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

class InvalidUsernameException extends Exception {
    public InvalidUsernameException(String msg) {
        super(msg);
    }
}

class UsernameValidator {
    void checkUsername(String username) {
        try {
            if (username.length() < 5) {
                throw new InvalidUsernameException("Invalid Username: Username
must be at least 5 characters long");
            } else if (username.contains(" ")) {
                throw new InvalidUsernameException("Invalid Username: Username
cannot contain spaces");
            } else {
                System.out.println("Username is valid: " + username);
```

```java
        }
    } catch (Exception e) {
        System.out.println(e.getMessage());
    }
  }
}

class main {
    public static void main(String args[]) {
        Scanner s = new Scanner(System.in);
        String username = s.nextLine();
        UsernameValidator u1 = new UsernameValidator();
        u1.checkUsername(username);
    }
}
```

Status : Correct   *Marks : 10/10*