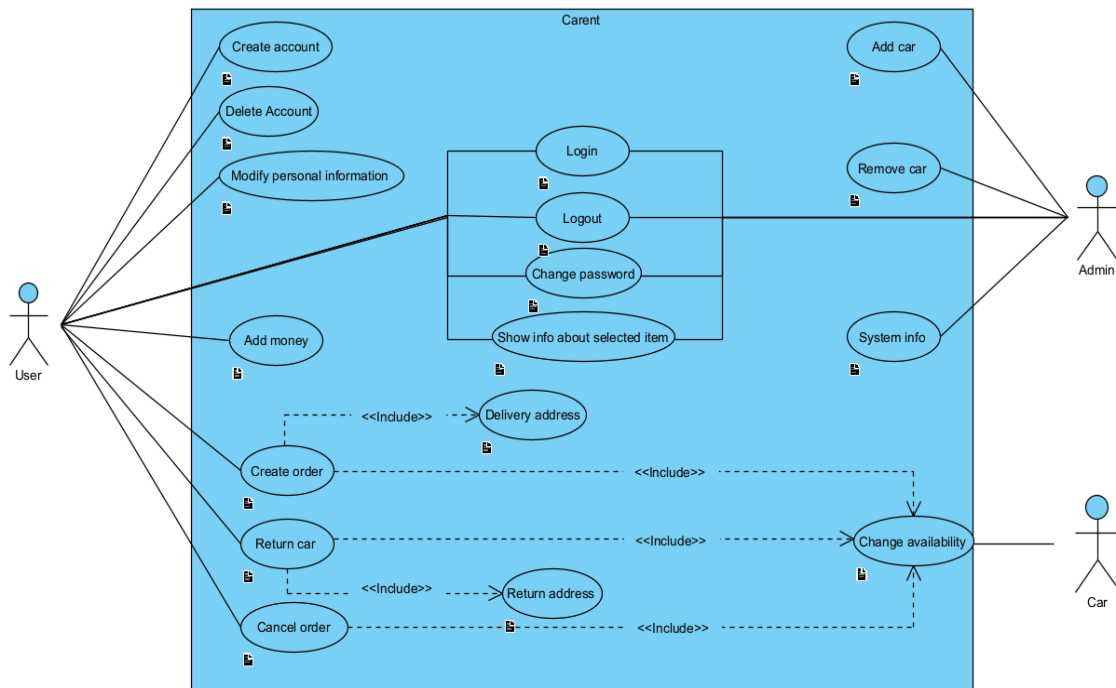


Use Case Diagram vrátane popisu

Use Case Diagram:



Create Account:

Use Case ID	Create Account
Brief Description	Creates new account in Carent system as new user.
Primary Actors	User
Secondary Actors	-
Preconditions	Application must be running. User must be logged out.
Main Flow of Events	<ol style="list-style-type: none">1. User clicks on "Create account" button on the start page of the application.2. User fills in his personal information, such as username, password, email and so on.3. User confirms the creation of new account by clicking on "Create new account" button.4. IF the username is already used or username == "Admin"4.1. System show message dialog with message that user must use different username.5. ELSE IF User is younger than 18 years5.1. System show message dialog with message that user must be 18 years old or older to use Carent.6. ELSE IF Repeated password is not correct6. System show message dialog with message that user must repeat the same chosen password.7. ELSE7.1. System stores users's new account information in database.8. User can now login to the system.
Alternative Flows	User can click on "Cancel" button in step 3.
Post-conditions	New user is stored in database. User is returned to start page and can login with new account.

Delete Account:

Use Case ID	Delete Account
Brief Description	Deletion of user's account from Carent system.
Primary Actors	User
Secondary Actors	-
Preconditions	User must be logged in.
Main Flow of Events	<ol style="list-style-type: none">1. User goes to his profile through menu bar.2. User clicks on "Delete account" button.3. IF User has ordered cars (current orders)<ol style="list-style-type: none">3.1. System shows message dialog with message that user can not delete his account with ordered cars.4. IF User has positive money balance<ol style="list-style-type: none">4.1. System Shows message dialog with message that user still has some money on his account.5. ELSE IF User has negative money balance<ol style="list-style-type: none">5.1. System shows message dialog with message that user must add money to his account.6. ELSE<ol style="list-style-type: none">6.1. System shows confirm dialog asking user if he is sure with deletion of his account7. User clicks "YES" button to confirm deletion of his account8. User is returned to application start page.
Alternative Flows	User clicks "NO" button in step 7.
Post-conditions	All information about user are deleted from database. That includes all his personal information or order history.

