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Selenium Lab Assessment

Perform the below activities for each Requirements

General Instructions:

1. **Use the existing React – Spring Boot REST Application (Created for Manual Testing)**
2. **Perform the W3H Analysis on the Automation Testing Scenarios**

(Use Manual Testing Doc as Reference)

3. **Prepare a Test Document which contains the Automation Test Cases which can be performed in front-end and back-end.**
4. **Use Selenium for performing automation testing on your application**
    a. **Use Selenium IDE to record/run the test cases**
    b. **Use Selenium Java code to Automation test your application functionalities (Use only ChromeDriver)**
    c. **Use TestNG to create test cases**

Notes:

1. Perform Automation Testing after developing the Test Cases & Test Scenarios
2. Documents to be Submitted:
    a. Selenium IDE test cases Screen Shots
    b. Test Case Documents
    c. Selenium Scripts Used
    d. Test Success /Failure Screens

W3H Analysis: Bank Management System

What	How
What are user stories that are present here? **Ans** • Create/Update/Delete Payee • Money transaction & record the histories of transaction **What is testing we are going perform in the Scenario?** **Ans** Automated Testing using selenium **What were we going to test in the user stories?** **Ans** • Insert Payee • Edit Payee • Update Payee • Delete Payee • Transfer Money • Transaction History **What are the selenium components that were going to be used for this automation testing?** **Ans** • Selenium IDE • Web Driver	**How can we select the web element in this scenario?** **Ans** • By using find element by name • By using find element by id • By using find element by xpath **How can we select the element in the Navbar?** **Ans** • By using find element by link text • By using find element by id • By using find element by CSS Selector **How to record the automated testing process?** **Ans** • By using Selenium Gird • By using Web Driver • By using Selenium IDE **How to perform the automation in the code itself?** **Ans** • By Web Driver • By Selenium IDE

Why	Why not
How can we select the web element in this scenario? Why?	**How can we select the web element in this scenario? Why Not?**

Ans • By using find element by name (Because the name is default select and to avoid the ambiguity among other elements) **How can we select the element in the Navbar? Why?** **Ans** • By using find element by link text (Because navbar will content angular tag to navigate to other pages) **How to record the automated testing Process? Why?** **Ans** • By using Selenium IDE (Because selenium IDE provide the support of Record the code and Autogenerate the scripts for testing) **How to perform the automation in the code itself?** **Ans** • By Web Driver (Because web driver is fully based on the programming perspective)	**Ans** Because other elements may cause or have the chances of ambiguity **How can we select the element in the Navbar? Why Not?** **Ans** Because navbar will contains linked text element to navigate with in the web side **How to record the automated testing Process? Why?** **Ans** Because selenium IDE provide the support of Record the code and Autogenerate the scripts for testing But others don't have that specific option **How to perform the automation in the code itself?** **Ans** Because the web driver is fully based on the programming perspective, it is based on object – oriented concept.

Selenium IDE:

Scripts:

Add Payee:

