

**Test Objective:**

The objective is to automate the below testcase using selenium WebDriver and framework concepts.

**Testcase: Tc07**

**Process:** Modify the address and verify the same on user page

**Steps to Execute:**

Step1: Login to admin portal

Step2: Go to System and then Settings

Step3: Change the address

Step4: Go to user page

Step5: Verify the same on user page

Note: Search for the modified email-address

**Expected Results:**

Validate the presence of modified phone number under admin portal

Verify the address on the user page.

Note: Address presents on bottom of the user page.

**Source code:**

**File1:** EditAddress.java

```
package com.ibm.groceries;

import java.io.IOException;
import org.openqa.selenium.By;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.testng.Assert;
import org.testng.Reporter;
import org.testng.annotations.Test;
import com.ibm.groceriespages.EditProductsPage;
import com.ibm.groceriespages.EditSettingPage;
import com.ibm.groceriespages.GroceriesUserPage;
import com.ibm.groceriespages.PageDashboard;
import com.ibm.groceriespages.PageLogin;
import com.ibm.groceriespages.PageProducts;
import com.ibm.initialization.WebDriverLaunch;

public class EditAddress extends WebDriverLaunch {

    @Test(priority = 1, testName = "EditAddress", groups = "low")
    public void editAddress() throws IOException, InterruptedException {
```

```

String url = data.get("url");
String userName = data.get("username");
String password = data.get("password");
String userPage = data.get("userPageUrl");
String newAddress = data.get("addressNew");
String newEmail = data.get("emailNew");
String newPhone = data.get("phoneNew");
String expMessage = data.get("expectedEditSettingMessage");
String addressFoundMessage = data.get("addressFoundMsg");
String emailFoundMessage = data.get("emailFoundMsg");
String phoneFoundMessage = data.get("phoneFoundMsg");

// Launching the web site for atozgroceries
driver.get(url);

PageLogin login = new PageLogin(driver, wait);
// To enter email address and password and click on login button
login.enterEmailAddress(userName);
login.enterPassword(password);
login.clickOnLogin();

Assert.assertTrue(driver.findElement(By.partialLinkText("Logout")).isDisplayed
());

PageDashboard dashboard = new PageDashboard(driver, wait);

// calling method to click on System link
dashboard.clickOnSystem();

// calling method to click on Settings link
dashboard.clickOnSettings();

// TO wait for the text area box address to be displayed.
wait.until(ExpectedConditions.presenceOfElementLocated(By.id("address")));

EditSettingPage editPage = new EditSettingPage(driver, wait);

// calling method to edit address, email and phone
String pageSource = editPage.editSettingInfo(newAddress, newEmail,
newPhone);
Thread.sleep(10000);
try {
    // Verifying for message whether the address, email, phone updated
    or not on admin page
    if (pageSource.contains(expMessage)) {
        System.out.println(expMessage);
        Reporter.Log(expMessage);

        // Assertion on expected message when settings updated
        Assert.assertTrue(pageSource.contains(expMessage));
        // Assertion on new email
        Assert.assertTrue(pageSource.contains(newEmail));
    }
}

```

```

        // Assertion new phone number
        Assert.assertTrue(pageSource.contains(newPhone));
    }
}

catch (Exception e) {
    Assert.fail();
}

finally {
    // To click on on Logout button
    driver.findElement(By.partialLinkText("Logout")).click();
}

// To launch groceries user page
driver.get(userPage);
GroceriesUserPage userpage = new GroceriesUserPage(driver, wait);
String userPageSource = userpage.verifyAddress();

// Verifying for whether the address,email,phone updated or not on user
page
try {
    if (userPageSource.contains(newAddress)) {
        Assert.assertTrue(userPageSource.contains(newAddress));
        System.out.println(addressFoundMessage);
    }
    if (userPageSource.contains(newEmail)) {
        Assert.assertTrue(userpage.verifyEmail(newEmail));
        System.out.println(emailFoundMessage);
    }
    if (userPageSource.contains(newPhone)) {
        Assert.assertTrue(userpage.verifyPhone(newPhone));
        System.out.println(phoneFoundMessage);
    }
} catch (Exception e) {
    Assert.fail();
}

}
}

```

#### File2:PageLogin.java

```

package com.ibm.groceriespages;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;

```

```

public class PageLogin {

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

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

    //@FindBy(className="btn btn-labeled btn-info m-b-5")
    @FindBy(xpath="//button[@class='btn btn-labeled btn-info m-b-5']")
    WebElement loginEle;

    WebDriverWait wait;
    WebDriver driver;

    public PageLogin(WebDriver driver,WebDriverWait wait)
    {
        PageFactory.initElements(driver, this);
        this.driver=driver;
        this.wait=wait;
    }

    //To enter email address
    public void enterEmailAddress(String userName)
    {
        emailEle.sendKeys(userName);
    }

    //To enter apssword
    public void enterPassword(String password)
    {
        passEle.sendKeys(password);
    }

    //To click on Login button
    public void clickOnLogin()
    {
        loginEle.click();
    }

}

