

Problem Statement:

Work on the framework to validate the error message for “Forgot Your Password”.

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

Navigate to the login page.

Click on Forgot password and then click on Submit button to validate the error message “This is a required field”

And also provide mail id as ‘bala#\$\$’ and click on Submit to check for below validation as well.

“Please enter a valid email address. For example johndoe@domain.com.”

Source code: ValidateMagento.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.firefox.FirefoxDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Test;
import com.ibm.magentopages.PageHome;
import com.ibm.magentopages.PageLogin;
import com.ibm.magentopages.PageForgotpwd;
import com.ibm.utilities.PropertiesFileHandler;
import jdk.nashorn.internal.runtime.PrototypeObject;
import org.testng.Assert;

public class ValidateMagento {
    PropertiesFileHandler propFileHandler;
    HashMap<String, String> data;
    WebDriver driver;
    WebDriverWait wait;

    //Setting path for Webdriver and instantiating the object

    @BeforeMethod
```

```

public void initializeDriver() throws IOException
{
    String file="./TestData/magento.properties";
    //Location //Properties handler
    propFileHandler = new PropertiesFileHandler();
    //Returning the keys from .properties file in to Map
collection
    data =propFileHandler.getPropertiesAsMap(file);
    System.setProperty("webdriver.gecko.driver",
"./drivers/geckodriver.exe");
    driver= new FirefoxDriver();
    wait=new WebDriverWait(driver, 60);
    driver.manage().window().maximize();

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

@AfterMethod
public void quitBrowser()
{
    driver.quit();
}

@Test(priority=1)
public void navigateLogin() throws InterruptedException
{
    String file="./TestData/magento.properties";
    //Getting the values from Map collection
    String url=data.get("url");
    String userName=data.get("username");
    String password=data.get("password");
    String expectedTitle=data.get("expectedtitle");
    String expectedmessage=data.get("validateMessage");
    String email=data.get("emailaddress");
    String expectedvalidemail=data.get("validemailmessage");

    //Launching the Magento website
    driver.get(url);
    PageHome home=new PageHome(driver);
    home.clickOnMyAccountIcon();

    //To click on Forgot Password link
    PageLogin login=new PageLogin(driver,wait);
    login.clickOnForgotLink();

    //To click on Submit button
    PageForgotpwd forgot=new PageForgotpwd(driver,wait);
    String pageSource=forgot.clickOnSubmitButton();
    Thread.sleep(2000);

    //Validating the message for required field

```

```

        if(pageSource.contains(expectedmessage))
            System.out.println("Validation message for required field:
"+expectedmessage);
        Assert.assertTrue(pageSource.contains(expectedmessage),"Assertion on
required field Error Message");
        //To enter the email address in text box
        forgot.enterEmailAddress(email);

        pageSource=forgot.clickOnSubmitButton();

        //Validating the error message for email-address
        if(pageSource.contains(expectedvalidemail))
            System.out.println("Validation message email-address field:
"+expectedvalidemail);
        Assert.assertTrue(pageSource.contains(expectedvalidemail),"Assertion on
email address field Error Message");

    }

} //End of program

```

Source code file2: PageHome.java

```

package com.ibm.magentopages;
import org.openqa.selenium.By;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.WebDriver;
import com.ibm.magentotest.ValidateMagento;

//Locating the user web element
public class PageHome {
    @FindBy(xpath="//span[text()='Account']/ancestor::a")
    WebElement myAccountEle;

    //Defining constructor
    public PageHome(WebDriver driver)
    {
        PageFactory.initElements(driver, this);
    }

    //To click on user icon
    public void clickOnMyAccountIcon()    {
        myAccountEle.click();
    }

}

```

Source code file3: PageLogin.java

```
package com.ibm.magentopages;
import org.openqa.selenium.By;
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;
import org.openqa.selenium.WebDriver;

public class PageLogin {

    @FindBy(xpath="//*[text()='Forgot Your Password?']")
    WebElement forgotElt;
    By forgotLink=By.partialLinkText("Forgot Your Password?");

    WebDriver driver;
    WebDriverWait wait;

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

    //To click on the forgot your password link
    public void clickOnForgotLink()
    {
        wait.until(ExpectedConditions.presenceOfElementLocated((forgotLink)));
        forgotElt.click();
    }
}
```

Source code file4: PageForgotpwd.java

