Software Project

Project Name: Car Rental Management Software

Company: Sabanet Albania

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Start date:01/10/2022

End date : 14/10/2022

Document Summery :

Below you will find :

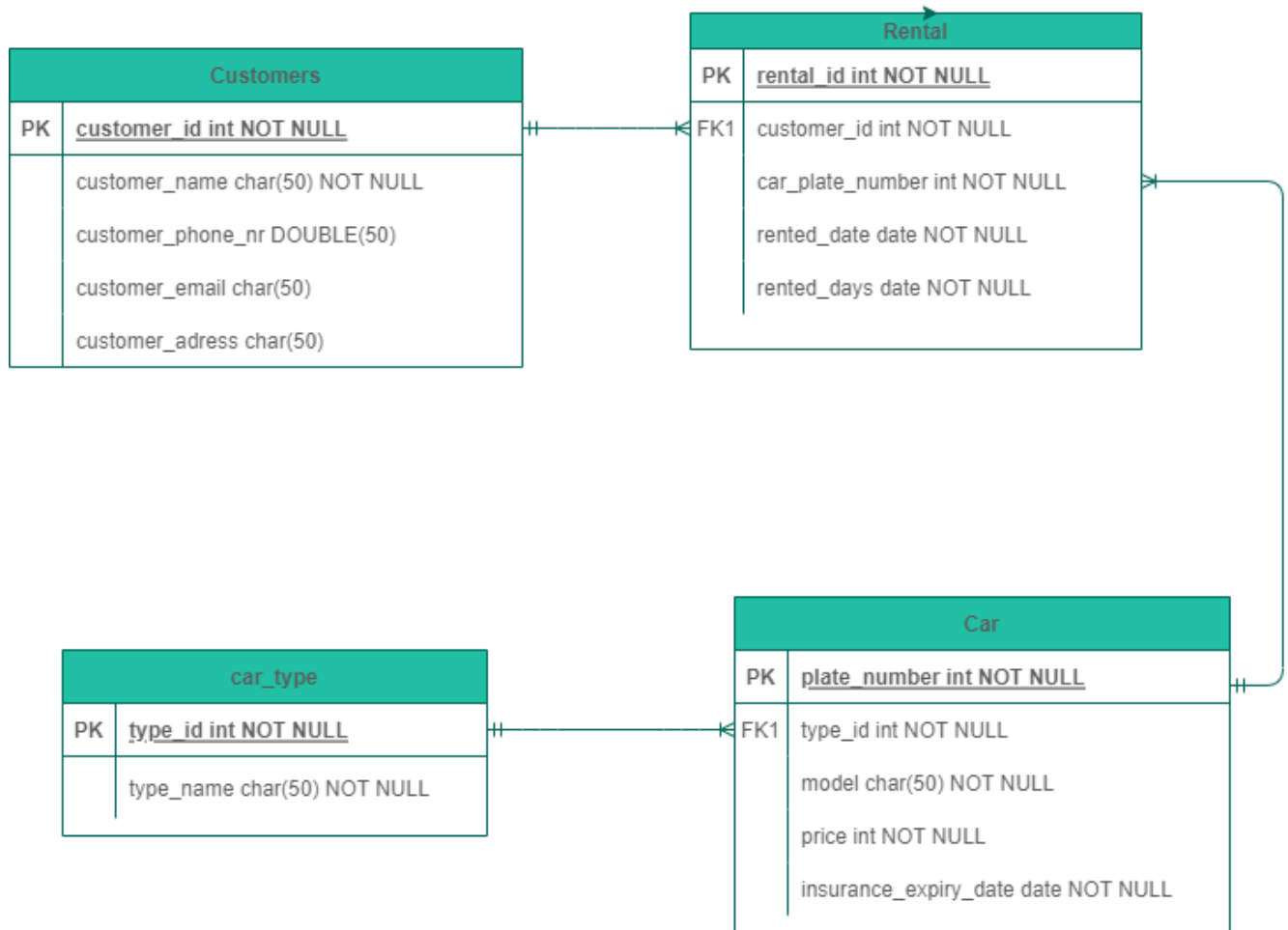- Project Use cases

- ER diagram

- Class diagram

Use cases

UC Name	Uc1: view rented vehicles
Summary	List of rented vehicles on currentmonth.
Dependency	Uc1
Actors	User(car rental employee)
Preconditions	You should have an account.
Description of the Main Sequence	● **The system should provide the user the information of the cars rented the current month.**
Description of the Alternative Sequence	● View rented vehicles on current month. ● View all rented vehicles. ● View unrented vehicles.
Non functional requirements	Authorization will be given to user as an employee of this company, Since only company members are supposed to use this program and not customers.
Post conditions	User gets the list of vehicles rented.

UC Name	UC2:insurance list
Summary	Insurance list to be renewed.
Dependency	Uc1
Actors	User(car rental employee)
Preconditions	You should have an account.
Description of the Main Sequence	● The system should provide the user with the ability to access insurance list that needs to be renewed.
Description of the Alternative Sequence	● Insurances to be renewed
Non functional requirements	Authorization will be given to user as an employee of this company, Since only company members are supposed to use this program and not customers.
Post conditions	User gets the list of insurances to be renewed.

UC Name	Uc3: List depending on model type of the vehicle
Summary	List of vehicles depending on model type.
Dependency	Uc1
Actors	User(car rental employee)
Preconditions	You should have an account.
Description of the Main Sequence	● The system should provide the user with the ability to access list of vehicles with same model type.
Description of the Alternative Sequence	● List of vehicles depending on model type.
Non functional requirements	Authorization will be given to user as an employee of this company, Since only company members are supposed to use this program and not customers.
Post conditions	User gets the list of vehicles with same model type.