Modify personal information:

Use Case ID	Modify Personal Information
Brief Description	Modification of user's personal information showed in his profile.
Primary Actors	User
Secondary Actors	-
Preconditions	User must logged in.
Main Flow of Events	<ol style="list-style-type: none">1. User goes to his profile through menu bar.2. User clicks on "Profile info".3. User clicks on "Change profile info" button.4. System shows input dialog, where user can change his current personal information.5. User clicks on "YES" button to confirm changes.6. IF some field is empty<ol style="list-style-type: none">6.1. System shows warning message dialog with message to fill all fields with personal information.7. ELSE<ol style="list-style-type: none">7.1. Changes are stored and user's profile dialog is updated.
Alternative Flows	User clicks on "NO" button in step 5.
Post-conditions	User's personal information are updated in database.

Add money:

Use Case ID	Add money
Brief Description	Adds money to user's account.
Primary Actors	User
Secondary Actors	-
Preconditions	User must be logged in.
Main Flow of Events	<ol style="list-style-type: none">1. User goes to his profile through menu bar.2. User clicks on "Profile info".3. User clicks on "Add money" button.4. User chooses one of the offered amounts and clicks "OK" button.5. After successful bank connection, the specified amount of money is now added to user's profile.
Alternative Flows	User can logout any time. User can click "Cancel" button and no money will be added.
Post-conditions	New state of user's balance is stored in database and showed in user's profile.

Create Order:

Use Case ID	Create Order
Brief Description	Creates order on selected car.
Primary Actors	User
Secondary Actors	-
Preconditions	User must be logged in. User must select ordered car from Available cars table. User has less than 3 rented cars.
Main Flow of Events	1. User selects one car to order. 2. User clicks on "Create order" button. 3. IF no car is selected 3.1. System display warning message that to create order, car must be selected. 4. ELSE IF User has already 3 ordered cars 4. System display warning message that the user exceeded maximum amount of ordered cars. 5. ELSE 5.1. Users specifies address, where the ordered car will be delivered.
Alternative Flows	User can logout any time.
Post-conditions	User must specify delivery address.

Return car:

Use Case ID	Return Car
Brief Description	Return of ordered car
Primary Actors	User
Secondary Actors	-
Preconditions	User must be logged in. User must select order from Current orders table. Order must be older than 3 hours (minimal time for renting car is 3 hours)
Main Flow of Events	1. User selects one order from Current orders table for car that will be returned. 2. User clicks on "Return car" button. 3. IF no order is selected 3.1. System display warning message that to return car, order must be selected. 4. ELSE IF amount of hours from creation of order is less than 4 hours 4.1. System display warning message that the car can be returned already because the minimal time for renting car is 3 hours. 5. ELSE 5.1. User specifies his current address or address where the car will be returned.
Alternative Flows	User can log out any time.
Post-conditions	User must specify return address.

Cancel Order:

Use Case ID	Cancel Order
Brief Description	Cancellation of one of the user's orders before a delivery of the ordered car.
Primary Actors	User
Secondary Actors	-
Preconditions	User must be logged in. User must select order from Current orders table. Time from creation of the order can not exceed one hour.
Main Flow of Events	1. User selects one order from Current orders that will be canceled. 2. User clicks on "Cancel order" button. 3. IF no order is selected 3.1. System display warning message that to cancel order, order must be selected. 4. ELSE IF amount of hours from creation of order is more than 1 hour 4.1. System display warning message that the order can not be canceled after one hour from it's creation (when the car is already delivered to the user). 5. ELSE 5.1. Message dialog that asks if the user is sure with cancellation of the order is showed. 5.2. The price for cancellation of order is calculated. 5.3. Message dialog with confirmation, cancellation price and current user's balance is showed and order is cancelled .
Alternative Flows	User can log out any time. User clicks on "Cancel" button in step 5.1.
Post-conditions	Progress of selected order is changed in database to canceled. Selected order is removed from Current orders table and added to Order history table. Ordered car changes availability from ordered to available and is added to available cars table. Balance of user is updated.

Delivery address:

Use Case ID	Delivery address
Brief Description	Specification of address, where the ordered car will be delivered.
Primary Actors	User
Secondary Actors	-
Preconditions	User must create new order on selected available car.
Main Flow of Events	1. User specifies delivery address in input dialog. 2. User clicks "OK" button. 3. Message dialog with confirmation is showed and new order is created.
Alternative Flows	User clicks on "Cancel" button.
Post-conditions	New order is stored in database and added to Current orders table. Ordered car changes availability from available to ordered and is removed from available cars table. The car is delivered to user in one hour period.

Return address:

Use Case ID	Return address
Brief Description	Specification of address, where the ordered car will be returned from user.
Primary Actors	User
Secondary Actors	-
Preconditions	User must return car in selected current order.
Main Flow of Events	1. User specifies return address in input dialog. 2. User clicks "OK" button. 3. The price for rent is calculated and deducted from user's balance. 4. Message dialog with confirmation, rent price and current user's balance is showed and car is returned.
Alternative Flows	User clicks on "Cancel" button in step 2.
Post-conditions	Progress of selected order is changed in database to finished. Selected order is removed from Current orders table and added to Order history table. Ordered car changes availability from ordered to available and is added to available cars table. Balance of user is updated. A company team is present on the address in one hour period from returning the car and finishing the order.