```

**File3:** PageDashboard.java

```

package com.ibm.groceriespages;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;

```

```
import org.openqa.selenium.support.FindingBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
```

```
public class PageDashboard {
```

```
    //@FindBy(xpath="//a[@class='material-ripple']")
```

```
    @FindBy(xpath="//a[text()=' Catalog']")
```

```
    WebElement catalogEle;
```

```
    @FindBy(xpath="//a[text()=' Products']")
```

```
    WebElement productEle;
```

```
    By prodElt=By.xpath("//a[text()=' Products']");
```

```
    WebDriverWait wait;
```

```
    WebDriver driver;
```

```
    //Locating elements for Marketing link
```

```
    @FindBy(xpath="//a[text()=' Marketing']")
```

```
    WebElement marketEle;
```

```
    //Locating Pushnotification link
```

```
    @FindBy(xpath="//a[text()=' Push Notification']")
```

```
    WebElement notificatonEle;
```

```
    //Locating System link
```

```
    @FindBy(xpath="//a[text()=' System']")
```

WebElement systemEle;

//Locating Returns link

@FindBy(xpath="//a[text()=' Returns']")

//@FindBy(xpath("//a[contains(text(),'Returns')]"))

WebElement returnsEle;

//Locating Shipping link

@FindBy(xpath="//a[text()=' Shipping']")

WebElement shippingEle;

//Locating ShippingLocatons link

@FindBy(xpath="//a[text()=' Shipping Locations']")

WebElement locatoinEle;

@FindBy(xpath="//a[text()=' Return Actions']")

WebElement actionsEle;

@FindBy(xpath="//a[text()=' Settings']")

WebElement settingsEle;

public PageDashboard(WebDriver driver,WebDriverWait wait) {

    PageFactory.initElements(driver, this);

    this.driver=driver;

    this.wait=wait;

}

//To click on Catalog

public void clickOnCatalog()

```
{  
    catalogEle.click();  
    wait.until(ExpectedConditions.presenceOfElementLocated(prodElt));  
  
}
```

//To click on Products

```
public void clickOnProducts()  
{  
    productEle.click();  
  
}
```

//To click on Marketing link

```
public void clickOnMarketing()  
{  
  
    marketEle.click();  
  
}
```

//To click on Push Notificatoin link

```
public void clickOnPushNotification()  
{  
    notificatonEle.click();  
  
}
```

```
        //TO click on System link
public void clickOnsystem()
{
    systemEle.click();

}

//To click on Retuns link
public void clickOnReturns()
{
    driver.findElement(By.partialLinkText("Returns")).click();
    //returnsEle.click();
}

//To click on Return actoins link
public void clickOnRetrunActions()

{
    actionsEle.click();
}

public void clickOnShipping()
{
    driver.findElement(By.partialLinkText("Shipping")).click();
    //shippingEle.click();

}
```



```

public void clickOnShippingLocations()
{
    locatoinEle.click();

}

//To click on Settings link
public void clickOnSettings()
{
    settingsEle.click();
}

}

```

**File4:** EditSettingPage.java

```

package com.ibm.groceriespages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;

public class EditSettingPage {

    //To locate Address text area box
    @FindBy(xpath="//textarea[@id='address']")
    WebElement addressEle;

    //To locate email text box
    @FindBy(xpath="//input[@id='email']")
    WebElement emailEle;

    //To locate phonenumber text box
    @FindBy(xpath="//input[@id='phonenumber']")
    WebElement phoneEle;

    // To locate save button
    @FindBy(xpath = "//button[@title='Save']")
    WebElement saveEle;
}

```

```

WebDriverWait wait;
WebDriver driver;

public EditSettingPage(WebDriver driver, WebDriverWait wait) {
    PageFactory.initElements(driver, this);
    this.driver = driver;
    this.wait = wait;
}

public String editSettingInfo(String address, String email, String phone)
{
    //To edit the address
    addressEle.clear();
    addressEle.sendKeys(address);

    //To edit email
    emailEle.clear();
    emailEle.sendKeys(email);

    //To edit phone number
    phoneEle.clear();
    phoneEle.sendKeys(phone);

    //To click on Save button
    saveEle.click();
    return driver.getPageSource();
}

}

```

**File5:** GroceriesUserPage.java

```

package com.ibm.groceriespages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;

public class GroceriesUserPage {

```

```
@FindBy(xpath = "//input[@placeholder='Search for products...']")
```

```
WebElement searchEle;
```

```
@FindBy(xpath = "//div[@class='input-group']/descendant::input[1][2]")
```

```
WebElement searchEle2;
```

```
@FindBy(xpath = "//div[@id='searchproducts-div']/descendant::a[1]")
```

```
WebElement productNewLink;
```

```
// To locate email link on user page
```

```
@FindBy(xpath = "//div[@class='header-mid-right-content']/descendant::a[1][2]")
```

```
WebElement emailLink;
```

```
// To locate phone link on user page
```

```
@FindBy(xpath = "//div[@class='header-mid-right-content']/descendant::a[1][1]")
```

```
WebElement phoneLink;
```

```
WebDriverWait wait;
```

```
WebDriver driver;
```

```
public GroceriesUserPage(WebDriver driver, WebDriverWait wait) {
```

```
    PageFactory.initElements(driver, this);
```

```
    this.driver = driver;
```

```
    this.wait = wait;
```

```
}
```

```
public String searchProduct(String proudctName) throws InterruptedException {
```

```

        searchEle.sendKeys(proudctName);
        searchEle.click();

        // To enter product name in search text box of popup
        searchEle2.sendKeys(proudctName);
        Thread.sleep(10000);
        productNewLink.click();

        return driver.getPageSource();
    }

    // To verify the new address on user page
    public String verifyAddress() {
        return driver.getPageSource();
    }

    // To verify the new email link is on user page
    public boolean verifyEmail(String newemail) {

        if (emailLink.getText().contains(newemail))

            return true;
        else
            return false;
    }

    // To verify the new phone number is user page
    public boolean verifyPhone(String newphone) {

```

```
        if (phoneLink.getText().contains(newphone))

            return true;
        else
            return false;

    }

}
```

**File6:** WebDriverLaunch.java

```
package com.ibm.initialization;

import java.io.IOException;
import java.util.HashMap;
import java.util.concurrent.TimeUnit;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.ie.InternetExplorerDriver;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Optional;
import org.testng.annotations.Parameters;
import com.ibm.utilities.PropertiesFileHandler;
```

```

public class WebDriverLaunch {

    public WebDriver driver;

    public WebDriverWait wait;

    public PropertiesFileHandler propFileHandler;

    public HashMap<String, String> data;


    //Getting the keys from properties file
    //@BeforeSuite
    @BeforeSuite(groups= {"high", "low"})

        public void preSetForTest() throws IOException {
            String file = "./TestData/groceries.properties";
            propFileHandler = new PropertiesFileHandler();
            data = propFileHandler.getPropertiesAsMap(file);
        }


    //@BeforeTest

    @BeforeMethod(groups= {"high", "low"})
    @Parameters({"browser"})
    public void Initialization(@Optional("ff")String browser) {

        browserInitialization(browser);

        wait = new WebDriverWait(driver, 60);

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

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


    //@AfterMethod

```

```

//Closing driver

@AfterMethod(groups= {"high","low"})

public void closeBrowser() {

    driver.quit();

}


//Setting path for webdriver

public void browserInitialization(String browser)

{

    switch (browser.toLowerCase()) {

    case "ff":

    case "firefox":

        System.setProperty("webdriver.gecko.driver", "./drivers/geckodriver.exe");

        driver = new FirefoxDriver();

        break;

    case "ch":

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

        driver = new ChromeDriver();

        break;

    case "ie":

        System.setProperty("webdriver.ie.driver", "./drivers/IEDriverServer.exe");

        driver = new InternetExplorerDriver();

        break;

    default:

        System.out.println("No browser Available "+browser);

        break;

    }

}

}

```

**File7:** PropertiesFileHandler.java

```
package com.ibm.utilities;
```

```
import java.io.File;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.IOException;
```

```
import java.util.HashMap;
```

```
import java.util.Properties;
```

```
import java.util.Set;
```

```
public class PropertiesFileHandler {
```

```
    public HashMap<String, String> getPropertiesAsMap(String file) throws IOException {
```

```
        HashMap<String, String> magentoMap = new HashMap<String, String>();
```

```
        FileInputStream fileIn = new FileInputStream(file);
```

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

```
        prop.load(fileIn);
```

```
        Set<Object> keysProp = prop.keySet();
```

```
        for (Object key : keysProp) {
```

```
            magentoMap.put(key.toString(), prop.getProperty(key.toString()));
```

```
        }
```

```
        prop.clear();
```

```
        return magentoMap;
```

```
    }
```

```
    public void setKeyAndValue(String file,String key,String value) throws IOException
```



```

{
    FileInputStream fileIn = new FileInputStream(file);

    Properties prop = new Properties();

    prop.load(fileIn);

    prop.setProperty(key, value);

    FileOutputStream fOut=new FileOutputStream(file);

    prop.store(fOut, "Test Result");

    fOut.close();

    fileIn.close();

}

}

