Rajalakshmi Engineering College

Name: HARI PRASANNA S
Email: 241501064@rajalakshmi.edu.in
Roll no: 241501064
Phone: 9042038178
Branch: REC
Department: AI & ML - Section 1
Batch: 2028
Degree: B.E - AI & ML

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.*;
class InvalidUsernameException extends Exception{
    public InvalidUsernameException(String s){
        super(s);
    }
}
public class Main{
    public static void validusername(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");
        }
    }

    public static void main(String args[]){
```

```java
    Scanner sc=new Scanner(System.in);
    String username=sc.nextLine();
    try{
       validusername(username);
       System.out.println("Username is valid: "+username);
    }
    catch(InvalidUsernameException e){
       System.out.println("Invalid Username: "+e.getMessage());
    }
}}
```

Status : Correct   *Marks : 10/10*