Rajalakshmi Engineering College

Name: Lathika N
Email: 241801135@rajalakshmi.edu.in
Roll no: 241801135
Phone: 7349649372
Branch: REC
Department: AI & DS - Section 1
Batch: 2028
Degree: B.E - AI & DS

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 message) {
      super(message);
  }
}

class Main {
   public static void validateUsername(String username) throws
InvalidUsernameException {
      if (username.contains(" ")) {
        throw new InvalidUsernameException("Username cannot contain
spaces");
      } else if (username.length() < 5) {
        throw new InvalidUsernameException("Username must be at least 5
characters long");
      }
```

```java
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String username = sc.nextLine().trim();
        sc.close();

        try {
            validateUsername(username);
            System.out.println("Username is valid: " + username);
        } catch (InvalidUsernameException e) {
            System.out.println("Invalid Username: " + e.getMessage());
        }
    }
}
```

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