



Carsharing Requirements

Accessing carsharing

FR-CS1: The carsharing option shall be available from the “Custom” mode in Urban Routes.

FR-CS2: If the user selects “Carsharing” in “Custom” mode, a “Book” button shall appear below the modes, along with the total travel time and cost.

The order process

FR-CS3: When the user clicks the “Book” button, the order form shall appear. The order form shall have inputs for the following information:

- Class (see the “Classes” section)
- Driver's license information (see the “Driver's licence” section)
- Payment method (see the “Payment method” section)
- Additional order requirements (see the “Additional options” section)

FR-CS4: The "Casual" class shall be selected by default.

FR-CS5: The system selects the nearest car automatically and uses that for calculations.

FR-CS6: The selected class is highlighted in light grey. The class description and information about the nearest car are placed below the class:

- Class description
- Estimated wait

- Free waiting time
- Image of the car
- Options offered by the class

FR-CS7: The rest of the available cars, regardless of their class, shall be displayed as icons on the map. They shall also be selectable. If the user clicks on any of them, the car icon shall expand and a black block with the car model will appear above it. The car details on the left shall change accordingly.

FR-CS8: If the user doesn't have any cards saved in the system, the "Add card" button shall be displayed instead of the "By card" button. The carsharing vehicle cannot be ordered without adding a card.

Classes

FR-CS9: The carsharing option shall provide three classes:

- Casual
- Camping
- Luxury

FR-CS10: Each class shall consist of the car icon, the class name, and its price.

FR-CS11: It shall not be possible to select no class. It shall be implemented as a radio button so that a class shall always be selected and the user is only able to change between them.

FR-CS12: The user shall be able to change the selected class to any of the other two classes.

FR-CS13: Below the class switch, there shall be a block with the description of the selected class. The table below shows the text each block shall have:

Class	Model	Description	Subheading	Features
Casual	BMW 750	Just business, nothing else	n min — free waiting time: 15 min	- dash camera - phone charger
Camping	Audi A3 Sedan	For traveling	n min — free waiting time: 12 min	- Bluetooth car lock - camping equipment
Luxury	Porsche 911	Pure finesse	n min — free waiting time: 10 min	- disco lights - beverages

The booking process

FR-CS14: The “Book” button shall be located below the “Order requirements” dropdown list.

FR-CS15: When the user clicks the "Book" button, the system shall perform the following actions based on the input provided:

Input	Button text	Action
All the required fields are filled out	Book The ride is x miles and will take y min	The “Order sent” window appears
The "Driver's license" field is empty	Add driver's license to order The ride is x miles and will take y min	The driver's license form appears
The "Payment method" field is empty	Add card to order The ride is x miles and will take y min	The card details form appears
The address fields are empty	Book	The "Order sent" window appears
All the required fields are empty	Add driver's license to order	The driver's license form appears

FR-CS16: When the user clicks the "Book" button, if all required fields are filled out, the system shall display the "Order sent" window with the following information:

- Car model
- License plate number
- Total travel cost
- Free waiting timer

FR-CS17: If the address fields are filled out, the system shall display the exact travel cost. If these fields are empty, the system shall change the price to the default starting price.

Timer

FR-CS18: After the user clicks the "Book" button, the system shall display a timer showing the amount of free waiting time.

FR-CS19: The user can cancel the order during the free waiting time period.

FR-CS20: When the free waiting time runs out, the system shall display a timer showing the total time spent using the carsharing vehicle.

Driver's Licence

FR-CS21: The user shall not be able to order a car without adding their driver's license.

FR-CS22: The "Add driver's license" field shall be empty by default.

FR-CS23: Clicking on the "Add driver's license" field shall trigger a form that requires the user to enter their first name, last name, date of birth, and license number.