```
package com.ibm.magentopages;
import java.io.File;
import java.util.Date;
import org.openqa.selenium.OutputType;
import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.OutputType;
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;
import org.openqa.selenium.WebDriver;

public class PageForgotpwd {

    @FindBy(xpath = "//span[text()='Submit']")
    WebElement submitButton;

    @FindBy(id = "email_address")
    WebElement emailAddress;

    By emailBox = By.id("email_address");

    WebDriver driver;
    WebDriverWait wait;

    // Defining constructor
    public PageForgotpwd(WebDriver driver, WebDriverWait wait) {
        this.driver = driver;
        this.wait = wait;
        PageFactory.initElements(driver, this);
    }

    // Method to click on submit button and capturing the message displayed
    public String clickOnSubmitButton() {
        wait.until(ExpectedConditions.presenceOfElementLocated(emailBox));
        submitButton.click();
        return driver.getPageSource();
    }

    // To enter the email address in text box
    public void enterEmailAddress(String email) {
        emailAddress.sendKeys(email);
    }
}

```

Source code file5: 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 {

    //To store keys mentioned in the properties file to a Map collection
    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();
    }
}

```

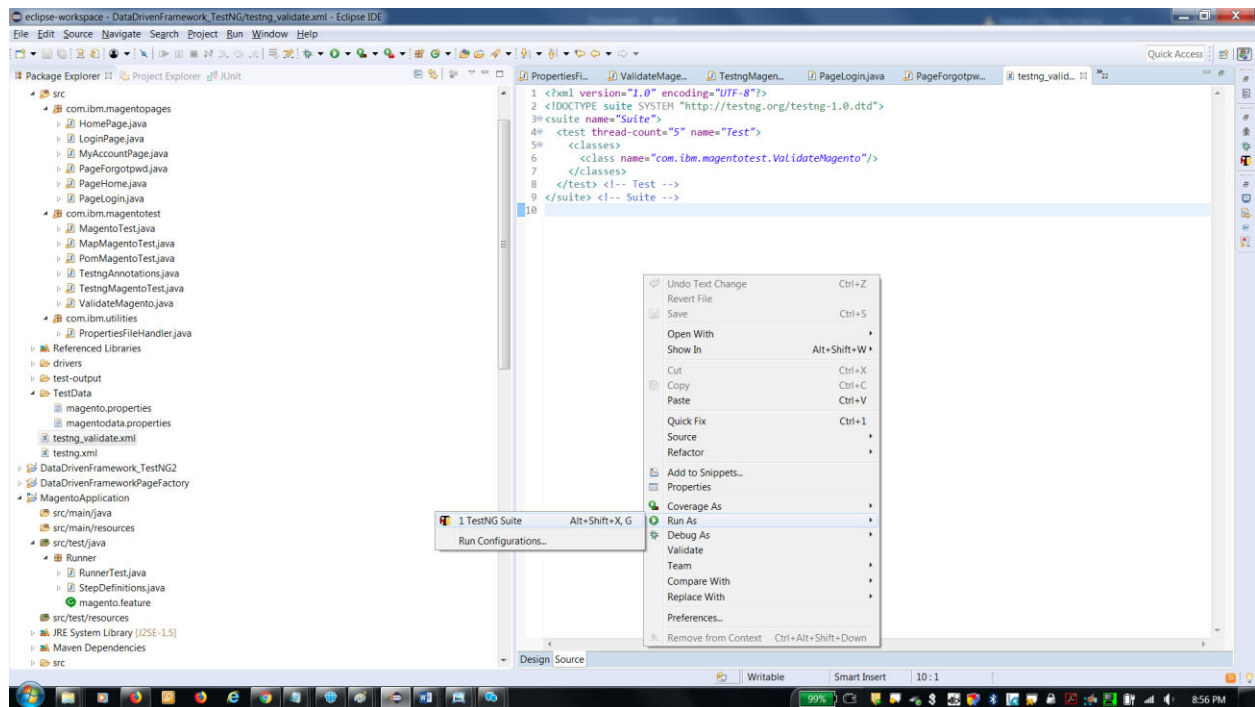
testing_validate.xml

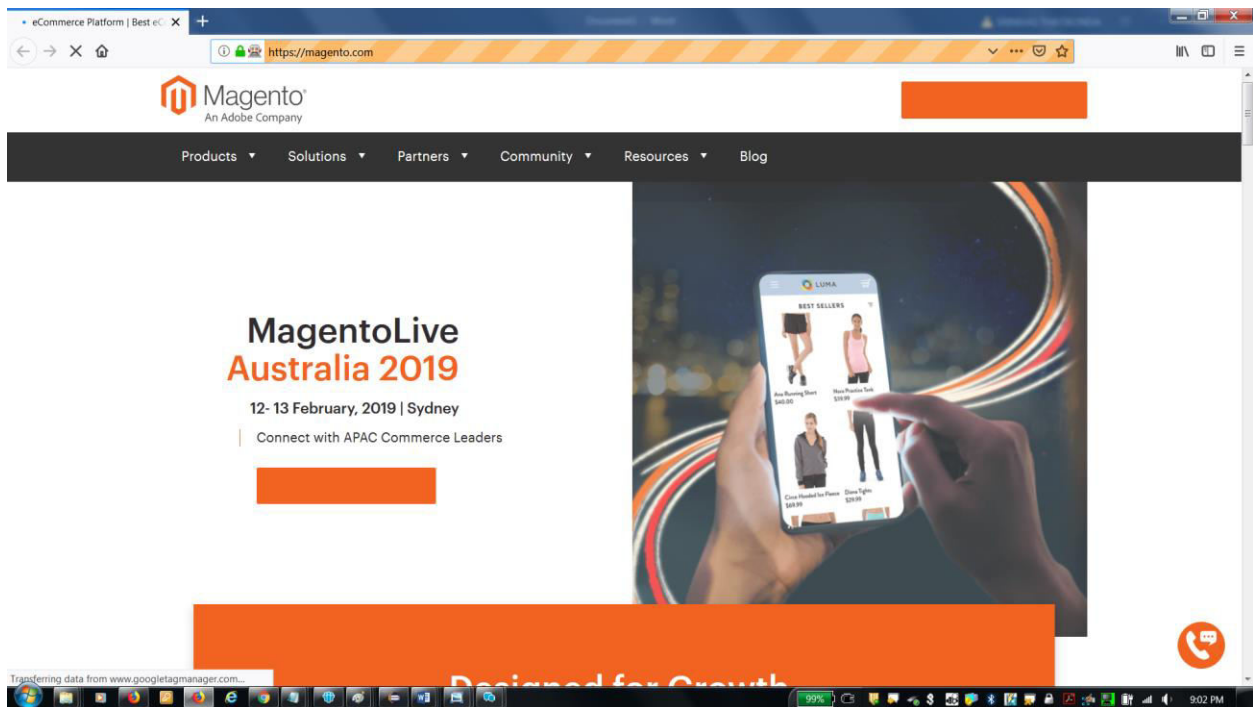