// Generated by Selenium IDE

```
import org.junit.Test;
import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.core.IsNot.not;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Alert;
import org.openqa.selenium.Keys;
import java.util.*;
import java.net.MalformedURLException;
import java.net.URL;
```

```
public class AddPayeeTest {
  private WebDriver driver;
  private Map<String, Object> vars;
  JavascriptExecutor js;
  @Before
  public void setUp() {
    driver = new ChromeDriver();
    js = (JavascriptExecutor) driver;
    vars = new HashMap<String, Object>();
  }
  @After
  public void tearDown() {
    driver.quit();
  }
  @Test
  public void addPayee() {
    driver.get("http://localhost:4040/");
    driver.manage().window().setSize(new Dimension(1552, 840));
    driver.findElement(By.name("addPayee")).click();
    driver.findElement(By.id("payeeName")).click();
    driver.findElement(By.id("payeeName")).sendKeys("Test001");
    driver.findElement(By.id("nickName")).click();
    driver.findElement(By.id("nickName")).sendKeys("TS1");
```

```
   driver.findElement(By.id("accountNumber")).click();
   {
     WebElement element =
driver.findElement(By.name("addBtn"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
   }

driver.findElement(By.id("accountNumber")).sendKeys("12345678
90");
   driver.findElement(By.name("addBtn")).click();
   driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
   driver.findElement(By.name("addPayee")).click();
   driver.findElement(By.id("payeeName")).click();
   driver.findElement(By.id("payeeName")).sendKeys("Test002");
   driver.findElement(By.id("nickName")).click();
   driver.findElement(By.id("nickName")).sendKeys("TS2");
   driver.findElement(By.id("accountNumber")).click();

driver.findElement(By.id("accountNumber")).sendKeys("12345678
91");
   driver.findElement(By.name("addBtn")).click();
```

```
   driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
   driver.findElement(By.name("addPayee")).click();
   driver.findElement(By.id("payeeName")).click();
   driver.findElement(By.id("payeeName")).sendKeys("Test003");
   driver.findElement(By.id("nickName")).click();
   driver.findElement(By.id("nickName")).sendKeys("TS3");
   driver.findElement(By.id("accountNumber")).click();
   {
     WebElement element =
driver.findElement(By.name("addBtn"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
   }

driver.findElement(By.id("accountNumber")).sendKeys("12345678
92");
   driver.findElement(By.name("addBtn")).click();
   {
     WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall >
path"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
```

```
    }
    driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall > path")).click();
    driver.findElement(By.name("addPayee")).click();
    driver.findElement(By.cssSelector(".MuiDialogContent-root > .MuiFormControl-root:nth-child(1)")).click();
    driver.findElement(By.id("payeeName")).click();
    driver.findElement(By.id("payeeName")).sendKeys("Test004");
    driver.findElement(By.id("nickName")).click();
    driver.findElement(By.id("nickName")).sendKeys("TS1");
    driver.findElement(By.id("accountNumber")).click();

driver.findElement(By.id("accountNumber")).sendKeys("1234567893");
    driver.findElement(By.name("addBtn")).click();
    {
      WebElement element = driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall")).click();
    driver.findElement(By.name("addPayee")).click();
```

```
    driver.findElement(By.id("payeeName")).click();
    driver.findElement(By.id("payeeName")).sendKeys("Test004");
    driver.findElement(By.id("nickName")).click();
    driver.findElement(By.id("nickName")).sendKeys("TS4");
    driver.findElement(By.id("accountNumber")).click();

driver.findElement(By.id("accountNumber")).sendKeys("1234567890");
    driver.findElement(By.name("addBtn")).click();
    {
      WebElement element = driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall > path"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall > path")).click();
  }
}
```

Edit Payee:

```
// Generated by Selenium IDE
import org.junit.Test;
```

```
import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.core.IsNot.not;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Alert;
import org.openqa.selenium.Keys;
import java.util.*;
import java.net.MalformedURLException;
import java.net.URL;
public class EditPayeeTest {
```

```
  private WebDriver driver;
  private Map<String, Object> vars;
  JavascriptExecutor js;
  @Before
  public void setUp() {
    driver = new ChromeDriver();
    js = (JavascriptExecutor) driver;
    vars = new HashMap<String, Object>();
  }
  @After
  public void tearDown() {
    driver.quit();
  }
  @Test
  public void editPayee() {
    driver.get("http://localhost:4040/");
    driver.manage().window().setSize(new Dimension(1552, 840));
    {
      WebElement element =
driver.findElement(By.cssSelector("tr:nth-child(1) .MuiButton-
containedPrimary"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
```

```
    }
    driver.findElement(By.cssSelector("tr:nth-child(1) .MuiButton-containedPrimary")).click();
    {
      WebElement element = driver.findElement(By.tagName("body"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element, 0, 0).perform();
    }
    driver.findElement(By.id("payeeName")).click();
    driver.findElement(By.id("payeeName")).sendKeys("Test001");
    driver.findElement(By.cssSelector(".MuiDialogContent-root")).click();
    driver.findElement(By.id("nickName")).click();
    {
      WebElement element = driver.findElement(By.cssSelector(".MuiButton-containedSuccess:nth-child(2)"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.id("nickName")).sendKeys("TS1");
    driver.findElement(By.cssSelector(".MuiButton-containedSuccess:nth-child(2)")).click();
```

```
   {
     WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
   }
   driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
   driver.findElement(By.cssSelector("tr:nth-child(2) .MuiButton-
containedPrimary")).click();
   driver.findElement(By.id("nickName")).click();
   driver.findElement(By.id("nickName")).sendKeys("TS1");
   driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)")).click();
   {
     WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
   }
   driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
   driver.findElement(By.cssSelector("tr:nth-child(2) .MuiButton-
containedPrimary")).click();
```

```
    driver.findElement(By.id("payeeName")).click();
    driver.findElement(By.id("payeeName")).sendKeys("Test004");
    driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)")).click();
    {
      WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
  }
}
```

