```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 */

package com.mycompany.chatapp;

import java.util.Scanner;

/**
 *
 * @author RC_Student_lab
 */
public class ChatAppLogin {

    // Method to validate the username
    public static boolean isUsernameValid(String username) {
        return username.contains("_") &&
            username.length() <= 5;
    }

    // Method to validate the password
    public static boolean isPasswordValid(String password) {
        return password.length() >= 8 &&
            password.matches(".*[A-Z].*") &&
            password.matches(".*[0-9].*") &&
            password.matches(".*[^a-zA-Z0-9].*");
    }
```

```java
    // Method to validate the phone number
    public static boolean isPhoneNumberValid(String phoneNumber) {
        return phoneNumber.matches("\\+27\\d{9}");
    }


    // Method to validate login
    public static boolean login(String inputUsername, String inputPassword, String
registeredUsername, String registeredPassword) {
        return inputUsername.equals(registeredUsername) &&
inputPassword.equals(registeredPassword);
    }


    // Main method for registration and login
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);


        // --- Variable Declarations ---
        String registeredUsername = "";
        String registeredPassword = "";
        String registeredPhoneNumber = "";
        String registeredFirstName = "";
        String registeredLastName = "";


        int attempts = 0;
        int maxAttempts = 3;
```

```java
boolean isLoggedIn = false;

System.out.println("***   REGISTRATION PAGE   ***");

//Register the user
System.out.print("Enter username: ");
registeredUsername = scanner.nextLine();

System.out.print("Enter password: ");
registeredPassword = scanner.nextLine();

System.out.print("Enter South African phone number: ");
registeredPhoneNumber = scanner.nextLine();

System.out.print("Enter your first name: ");
registeredFirstName = scanner.nextLine();

System.out.print("Enter your last name: ");
registeredLastName = scanner.nextLine();

// --- Validation ---
boolean isUsernameValid = isUsernameValid(registeredUsername);
boolean isPasswordValid = isPasswordValid(registeredPassword);
boolean isPhoneValid = isPhoneNumberValid(registeredPhoneNumber);

if (isUsernameValid) {
```

```java
            System.out.println("Username successfully captured.");

        } else {

            System.out.println("Username is not correctly formatted. Please ensure that it
contains an underscore and is no more than five characters.");

        }


        if (isPasswordValid) {

            System.out.println("Password successfully captured.");

        } else {

            System.out.println("Password is not correctly formatted; it must be at least 8
characters, contain a capital letter, a number, and a special character.");

        }


        if (isPhoneValid) {

            System.out.println("Phone number successfully captured.");

        } else {

            System.out.println("Cell phone number incorrectly formatted or missing
international code.");

        }


        if (isUsernameValid && isPasswordValid && isPhoneValid) {

            System.out.println("\nRegistration successful!");

            System.out.println("Please log in to continue.\n");

        } else {

            System.out.println("\nRegistration failed due to invalid inputs. Please restart the
application.");

            scanner.close();
```

```java
        return;

    }


    // Login

    while (attempts < maxAttempts && !isLoggedIn) {

        System.out.print("Enter username: ");

        String inputUsername = scanner.nextLine();


        System.out.print("Enter password: ");

        String inputPassword = scanner.nextLine();


        if (login(inputUsername, inputPassword, registeredUsername, registeredPassword))
{

            System.out.println("Welcome " + registeredFirstName + " " + registeredLastName +
", it is great to see you again!");

            isLoggedIn = true;

        } else {

            attempts++;

            int remaining = maxAttempts - attempts;

            if (remaining > 0) {

                System.out.println("Incorrect username or password. Attempts remaining: " +
remaining);

            }

        }

    }


    if (!isLoggedIn) {
```

```java
            System.out.println("Too many failed login attempts. Access denied.");

        }


        scanner.close();

    }

}
```

References:

RC_Student_lab. (2025). ChatAppLogin (Version 1.0) [Computer software]. GitHub.

ChatGPT