FR-CS24: The fields for the driving licence form shall have the following properties:

Name	Field type	Possible values	Required
First name	text area	Any input besides spaces, dashes, and Latin letters is incorrect. No less than 2 and no more than 14 characters are allowed. In case of incorrect input, the error message: "Incorrect name" will be displayed.	Yes
Last name	text area	Any input besides spaces, dashes, and Latin letters is incorrect. No less than 2 and no more than 14 characters are allowed. In case of incorrect input, the error message: "Incorrect name" will be displayed.	Yes
Date of birth	text area (numbers)	<p>The input format is DD.MM.YYYY Any input besides numbers is incorrect, and the system will not allow it.</p> <p>Boundary values for DD: 01 and 31, inclusive. Boundary values for MM: 01 and 12, inclusive. Boundary values for YYYY: 1880 and 2006, inclusive.</p> <p>Periods between numbers will be automatically added when the field is not in focus.</p>	Yes
Number	text area (numbers)	<p>The input format is nnnn nnnnnn Any input besides numbers is incorrect, and the system will not allow it.</p> <p>Boundary values for nn: 01 and 99, inclusive. Boundary values for nnnnnn: 000001 and 999999, inclusive.</p> <p>Dashes between numbers will be</p>	Yes

Name	Field type	Possible values	Required
		automatically added when the field is not in focus.	

FR-CS25: The input text color for the driver's license field shall be black, whereas the placeholder text shall be dark gray.

FR-CS26: After filling out all the required fields, the user shall see a system message that says "Thanks! The document is being verified. Please wait." There shall also be an "OK" button below the message.

FR-CS27: Clicking the "OK" button shall close the message and display a 30-second timer in the "Add driver's license" field.

FR-CS28: When the timer runs out, the system shall display the verification status of the driver's license.

FR-CS29: For successful verification of the driver's license, the field border shall be highlighted in green and a green checkmark shall appear inside. The system shall not allow the user to edit the license number or add another license.

FR-CS30: For unsuccessful verification of the driver's license, the field border shall be highlighted in red and a red "X" shall appear inside. Clicking on the field shall open the form again. An error message shall also be displayed above the form: "Your document hasn't been verified. Please try again."

Payment methods

FR-CS31: The "payment method" field shall be empty by default.

FR-CS32: To order a car, the user must enter the card information and click "Add." There shall be no limit to the number of cards that can be added.

FR-CS33: The following limits shall be applied to the input fields for card payments:

Field	Limits
Card number	Any input besides numbers is incorrect, so the system will not allow it. No more than 12 characters are allowed. The input format is: <i>nnnn nnnn nnnn</i> The boundary values are 0000 and 9999, inclusive.

Field	Limits
	<p>Spaces between numbers will be automatically added when the field is not in focus.</p> <p>The "Add" button will remain inactive if the input length is less than 12 characters.</p>
CVV/CVC	<p>Any input besides numbers is incorrect, so the system will not allow it. No more than 2 characters are allowed. The input format is: <i>nn</i></p> <p>The boundary values are 01 and 99, inclusive.</p> <p>The "Add" button will remain inactive if the input length is less than 2 characters.</p>

FR-CS34: The system shall display the last 4 digits of the saved card number so that the user can choose the card they'd like to pay with.

FR-CS35: The system shall encrypt card payment details when sending them from the client to the server.

Additional options

FR-CS36: The dropdown list is closed if the "Casual" class is selected by default. It automatically expands when the user selects another class, and vice versa.

FR-CS37: Each class has a different list of options. The table below lists the options:

Class	List state	List content	Element	Element state
Casual	Closed	Phone charger	Checkbox	Checked/Not checked
		Disco lights Available in the "Luxury" class	Button/link	Changes the class to "Luxury"

Class	List state	List content	Element	Element state
Camping	Expands automatically	1. Insect repellent 2. Sleeping bag	1. Counter 2. Counter	Counter limits: 1. from 0 to 2, inclusive 2. from 0 to 5, inclusive
		Disco lights Available in the "Luxury" class	Button/link	Changes the class to "Luxury"
Luxury	Expands automatically	Disco lights	Checkbox	Checked/Not checked
		1. Beverages 2. Fruits	Radio button	One option only
		1. Cool glasses	Counter	Counter limits: from 0 to 3, inclusive