Delete Payee:

```
// Generated by Selenium IDE
import org.junit.Test;
import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.core.IsNot.not;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Alert;
import org.openqa.selenium.Keys;
import java.util.*;
import java.net.MalformedURLException;
import java.net.URL;
public class DeletePayeeTest {
  private WebDriver driver;
  private Map<String, Object> vars;
  JavascriptExecutor js;
  @Before
  public void setUp() {
```

```
    driver = new ChromeDriver();
    js = (JavascriptExecutor) driver;
    vars = new HashMap<String, Object>();
  }
  @After
  public void tearDown() {
    driver.quit();
  }
  @Test
  public void deletePayee() {
    driver.get("http://localhost:4040/");
    driver.manage().window().setSize(new Dimension(1552, 840));
    driver.findElement(By.cssSelector("tr:nth-child(3) .MuiButton-
containedError")).click();
    {
      WebElement element =
driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)")).click();
    {
```

```
    WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
  driver.findElement(By.cssSelector("tr:nth-child(2) .MuiButton-
containedError")).click();
  {
    WebElement element =
driver.findElement(By.cssSelector(".MuiDialogActions-root
> .MuiButton-containedPrimary"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.cssSelector(".MuiDialogActions-root
> .MuiButton-containedPrimary")).click();
  driver.findElement(By.cssSelector("tr:nth-child(2) .MuiButton-
containedError")).click();
  driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)")).click();
  {
    WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
```

```
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
  driver.findElement(By.cssSelector(".MuiButton-
containedError")).click();
  {
    WebElement element =
driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.cssSelector(".MuiButton-
containedSuccess:nth-child(2)")).click();
  {
    WebElement element =
driver.findElement(By.cssSelector(".MuiSvgIcon-fontSizeSmall"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
```

```
  }
}
```

TranferMoney:

```
// Generated by Selenium IDE
import org.junit.Test;
import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.core.IsNot.not;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Alert;
import org.openqa.selenium.Keys;
import java.util.*;
```

```
import java.net.MalformedURLException;
import java.net.URL;
public class TransferMoneyTest {
  private WebDriver driver;
  private Map<String, Object> vars;
  JavascriptExecutor js;
  @Before
  public void setUp() {
    driver = new ChromeDriver();
    js = (JavascriptExecutor) driver;
    vars = new HashMap<String, Object>();
  }
  @After
  public void tearDown() {
    driver.quit();
  }
  @Test
  public void transferMoney() {
    driver.get("http://localhost:4040/");
    driver.manage().window().setSize(new Dimension(1536, 824));
    driver.findElement(By.linkText("Transfer Money")).click();
    driver.findElement(By.cssSelector("body")).click();
```

```
   driver.findElement(By.cssSelector(".MuiMenuItem-root:nth-child(1)")).click();
   driver.findElement(By.id("amount")).click();
   {
     WebElement element = driver.findElement(By.cssSelector(".MuiButton-containedPrimary"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element).perform();
   }
   driver.findElement(By.id("amount")).sendKeys("2000");
   driver.findElement(By.cssSelector(".MuiButton-containedPrimary")).click();
   {
     WebElement element = driver.findElement(By.tagName("body"));
     Actions builder = new Actions(driver);
     builder.moveToElement(element, 0, 0).perform();
   }
   driver.findElement(By.linkText("Transfer Money")).click();
   driver.findElement(By.cssSelector("body")).click();
   driver.findElement(By.cssSelector(".MuiButtonBase-root:nth-child(3)")).click();
   driver.findElement(By.id("amount")).click();
```

