**Source code for UserAuthentication:**

1. **Authentication:**

package com.simplilearn.demo;

import java.util.regex.\*;

public class Authentication {

public boolean authenticate(String Email, String password){

String email = "Vyshi@1432";

String pass = "vyshi";

String emailPatern = "^(.+)@(.+)$";

Pattern p = Pattern.compile(emailPatern);

Matcher m = p.matcher(Email);

if(m.matches())

{

if(email.equals(Email) && pass.equals(password))

return true;

else

return false;

}

return false;

}

}

1. **AuthenticationTest:**

package com.simplilearn.demo;

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

import static org.junit.jupiter.api.DynamicTest.dynamicTest;

import java.util.Arrays;

import java.util.Collection;

import org.junit.jupiter.api.AfterEach;

import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.DynamicTest;

import org.junit.jupiter.api.TestFactory;

class AuthenticationTest {

private Authentication a;

@BeforeEach

public void iniatilse()

{

a = new Authentication();

}

@AfterEach

public void destroy()

{

a =null;

}

@TestFactory

Collection<DynamicTest> authenticationTestDemo(){

return Arrays.asList(

dynamicTest("Test 1", ()->assertEquals(true, a.authenticate("Vyshi@1432", "vyshi"))),

dynamicTest("Test 2", ()->assertNotEquals(true, a.authenticate("vyshi", "Vyshi"))),

dynamicTest("Test 3", ()->assertTrue(a.authenticate("Vyshi@1432", "vyshi"))),

dynamicTest("Test 4", ()->assertNotSame(false, a.authenticate("Vyshi@1432", "vyshi"))),

dynamicTest("Test 5", ()->assertEquals(false, a.authenticate("Vyshi@1432", "Vyshi")))

);

}

}

**3.pom.xml:**

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.simplilearn.demo</groupId>

<artifactId>UserAuthentication1</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>jar</packaging>

<name>UserAuthentication1</name>

<url>http://maven.apache.org</url>

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

</properties>

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>3.8.1</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-api</artifactId>

<version>5.9.0</version>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.10.1</version>

<configuration>

<source>1.8</source>

<target>1.8</target>

</configuration>

</plugin>

</plugins>

</build>

</project>