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Online house rental system

# Problem statement:

Online house rental system is where the user can rent or buy the house or take pg and owner can sell or rent the house. User and owner details are registered. Owner registers the house details. Admin verifies the owner based on the requested timestamp of the owner and approves or rejects. Owner can view the status of his house whether the request is pending or accepted or rejected. User choose options like rent or buy or pg. User search for the house by location ,corresponding house details are displayed along with reviews and ratings and facilities .Reviews and ratings are obtained from the registered user. User can mark interest for the displayed houses. Owner can view the interested users for his house and approves or rejects the user. Once the owner approves the user, other users cannot mark interest on that house.

# Functionalities:

User:

1.Register details

2.Login

3.Search for the house by location

4.Marks interest on the house

5.Can add reviews and ratings for the house.

Owner:

1.Registers details

2.Login

3.Adds house rental details

4.Updates rental details

5.Views status of the house

6.Views Interested users on the house

7.Approves or rejects the interested users

Admin:

1.Updates the status of the house

# Packages:

com.zilker.beans

com.zilker.Constant

Com.zilker.dao

Com.zilker.delegate

Com.zilker.jdbcimpl

Com.zilker.utils

Com.zilker.beans consist of

User.java

Rental.java

User class consist of user details and getters and setters.Rental class consist of rental getters and setters.

Com.zilker.Constant consist of

RegexConstant.java

SQLConstant.java

RegexConstant consist of regex pattern and SQLConstant consist of SQL query constant.

Com.zilker.dao consist of

RentalDAO.java

RentalDAO process the queries and retrieves the corresponding data from the database.

Com.zilker.delegate consist of

RentalRedirect.java

RentalRedirect class delegates the request from UI to RentalDao class.

Com.zilker.jdbcimpl consist of

RentalImpl.java

RentalUI.java

RentalImpl class prompts user to choose basic functionalities of owner or tenant.

RentalUI class gets required input from the console and calls delegate.

Com.zilker.utils consist of

DBUtils.java

RentalValidation.java

DBUtils class opens and closes connection with the database.

RentalValidation class validates the email and phone number.

# Project Flow

1)RentalImpl class prompts to enter the choice whether to Register or login.

1a)If the user chooses register,the register method in the RentalUI is called.RentalUI gets register details from the user and calls Register method in RentalRedirect which in turn calls the RentalDao register method.It inserts the register details along with the role into the database.

Register method asks for name ,email ,password ,occupation ,address ,area ,zipcode and owner or tenant.

Email and Phone number validation is done using regex in RentalValidation.

1b)If the user chooses login,the Login method in the RentalUI is called.RentalUI gets login details from the user and calls Login method in RentalRedirect which in turn calls the RentalDao Login method.It verifies whether the entered email and password is same with values in the database.

2)If the user role is tenant,then the RentalImpl class prompts to choose whether to search or to add reviews.

2a)If the tenant chooses to search,RentalUI’s search method is called.It asks for location and prompts to choose whether buy or rent or pg.Then the control is passed from RentalUI to RentalRedirect and then to RentalDao’s search method.

It fetches house details such as house address,area,house type,price ,ratings and reviews as well as the facilities from the database and displays them.

Tenant can mark Interest on the house and can request amount.

2b)If the tenant chooses to add reviews and ratings then RentalUI asks for rating and review for the particular house.Only registered user will be able to give reviews and ratings.Control goes from RentalUI to RentalRedirect and then to RentalDao’s addReview method.It inserts the rating and review for the house into the database.

3)If the user role is owner,the RentalImpl class prompts to choose whether to add rental details or to update rental details or to view status of the house or to view interested tenants.

3a)If the owner chooses to add rental details, RentalUI asks for rental details like rental type,rental address,rent area,rent price.Control goes from RentalUI to RentalRedirect and then to RentalDao’s addRentalDetails method inserts rental details into the database.

3b)If the owner chooses to update rental details,RentalUI asks to choose

Whether to update rental type(1BHK or 2BHK or 3BHK or 1RK or 4+BHK) or rental address or rental price or rental choice(buy or rent or pg).Then the corresponding details can be updated using UpdateRental methods in RentalDao class.

3c)If the owner chooses to view status of his house,then all the house address of the particular owner is displayed along with status indicating whether pending approved or rejected.

3d)If the owner chooses to view the interested tenants,then all the house address of the particular owner is displayed from which the particular house is selected and corresponding user details such as user name,email,occupation,address,area,requested amount is displayed. Based on these details owner accepts or rejects the user.

If the owner accepts the tenant then no other tenant can mark interest on that house and other tenants request gets rejected.

4)Admin accepts the owner based on the rental details and Requested timestamp.