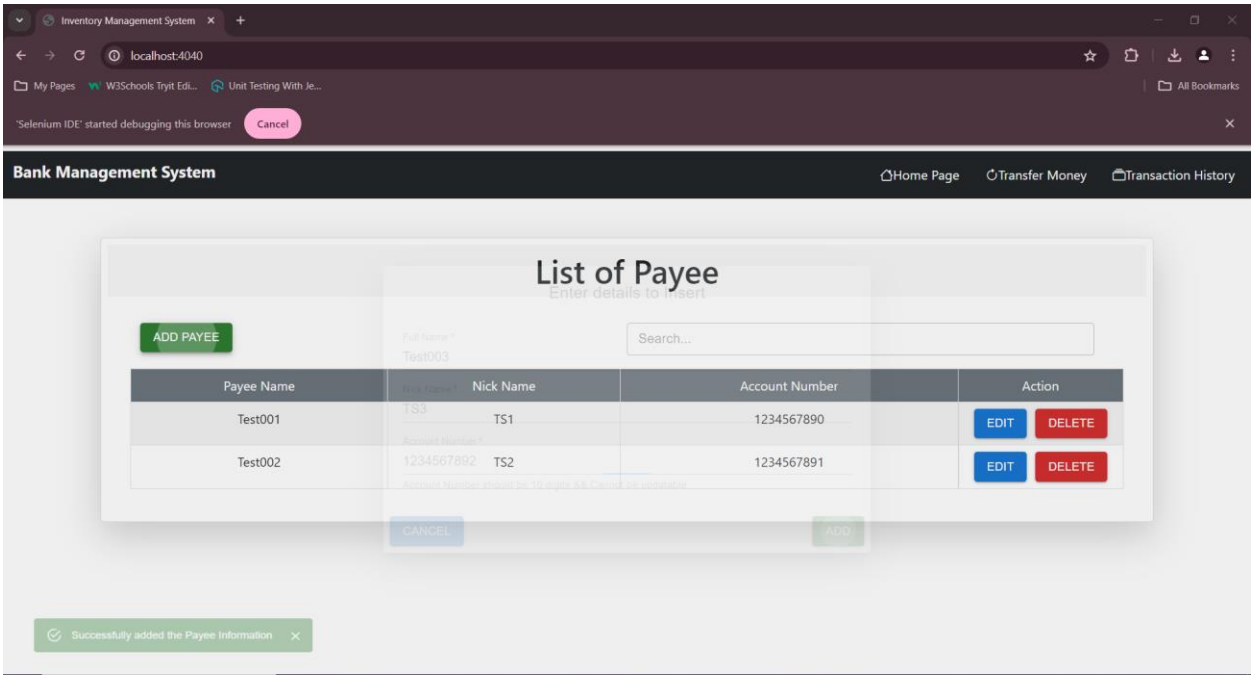
```
    {
      WebElement element =
driver.findElement(By.cssSelector(".MuiButton-
containedPrimary"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element).perform();
    }
    driver.findElement(By.id("amount")).sendKeys("12999999999");
    driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
    {
      WebElement element =
driver.findElement(By.tagName("body"));
      Actions builder = new Actions(driver);
      builder.moveToElement(element, 0, 0).perform();
    }
    driver.findElement(By.linkText("Transfer Money")).click();
    driver.findElement(By.cssSelector("body")).click();
    driver.findElement(By.cssSelector(".MuiMenuItem-root:nth-
child(2)")).click();
    driver.findElement(By.id("amount")).click();
    {
```

