

Role and Privilege Mapping

Any system will have many privileges and many roles .A Role is defined as the specific position of the person in the System and a privilege is the various functionalities he has been allocated to in the System. Write a program to implement the concept of Many relationship using the privilege and role mapping in a System where many roles can have many privileges’.

Pre-load the roles and privileges of a system and assign a role to a particular privilege (same role can be assigned to a different privilege and same privilege can be assigned to different roles) getting it as input from the user. User two types of search types: Search based on Role and search based on privilege. Your block of code should finally display the Privileges for a specific Role.

Problem Specifications :

[Note: Strictly adhere to the object oriented specifications given as a part of the problem statement.Use the same class names, attribute names and method names.]

Create a class named under **Role** with the following private member variable/attributes

- Integer Id
- String name
- String description

1. Include appropriate getters and setters.
2. Include 3 argument constructor with argument order **id,name,description**.

Create a class named **Privilege** with the following private member variables/attributes

Problem specifications:

- Integer Id
- String name

1. Include appropriate getters and setters.
2. Include a default constructor and 2 argument constructor with argument order **id,name**.

Create a class named **Privilege role** with the following private member variables/attributes

Problem specifications:

- Role role
- **Privilege Privilege**

1. Include appropriate getters and setters.
2. Include a default constructor and 2 argument constructor with argument order **role, Privilege**.

Create a PrivilegeRoleBO class, which includes following method.

	d Name	d Description
	splayRoleDetailsByPrivilage (PrivilageRole[]privilageRole,String privilage)	method, search and display the role name depends upon privilege name.
	splayRole(Role[]roles)	method, display the pre-loaded roles.
	splayPrivilage(Privilage[]privilage)	method, display the pre-loaded privileges.
	splayPrivilage DetailsByRole (PrivilageRole[]privilageRole,String role)	method, search and display the privilege name depends upon role name.

Use `System.out.format("%-15s%s/n","Id","Name")` to format the string.

Create a **Main** class to test the above 4 classes. In the main method, create an array of PrivilageRole instances. Invoke the various methods PrivilageRoleBO class and test them.

Note :

Role and previlage details are preloaded and given in the tempalate code.

Input and Output Foramt:

Refer sample input and output

[All text in bold corresponds to input and the rest corresponds to output.]

Sample Input and Output 1:

Role Details :

ID Name

1 Software Developer

2 Manager

3 Tester

4 General Manager

Privilege Details :

ID Name

- 1 Admin
- 2 DecisionMaking
- 3 Ordering
- 4 Managing
- 5 Development

Enter the number of previlages to assign the role:

6

Enter the role id and previlage id 1:

1,2

Enter the role id and previlage id 2:

1,1

Enter the role id and previlage id 3:

1,4

Enter the role id and previlage id 4:

2,5

Enter the role id and previlage id 5:

3,4

Enter the role id and previlage id 6:

3,1

1. Search by role
2. Search by previlage
3. Exit.

Enter the choice:

1

Enter the role to search:

Software Developer

Privilage name :

Decision making

Admin

Managing

1. Search by role
2. Search by previlage
3. Exit.

Enter the choice:

1

Enter the role to search:

General Manager

There is no previlage for that role

1. Search by role
2. Search by previlage
3. Exit.

Enter the choice:

2

Enter the previlage to search:

Admin

Role name:

Software Developer

Tester

1. Search by role
2. Search by previlage
3. Exit.

Enter the choice:

2

Enter the previlage to search:

Ordering

There is no role for that privilage

1. Search by role
2. Search by previlage
3. Exit.

Enter the choice:

3