CENG 211

PROGRAMMING FUNDAMENTALS

HOMEWORK- 5

Due Date: 25 December 2016, 23:55

You are required to write a Java program for simulating estate agent and draw UML diagram for this application.

Firstly, you should read "housing.txt" and determine necessary attributes and their data types accordingly.

Your application should present the data given in the file on the table with SWING. You should have following properties in your application:

- **Add house**: For this option, the estate agent should be able to add a new house by entering its necessary information.

- **Remove house**: For this option, the estate agent should be able to remove the house by entering its id.

- **Search house:** For this option, the estate agent should be able to search a house by different categories:

    - ***By price***: Enter minimum and maximum price.

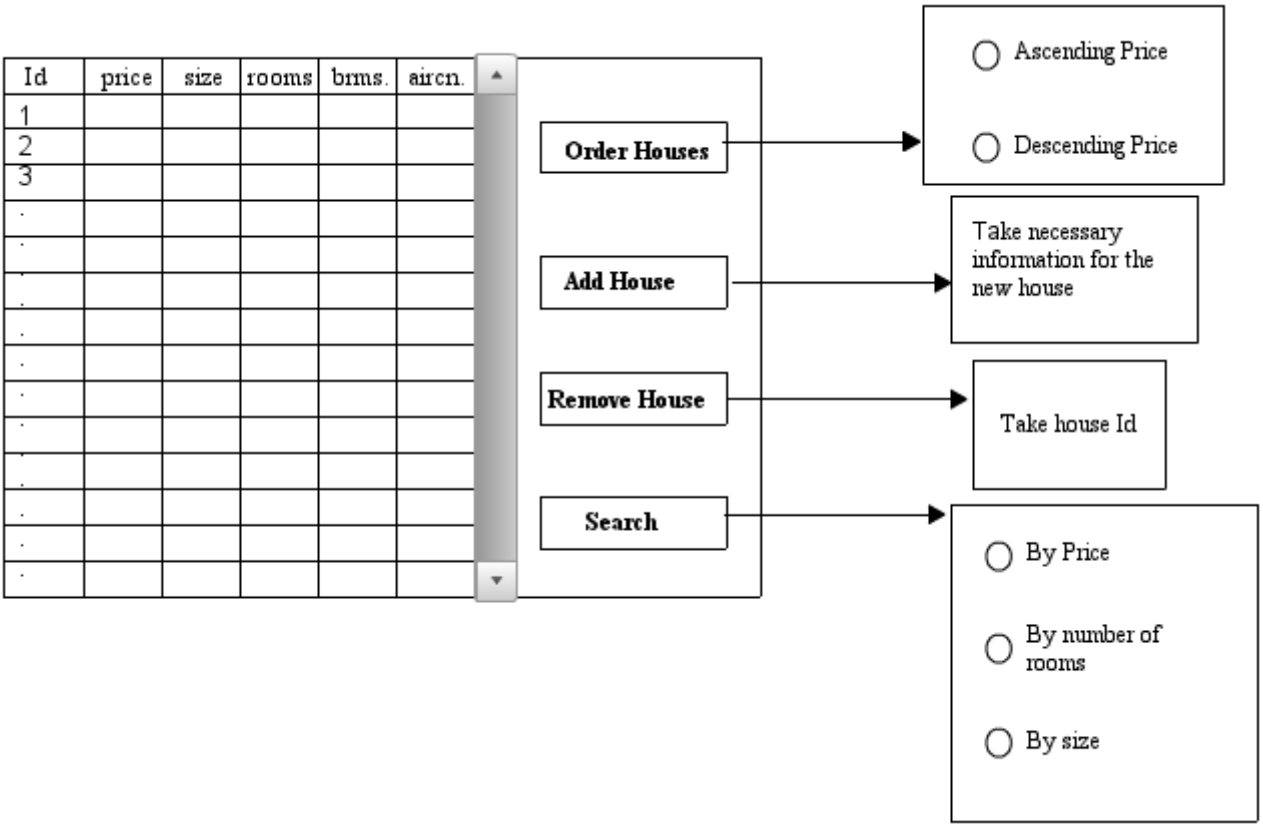
    - ***By number of rooms***: Enter number of rooms.

    - ***By size***: Enter minimum and maximum size.

- **Order houses**: For this option, the estate agent should be able to order houses according to their price in either ascending or descending order.

After all above operations, you should record information of the remaining houses to the file, named as "housing_updated.txt". The format of this file should be the same as the file that is read firstly.

Your application can be similar as follows:



IMPORTANT NOTES:

- You should show the output of the all options on the SWING not on the console.
- You should have at least three packages: domain, fileAccessLayer, and presentation.
- You should give an id to the newly added house automatically not taken from the user.

SUBMISSION RULES:

- You should create your Java project as **ID1_ID2_HW5** and export as **ID1_ID2_HW5.zip**
- You should upload your zip file **ID1_ID2_HW5.zip** to the CMS which should contain your Java project and UML diagram(**ID1_ID2_HW5_UML.(pdf, jpg, png**).
- One of the group members is sufficient to upload homework to the CMS.
- You should add an author comment to the top of each class that you implement.