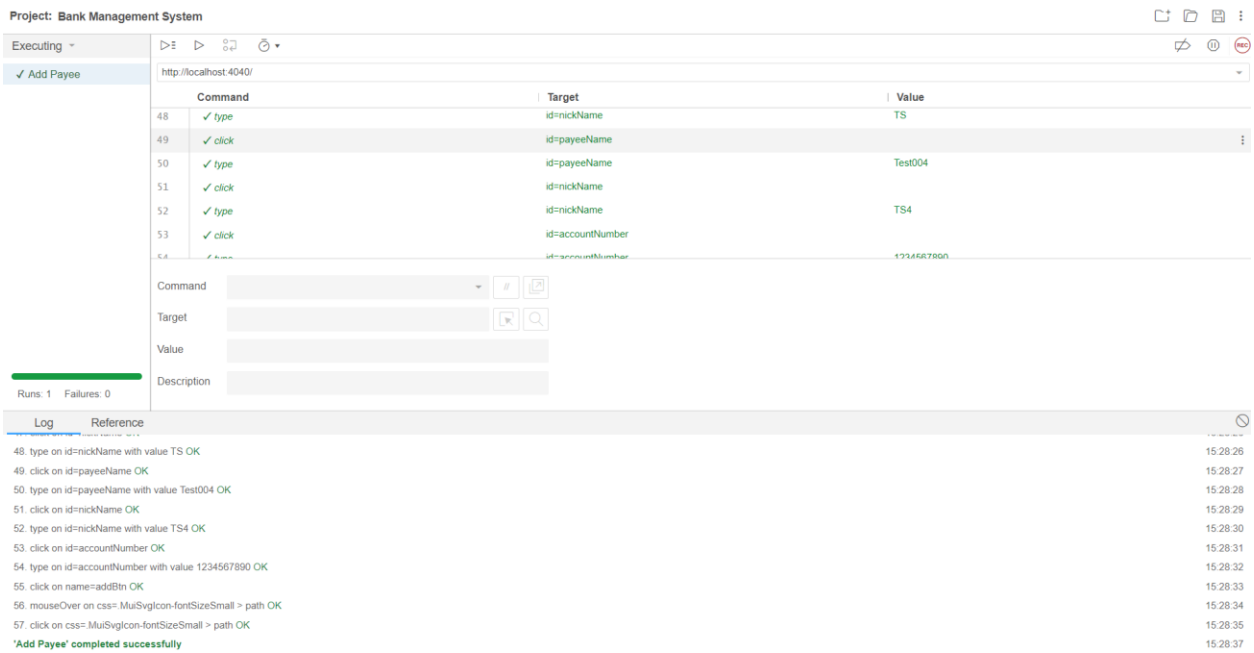
```
    WebElement element =
driver.findElement(By.cssSelector(".MuiButton-
containedPrimary"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }
  driver.findElement(By.id("amount")).sendKeys("10000");
  driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
  {
    WebElement element =
driver.findElement(By.tagName("body"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element, 0, 0).perform();
  }
  driver.findElement(By.linkText("Transfer Money")).click();
  driver.findElement(By.cssSelector("body")).click();
  driver.findElement(By.cssSelector(".MuiButtonBase-root:nth-
child(3)")).click();
  driver.findElement(By.id("amount")).click();
  {
    WebElement element =
driver.findElement(By.cssSelector(".MuiButton-
containedPrimary"));
```

```
    Actions builder = new Actions(driver);
    builder.moveToElement(element).perform();
  }

driver.findElement(By.id("amount")).sendKeys("199999999999");
  driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
  {
    WebElement element =
driver.findElement(By.tagName("body"));
    Actions builder = new Actions(driver);
    builder.moveToElement(element, 0, 0).perform();
  }
  driver.findElement(By.linkText("Transfer Money")).click();
  driver.findElement(By.id("amount")).click();
  driver.findElement(By.id("amount")).sendKeys("-12332");
  driver.findElement(By.cssSelector(".bi-arrow-left")).click();
 }
}
```

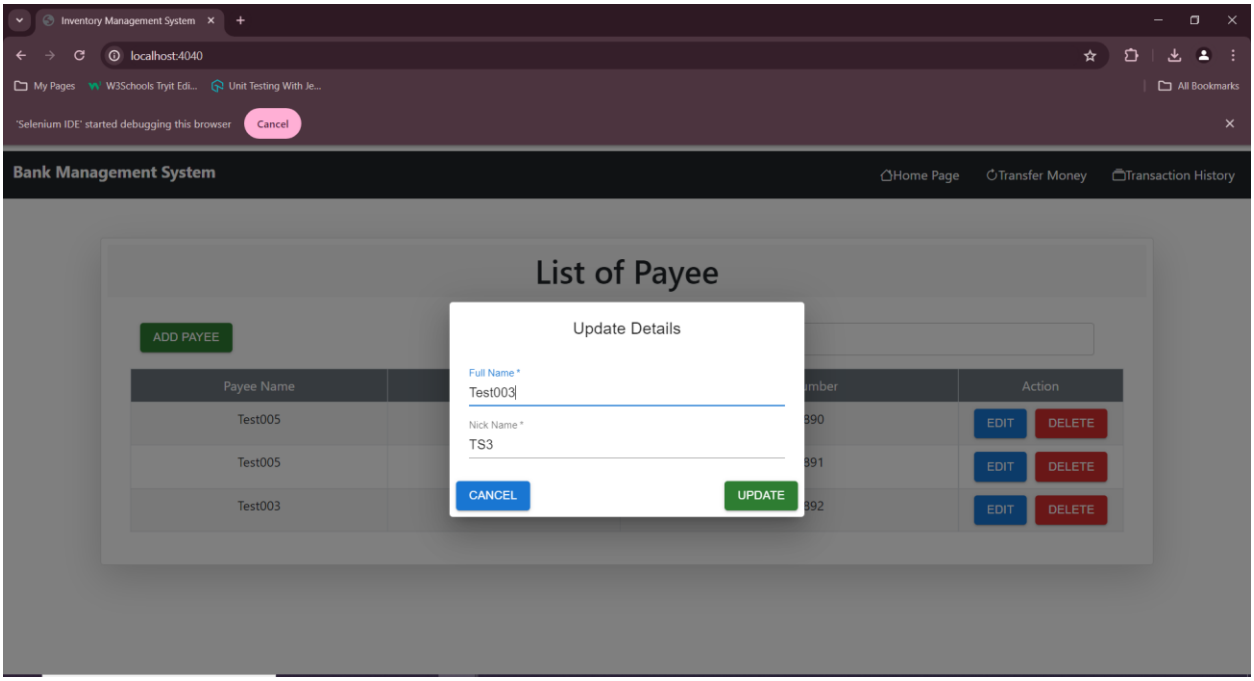
Output screen of Selenium IDE:

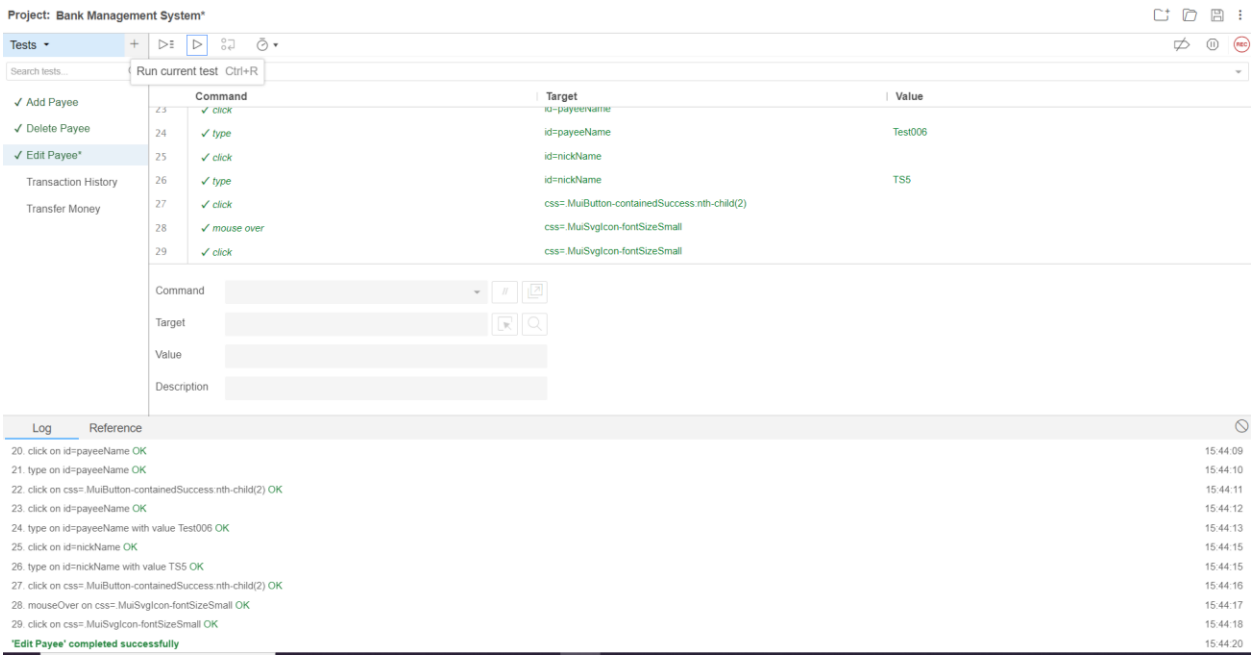
Add Payee:



