous atten

e in the Hire a cars tab - exact appearance TBD.

ne page - the research highlights this as a positive arch should be refined based on future research, but for

address location

location.

below the search fields.

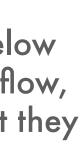
ording to the research this would ideally show the the company to provide users with confidence about its

mpts

I tried to structure the form in two columns....

and single column, but....

....drop down fields then obscured the fields below them. That's how I ended up with a horizontal flow, which means that the user can always see what they have input and what's left to fill in.





Search - 'did you mean' list of search results

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the user clicks into the pick up location field to edit the default, the field activates. The maining fields are visible but visually less prominent (eg perhaps label of active field gets irger or changes colour).

ne drop down workspace under this field takes up the full width of the screen, masking the otentially busy imagery underneath and reducing distraction. These drop down workspaces re a feature throughout the search.

ne cut out in the border of this drop down screen aligns with the search field it relates to - so this case under 'pick up location.'

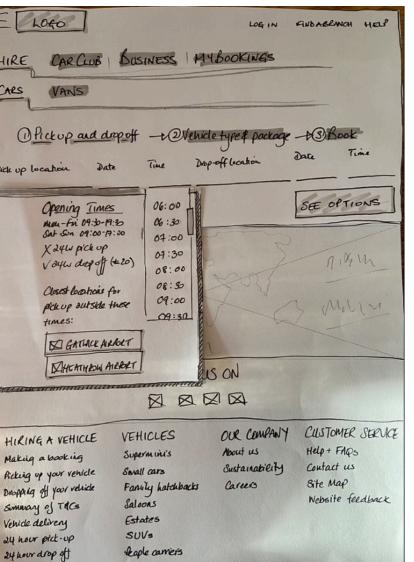
ption to 'search for locations near me' loads the next screen state when clicked.

Iternatively the user types into the pick up location and results are displayed, broken down y country (the user's country, based on IP address, first and then all countries alphabetically om A to Z thereafter). Flag displayed next to each country name.

ons provide a hint as to type of search result (city/town, airport, train station, company ranch). Results likely to be cities or towns as the user first starts to type, because branch ocations are usually more precise terms.

ser can click on any of these results to reveal branches near the location they clicked on ext screen state). Or they can continue typing until their search terms match a branch or a nall number of branches, in which case the system will automatically switch to displaying ese on the next screen.

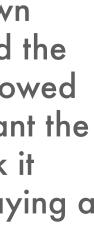
ignificant previous attempts



My initial sketches did not have large white drop down workspaces - the size of the drop down area matched the size of what it needed to display. But the research showed that users wanted to focus on the task and did not want the distracting imagery, so I took the opportunity to mask it while the user is engaged in detailed input, by overlaying a white workspace.









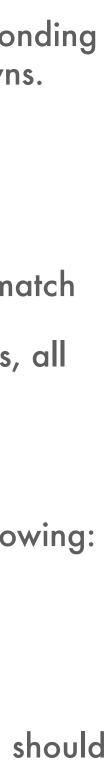
Search - list and map of branch location results

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his screen state shows a list of locations in the drop down workspace, and a corresponding hap view. Icons show whether these branches are at airports, train stations, or in towns.

his is shown when, on the previous screen state, the user either:

- Clicks on a town or city
- Carries on typing into the pick up location field until there is only one town or city match
- Carries on typing into the pick up location field until there are 10 or fewer branches, all within a 20 mile radius
- Clicks on 'search for branches near me'
- the user clicks on 'search for branches near me, the list and map view show the following:
- if there are more than 7 of these, the closest 7 only.
- if there are none, the closest 7 beyond 20 miles away.
- he map should be zoomed in as much as it can be and all branches in the map area should be shown.





Search (alternative flow - move map area)

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The user can manipulate the map, which then reveals a 'search for branches in this area' button to refine the search.

Until this floating button is pressed, the map and corresponding list view to the left continue to display the original search results (including map pins). Thus the results on the map and list are always consistent with each other. This also guards against user irritation, which the research highlighted, occurs when the search refreshes every time they touch the map.



