Name or identifier	**R1. Register vehicle**		
Summary	The information system must allow the user to register a new or used vehicle and its documentation. The vehicles can be motorcycles or cars. The cars can be gasoline cars, electric cars or hybrid cars. The data registered depends on the type of vehicle.		
Inputs	**Input name**	**Data type**	**Selection or repetition condition**
	vehicleType	int	Repeat while vehicleType is different from 1 or 2
	basePrice	double	Repeat while basePrice is less than 0
	brand	String	The string must not be empty
	model	int	Repeat while model is less than 0
	cylinderCapacity	int	Repeat while the number is less than 0
	mileage	int	Enter if the vehicle is used
	licensePlate	String	Enter if the vehicle is used
	pcPrice	Double	Enter if the vehicle is used
	pcYear	Integer	Enter if the vehicle is used
	tmPrice	Double	Enter if the vehicle is used
	tmYear	Integer	Enter if the vehicle is used
	gasEmitted	Double	Enter if the vehicle is used
	soatPrice	Double	Enter if the vehicle is used
	soatYear	Integer	Enter if the vehicle is used
	coverageAmount	Double	Enter if the vehicle is used
General activities	- Ask the user for data - Register the vehicle and its documentation in the system - Show a message to the user		

Result	The vehicle is registered in the vehicle list.		
Outputs	**Output name**	**Data type**	**Selection or repetition condition**
	vehicle	Vehicle	

Name or identifier	**R2. Calculate selling price**		
Summary	The information system must allow the user to find a vehicle and the calculate its selling price. The selling price will change according to the type of vehicle.		
Inputs	**Input name**	**Data type**	**Selection or repetition condition**
	id	String	
General activities	- Ask the user for the vehicle id - Find the vehicle by id - Calculate the selling price of the found vehicle - Show the selling price calculated		
Result	The selling price is calculated and displayed if the vehicle exists.		
Outputs	**Output name**	**Data type**	**Selection or repetition condition**
	sellingPrice	double	If the vehicle exists.

Name or identifier	**R3. Generate report**		
Summary	The information system must allow the user to generate a report of all vehicles by type, fuel type or usage.		
Inputs	**Input name**	**Data type**	**Selection or repetition condition**
	option	int	Repeat while the option is different from 1, 2 or 3.
General activities	- Ask the user for the option - Find the vehicles that meet these criteria - Return the vehicle information. - Show the information of the vehicles found.		

Result	The information of the vehicles that meet these criteria is displayed.

Outputs	Output name	Data type	Selection or repetition condition
	report	String	

Name or identifier	**R4. Show document status**
Summary	The information system must allow to show the document status of a vehicle. The document status contains the number of the document. This number is decoded from its image.

Inputs	Input name	Data type	Selection or repetition condition
	id	String	

General activities	- Ask the user for the vehicle id - Find the vehicle by id - Return the report with the document status of the vehicle. - Show the document status.
Result	The document status is displayed if the vehicle exists.

Outputs	Output name	Data type	Selection or repetition condition
	documentStatus	String	If the vehicle exists

Name or identifier	**R5. Show parking map**
Summary	The information system must allow to show the map of the parking lot. The map shows the empty and occupied spaces. The green squares are the available parking spots and the red squares are the taken parking spots. If the parking lot is full, the system shows a message.

Inputs	Input name	Data type	Selection or repetition condition

General activities	- Find the empty and occupied spaces. - Represent these spaces with red and green squares - Show the map of the parking lot.
Result	The map is shown.

Outputs	Output name	Data type	Selection or repetition condition
	map	String	

Name or identifier	**R6. Generate parking report**		
Summary	The information system must allow the user to generate a report of the parking lot occupancy. The report can be by time range, newest/oldest vehicle or occupancy percentage.		
Inputs	Input name	Data type	Selection or repetition condition
	option	int	Repeat while the option is different from 1, 2 or 3.
General activities	- Ask the user for the option - Return the information according to the criterion. - Show the information.		
Result	The parking lot report is displayed		
Outputs	Output name	Data type	Selection or repetition condition
	parkingReport	String	