UNIT TESTS

package st10491568;

import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.Test;

import static org.junit.jupiter.api.Assertions.\*;

public class QuickChatAppTest {

@BeforeEach

public void setup() {

QuickChatApp.registeredUsername = "user\_";

QuickChatApp.registeredPassword = "Pass123!";

QuickChatApp.registeredFirstName = "Test";

QuickChatApp.registeredLastName = "User";

}

@Test

public void testCheckUsername\_Valid() {

assertTrue(QuickChatApp.checkUsername("ab\_c"));

}

@Test

public void testCheckUsername\_InvalidLength() {

assertFalse(QuickChatApp.checkUsername("abcdef"));

}

@Test

public void testCheckUsername\_MissingUnderscore() {

assertFalse(QuickChatApp.checkUsername("abcde"));

}

@Test

public void testCheckPasswordComplexity\_Valid() {

assertTrue(QuickChatApp.checkPasswordComplexity("Strong1!A"));

}

@Test

public void testCheckPasswordComplexity\_TooShort() {

assertFalse(QuickChatApp.checkPasswordComplexity("P1!a"));

}

@Test

public void testCheckPasswordComplexity\_MissingUppercase() {

assertFalse(QuickChatApp.checkPasswordComplexity("pass123!"));

}

@Test

public void testCheckPasswordComplexity\_MissingDigit() {

assertFalse(QuickChatApp.checkPasswordComplexity("Password!"));

}

@Test

public void testCheckPasswordComplexity\_MissingSpecialChar() {

assertFalse(QuickChatApp.checkPasswordComplexity("Password1"));

}

@Test

public void testCheckCellPhoneNumber\_Valid() {

assertTrue(QuickChatApp.checkCellPhoneNumber("+27831234567"));

}

@Test

public void testCheckCellPhoneNumber\_InvalidLength() {

assertFalse(QuickChatApp.checkCellPhoneNumber("+2783123456789"));

}

@Test

public void testCheckCellPhoneNumber\_MissingCountryCode() {

assertFalse(QuickChatApp.checkCellPhoneNumber("0831234567"));

}

@Test

public void testLoginUser\_Successful() {

assertTrue(QuickChatApp.loginUser("user\_", "Pass123!"));

}

@Test

public void testLoginUser\_Failure() {

assertFalse(QuickChatApp.loginUser("wrong", "pass"));

}

@Test

public void testReturnLoginStatus\_Success() {

String status = QuickChatApp.returnLoginStatus(true);

assertTrue(status.contains("Welcome Test, User"));

}

@Test

public void testReturnLoginStatus\_Failure() {

String status = QuickChatApp.returnLoginStatus(false);

assertEquals("Username or password incorrect, please try again.", status);

}

}