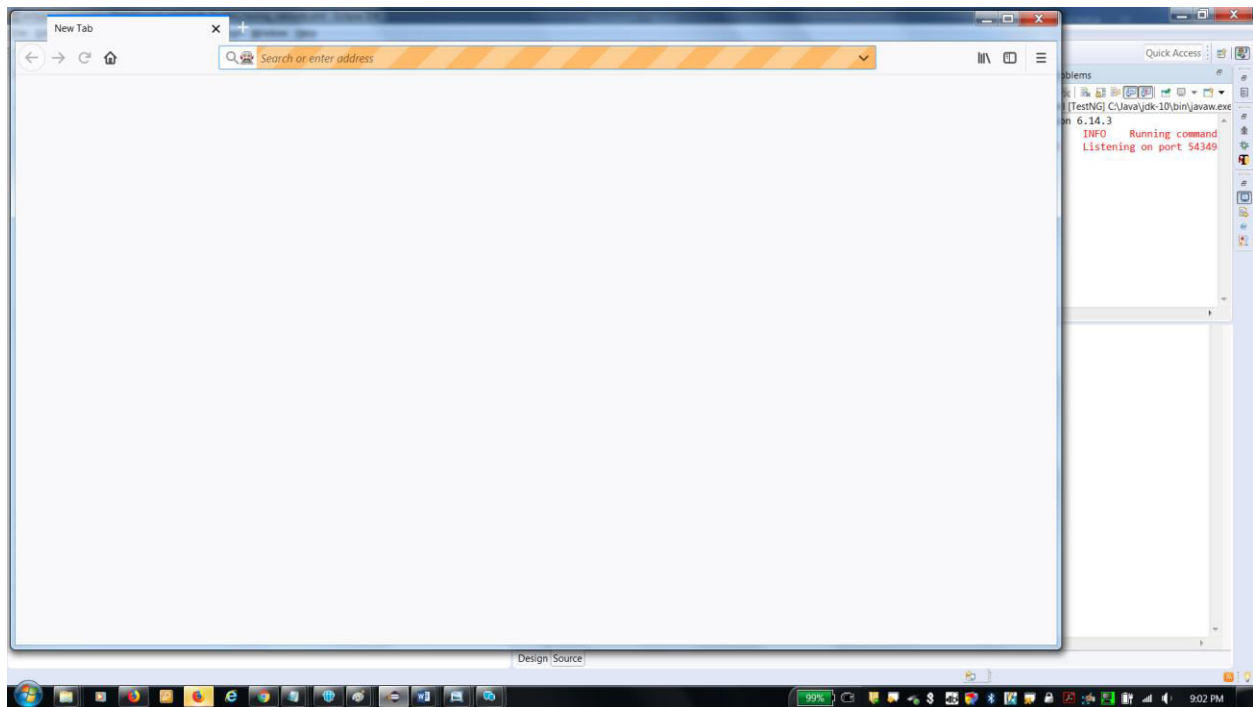
```

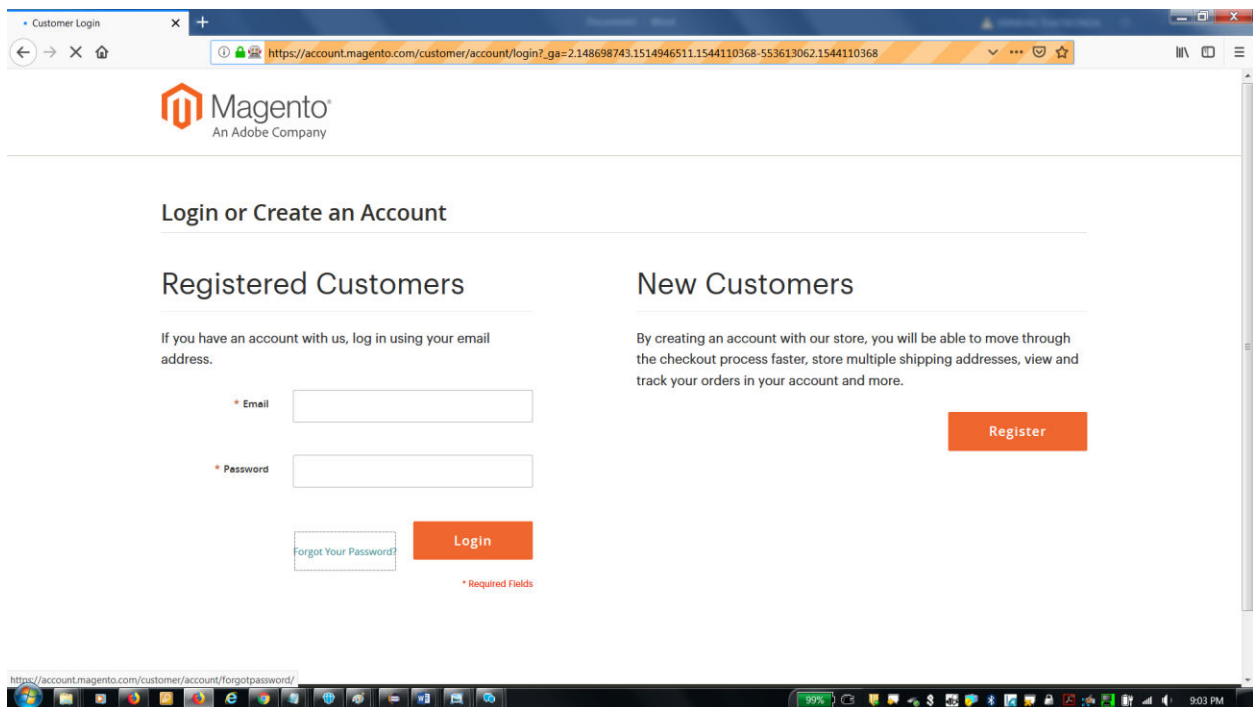
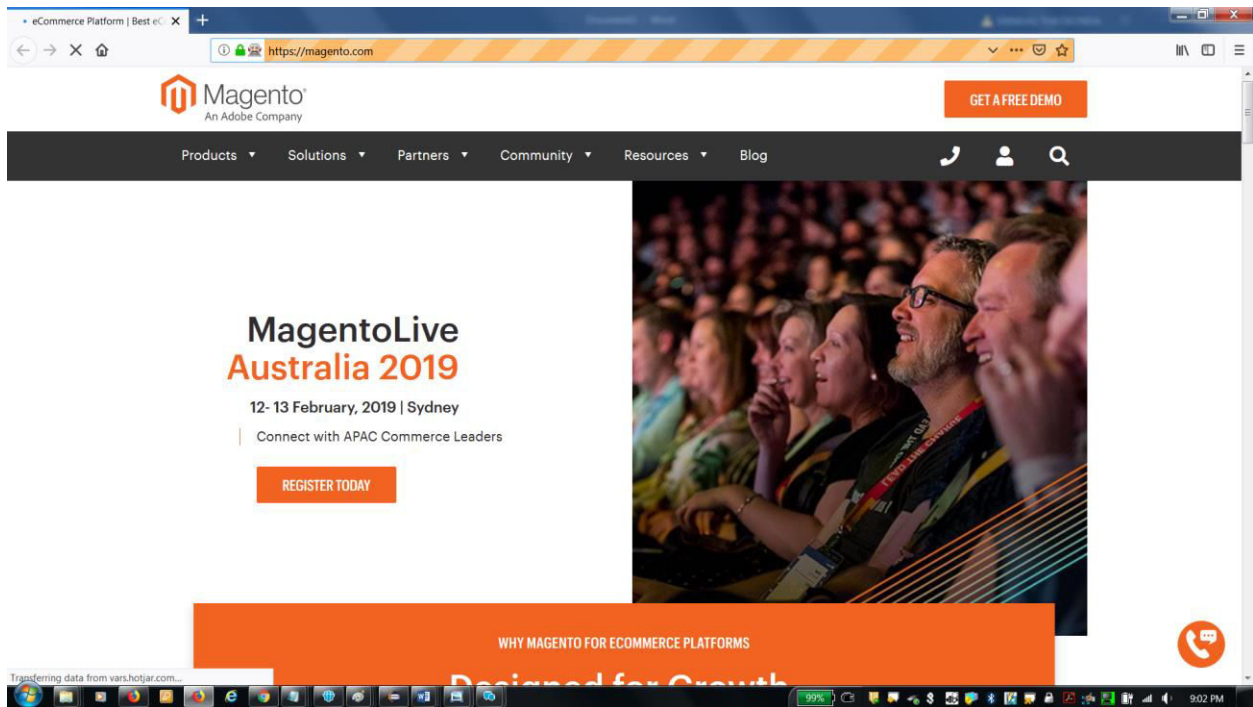
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
<suite name="Suite">
    <test thread-count="5" name="Test">
        <classes>
            <class name="com.ibm.magentotest.ValidateMagento"/>
        </classes>
    </test> <!-- Test -->
</suite> <!-- Suite -->

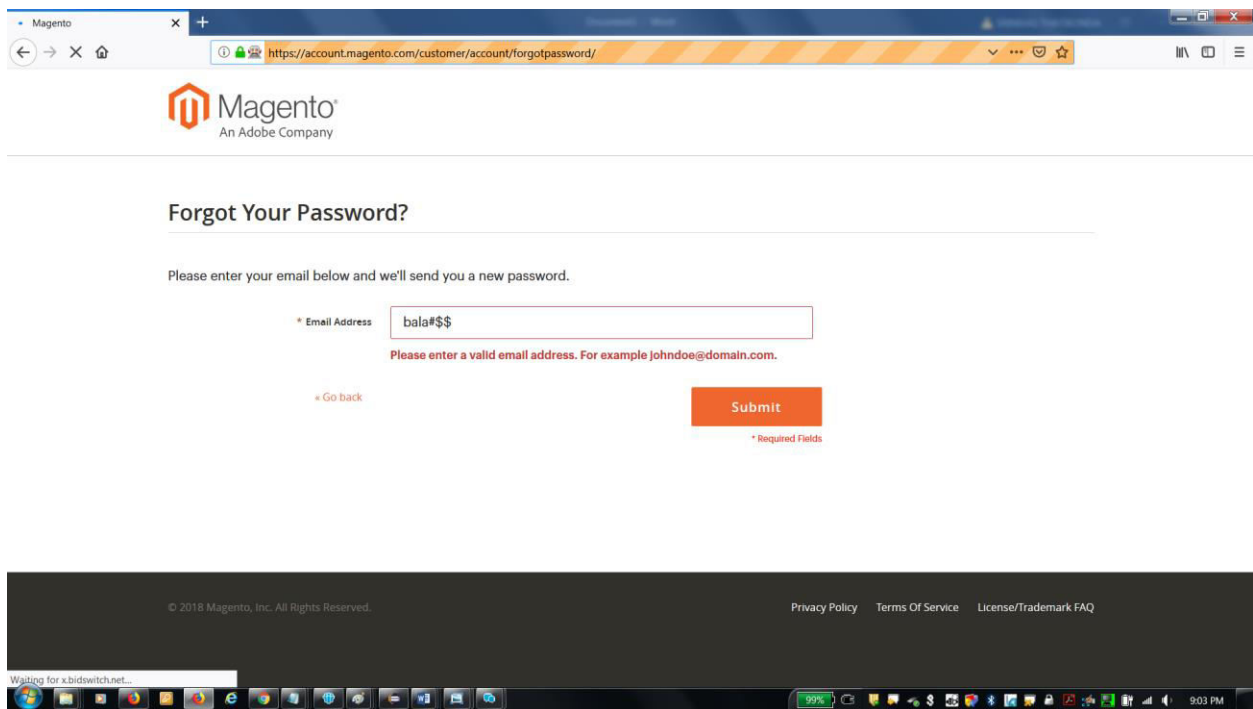
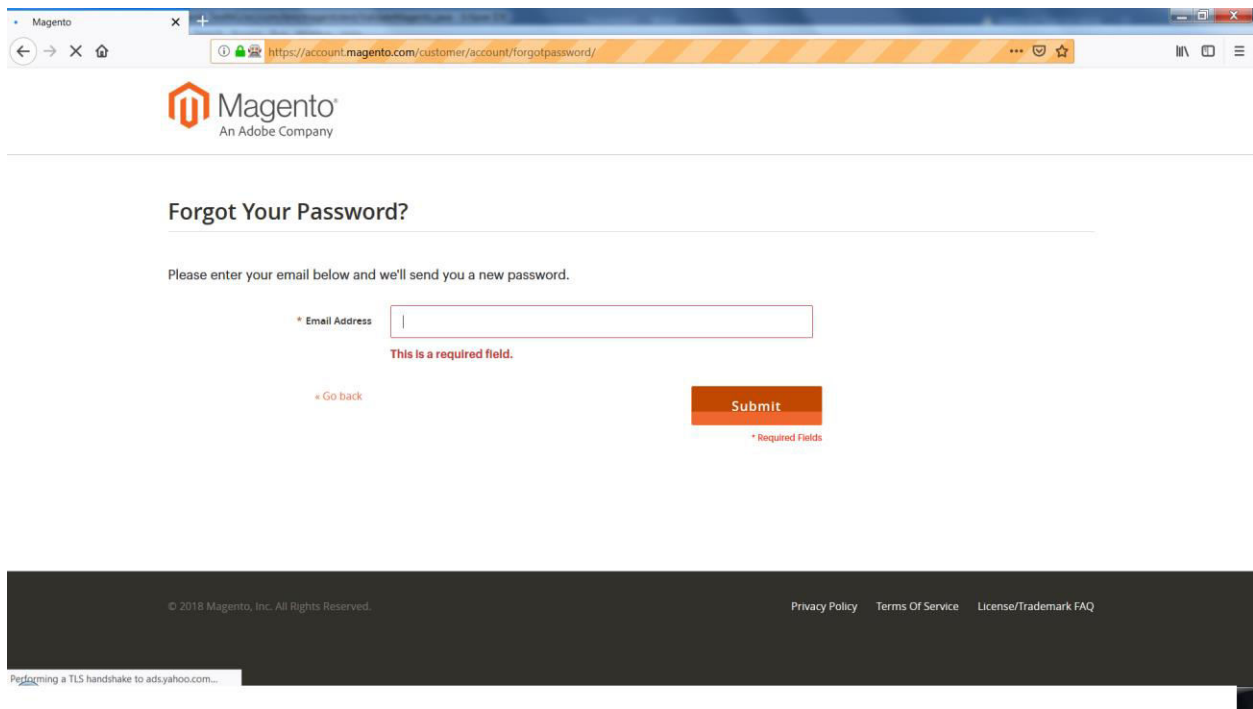
```

