1.Problem statement:

Description	Test Steps	Validation
Modify a Notification	1. Navigate onto admin panel -> Marketing -> Push Notification 2. Modify the Notification Name and Save 3. Populate the other mandatory fields, Attach file and Save	1. Validate the presence of modified Push Notification header. 2. Validate the error message. 3.1. Validate the success message. 3.2. Validate the presence of modified record in the admin panel table. 3.3 Validate the presence of modified record in the DB table

Note: Since when we click on edit from action drop down of any pus notification from table it is going to different page I have added a new Notification to check this scenario.

2. code with comments:

BaseTest.java:

package com.ibm.test;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import java.lang.*;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.HashMap;

import java.util.Properties;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

```java
import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.WebDriverWait;

import org.testng.Assert;

import org.testng.Reporter;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Test;


import com.ibm.pages.UserPage;

import com.ibm.utilities.DBUtil;

import com.ibm.utilities.ExcelReader;

import com.ibm.utilities.ExcelUtil;

import com.ibm.utilities.PropertiesFileHandler;


public class BaseTest extends ExcelReader{
        WebDriverWait wait;
        WebDriver driver;

   @Test()

   public void testcase12() throws InterruptedException, IOException, SQLException{

        FileInputStream file = new FileInputStream("./TestData/data.properties");
```

```java
Properties prop = new Properties();

prop.load(file);

String url = prop.getProperty("url");

String username = prop.getProperty("user");

String password = prop.getProperty("password");

        System.setProperty("webdriver.chrome.driver", "./drivers/chromedriver.exe");

        driver = new ChromeDriver();

        wait = new WebDriverWait(driver, 60);



        driver.manage().window().maximize();

        driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);

        Login login = new Login(driver, wait);

        driver.get(url);


        login.enterEmailAddress(username);

        login.enterPassword(password);

        login.clickOnLogin();


        WebElement marketingEle=driver.findElement(By.linkText("Marketing"));

        marketingEle.click();


        WebElement pushNotificationEle=driver.findElement(By.linkText("Push Notification"));

        pushNotificationEle.click();


        Thread.sleep(3000);


        WebElement newNotificationEle=driver.findElement(By.cssSelector("i.fa.fa-plus"));

        newNotificationEle.click();
```

```java
WebElement nameEle=driver.findElement(By.name("name"));

nameEle.sendKeys("Test_Syeda_TC12");


WebElement messageEle=driver.findElement(By.name("message"));

messageEle.sendKeys("Message for the newly added notification");


WebElement imageEle=driver.findElement(By.xpath("//*[@id=\"page-
wrapper\"]/div/form/div[2]/div/div/div[2]/div[3]/span"));

imageEle.click();


String winHandleBefore = driver.getWindowHandle();


WebElement frame=driver.switchTo().activeElement();


frame.sendKeys("C:\\Users\\Public\\Pictures\\Sample Pictures\\Chrysanthemum.jpg");

//codeEle.sendKeys("C:/Users/Public/Pictures/Sample Pictures/Chrysanthemum.jpg");

Thread.sleep(3000);

driver.switchTo().window(winHandleBefore);


WebElement saveEle=driver.findElement(By.cssSelector("i.fa.fa-save"));

saveEle.click();

Thread.sleep(2000);


//Assertion in the admin page

String successMsg=login.AddWeightClassSuccMsg().trim();

Assert.assertEquals(successMsg,"Success: You have successfully sent push notification
to your app!");
```

```java
                System.out.println("Push Notification added success message in the admin page");


                Thread.sleep(2000);

                String exp="Test_Syeda_TC12";

                String act= DBUtil.singleDataQuery("SELECT name from as_pushnotification where
name=\"Test_Syeda_TC12\"");


                //validation of database

                Assert.assertEquals(act,exp);

                Reporter.log("Assertion on phone number change present in database");

                WebElement logOutEle=driver.findElement(By.cssSelector("i.fa.fa-sign-out"));

                logOutEle.click();



    }
}
```

