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Databases I, Winter 2021
User Stories "Vehicle Rental System System"

1   As an unregistered customer I should be able to:

a) Register to the website as a customer by providing my ssn, name (First and last name), email, address and password.
Signature:
Name: CustomerRegister
Input: ssn varchar(14), name varchar(25), password varchar(20), email varchar(50), address varchar(40)
Output: Nothing

b) Register to the website as an employee by providing my ssn, name (First and last name), email, address, password, hours_per_week.
Signature:
Name: EmployeeRegister
Input: ssn varchar(14), name varchar(25), password varchar(20), email varchar(50), address varchar(40), hours_per_week int

c) Get the number of available customers.
Signature:
Name: customerCout
Input: Nothing
Output: count int

d) Get the number of available vehicles.
Signature:
Name: vehicleCount
Input: Nothing
Output: count int

e) Get the number of rents that already occurred.
Signature:
Name: rentCount
Input: Nothing
Output: count int

2   As a registered customer I should be able to:

a) login using my ssn and password.
Signature:

Name: customerLogin
Input: ssn varchar(14), password varchar(20)
Output: Success bit

b) View and update my profile.

Signature:
Name: ViewCustProfile
Input: ssn varchar(14)

Output: table

Signature:
Name: UpdateCustProfile
Input: ssn varchar(14), name varchar(25), password varchar(20), email varchar(50), address varchar(40)

Output: success bit

c) add my phone number(s).

Signature:
Name: addMobile
Input: ssn varchar(14), phone_number varchar(11)
Output: Nothing

d) add online payment details.

Signature:
Name: addOnlinePayment
Input: ssn varchar(14), credit_card_number varchar(16), cvv varchar(3), expire datetime
Output: Nothing

e) View all available vehicles each with its average rating.

Signature:
Name: viewVehicles
Input: Nothing
Output: table

f) View all available insurances with different types.

Signature:
Name: viewVehicles
Input: Nothing
Output: table

g) View all extras for rent.

Signature:
Name: viewExtra
Input: Nothing
Output: table

h) Rent a vehicle for a specified time-frame.

Signature:
Name: rentTime

Input: vehicle int, insurance varchar(15), customer_ssn varchar(14), time decimal, destination varchar(40)

Output: Nothing

i) View all information of my previous accidents.

Signature:
Name: viewMyAccidents
Input: customer_ssn varchar(14)
Output: table

j) View any pending payements if any.

Signature:
Name: viewRemaningPayments
Input: customer_ssn varchar(14)
Output: table

k) Delete one of my credit cards.

Signature:
Name: deleteCreditCard
Input: customer_ssn varchar(14), credit_card_number varchar(16)
Output: Nothing

l) Search for vehicles that are in one of three locations provided.

Signature:
Name: searchForVehicles
Input: location1 varchar(20), location2 varchar(20), location3 varchar(20),
Output: table

m) Order all vehicles that are not rented by brand/class/rate.

Signature:
Name: orderVehiclesByBrand
Input: Nothing
Output: table

Signature:
Name: orderVehiclesByClass
Input: Nothing
Output: table

Signature:
Name: orderVehiclesByRate
Input: Nothing
Output: table

n) Get the count of accidents covered by each insurance.

Signature:
Name: countAccidentsPerInsurance
Input: Nothing
Output: table

o) Get the vehicles that were never rented before.
   Signature:
   Name: getNonRentedehicles
   Input: Nothing
   Output: table

p) View all insurances available sorted by rate.
   Signature:
   Name: viewInsurances
   Input: Nothing
   Output: table

3 As a customer renting a vehicle I should be able to:

a) Submit an accident with info.
   Signature:
   Name: accidentSubmission
   Input: ssn varchar(14), vehicle int, description varchar(100)
   Output: Nothing

b) Rent an extra item.
   Signature:
   Name: rentExtra
   Input: ssn varchar(14), id int
   Output: Nothing

c) Return an extra item.
   Signature:
   Name: returnExtra
   Input: ssn varchar(14), ExtraId int
   Output: Nothing

d) View Extra items ordered by rate descendingly.
   Signature:
   Name: viewExtraOrdered
   Input: Nothing
   Output: table

e) View the minimum rate of each Extra type.
   Signature:
   Name: viewMinPerType
   Input: Nothing
   Output: table

f) Get the count of how many times the currently rented vehicle was rented.
   Signature:
   Name: numberOfRents
   Input: vehicle id
   Output: count int

g) Evaluate the currently rented vehicle from 0 to 10.