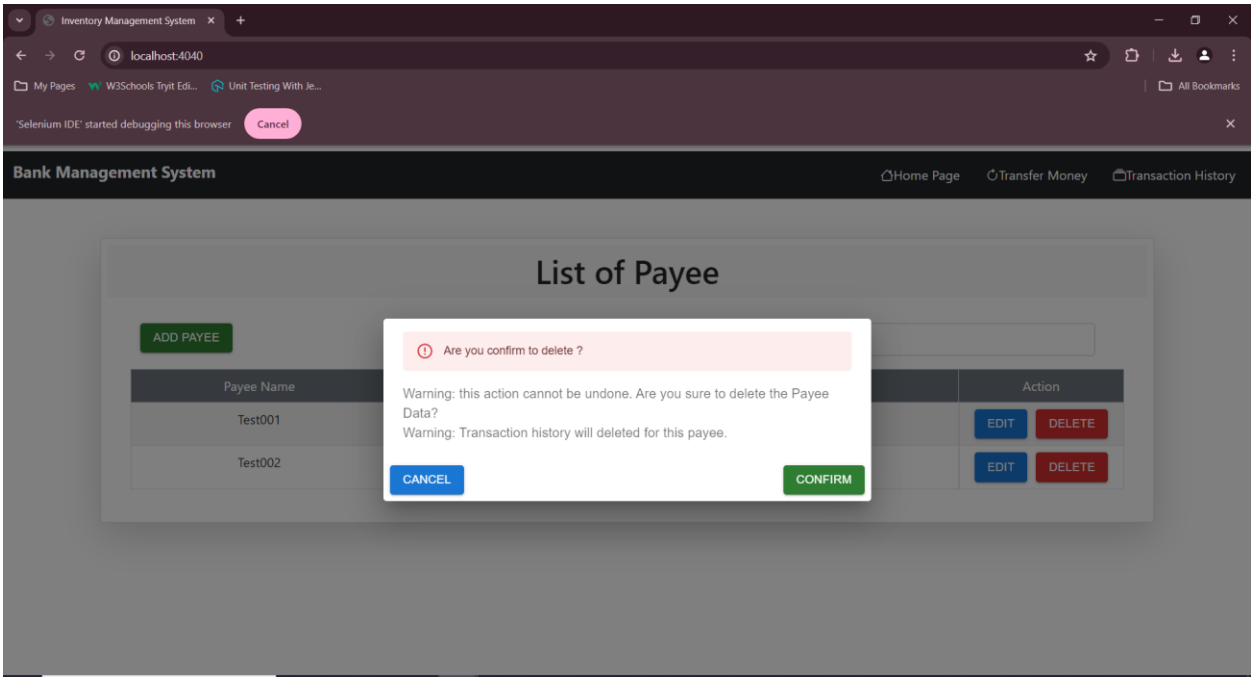


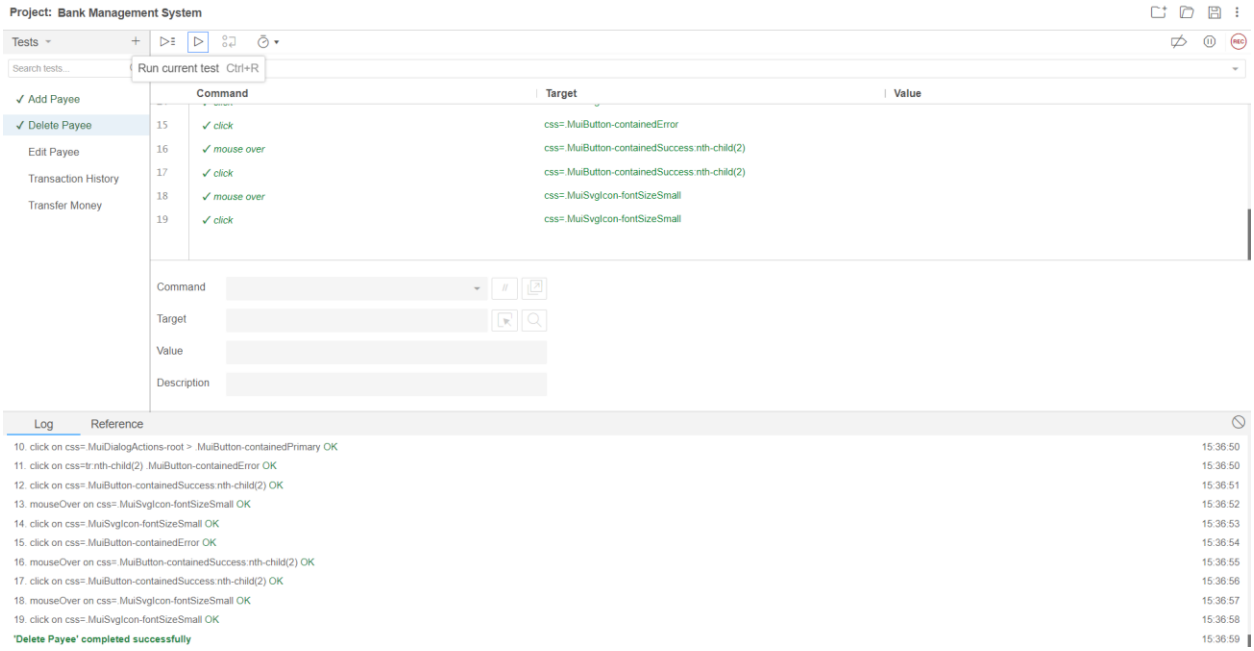
Edit Payee:


