

# Rajalakshmi Engineering College

Name: Tejendra Chapai

Email: 240701558@rajalakshmi.edu.in

Roll no:

Phone: 8368278358

Branch: REC

Department: CSE - Section 2

Batch: 2028

Degree: B.E - CSE

Scan to verify results



## 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

{

    public InvalidUsernameException(String message)

    {

        super(message);

    }

}

class UsernameValidator
```

```
{
```

```
    public void validateUsername(String username) throws  
    InvalidUsernameException
```

```
{
```

```
        if (username.contains(" "))
```

```
{
```

```
            throw new InvalidUsernameException("Invalid Username: Username  
            cannot contain spaces");
```

```
    } else if (username.length() < 5)
```

```
{
```

```
            throw new InvalidUsernameException("Invalid Username: Username must  
            be at least 5 characters long");
```

```
    } else
```

```
{
```

```
        System.out.println("Username is valid: " + username);
```

```
}
```

```
}
```

```
}
```

```
public class Main
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        String username = sc.nextLine();
        UsernameValidator validator = new UsernameValidator();
        try
        {
            validator.validateUsername(username);
        } catch (InvalidUsernameException e)
        {
            System.out.println(e.getMessage());
        }
    }
}
```

**Status : Correct**

**Marks : 10/10**