Search - view branch details and select

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<u>Opening Times</u> Mon - Fri 07:30 - 19:3 Saturday 69:00 - 17:0			CROYDA SOUTH	W ST.
Sunday closed X 24-hour pick up(i)	1 1 1			
CHOOSE THIS BRA			1	E

ers can click on pins on the map OR list items, and this

- Makes the map pin bigger and reveals its name.
- Expands the list item to show its address, opening times, pick up and drop off options (all help the user to understand whether they can pick up and drop off a vehicle when they need to) and the 'Choose this Branch' call to action (CTA).

icking on the 'Choose this branch' call to action has the following effects:

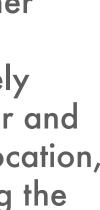
- Closing the pick up location workspace
- Populating the pick up and drop off location form fields with the selected branch
- Opening the pick up date form field (next screen state).

ignificant previous attempts

ried 'choose a different location' tickboxes which I had seen during the competitive enchmarking exercise but ultimately this was logically more complicated raised further estions about wording ('same location' vs 'different location' which would require fferent default values - ticked for the former and unticked for the latter, and ultimately ore user testing for which there is little scope on this course). It seemed much simpler and earer to simply automatically populate the drop off location field with the pick up location, d allow the user to edit it, but we'll have to check whether automatically populating the op off field presents a mental barrier to editing it.

prop of location I choose a different lo cahon Drop off location Choose a different location => Snop of locahon







Search - select pick up date

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Pick up Location Croydon South Breat		Drop off Lostine Croydou Couth St.	Date	Time
CROYDON JOUTH J 123 Southe St, Croydon, CRI 2AB	T [MMM/ YYYY]V]	MMM YY		
Opening Times Mm-Fn' 0730-1930 Saturday 0900-1900 Sunday closed X 24 hr pick-up ()				
X 24 WS pick-up (3 V 24 WS drop off (#20) (3				
<u>/////////////////////////////////////</u>	<u> </u>	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		

'hen the pick up date field is activated a new drop down workspace appears, with the cut It in its border aligned with the date field. The remaining fields are visible but visually less cominent (eg greying out, perhaps labels slightly smaller).

e opening times and pick up/drop off options at the selected branch persist to help the er choose dates when the branch is open.

e date picker shows a two month range (research shows that users prefer minimal effort scroll forward or backwards) and can be navigated by forward/back arrows or drop wns for month and year.

prevent users from booking dates in the past:

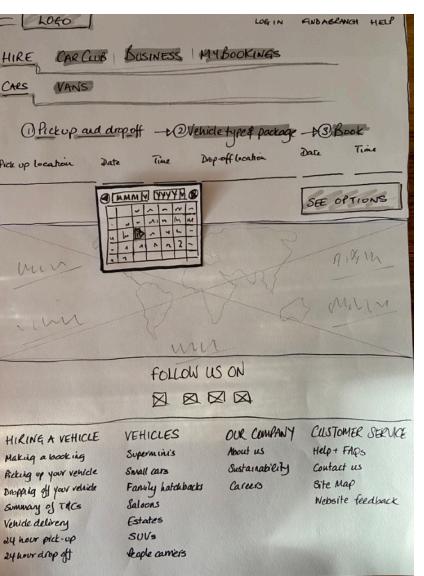
The current month and year are the earliest that are shown on the drop down fields in the calendars

The back arrow is not shown when the current month is showing

All dates before 'today' are greyed out and clicking on them has no effect.

ignificant previous attempts

y earlier attempts only displayed a single month at a time, which would only really work ell for people booking a vehicle in the current month. It did not include the opening times the branch which would make attempts to book a vehicle on days the branch is closed ore likely. And it did not cover the image under the form, which could be distracting.









Search (alternative flow - branch closed on selected date)

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	Sorry, South Street 1	branch is not open on S	indays	***
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Opening Pines Mon-Fri 07:20-19:30		Grimernee	Descrite St.	at the second
Saturday 09:00-17:0 Sunday Closed		- HEATHKON AIKINK	4	
Mon-fn' 07:30-19:30 Saturday 09:00-17:00 Sunday Closed X 24-hr pict - up O ~ 24-hr app off 0-f2			0	Nut LU
				Surfrey State
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				12.2

his expanded version of the date selection screen is only shown if a day of the week is elected when the branch is closed.

he message is shown above the date selector in a contrasting colour, providing the user vith the options of:

- . selecting a different date using the calendars already on screen, or
- Selecting a different branch. The system offers up a list and map of alternative branches, albeit with the current branch selection highlighted on the map.





Search (alternative flow - alternative branches)

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e user can click on the list items or map pins, which results in:

- The map pin of the selected branch being highlighted and
- The list item being expanded to show branch details including the address, opening times and pick-up / drop-off options at the branch. There is also a 'Choose this branch' CTA within the expanded list item
- he Choose this Branch CTA is selected, this
- Replaces the pick up and drop off branch values that were previously in the form
- Enters the date that was previously selected into the date field.

the scenario shown here the user selects a different date when the original branch is open ich leads to:

- This date being put into the form field.
- The closing of the date drop down workspace.
- The activation of the pick up time field (next screen).





Search - select pick up time

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<u></u>					

/hen the pick up time field is activated, the other fields are greyed out and a new drop own workspace appears, with the cut out in its border aligned with the time field.

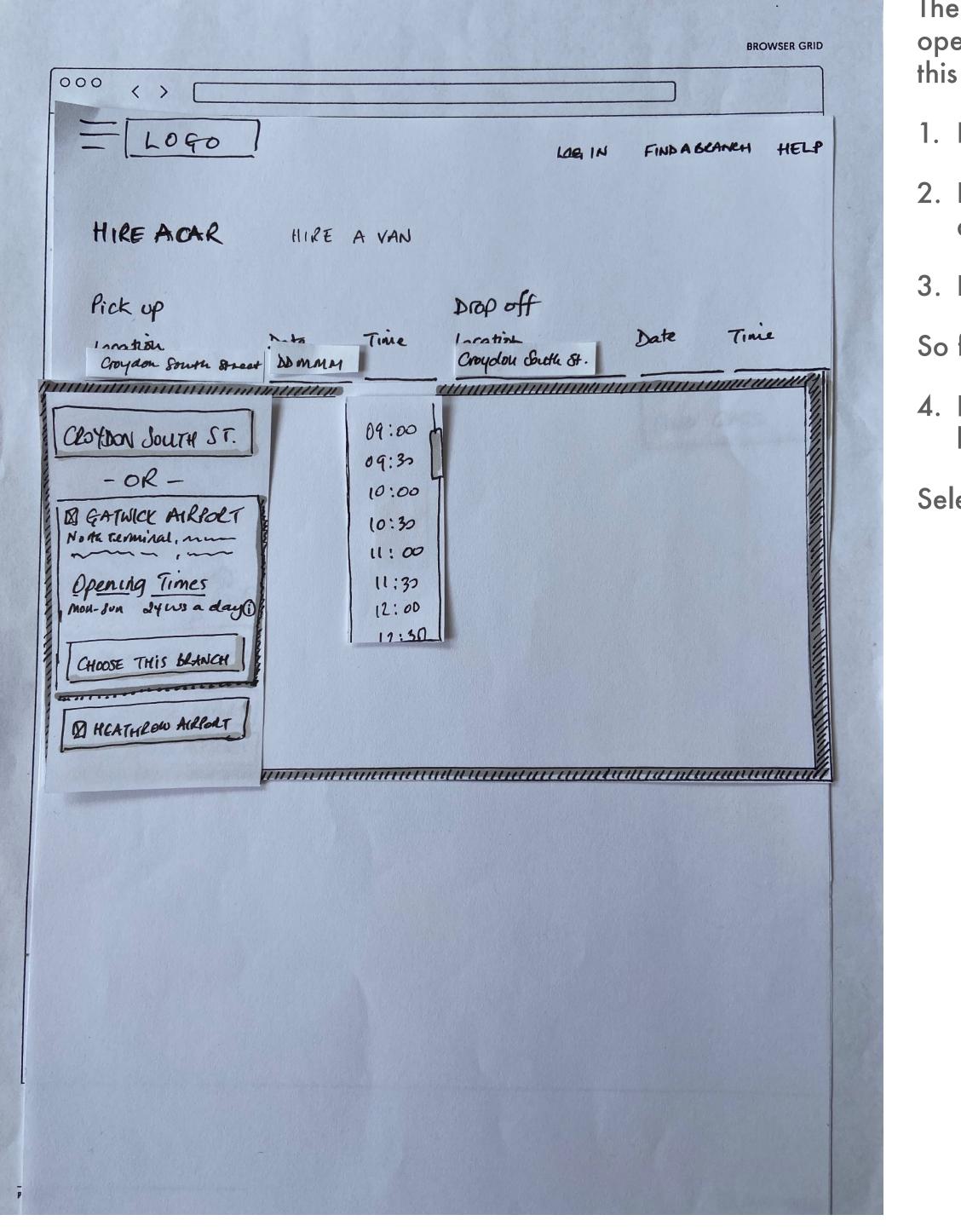
ne opening times and pick up/drop off options at the selected branch persist to help the ser choose a time when the branch is open.