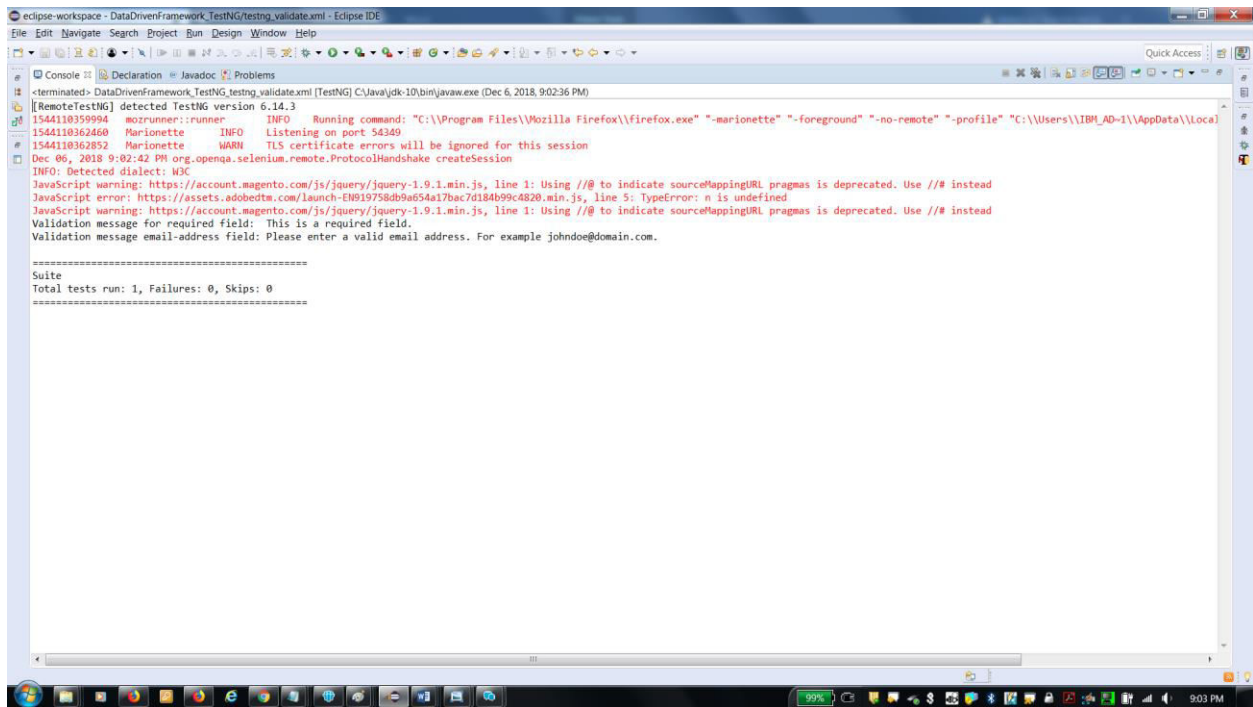
Output:











