**Handling User Authentication-SOURCE CODE:**

**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.userAuthentication</groupId>

<artifactId>UserAuthentication</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>jar</packaging>

<name>UserAuthentication</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>

<!--Junit Jupiter API-->

<dependency>

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

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

<version>5.9.0</version>

<scope>test</scope>

</dependency>

</dependencies>

<!--maven compiler plugin-->

<!--link: https://maven.apache.org/plugins/maven-compiler-plugin/examples/set-compiler-source-and-target.html-->

<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>

**AuthenticationUser.java:**

**package** com.userAuthentication;

**public** **class** AuthenticationUser {

**public** String username()

{

String email = "bheem@gmail.com";

**return** email;

}

**public** String paswd()

{

String password = "sak@2000";

**return** password;

}

}

**AuthTest.java**

package com.userAuthentication;

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

import static org.junit.jupiter.api.Assertions.assertEquals;

import static org.junit.jupiter.api.Assertions.assertNotNull;

import java.util.regex.Matcher;

import java.util.regex.Pattern;

import org.junit.jupiter.api.AfterEach;

import org.junit.jupiter.api.BeforeEach;

import org.junit.jupiter.api.Test;

import com.userAuthentication.AuthenticationUser;

class AuthTest {

private AuthenticationUser authU;

@BeforeEach

public void setup() {

authU= new AuthenticationUser();

System.out.println("Authentication User main class inititated");

}

@AfterEach

public void tearDown() {

authU=null;

System.out.println("Class Closed");

}

@Test

public void checkUser() {

assertEquals("namratakudachi@gmail.com", authU.username());

}

@Test

public void checkUserNull()

{

assertNotNull(authU.username());

}

@Test

public void checkPass() {

assertEquals("Namrata@12345", authU.paswd());

}

@Test

public void checkPassNull()

{

assertNotNull(authU.paswd());

}

@Test

public void checkUserRegx()

{

String email = authU.username();

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

Pattern pattern = Pattern.compile(regex);

Matcher matcher = pattern.matcher(email);

assertEquals(true, matcher.matches());

}

}