Rajalakshmi Engineering College

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 8_Q3

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

In a user registration system, there is a requirement to implement a username validation module. Users attempting to register must adhere to specific criteria for their usernames to be considered valid.

Your task is to develop a program that takes user input for a desired username and validates it according to the following rules:

The username must not contain any spaces.The username must be at least 5 characters long.

Implement a custom exception, InvalidUsernameException, to handle cases where the entered username does not meet the specified criteria.

Input Format

The input consists of a string S, representing the desired username.

Output Format

If the username is valid, print "Username is valid: [S]".

If the username is invalid:

1. If the username is short, print "Invalid Username: Username must be at least 5 characters long"
2. If the username contains spaces, print "Invalid Username: Username cannot contain spaces"

Refer to the sample output for formatting specifications.

Sample Test Case

Input: John
Output: Invalid Username: Username must be at least 5 characters long

Answer

```java
import java.util.Scanner;
class InvalidUsernameException extends Exception{
    public InvalidUsernameException(String s){
        super(s);
    }
}
class Main{
    public static void name(String s) throws InvalidUsernameException{
        int l=s.length();
        if(l<5){
            throw new InvalidUsernameException("Username must be at least 5 characters long");
        }
        else{
        for(int i=0;i<l;i++){
            if(s.charAt(i)==' '){
                throw new InvalidUsernameException("Username cannot contain spaces");
            }
        }
    }
```

```
        }
        System.out.print("Username is valid: "+s);
    }
    public static void main(String[] args){
        try{
            Scanner sc=new Scanner(System.in);
            String s=sc.nextLine();
            name(s);
        }
        catch(InvalidUsernameException e){
            System.out.print("Invalid Username: "+e.getMessage());
        }
    }
}
```

Status : Correct   **Marks : 10/10**