**ShiftHappens
Class Diagram**

Gets information for existing car (from editCar_D)

uses

uses

uses

uses

uses

shiftDatabase

\# db : QSqlDatabase

+ shiftDatabase()

+ customer_createTable() : void
+ cars_createTable() : void
+ rental_createTable() : void

+ cars_add(RegNr : QString*, brand : QString*, model : QString*, dayPrice : uint*) : bool
+ cars_fetchById(regNr: QString&, brand : QString&, model : QString&, dayPrice : uint&) : void
+ cars_fetchCar(regNr : QString&) : car
+ cars_updateByRegNr(RegNr : QString*, brand : QString*, model : QString*, dayPrice : QString*) : bool
+ cars_removeByRegNr(RegNr : QString*)
+ cars_countEntries() : uint
+ cars_fetchAll() : std::vector<car>
+ cars_dropTable() : void
+ cars_resetTable() : void
+ cars_checkExistence(RegNr : QString&) : bool
+ cars_fetchDayPrice(RegNr : QString &) : uint

+ customer_add(name : QString*, street: QString*, postNum : uint*, city : QString*)
+ customer_fetchById(id : uint&, name : QString&, street : QString&, postNum : uint&, city : QString&)
+ customer_fetchCustomer(id : uint&)
+ customer_updateById(idChoice : uint*, name : QString*, street : QString*, postNum : uint*, city : QString*)
+ customer_removeById(idChoice : uint*)
+ customer_countEntries() : uint
+ customer_fetchAll() : std::vector<customer>
+ customer_dropTable() : void
+ customer_resetTable() : void
+ customer_checkExistence(id : uint&) : bool

+ rental_addRental(RegNr : QString&, custId : uint&, startDate : QString&, endDate : QString&, totalPrice : uint&) : bool
+ rental_countRecords() : int
+ rental_FetchAll() : std::vector<rental>
+ rental_removeRental(id : uint&) : bool
+ rental_removeRentalonCustomer(custId : uint&) : bool
+ rental_removeRentalonCar(RegNr : QString&) : bool
+ rental_completeRental(id : uint&) : bool
+ rental_dropTable() : void
+ rental_resetTable() : void

+ databaseOpen() : void
+ databaseClose() : void

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car

+ RegNr : QString
+ brand : QString
+ model : QString
+ dayPrice : uint

customer

+ id : uint
+ name : QString
+ street: QString
+ postcode : uint
+ city : QString

rental

+ rentalId : uint
+ RegNr : QString
+ custId : uint
+ startDate : QDate
+ endDate : QDate
+ totalPrice : uint
+ completed : int

Gets information for existing customer

Uses shiftDatabase (multiple)

addCar_D

- ui : addCar_D *

+ addCar_D(parent : QWidget *)
- on_buttonBox_accepted() : void
- validateCar() : void

addCustomer_D

- ui : addCustomer_D *

+ addCustomer_D(parent : QWidget *)
- on_buttonBox_accepted() : void
- validateCustomer() : void

addRental_D

\# customerTable: QSqlTableModel *
\# carsTable : QSqlTableModel *
- ui : addRental_D *

+ addRental_D(parent : QWidget *)
+ viewCustomers_rental() : void
+ viewCars_rental() : void
- onpushButton_customerSearch_clicked() : void
- onpushButton_carSearch_clicked() : void
- onpushButton_reset_clicked() : void
- on_buttonBox_accepted() : void
- on_pushButton_checkRental_clicked() : void
- on_dateEdit_start_userDateChanged(&date: QDate) : void

editCar_D

- ui : editCar_D *

+ editCar_D(parent : QWidget *, regNr : QString &)
- on_buttonBox_accepted() : void
- validateCar() : void
- fetchCar(regNr : QString &) : void

editCustomer_D

- ui : editCustomer_D *

+ editCustomer_D(parent : QWidget *, id: uint &)
- on_buttonBox_accepted() : void
- validateCustomer() : void
- fetchCustomer(id : QString &) : void

Gets existing rentals

Opens

Opens

Opens (from MainWindow)

Opens (from MainWindow)

Opens (from MainWindow)

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importExporter

\# allCars : std::vector<car>
\# allCustomers : std::vector <customer>
\# allRentals : std::vector <rental>

+ importCars(dataB : shiftDatabase&) : void
+ importCustomers(dataB : shiftDatabase&) : void
+ importRentals(dataB : shiftDatabase&) : void
+ create_templates() : void

+ exportCustomers(dataB : shiftDatabase&) : void
+ exportCars(dataB : shiftDatabase&) : void
+ exportRentals(dataB : shiftDatabase&) : void
+ exportAll(dataB : shiftDatabase&) : void

Uses

*shiftDatabase
passed by reference*

MainWindow

\# regNrColumn : uint
\# IdColumn : uint
- *ui : MainWindow

+ MainWindow(*parent : QWidget)
+ viewCustomers()
+ viewCars()
+viewRentals()
+viewAll()
- on_addCarB_clicked()
- on_editCarB_clicked()
- on_removeCarB_clicked()
- on_addCustB_clicked()
- on_editCustB_clicked()
- on_removeCustB_clicked()
- on_addRetnalB_clicked()
- on_removeRentalB_clicked()
- on_actionCreate_templates_triggered()
- on_actionExport_cars_triggered()
- on_actionExport_customers_triggered()
- on_actionExport_rentals_triggered()
- on_actionExport_all_triggered()
- on_pushButton_rentalCompleted_clicked()
- on_action_E_xit_triggered()
- on_actionImport_Cars_triggered()
- on_actionImport_Customers_triggered()
- on_actionImport_Rentals_triggered()

Uses shiftDatabase

Uses shiftDatabase