Change availability:

Use Case ID	Change availability
Brief Description	Change of the car availability
Primary Actors	User
Secondary Actors	-
Preconditions	Car must be available or ordered.
Main Flow of Events	1. IF car is available 1.1. User creates new order on the selected car. 1.2. New order is created with this car. 1.3. Car's availability is changed from available to ordered, so no other user can order this car. 1.4. Car is removed from Available cars table. 2. ELSE IF car is ordered 2.1. User selects current order and returns car or cancels the order. 2.2. Car's availability is changed from ordered to available. 2.3. Car is added to Available cars table
Alternative Flows	-
Post-conditions	The state of car's availability is changed in database.

Login:

Use Case ID	Login
Brief Description	Login to the Carent system
Primary Actors	User, Admin
Secondary Actors	-
Preconditions	Application must be running. Actor must be on start page.
Main Flow of Events	1. Actor fill in Username and Password field. 2. IF Username or password are invalid 2.1. System show message dialog with message that username and password are invalid. 3. ELSE IF username == "Admin" 3.1. Actor is Admin and his homepage is shown. 4. ELSE 4.1. Actor is normal User and his homepage is shown.
Alternative Flows	Actor can close the application.
Post-conditions	Actor is logged in the Carent system as Admin or as User.

Logout:

Use Case ID	Logout
Brief Description	Logout of Carrent system.
Primary Actors	Admin, User
Secondary Actors	-
Preconditions	Actor must be logged in
Main Flow of Events	1. Actor goes to his profile through menu bar. 2. Actor clicks on "Logout" button. 3. System shows confirm dialog with message if actor is sure to logout from the system. 4. Actor clicks on "YES" button.
Alternative Flows	Actor clicks on "NO" or "Cancel" button or closes the dialog in step 4.
Post-conditions	Actor is logged out and is returned to start page of the application.

Change password:

Use Case ID	Change password
Brief Description	Change of currently logged account
Primary Actors	Admin, User
Secondary Actors	-
Preconditions	Actor must be logged in.
Main Flow of Events	1. Actor goes to his profile through menu bar. 2. Actor clicks on "Change password" button. 3. System shows input dialog where actor fills in his new password with repeat confirmation. 4. IF Fields are empty or repeated password is not the same as chosen password 4.1. System shows message dialog with message that password is invalid 5. Actor clicks on "OK" button.
Alternative Flows	Actor clicks on "Cancel" button in input dialog.
Post-conditions	The new password of actor is stored in users database and is used in login action.

Show info about selected item:

Use Case ID	Item info
Brief Description	View of detail or all information about selected item/object from table.
Primary Actors	Admin, User
Secondary Actors	-
Preconditions	Actor must be logged in.
Main Flow of Events	1. Actor selects one item (row) of table. 2. Actor clicks on "Show <item> info", where <item> is object of car, user or order. 3. IF No item from table is selected 3.1. System shows message dialog with message that no item were selected 4. ELSE 4.1. System shows dialog window with all information about selected item
Alternative Flows	Actor can logout any time.
Post-conditions	-

Add car:

Use Case ID	Add Car
Brief Description	Adding new car to the <u>Carent</u> system.
Primary Actors	Admin
Secondary Actors	-
Preconditions	Admin must be logged in.
Main Flow of Events	1. Admin clicks on "Cars" tab. 2. Admin clicks on "Add car" button. 3. System shows input dialog. 4. Admin fills in information about new car. 5. Admin clicks on "YES" button to confirm information about new car.
Alternative Flows	Admin clicks "NO" button in step 5.
Post-conditions	New car is stored in database. Availability of new car is set to available.

Remove Car:

Use Case ID	Remove Car
Brief Description	Deletion of car from <u>Carent</u> system.
Primary Actors	Admin
Secondary Actors	-
Preconditions	Admin must be logged in.
Main Flow of Events	1. Admin clicks on "Cars" tab. 2. Admin selects car to be deleted. 3. Admin clicks on "Delete car" button. 4. IF no car is selected 4.1. System shows message dialog with message that to delete car, car must be selected. 5. ELSE IF Car is ordered 5.1. System shows message dialog with message that ordered car can not be deleted from the system. 6. ELSE 6.1. System shows confirm dialog with question if admin is sure to delete selected car. 6.2. Admin clicks on "YES" button.
Alternative Flows	Admin clicks on "NO" button in step 5.2.
Post-conditions	Selected car is deleted from cars database and from <u>Carent</u> system.

System info:

Use Case ID	System info
Brief Description	Access to information about all cars, users and orders of the <u>Carent</u> system.
Primary Actors	Admin
Secondary Actors	-
Preconditions	Admin must be logged in.
Main Flow of Events	1. Admin goes to his profile through menu bar. 2. Admin clicks on "System info" button. 3. System show dialog window with information about amount of users, cars, orders and overall system balance from all users. 4. To close info dialog, Admin clicks on "OK" button or closes the window.
Alternative Flows	Admin can log out any time
Post-conditions	-