Test	# Passed	# Skipped	# Failed	Time (ms)	Included Groups	Excluded Groups
Default suite						
Default test	1	0	0	35,775		

Class	Method	Start	Time (ms)
Default suite			
Default test — passed			
com.ibm.magentotest.ValidateMagento	navigateLogin	1544110800646	31618

Default test

com.ibm.magentotest.ValidateMagento#navigateLogin

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Flow Information:

Initially the Test NG annotation 'Before Method' is used to invoke the method 'initializeDriver' which is used to create object for Webdriver instantiating FireFoxdriver and setting path for webdriver exe. A property file is created in Test Data folder and of key, values for url, username,password,validation

messages etc. are stored in this property file. The class PropertiesFileHandler is used and instantiated to return the list of these key,values in to a HashMap.

The annotation@Test is used with method navigateLogin.In this method get method is use to launch the application URL.The objects for each page related classes PageHome,PageLogin, PageFotgotpwd are instantiaed in this method.

The PageHome class is defined with methods to locate the user icon element and click on it. The PageLogin class is defined with method to locate 'Forgot Your Password' link and to click on it. The PageFotgotpwd class is defined with methods to locate email address text box and submit button. On clicking submit button , the getPageSource method captures the error message displayed and returns it to calling method. The sendkeys method is used to enter the email address in the text box. Finally 'contains' method on Pagesource is used to validate the messages displayed. On the console the output is displayed indicating the messages that are validated and test name which is passed.