Guild

Preparation

Download the skeleton provided in Judge. **Do not** change the **packages**!

Pay attention to name the package guild, all the classes, their fields and methods the same way they are presented in the following document. It is also important to keep the project structure as described.

Problem description

Your task is to create a repository which stores players by creating the classes described below.

Player

First, write a Java class **Player** with the following fields:

- **name: String**
- **clazz: String**
- **rank: String – "Trial" by default**
- **description: String – "n/a" by default**

The class **constructor** should receive **name and clazz**. You need to create the appropriate **getters and setters**. Override the **`toString()`** method in the following format:

```
"Player {name}: {clazz}
Rank: {rank}
Description: {description}"
```

Guild

Next, write a Java class **Guild** that has a **roster** (a collection which stores **Player** entities). All entities inside the repository have the **same fields**. Also, the **Guild** class should have those **fields**:

- **name: String**
- **capacity: int**

The class **constructor** should receive **name** and **capacity**, also it should initialize the **roster** with a new instance of the collection. Implement the following features:

- Method **`addPlayer(Player player)`** - **adds** an **entity** to the roster **if there is room** for it
- Method **`removePlayer(String name)`** - removes a player by **given name,** if such **exists**, and **returns boolean**
- Method **`promotePlayer(String name)`** - **promote** (**set his rank to "Member"**) the **first player** with the **given name.** If the player is **already** a "Member", **do nothing.**
- Method **`demotePlayer(String name)`- demote (set his rank to "Trial")** the first player with the **given** name. If the player is **already** a "Trial", **do nothing.**
- Method **`kickPlayersByClass(String clazz)`** - removes all the players by the given class and returns **all removed players** from that **class** **as an array**
- Method **`count()`** - **returns** the **number** of players

- Method **report()** - **returns** a **String** in the following **format:**
    - **"Players in the guild: {guildName}:**
      {Player₁}
      {Player₂}
      (…)"

Constraints

- The **names** of the players will be **always unique**.
- You will always have a player added before receiving methods manipulating the Guild's players.

Examples

This is an example how the **Guild** class is **intended to be used**.

Sample code usage

```
package guild;

public class Main {
    public static void main(String[] args) {
        //Initialize the repository (guild)
        Guild guild = new Guild("Weekend Raiders", 20);
        //Initialize entity
        Player player = new Player("Mark", "Rogue");
        //Print player
        System.out.println(player);
        //Player Mark: Rogue
        //Rank: Trial
        //Description: n/a

        //Add player
        guild.addPlayer(player);
        System.out.println(guild.count()); //1
        System.out.println(guild.removePlayer("Gosho")); //false

        Player firstPlayer = new Player("Pep", "Warrior");
        Player secondPlayer = new Player("Lizzy", "Priest");
        Player thirdPlayer = new Player("Mike", "Rogue");
        Player fourthPlayer = new Player("Marlin", "Mage");

        //Add description to player
        secondPlayer.setDescription("Best healer EU");

        //Add players
        guild.addPlayer(firstPlayer);
        guild.addPlayer(secondPlayer);
        guild.addPlayer(thirdPlayer);
        guild.addPlayer(fourthPlayer);

        //Promote player
        guild.promotePlayer("Lizzy");

        //Remove Player
        System.out.println(guild.removePlayer("Pep")); //true

        Player[] kickedPlayers = guild.kickPlayersByClass("Rogue");
        for (Player kickedPlayer : kickedPlayers) {
            System.out.print(kickedPlayer.getName() + " ");
        }
        //Mark Mike
```

```
        System.out.println(guild.report());
        //Players in the guild: Weekend Raiders:
        //Player Lizzy: Priest
        //Rank: Member
        //Description: Best healer EU
        //Player Marlin: Mage
        //Rank: Trial
        //Description: n/a
    }
}
```