

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