Signature:
Name: evaluateVehicle
Input: customer_ssn varchar(14), vehicle int, rating int
Output: table

h) Update the location of the vehicle.

Signature:
Name: updateLocation
Input: vehicle int, location varchar(40)
Output: success bit

i) View average rating of the vehicle currently rented.

Signature:
Name: viewAverageRating
Input: vehicle int
Output: average decimal

j) View accident details previously happened to the currently rented vehicle.

Signature:
Name: viewAccidentsForCurrentVehicle
Input: vehicle int
Output: table

4 As a logged in employee I should be able to:

a) View and update my profile.

Signature:
Name: ViewEmpProfile
Input: ssn varchar(14)

Output: table

Signature:
Name: UpdateEmpProfile
Input: ssn varchar(14), name varchar(25), password varchar(20), email varchar(50), address varchar(40), hours_per_week int
Output: success bit

b) Add a newly acquired Extra.

Signature:
Name: AddExtra
Input: type varchar(15), rate decimal

Output: Nothing

c) View all available vehicles.

Signature:
Name: viewVehicles
Input: Nothing
Output: table

d) Provide a gift-card to an employee.

Signature:
Name: ProvideGift
Input: customer_ssn varchar(14), employee_ssn varchar(14), amount decimal
Output: Nothing

e) Add an available insurance.

Signature:
Name: AddInsurance
Input: insurance varchar(15), rate decimal, type varchar(8), liability_amount decimal
Output: Nothing

f) Add a new Location.

Signature:
Name: AddLocation
Input: pin_number varchar(10), gps_location varchar(40)
Output: Nothing

g) List the currently rented vehicles.

Signature:
Name: ListRentedVehicles
Input: Nothing
Output: table

h) List all cutomer names currently renting a vehicle.

Signature:
Name: ListCustomersCurrentlyRenting
Input: Nothing
Output: table

i) List all customer information whose names start with a specific character.

Signature:
Name: CustomersStaringWithACharacter
Input: character varchar(1)
Output: table

j) Update an Extra item to a specific rate.

Signature:
Name: UpdateExtraRate
Input: id int, rate decimal
Output: Nothing

k) Increment all Extra items of a specific type by a specific value.

Signature:
Name: UpdateExtraTypeWithVal
Input: type varchar(15), value decimal
Output: success bit

l) Issue a bill for an accident.

Signature:
Name: IssueBill
Input: insurance varchar(15), accident int, bill decimal
Output: Nothing

m) List all customer information who have an unused gift-card.

Signature:
Name: CustomerWithGift
Input: Nothing
Output: table

n) Issue installments as per the number of installments for a certain accident separated by 1 month each.

Signature:
Name: IssueInstallements
Input: insurance varchar(15), accident int
Output: Sucess bit

o) List customers along with their due bills (if any).

Signature:
Name: ListCustomersWithBills
Input: Nothing
Output: table

p) Update the battery level of a scooter and the motor diesel needed.

Signature:
Name: UpdateBattery
Input: vehicle int, battery decimal
Output: Nothing

Signature:
Name: UpdateDiesel
Input: vehicle int, kiloLeft decimal
Output: Nothing

q) View all Extra items that are currently rented.

Signature:
Name: ViewExtra
Input: Nothing
Output: table

r) View all insurance info with no due bills.

Signature:
Name: ViewInsuranceWithNoBills
Input: Nothing
Output: table

s) Delete payments with an expire date earlier than a specific date.

Signature:
Name: DeleteExpiredPayments
Input: date datetime
Output: Nothing

t) View customer details who have rented all available vehicles.

Signature:
Name: ViewPremiumCustomers
Input: Nothing
Output: table

u) Get all locations at which there is currently a vehicle.

Signature:
Name: getLocationsOfVehicles
Input: Nothing
Output: table

v) Get all locations at which there is no vehicles.

Signature:
Name: getEmptyLocations
Input: Nothing
Output: table

w) Get the customer information with the greatest gift card amount.
Signature:
Name: greatestGiftCard
Input: Nothing
Output: table

x) Get the vehicles that are either unavailable or have a battery level 0 or have less than 30 kilometers left.
Signature:
Name: GetUnavailableVehicles
Input: Nothing
Output: table