UC Name	Uc4: Customer information
Summary	Customer infromertion will be shown depending on vehicle type they rented.
Dependency	
Actors	User(car rental employee)
Preconditions	You should have an account.
Description of the Main Sequence	● *The system should provide the basic information of a client that have rented a specific vehicle type.*
Description of the Alternative Sequence	● Choose vehicle type
Non functional requirements	Authorization will be given to user as an employee of this company, Since only company members are supposed to use this program and not customers.
Post conditions	List of basic customers information will be provided.

ER DIAGRAM

Customers

PK	customer_id int NOT NULL
	customer_name char(50) NOT NULL
	customer_phone_nr DOUBLE(50)
	customer_email char(50)
	customer_adress char(50)

Rental

PK	rental_id int NOT NULL
FK1	customer_id int NOT NULL
	car_plate_number int NOT NULL
	rented_date date NOT NULL
	rented_days date NOT NULL

car_type

PK	type_id int NOT NULL
	type_name char(50) NOT NULL

Car

PK	plate_number int NOT NULL
FK1	type_id int NOT NULL
	model char(50) NOT NULL
	price int NOT NULL
	insurance_expiry_date date NOT NULL

CLASS DIAGRAM

customer

+JDBCconection obj

void customers_info_car_type()

void setConn(JDBCconection conn)

Car

+JDBCconection obj

void vehicles_rented_current_month()

void get_insurence_list()

void get_model_list()

 void setConnn(JDBCconection connn)

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rental

+ car obj

+ customer obj

void customers_info_carType()

void vehicle_per_month()

void model_listt()

void insurance_expiry()

void delete__car()

void setCar(Car car)

void setCustomer(customer customer)

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beans.xml

JDBCconection

String driver ;
 String url;
 String username;
 String password;

void setDriver(String driver)

void setDriver(String driver)

void setDriver(String driver)

void setPassword(String password)

 void creatDBconection()

void closeDBconection()

void vehicles_rented_permonth()

void deleteItem()

void Listofcustomers(String type)

void Listofinsurences()

void model_list(String modell)

int stringCompare(String str1, String str2)

Main

void main(String[] args)