```

**File9:**groceries.properties

```

url=https://atozgroceries.com/admin
username=demo@atozgroceries.com
password=456789
expectedMessage=Success: You have successfully deleted data!
notifyName=DemoNotification
notifyMessage=Adding Notification
expNotificationMessage=Success: You have successfully sent push notification to your
app!
imagePath=C:\\Users\\IBM_ADMIN\\eclipse-
workspace\\TestCases_DataDrivenFramework\\TestData\\globe.jpg
searchForKeyword=refund
searchDispalyMessage=Search with keyword is successful
noMatchDisplayMessage=No matching records found
searchForShipKeyword=Discount
prodNameNew=ProductNew100
modelNameNew=Model-New
expectedEditProductMessage=Success: You have successfully updated product!
productNotUpdated=Product update failed
userPageUrl=https://atozgroceries.com
userPageMsg=New Product found on User page
addressNew=Koramangala,Bengaluru
emailNew=info@atozgroceries.com
phoneNew=9797979797
expectedEditSettingMessage=successfully updated Store!
addressFoundMsg=new Address found on user page.
emailFoundMsg=new Email found on user page.

```

phoneFoundMsg=new Phone number found on user page.

#### File9:testng\_EditSettings.xml

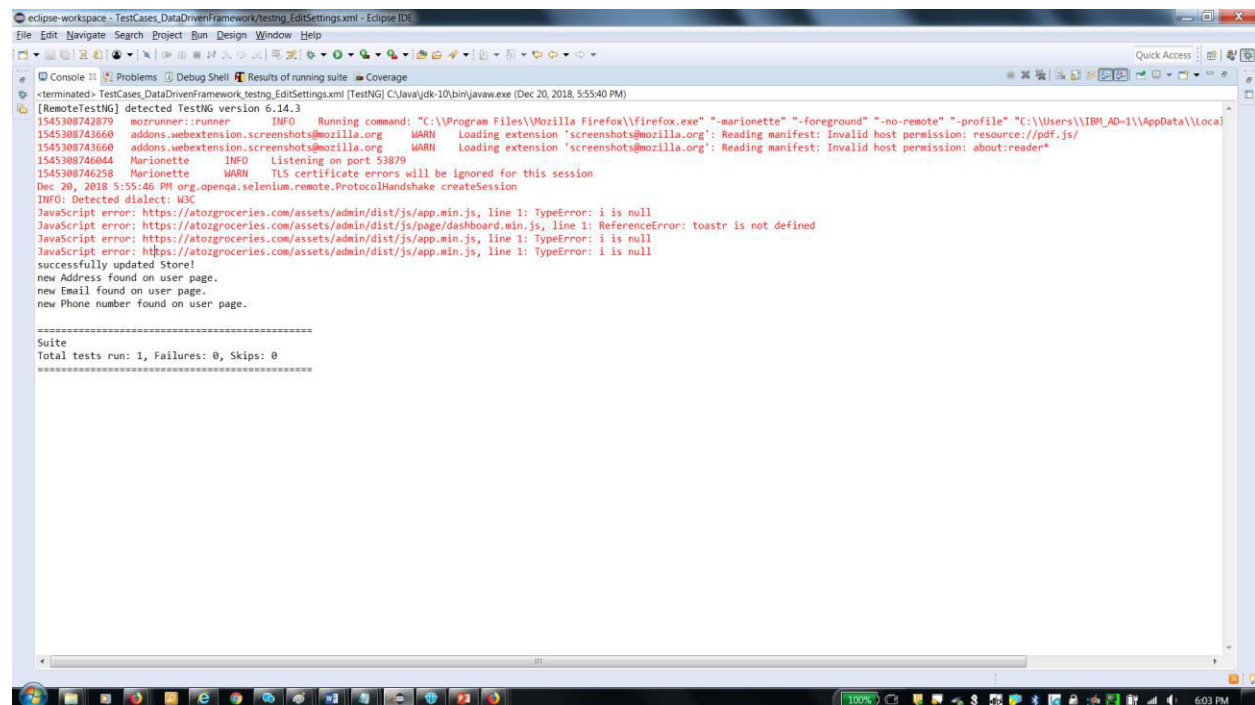
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
<suite name="Suite">
  <test thread-count="5" name="EditingSettings">
    <parameter name="browser" value="firefox"></parameter>
    <classes>
      <class name="com.ibm.groceries.EditAddress"/>
    </classes>
  </test> <!-- EditSettings -->
</suite> <!-- Suite -->
```

#### Test Result:

It is validated that the new address,new phone number, new email is updated and displayed on user portal and also admin portal of atozgroceries site.

#### Screenshots:

#### Console output:



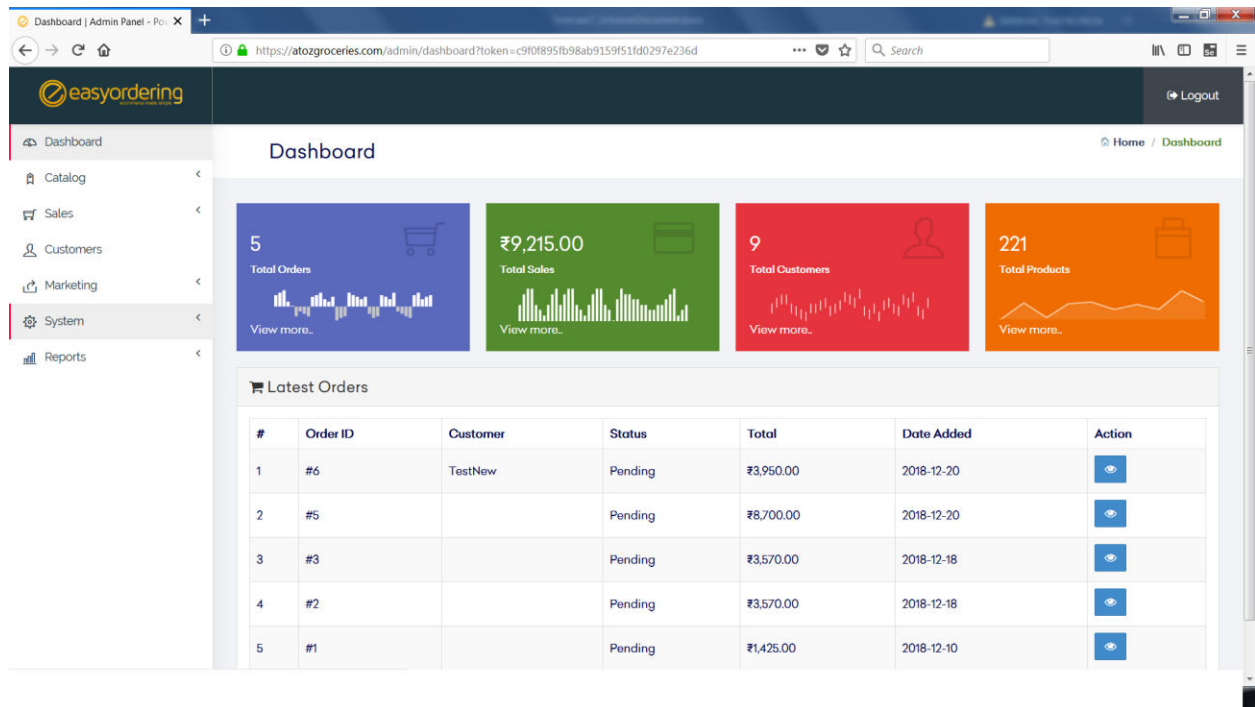
Existing address

The screenshot shows the 'Store' configuration page in the EasyOrdering admin panel. The left sidebar contains a menu with 'System' (Settings, Users, Shipping, Order Statuses, Weight Class, Returns, Manage Backup) and 'Reports'. The main content area has tabs for 'Store', 'Theme', and 'Image'. The 'Store' tab is active, showing fields for: Store Name (AtoZ Grocery), Store Type (Shopping Cart), GSTIN, Store Owner (AtoZ Grocery), Address (BNGLR), E-Mail (contact@atozgroceries.com), and Phone Number (9292929292). A 'Logout' button is in the top right corner.

Login page is displayed