ne system also lists two of the closest branches that have out of hours pick up and drop off ptions, in case the the user has got this far and the opening times of their selected branch ill do not work for them.

licking on one of these expands the drop down workspace (next screen)



Search (alternative flow - pick up outside office hours)



The selected branch with 24 hour pick-up is expanded in the list, showing its address, opening times, pick up and drop off options, and a 'Choose this Branch CTA. Clicking on

- 1. Populates the pick up and drop off location form fields with the newly selected branch.
- 2. Replaces the details of the previous branch with those of the current branch on the drop down workspace.
- 3. Removes the map and shrinks the workspace.
- So far this effectively looks like the previous screen.
- 4. It shows a drop down list of times spanning a full 24 hours, rather than just the business hours of the previous branch.

Selecting a time from this list enters the value in the time field.





Search - drop off location

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Pick up			Drop off		
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				FIND CARS	2

At this stage all of the pick up fields have been populated by the user and the system as auto-populated the drop off location field to match the pick up location.

Modifying the drop off location initiates a process identical to selecting the pick up location. This is not repeated in this document.

The drop off date and time have slightly different screen states compared to their pick up equivalents, and are shown in the coming slides.

as cation.

Search - select drop off date

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Pick up Drop off	
Croydon South Street DomMM HH: MAS Croydou Buth St	
Clo Don South ST. 123 South St. Caydon Clicks Opening Times Mon-Fi 0750-1955 Saturday 0900-1700 Sinday Closed X 24 hr pick op () V 24 hr drop off () = 220	

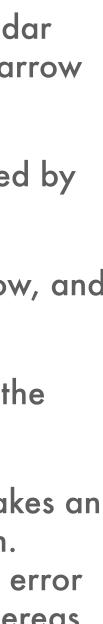
he drop off date screen state looks very similar to that of pick up date, but the calendar efaults to the month of the pick up date and that date is highlighted with a forward arrow hape as shown on screen.

As with the pick up date, the calendars show a two month range and can be navigated by orward/back arrows or drop downs for month and year.

As the user hovers over dates, the drop off date moves, as indicated by the back arrow, and ne highlighted rental duration also moves.

Vhen the user clicks a return date, this window closes, and the date value is put into the orm.

his separation between pick up and drop off date selection means that if the user makes an rror with their selection, they can come back into this field and make a new selection. esearch has shown that this is better than combined start/end date pickers, in which error orrection is much more fiddly - after an end date the system expects a start date, whereas ne user wants to input a new end date.



Search - select drop off time

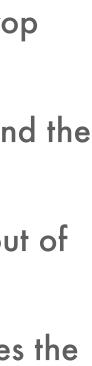
000 < > = Logo	BROWSER GRID LOGIN FINDABCANCH HELP
hata Tinio	Drop off Incation Date Time Croydou Buth St. Date Time Domain
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Clicking on a time in this list puts the selected value in the drop off time field and closes the rop down workspace.

Vhen the pick up time field is activated, the other fields are greyed out and a new drop own workspace appears, with the cut out in its border aligned with the time field.

he opening times and pick up/drop off options at the selected branch persist to remind the ser when the branch is open and to show that there is a 24 hour drop off facility.

he scrollable drop down field shows all the times when drop off is possible, but for out of ours drop off the text under the time shows that there is a £20 fee.



Search - completed form

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HIRE ACAR	HIRE A VAN		
Pick up		Drop off	
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			FIND CARS
-			

The search screen only requires six inputs - we have seen the worst case scenario with all optional flows which, depending on users' car hire constraints, would support them to optimise their location, date and time choices, removing some of the dead ends that users encountered during research.

This screen shows all six fields filled in and the user clicks the 'Find cars' CTA to move onto seeing the results.

Results

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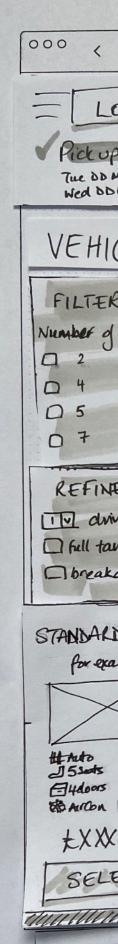
Stepper shows the selections made on step 1. These are in a different font colour, clickable and take the user back to step 1 with all input values preserved in the form.

process.

Refined set of filters on the left. Sort above the search results.

Search results names a vehicle type rather than make or model (which is misleading). An image of an exemplar is shown but the make and model is not displayed. Vehicle details are presented with a summary of attributes including environmental credentials. These symbols would need testing for comprehension.

Three contract options and corresponding prices are displayed for each vehicle, making the range of prices comparable across the board. User can click 'show option details' to see what those details are (next slide).



Tabs available on the homepage have been stripped out: we now want the user to follow the

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Significant previous attempts

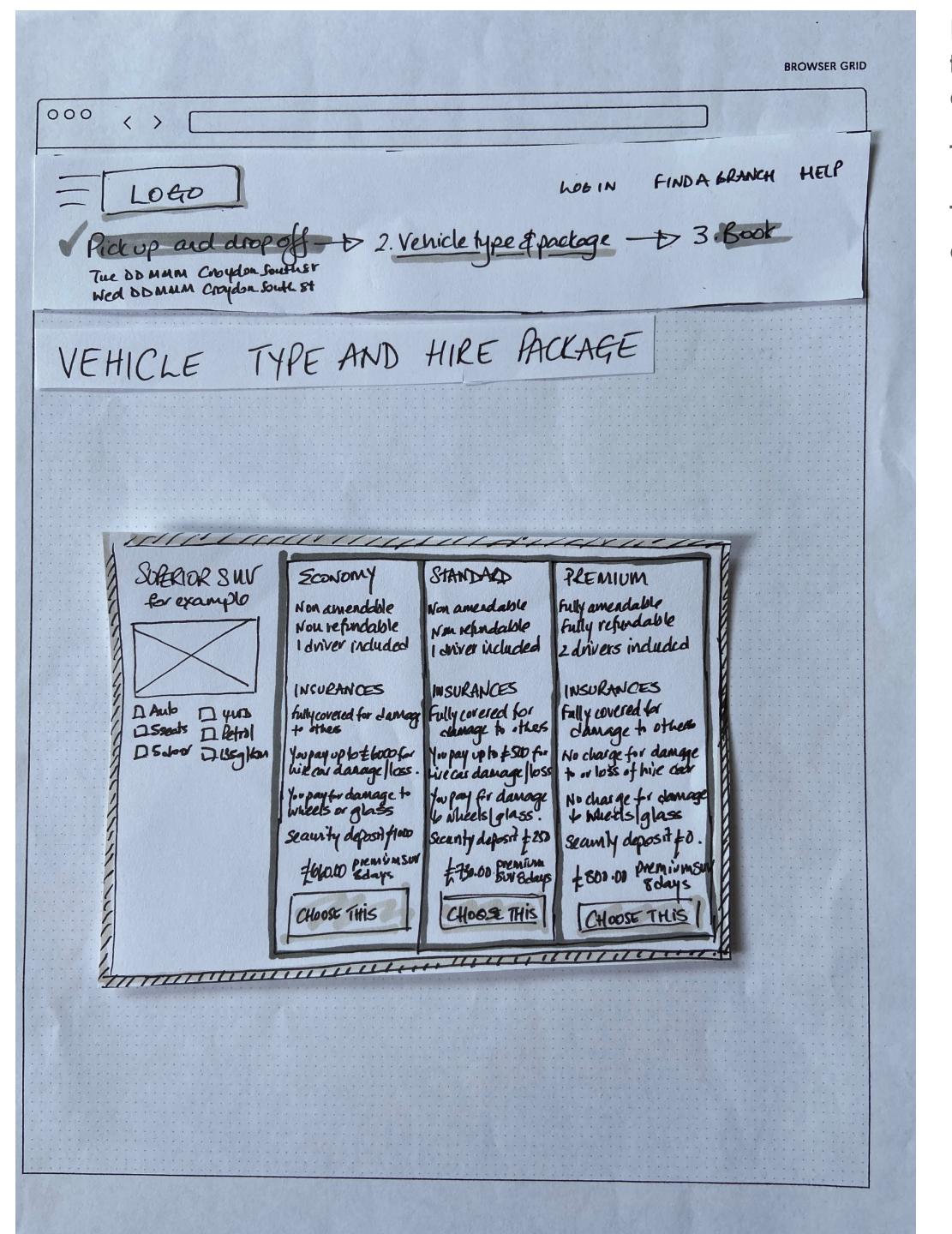
Horizontal filters and price refinement options which would update the price of all search results. However this design seemed really busy.