Login.java:

```java
package com.ibm.test;


import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import java.util.HashMap;

import java.util.Properties;

import java.util.concurrent.TimeUnit;


import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;
```

```java
import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

import org.openqa.selenium.support.ui.WebDriverWait;

import org.testng.Assert;

import org.testng.annotations.BeforeSuite;

import org.testng.annotations.Test;


import com.ibm.pages.AdminPage;

import com.ibm.utilities.PropertiesFileHandler;


public class Login extends BaseTest{


        @FindBy(name="email")
        WebElement emailEle;


        @FindBy(name="pword")
        WebElement passEle;


        @FindBy(xpath="/html/body/div/div/div/div[2]/form/button")
        WebElement loginEle;


        @FindBy(xpath="//*[@class='alert alert-success alert-dismissible']")
        WebElement addWeightSuccMsg;


        WebDriverWait wait;
        WebDriver driver;
```

```java
        public Login(WebDriver driver,WebDriverWait wait) {

                PageFactory.initElements(driver, this);

                this.driver=driver;

                this.wait=wait;

        }


        public String AddWeightClassSuccMsg()

        {

        String succMsg=addWeightSuccMsg.getText().trim().replace("×", "");

        //System.out.println(succMsg);

        return succMsg;

        }


        public void enterEmailAddress(String user)

        {

                emailEle.sendKeys(user);

        }

        public void enterPassword(String password)

        {

                passEle.sendKeys(password);

        }

        public void clickOnLogin()

        {

                loginEle.click();

        }


}
```

DBUtil.java:

package com.ibm.utilities;

```java
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.ArrayList;

import java.util.List;


public class DBUtil {

        public static String singleDataQuery(String query) throws SQLException {

                Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atozgroceries","
foodsonfinger_atoz","welcome@123");

                Statement s=c.createStatement();

                String text=null;

                //SELECT name from as_category where name="Fruits" - if data exists value else null.

                //SELECT tab_id,name FROM as_tabs ORDER BY tab_id DESC

                //SELECT * from as_coupons


                ResultSet rs=s.executeQuery(query);

                while(rs.next()) {

                        text=rs.getString(1);//validating name alone

                        //System.out.println("database check for added
element:"+rs.getString("name"));

                }

                return text;

                //Assert.assertEquals("Grains", rs.getString("name"));

        }

        public  static Object[] lineDataQuery(String query, int[] cols) throws SQLException {
```

```java
                Object[] data=new Object[cols.length];

                Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atozgroceries",

        "foodsonfinger_atoz",

        "welcome@123");


                Statement s=c.createStatement();

                //SELECT * from as_banner where name="Pavithra"

                ResultSet rs=s.executeQuery(query);

                int i=0;

                if(rs.next()){

                        for(int col:cols)

                        {

                        data[i]=rs.getObject(col);

                        i++;

                        }

                }

                return data;

        }


        public static int countQuery(String query) throws SQLException {

                int count=0;

                Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atozgroceries","
foodsonfinger_atoz","welcome@123");

                Statement s=c.createStatement();

                //select count(name) from as_coupons

                ResultSet rs=s.executeQuery(query);
```

```java
            while(rs.next()) {

                    count=rs.getInt(1);

            }

            return count;


            //Assert.assertEquals("Grains", rs.getString("name"));

        }
        /*
        public ArrayList<ArrayList<Object>> tableDataQuery(String query) throws SQLException{

            Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atozgroceries","
foodsonfinger_atoz","welcome@123");

            Statement s=c.createStatement();

            ArrayList<ArrayList<Object>> data=new ArrayList<ArrayList<Object>>();

            String[] queries=query.split(",");

            ResultSet rs=s.executeQuery(query);

            ArrayList<Object> temp = null;

            while(rs.next()) {

                    //data.add(rs.getString(1), rs.getString(2), rs.getString(3));

                    for(int i=0;i<queries.length;i++)

                    {

                    temp.add(rs.getObject(i));

                    }

                    data.add(temp);

                    temp.clear();

            }

            return data;

            //Assert.assertEquals("Grains", rs.getString("name"));

        }
```

```
*/

}
```

Data.properties:

```
url=https://atozgroceries.com/admin
user=demo@atozgroceries.com
password=456789
url1=https://atozgroceries.com
user1=7675058941
password1=456789
```

3. Explanation of the code: Added the notication related code in BaseTest.java and used the Login.java where login code of admin page is there. DBUTil.java contains DB validation related methods which are implemented in Basetest.java program to test

4. Result flow in detail: Added the notication related code in BaseTest.java and used the Login.java where login code of admin page is there. DBUTil.java contains DB validation related methods which are implemented in Basetest.java program to test

5. Output screenshot: