

Task:-

Use the framework to launch the <https://magento.com/>

Navigate to the login page

Click on forgot password and then click on submit button to validate the error message

And also provide email id "bala#\$\$" and click on submit to check validate email address error message.

MagentoTest.java

```
package com.ibm.magentotest;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.util.HashMap;
import java.util.Properties;
import java.util.Set;
import java.util.concurrent.TimeUnit;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.Assert;
import org.testng.Reporter;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.BeforeTest;
```

```

import org.testng.annotations.Test;
import com.ibm.magentopages.HomePage;
import com.ibm.magentopages.LoginPage;
import com.ibm.magentopages.MyAccountPage;
import com.ibm.utilities.PropertiesFileHandler;
import jdk.nashorn.internal.runtime.PrototypeObject;
public class MagentoTest {
    WebDriver driver=new ChromeDriver();
    WebDriverWait wait;
    PropertiesFileHandler propFileHandler;
    HashMap<String, String> data;
    @BeforeSuite
    //passing properties file and PropertiesFileHandler and Hashmap
    public void preSetForTest() throws IOException {
        String file = "./TestData/magentodata.properties";
        propFileHandler = new PropertiesFileHandler();
        data = propFileHandler.getPropertiesAsMap(file);
    }
    @BeforeMethod
    //ChromeDriver location , wait period and maximize window
    public void Initialization() {
        System.setProperty("webdriver.chrome.driver", "./chromedriver.exe");
        driver = new ChromeDriver();
        wait = new WebDriverWait(driver, 60);
        driver.manage().window().maximize();
        driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
    }
}

```

```

}
@AfterMethod
//After every method close chrome browser windows
public void closeBrowser() {
    driver.quit();
}
@Test(priority = 1, testName = "CheckValidCredentials") //to execute this test first we given priority 1

public void positiveCredential() throws IOException {
    String url = data.get("url"); //passing url to open website from property file
    String userName = data.get("username"); //passing username from property file
    String password = data.get("password"); //passing password property file
    String expectedTitle = data.get("expectedtitle"); //passing expected results
    driver.get(url); //Open url with chrome browser
    HomePage home = new HomePage(driver); //Accessing HomePage class
    home.clickOnMyAccountIcon();
    LoginPage login = new LoginPage(driver, wait); //Accessing LoginPage class
    login.enterEmailAddress(userName);
    login.enterPassword(password);
    login.clickOnLogin();
    MyAccountPage myAccount = new MyAccountPage(driver, wait); //Accessing MyAccountPage class
    String actualTitle = myAccount.getCurrentTitle();
    Assert.assertEquals(actualTitle, expectedTitle); //Comparing actual and expected Title
}

```

```

myAccount.clickOnLogOut(); //Log out from Magento website
}
@Test(priority = 2, invocationCount = 2)
//To execute second test case we given Priority 2 and execute 2 times
public void negativeCredential() throws IOException {
try {
String url = data.get("url");
String userName = data.get("invalidusername"); //Passing invalid username
String password = data.get("password"); //passing password
String expectedMessage = data.get("invaliderrormessage"); //Passing invaliderror message
driver.get(url); //open browser
HomePage home = new HomePage(driver); //Accessing HomePage class
home.clickOnMyAccountIcon();
LoginPage login = new LoginPage(driver, wait); //Accessing LoginPage Class
login.enterEmailAddress(userName);
login.enterPassword(password);
login.clickOnLogin();
//Calling method from loginpage class
String pageSource = login.getPageSourceforInvalidErrorMessage();
Assertion to compare results
Assert.assertTrue(pageSource.contains(expectedMessage), "Assertion on Invalid Login Error Message");
Reporter.log("Negataive Credentials Passed");
}
catch (Exception e) {

```

```

// TODO: handle exception
System.out.println(e.getMessage());
Reporter.log("Negataive Credentials Failed");
//screenshot
//throw e;
Assert.fail();
}
}
//Execute this test case in last so given priority 3
@Test(priority=3, testName="Check Forgot Email validation")
public void forgotLoginPassword() throws IOException
{
/*WebDriver driver = new ChromeDriver();
WebDriverWait wait = new WebDriverWait(driver, 60);
driver.manage().window().maximize();
driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
String file = "./TestData/magentodata.properties";
PropertiesFileHandler propFileHandler = new PropertiesFileHandler();
HashMap<String, String> data = propFileHandler.getPropertiesAsMap(file);*/
String url = data.get("url");
String reenteremailaddress=data.get("reenteremailaddress"); //ReEntering email address
driver.get(url); //open chrome browser
HomePage home = new HomePage(driver); // Accessing HomePage class
home.clickOnMyAccountIcon();

```

```
LoginPage login = new LoginPage(driver, wait); //Accessing LoginPage class
login.forgotPassword();
login.submitButton();

String pageSourceOne=login.requiredFieldErrorMessage();
//Assertion to compare error message from page source
Assert.assertTrue(pageSourceOne.contains("This is a required field."), "Assertion on Required Field");
login.enterForgotEmail(reenteremailaddress);
login.submitButton();
String pageSourceTwo=login.getPageSourceToEnterValidEmailErrorMessage();
//Assertion to compare error message from page source
Assert.assertTrue(pageSourceTwo.contains("Please enter a valid email address."), "Assertion on Enter
Valid Email Address");
}
}
```

LoginPage.Java

```
package com.ibm.magentopages;
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.How;
```

```
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class LoginPage {

    //Located all the elements using locators from browser HTML code
    @FindBy(id="email")
    WebElement emailEle;
    @FindBy(how=How.ID,using="pass")
    WebElement passEle;
    @FindBy(xpath="//button[@type='submit']")
    WebElement loginEle;
    By errMsgLoc=By.className("error-msg");
    @FindBy(xpath="//a[@href=\"https://account.magento.com/customer/account/forgotpassword/\"]")
    WebElement forgotPassword;
    @FindBy(xpath="//input[@id='email_address']")
    WebElement enterForgotEmail;
    @FindBy(xpath="//span[text()='Submit']")
    WebElement submitButton;
    By requiredErrMsg=By.className("validation-advice");
```

```
By entrValidEmailmsg=By.className("validation-advice");
WebDriverWait wait;
WebDriver driver;
public LoginPage(WebDriver driver, WebDriverWait wait) {
    PageFactory.initElements(driver, this);
    this.driver=driver;
    this.wait=wait;
}
public void enterEmailAddress(String userName) //To Enter email address
{
    emailEle.sendKeys(userName);
}
public void enterPassword(String password) //To Enter password
{
    passEle.sendKeys(password);
}
public void clickOnLogin() //Click on login button
{
    loginEle.click();
}
public String getPageSourceforInvalidErrorMessage() //Getting error message from page source
{
```



```
wait.until(ExpectedConditions.presenceOfElementLocated(errMsgLoc));
return driver.getPageSource();
}
public void forgotPassword() //Click on Forgot password
{
forgotPassword.click();
}
public void enterForgotEmail(String reenteremailaddress) //To reEnter email address
{
enterForgotEmail.sendKeys(reenteremailaddress);
}
public void submitButton() //Click on submit button
{
submitButton.click();
}
public String requiredFieldErrorMessage() //To locate This field is required error message
{
wait.until(ExpectedConditions.presenceOfElementLocated(requiredErrMsg));
return driver.getPageSource();
}
public String getPageSourceToEnterValidEmailErrorMessage() //To locate Enter valid error message
{
wait.until(ExpectedConditions.presenceOfElementLocated(entrValidEmailmsg));
return driver.getPageSource();
}
```

}

HomePage.java

```
package com.ibm.magentopages;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindAll;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
public class HomePage {
//Xpath to click on MyAccount
@FindBy(xpath="//span[text()='Account']/ancestor::a")
WebElement myAccountEle;
@FindBy(tagName="a")
List<WebElement> linksEle;
public HomePage(WebDriver driver)
{
PageFactory.initElements(driver, this);
}
public void clickOnMyAccountIcon() //To click on MyAccount button
{
```

```
myAccountEle.click();
}
public int noOfLinks() //no of links in page
{
return linksEle.size();
}
}
```

MyAccountPage.java

```
package com.ibm.magentopages;
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 MyAccountPage {
By logOutLoc = By.xpath("//a[text()='Log Out']");
WebDriver driver;
WebDriverWait wait;
@FindBy(linkText="Log Out") //To click on log out button
WebElement logOutEle;
public MyAccountPage(WebDriver driver,WebDriverWait wait)
{
```

```

this.driver=driver;
this.wait=wait;
PageFactory.initElements(driver,this);
}
public String getCurrentTitle() { //to find current page title
wait.until(ExpectedConditions.presenceOfElementLocated(logOutLoc));
String actualTitle = driver.getTitle();
return actualTitle;
}
public void clickOnLogOut() //Click on Log Out
{
logOutEle.click();
}
}

```

Magentodata.properties

```

#Test Result
#Wed Dec 05 12:04:29 IST 2018
url=https\://magento.com/
password=Welcome123
TestResult=Test Passed
expectedtitle=My Account
username=balajidinakaran1@gmail.com
invalidusername=bala@gmail.com
invaliderrormessage=Invalid login or password.
reenteremailaddress=bala#$$
requiredfieldMsg=This is a required field.
entervalidemailaddress=Please enter a valid email address.

```

Testing.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
<suite name="Suite" parallel="tests">

```

```

<test thread-count="5" name="Test">
<classes>
<class name="com.ibm.magentotest.MagentoTest">
</class>
</classes>
</test> <!-- Test -->
</suite> <!-- Suite -->

```

Output after running code from testing.xml

Test	# Passed	# Skipped	# Failed	Time (ms)	Included Groups	Excluded Groups
Suite						
Test	4	0	0	418,208		

Class	Method	Start	Time (ms)
Suite			
Test — passed			
com.ibm.magentotest.MagentoTest	forgotLoginPassword	1544115126879	86843
	negativeCredential	1544114941035	88616
	negativeCredential		
	positiveCredential	1544114799356	138119

Test

com.ibm.magentotest.MagentoTest#forgotLoginPassword

[back to summary](#)

com.ibm.magentotest.MagentoTest#negativeCredential

Messages
Negative Credentials Passed

[back to summary](#)

com.ibm.magentotest.MagentoTest#negativeCredential

Messages
Negative Credentials Passed

MagentoTest.java code

```

package com.ibm.magentotest;

import java.io.FileInputStream;

public class MagentoTest {
    WebDriver driver=new ChromeDriver();
    WebDriverWait wait;
    PropertiesFileHandler propFileHandler;
    HashMap<String, String> data;

    @BeforeSuite
    public void preSetForTest() throws IOException {
        String file = ".\\TestData\\magentodata.properties";
        propFileHandler = new PropertiesFileHandler();
        data = propFileHandler.getPropertiesAsMap(file);
    }

    @BeforeMethod
    public void Initialization() {
        System.setProperty("webdriver.chrome.driver", ".\\chromedriver.exe");
        driver = new ChromeDriver();
        wait = new WebDriverWait(driver, 60);
        driver.manage().window().maximize();
        driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
    }
}

```

Results of running suite

Search: Passed: 4 Failed: 0 Skipped: 0 1/1 Methods: 4 (421802 ms)

1/1 All Tests Summary

1/1 Suite (4/0/0) (403.799 s) Failure Exception

1/1 Test (403.799 s)

com.ibm.magentotest.MagentoTest

positiveCredential (138.119 s)

negativeCredential 1/2 (88.616 s)

negativeCredential 2/2 (90.221 s)

forgotLoginPassword (86.843 s)

Console

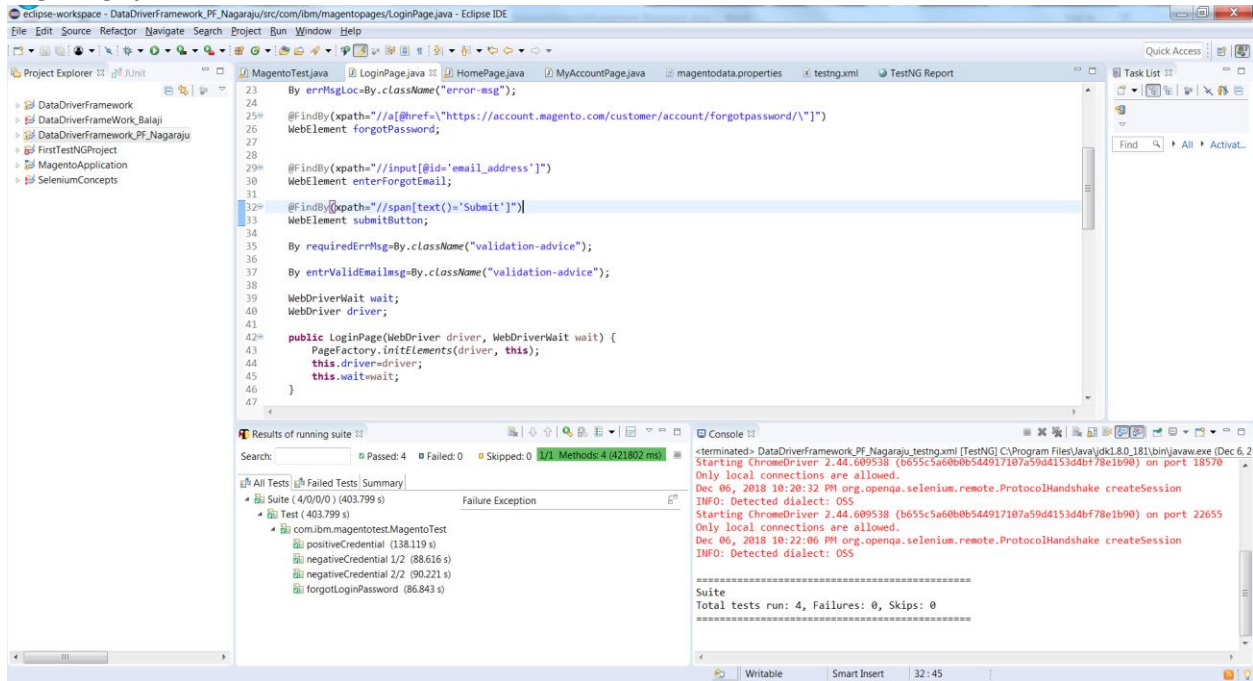
```

<terminated> DataDriverFramework_PF_Nagaraju_testing.xml [TestNG] C:\Program Files\Java\jdk1.8.0_181\bin\java.exe (Dec 6, 2018 10:22:06 PM)
Starting ChromeDriver 2.44.609538 (b6555c5a60b544917107a59d4153d4bf78e1b90) on port 18570
Only local connections are allowed.
Dec 06, 2018 10:20:32 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Starting ChromeDriver 2.44.609538 (b6555c5a60b544917107a59d4153d4bf78e1b90) on port 22655
Only local connections are allowed.
Dec 06, 2018 10:22:06 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS

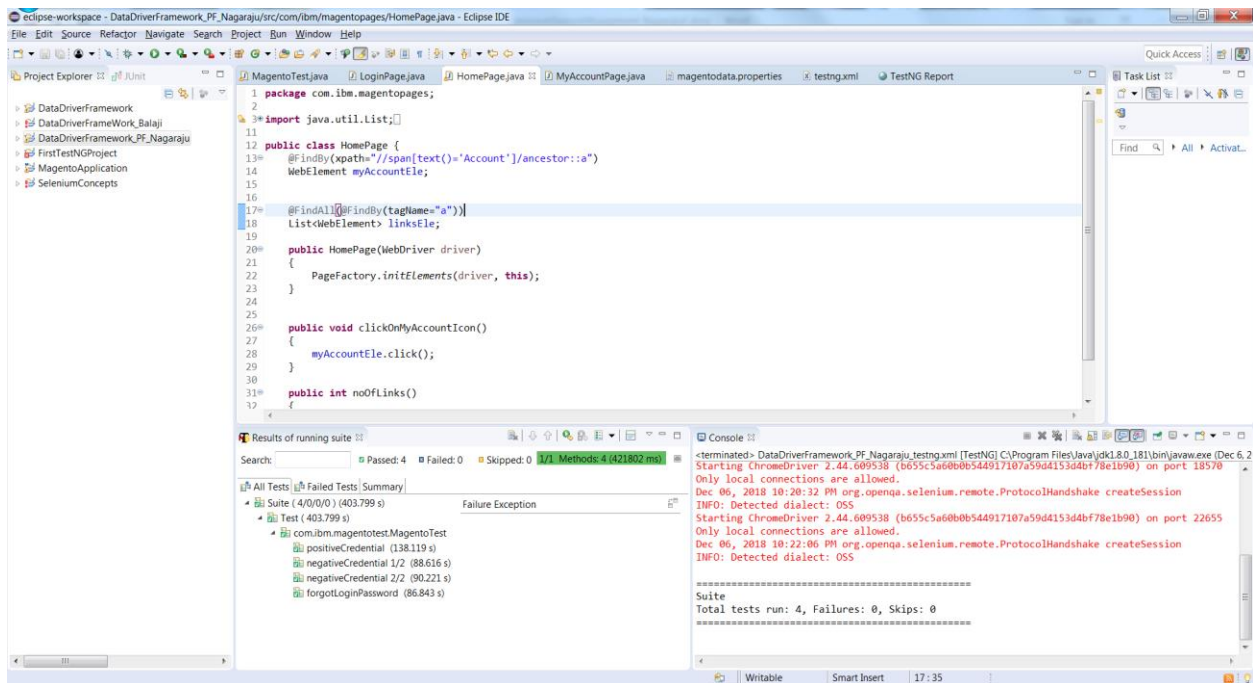
Suite
Total tests run: 4, Failures: 0, Skips: 0

```

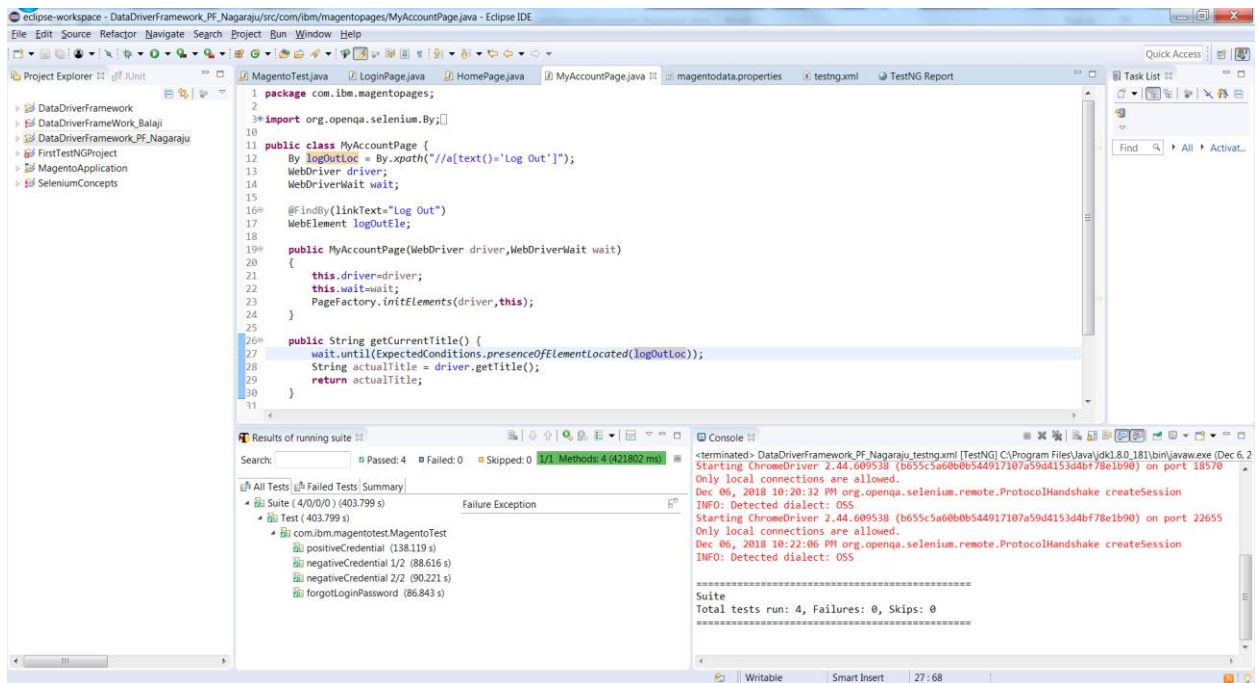
LoginPage.java code



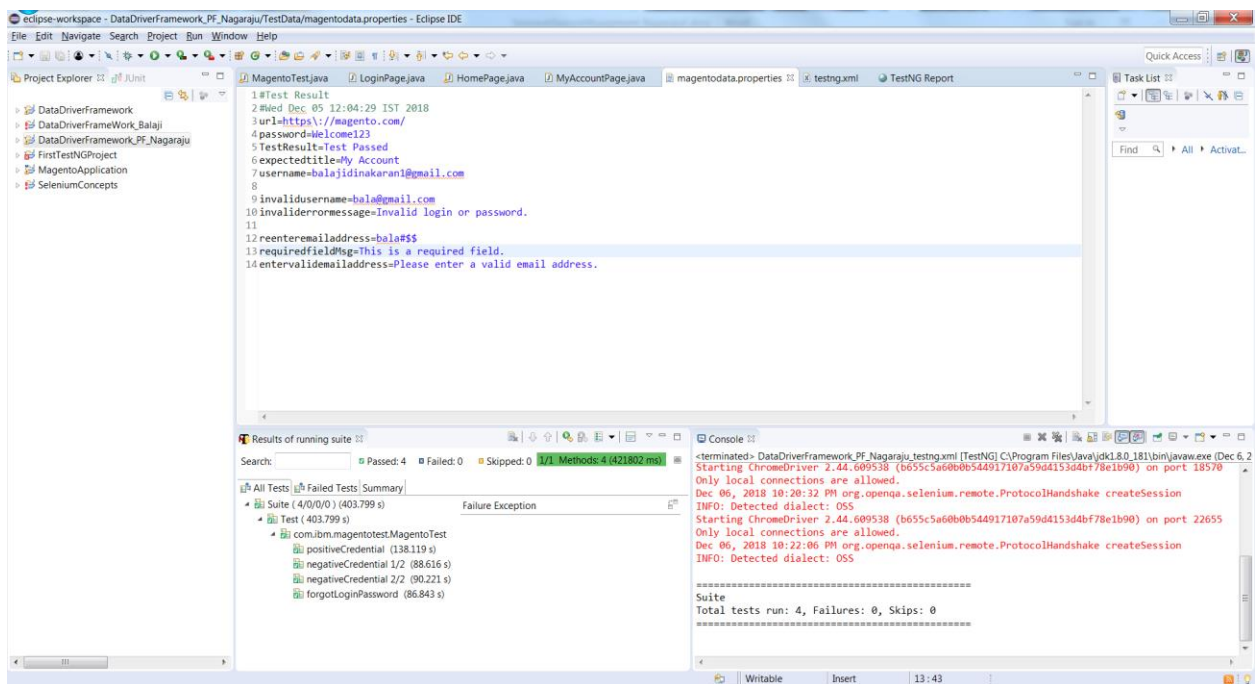
HomePage.java code



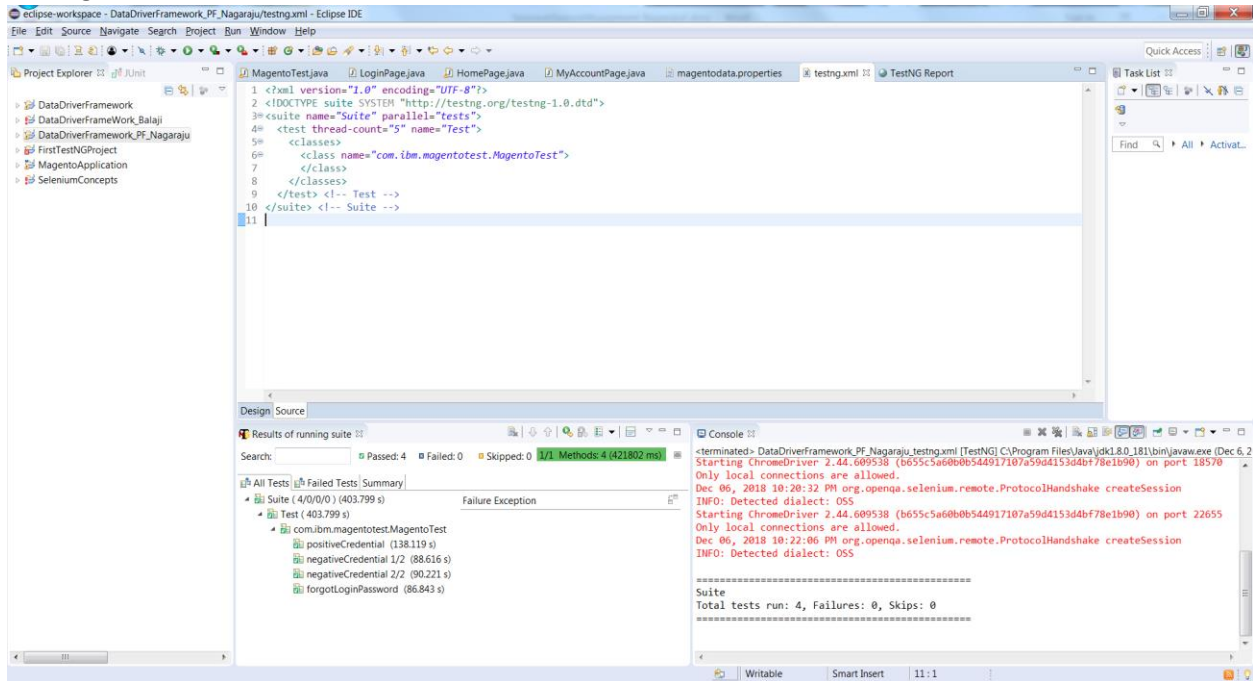
MyAccountPage.java code



Magentodata.properties screen shots



Testing.xml file



Report

The screenshot shows the Eclipse IDE with the TestNG email report open. The report content is as follows:

Test	# Passed	# Skipped	# Failed	Time (ms)	Included Groups	Excluded Groups
Suite						
Test	4	0	0	418,208		

Class	Method	Start	Time (ms)
Suite			
Test — passed			
com.ibm.magentotest.MagentoTest	forgotLoginPassword	1544115126879	86843
com.ibm.magentotest.MagentoTest	negativeCredential 1/2	1544114941035	88616
com.ibm.magentotest.MagentoTest	negativeCredential 2/2	1544114799356	138119

Test

com.ibm.magentotest.MagentoTest#forgotLoginPassword

Search: Passed: 4 Failed: 0 Skipped: 0 1/1 Methods: 4 (421802 ms)

Test (403.799 s)

- com.ibm.magentotest.MagentoTest
 - positiveCredential 138.119 s
 - negativeCredential 1/2 (88.616 s)
 - negativeCredential 2/2 (90.221 s)
 - forgotLoginPassword (86.843 s)

The console shows the following output:

```
<terminated> DataDriverFramework_PF_Nagaraju_testng.xml [TestNG] C:\Program Files\Java\jdk1.8.0_181\bin\java.exe (Dec 6, 2018 10:20:32 PM)
Starting ChromeDriver 2.44.609538 (b6555c5a608b544917107a59d4153d4b778e1b90) on port 18570
Only local connections are allowed.
INFO: Detected dialect: OSS
Dec 06, 2018 10:20:32 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Starting ChromeDriver 2.44.609538 (b6555c5a608b544917107a59d4153d4b778e1b90) on port 22655
Only local connections are allowed.
Dec 06, 2018 10:22:06 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Suite
Total tests run: 4, Failures: 0, Skips: 0
```