**Project objective**

Set up a standalone project to do unit testing of the user authentication class which is used in the main web application. The objective is to create a JUnit class that will test all aspects of the authentication class.

**Problem statement**

As a part of developing an ecommerce web application, a test-suite is being created to do unit testing of all backend components in the web application. This project will test the user authentication class. This project will be a standalone Java application, since Junit does not directly test servlets or web pages. We are only testing the classes that have the business logic.

**Source Code**

Authentication

**package** com.org;

**public** **class** Authentication {

**boolean** authenticate(String uname, String pwd)

{

**if**(uname.equals("admin") && pwd.equals("admin123"))

**return** **true**;

**else**

**return** **false**;

}

}

UserAuthentication

package com.org;

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

import org.junit.jupiter.api.AfterAll;

import org.junit.jupiter.api.AfterEach;

import org.junit.jupiter.api.BeforeAll;

import org.junit.jupiter.api.Disabled;

import org.junit.jupiter.api.Test;

import org.junit.platform.runner.JUnitPlatform;

import org.junit.runner.RunWith;

@RunWith(JUnitPlatform.class)

class UserAuthetication {

Authentication a=new Authentication();

@BeforeAll

static void setUp()

{

System.out.println("Set Up");

}

@Test

void test1() {

assertEquals(true, a.authenticate("admin", "admin123"));

System.out.println("Equal");

}

@Test

void test2() {

assertEquals(false, a.authenticate("abc", "abc"));

System.out.println("Not equal");

}

@AfterEach

void tearDownauth()

{

a=null;

System.out.println("Object deleted");

}

@AfterAll

static void tearDownAll()

{

System.out.println("Closed");

}

}