

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

```
// You are using Java
import java.util.*;

class InvalidUsernameException extends Exception{
    InvalidUsernameException(String m){
        super(m);
    }
}

class Main{

    public static void valid(String s) throws InvalidUsernameException{
        boolean c=false;
        int n=s.length();
        if(n>=5){
            for(int i=0;i<n;i++){
                if(s.charAt(i)==' '){
                    c=true;
                    break;
                }
            }
        }
        if(c)
            throw new InvalidUsernameException("Invalid Username: Username must be at least 5 characters long");
    }
}
```

```
        }
    else{
        throw new InvalidUsernameException("Invalid username:Username must
be atleast 5 characters long");
    }
    if(c){
        throw new InvalidUsernameException("Invalid username:Username
cannot contain spaces");
    }
    else{
        System.out.println("Username is valid: "+s);
    }
}
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
    try{
        String name=sc.nextLine();
        valid(name);
    }
    catch(Exception e){
        System.out.println(e.getMessage());
    }
}
```

Status : Correct

Marks : 10/10