

Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - CSE

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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

```
import java.util.Scanner;
class InvalidUsernameException extends Exception{
    InvalidUsernameException(String message){
        super(message);
    }
}

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

    public static void main(String[] args){
        Scanner scanner=new Scanner(System.in);
```

```
String username=scanner.nextLine();
Main m=new Main();

try{
    m.invalid(username);
    System.out.println("Username is valid: "+username);
}catch(InvalidUsernameException e){
    System.out.println(e.getMessage());
}finally{
    scanner.close();
}
}
```

Status : Correct

Marks : 10/10