VEHICLE/DRIVER MANAGEMENT SYSTEM

Assignment

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1 INTRODUCTION

Company: Inimegpac inc rents vehicles along with drivers

Target is to create a Vehicle and Driver management system, to manage vehicles, drivers and drivers access rights to a vehicles.

2 ELEMENT DEFINITIONS

2.1 VEHICLE DEFINTION:

Fields = VehicleId, brand, model, color

2.1.1 SAMPLE DATA:

- v00001, Maruti, Dzire, blue
- v00002, Honda, City, green
- v00003, Maruti, Dzire, red
- ….

2.2 DRIVER DEFINITION:

Fields = driverId, type, firstname, lastname, phoneNumber, email, password, joining-Date, admin

Note: Some drivers also perform the role of system administrator identified by the Boolean field ADMIN

2.2.1 SAMPLE DATA

- D0001, Raj, Patel, 9999999999, raj.patel@inimegpac.com, password1, 10/10/2010, Y
- D0002, John, Smith, 8999999999, john.smith@inimegpac.com, password2, 10/10/2010, N
- ……

Note: Raj is an administrator

2.3 DRIVER-VEHICLE ASSOCIATION DEFINITION (ACCESS):

Fields: vehicleId, driverId

2.3.1 RULE:

- Associates the driver and vehicle.
- Driver:vehicle is a n:n relationship, means
  1 vehicle can be accessed by multiple drivers and 1 driver can access multiple cars

2.3.2 SAMPLE DATA:

- v00001, d0001
- v00001, d0002
- v00002, d0003
- ……

REQUIREMENTS:

1) Drivers should be able to login into the system.
2) Admin should be able to add, get, and update vehicle info . (only color can be updated)
3) Admin should be able to add, get, and update driver info
4) Admin should be able to associate a driver and a vehicle
5) NonAdmins should be allowed to update their own data (only phone number)
6) Negative flows should be reflected with appropriate message to the user on the screen

3 TASKS:

- Create a design document with the following:
  - Show components (high level) including screen components, doesn't have to be an actual browser window
  - APIs: showing the input and output data. Exchange Format will be JSON.
  - Class diagrams and sequence flow
  - Unit Test cases
- Development (Coding + Unit Test)
- Testing
- Demo

4 TECHNOLOGIES

1. Front End: (Struts or Spring MVC), Browser(your choice)
2. BackEnd: AppServer (your choice), Spring , Hibernate, DB (your choice)
3. Eclipse , JDK-8

5 DATES AND DELIVERABLES:

Completion: 14th Aug