The screenshot shows the login page of the EasyOrdering admin panel. It features a central login form with a lock icon and the text 'Login Please enter your credentials to login.' The form has two input fields: 'Email' (demo@atozgroceries.com) and 'Password' (masked with dots). Below the password field is a 'Login' button and a 'Forgot Password' link. The footer text reads 'EasyOrdering © 2018 All Rights Reserved. Powered by A&S Technologies'.

Dashboard page is displayed



Edit setting page is displayed

**Settings | Admin Panel - Power**

https://atozgroceries.com/admin/settings?token=d3d9446802a44259755d38e6d163e820

**Store** | Theme | Image

**\* Store Name**  
AtoZ Grocery

**Store Type**  
Shopping Cart

**GSTIN**  
GSTIN

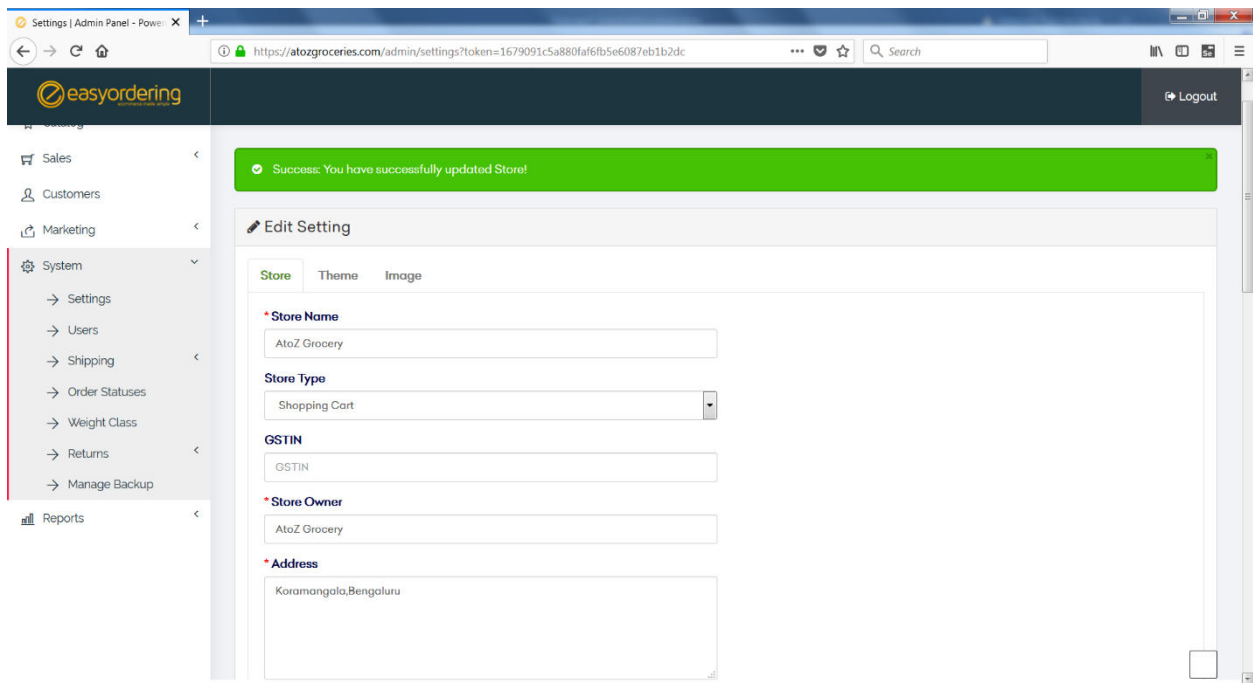
**\* Store Owner**  
AtoZ Grocery

**\* Address**  
Koramangala, Bengaluru

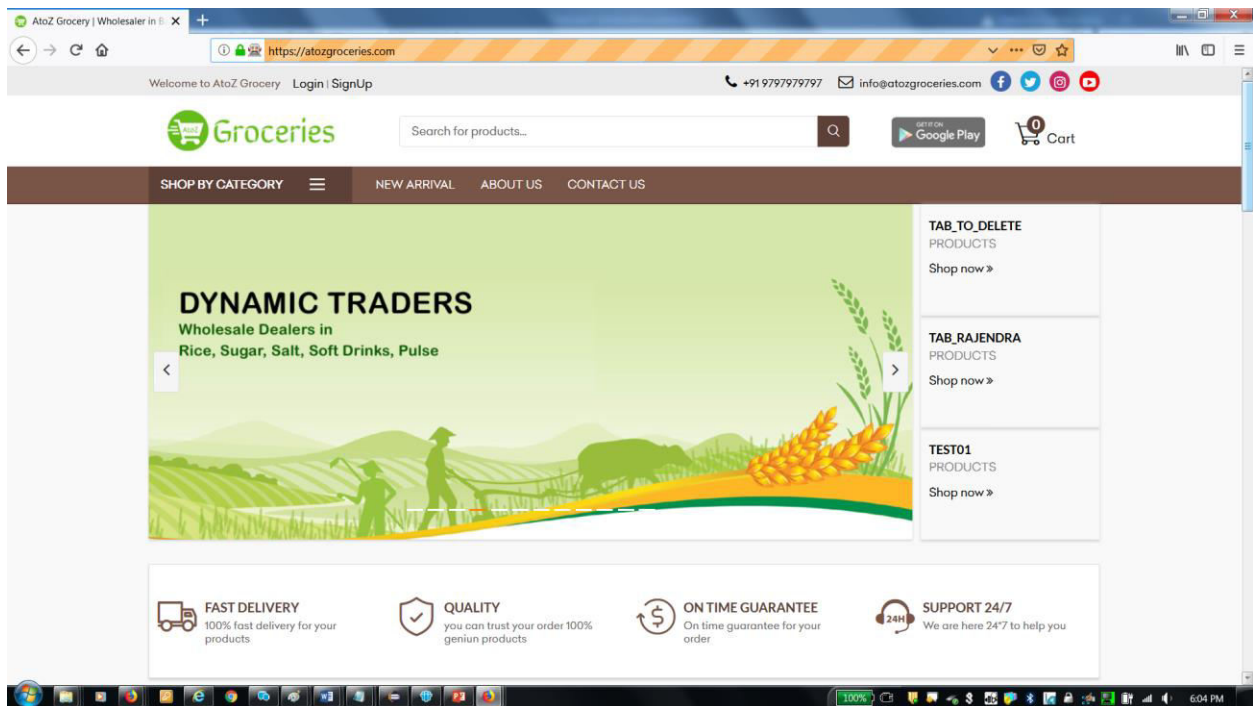
**\* E-Mail**  
info@atozgroceries.com

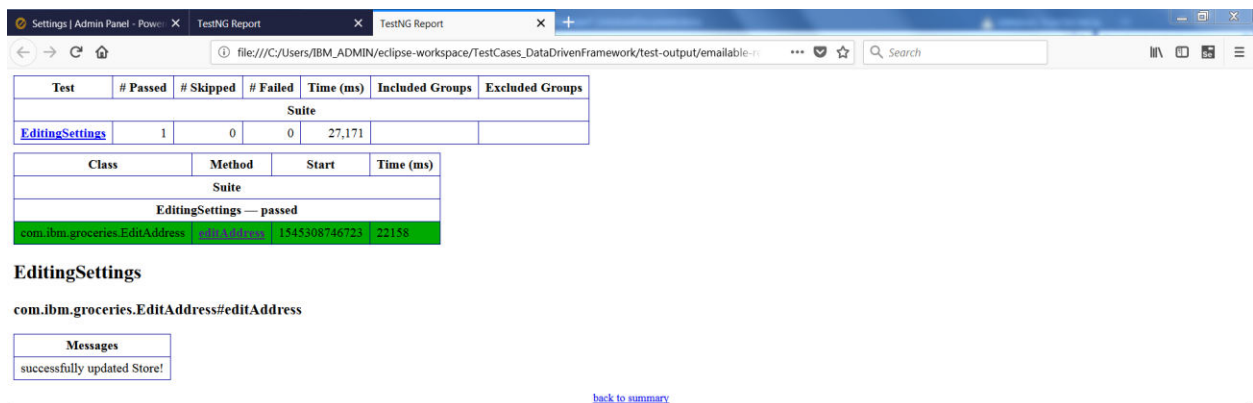
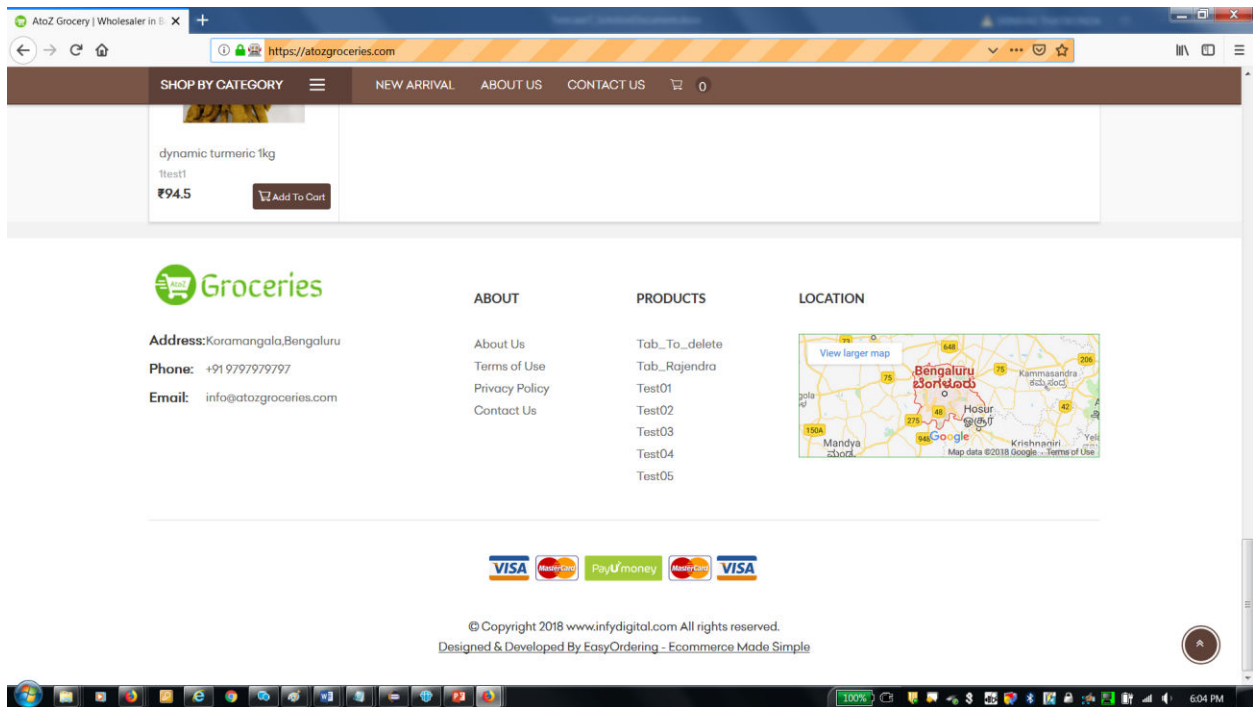
**\* Phone Number**  
9797979797

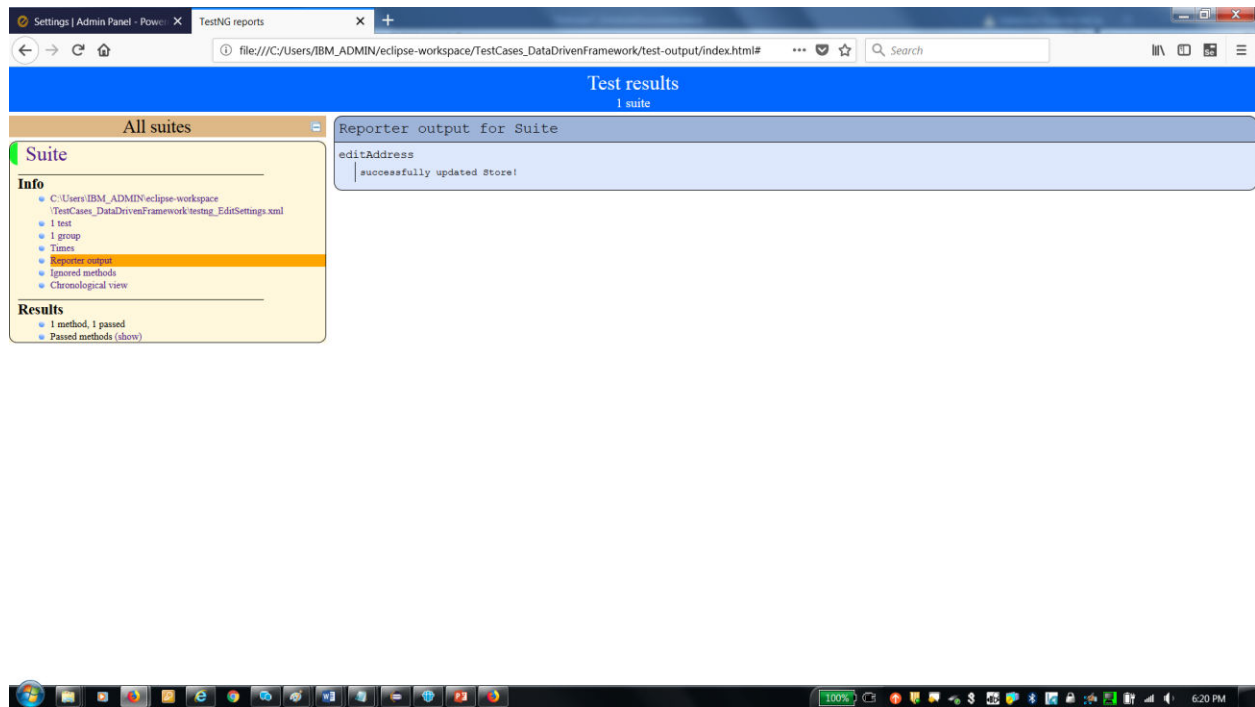
Expected message is displayed after updating the address.



User portal is displayed with newly updated address ,email and phone number







## Flow Information:

Initially a property file 'groceries.properties' is created in Test Data folder of the project and list of key, values for admin page url, username,password ,expected validation message, user page url,new address,new email,new phone number etc. are stored in this property file.