Customise package



Pop-up shows information about the vehicle and the three hire options. Selecting one of these using 'Choose this' reveals a screen below to customise the package and add equipment. This forms a full price breakdown with information buttons against each item.

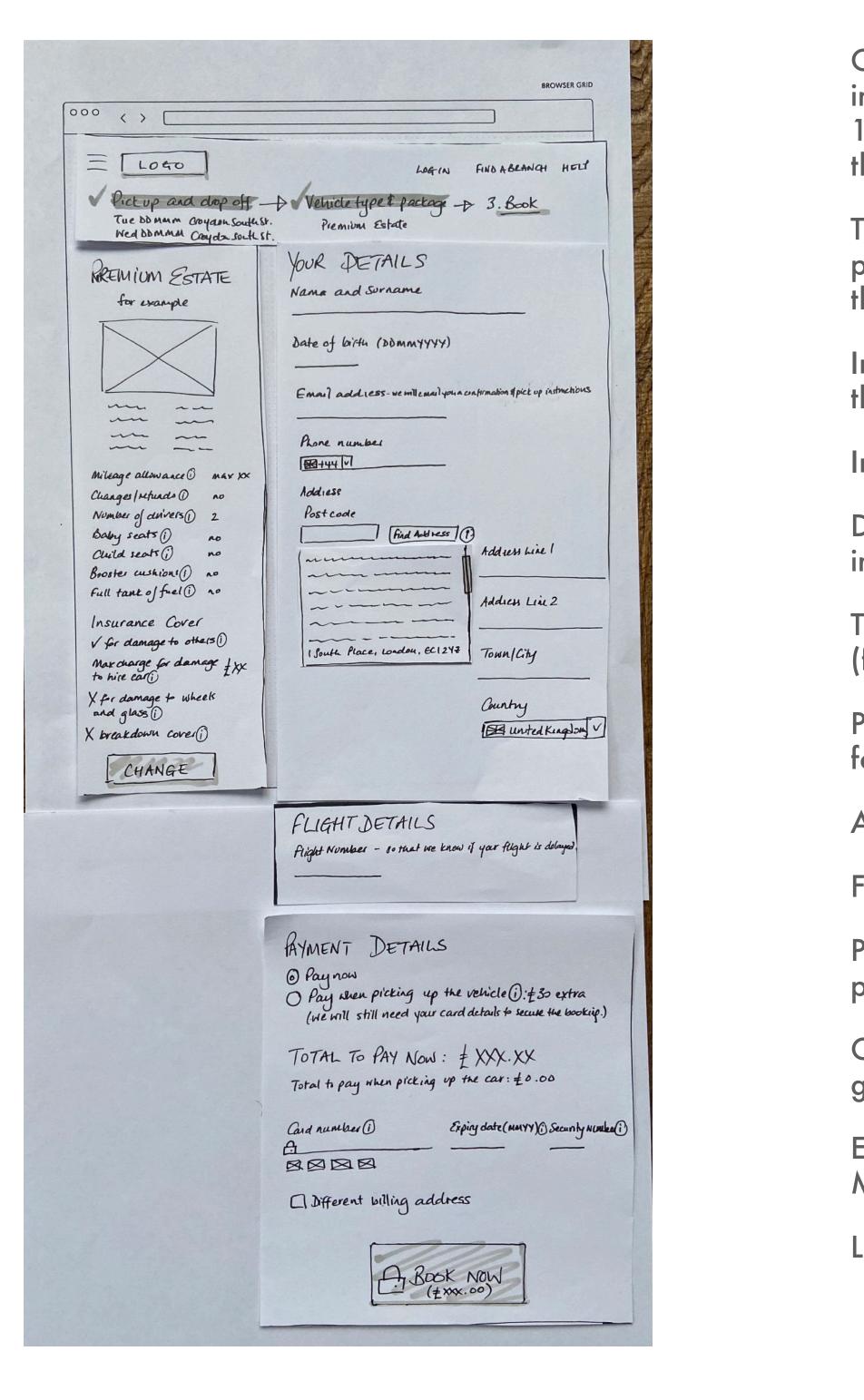
The user can modify these and the price instantly updates.