Under the class 'WebDriverLaunch' ,a Test NG annotation 'Before Suite' is used to invoke the method 'preSetFortTest' which is used to instantiate object for class PropertiesFileHandler to return the list of these key,values in to a HashMap.

The Test NG annotation 'Before Method' is used by passing the parameter for browser to select and to invoke the method 'Initialization' which is used to call another method and to create webdriver object for the firefoxdriver or chromedriver or internetexplorer by using switch statement and setting path for webdriver exe.

The PageLogin class is defined with methods to locate the web elements email,password and login buttons. PageFactory is used in the constructor of this class. The method sendKeys is used to enter the email address and password. The method click is used to click on login button

The class 'PageDashboard' is defined with methods to locate the web elements System,Settings. PageFactory is used in the constructor of this class.The method click is used to click on System, Settings links.

The class 'EditSettingPage' is defined with method editSettingInfo to enter new values for address,email and phonenumber which are located using 'FindBy' annotation . Click method is used to click on Save button.PageFactory method is used in the in the constructor of this class and pagesource is returned.

The class 'GroceriesUserPage' uses FindBy annotation to locate the elements email and phonenumber links.The method verifyemail is defined to check the presence of new email link,the method verifyPhone is defined to check the presence of new phonenumber link in user portal and verifyAddress is used to return the pagesource.

The testng\_EditSetting.xml file is having the parameter 'firefox' to launch Firefox browser.

The annotation @Test is used with method editAddress in the class 'EditAddress'. This method is used to get the values for admin page url, username,password ,expected validation message, user page url, new address,new email,new phone number etc. The get method is called to launch the web url for admin portal as well as user page. The objects for classes PageLogin,PageDashboard, EditSettingPage,GroceriesUserPage are created and the above necessary methods are called on these objects. Finally the Assert is used by verifying presence of the new address,new email,new phone number in user portal as well as admin portal when updated.