The user can go back by clicking anywhere outside of the pop up, or click the large 'That's all, let's book' CTA at the bottom of the screen to proceed to the third and final step.

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Place booking



On this screen both the pick up and drop off details and the vehicle type selected are shown in the stepper. which are in a different font colour, clickable and take the user back to step with all input values preserved in the form. The third and final step is highlighted, showing that this is where we are.

The details of the vehicle type and other products selected are summarised in the left hand pane, with the option to change these via the button below them. This takes the user back to the search results.

In 'Your Details' the user enters their personal details. The name field is activated on loading the page.

In-line validation messages appear in red below each field when the user leaves the field.

Date of birth is entered in DDMMYYYY format and is automatically formatted by the system into DD/MM/YYYY format.

The country code drop down is in numerical order but can be searched by typing numbers (for the code) or letters (for the country) into the field.

Phone number fields are auto formatted in ONNNN NNN NNN or ONNN NNN NN NN format for UK numbers.

Address picker opens up next screen but users can enter manually if they like.

Flight details pane is shown only if the pick up location is an airport.

Payment details pane allows for payment now or later. This selection changes the 'total to pay now' value, which goes to zero for payments to be taken later.

Card number is entered in NNNNNNNNNNNNNNN format and is chunked into four groups of four by the system. Padlock and card types provide a sense of security.

Expiry date is entered in MMYY format and automatically formatted by the system into MM/YY

Large Book Now CTA at the bottom of the page. Padlock provides a sense of security.





Confirmation

BROWSER GRID 000 < > FIND A BLANICH HELP LOGIN LOGO D / Vehicle type & packa Inemium Estate V Pickup and drop of Paid The DD MMM coydon South St Wed DD mmm coydon South St THANK YOU FOR YOUR BOOKING REF: ABC123 We have emailed you the details and instructions to help you find us and pick up your car. You can make dranges to your booking until DDMMM - just go to <u>www.log.com</u> and click on "My Bookings" follow US ON XXX X OUR COMPANY CUSTOMER SERVICE HIRING & VEHICLES SNEAKPEEKIT PROJECT

The booking confirmation refers to an email sent to the user with booking details.

The user is also informed that they can change their booking, up to a specific date, via the 'My Bookings' section of the site.