Inventory Management System
localhost:4040
'Selenium IDE' started debugging this browser
Cancel
Bank Management System
Home Page
Transfer Money
Transaction History
List of Payee
ADD PAYEE
Payee Name
Action
Test005
EDIT
DELETE
Test005
EDIT
DELETE
Test003
EDIT
DELETE
Update Details
Full Name *
Test003
Nick Name *
TS3
CANCEL
UPDATE

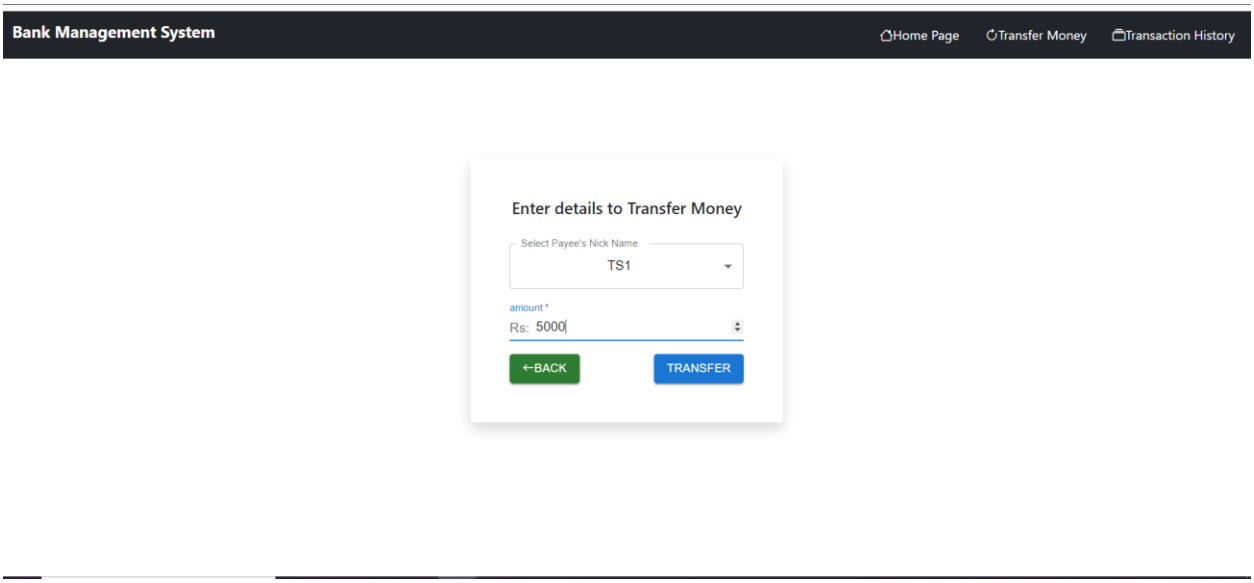

Project: Bank Management System*
Tests
Run current test Ctrl+R
Add Payee
Delete Payee
Edit Payee*
Transaction History
Transfer Money
Command
Target
Value
24 type id=payeeName Test006
25 click id=nickName
26 type id=nickName TS5
27 click css=.MuiButton-containedSuccess:nth-child(2)
28 mouse over css=.MuiSvgIcon-fontSizeSmall
29 click css=.MuiSvgIcon-fontSizeSmall
Description
Log
Reference
20. click on id=payeeName OK 15:44:09
21. type on id=payeeName OK 15:44:10
22. click on css=.MuiButton-containedSuccess:nth-child(2) OK 15:44:11
23. click on id=payeeName OK 15:44:12
24. type on id=payeeName with value Test006 OK 15:44:13
25. click on id=nickName OK 15:44:15
26. type on id=nickName with value TS5 OK 15:44:15
27. click on css=.MuiButton-containedSuccess:nth-child(2) OK 15:44:16
28. mouseOver on css=.MuiSvgIcon-fontSizeSmall OK 15:44:17
29. click on css=.MuiSvgIcon-fontSizeSmall OK 15:44:18
'Edit Payee' completed successfully 15:44:20

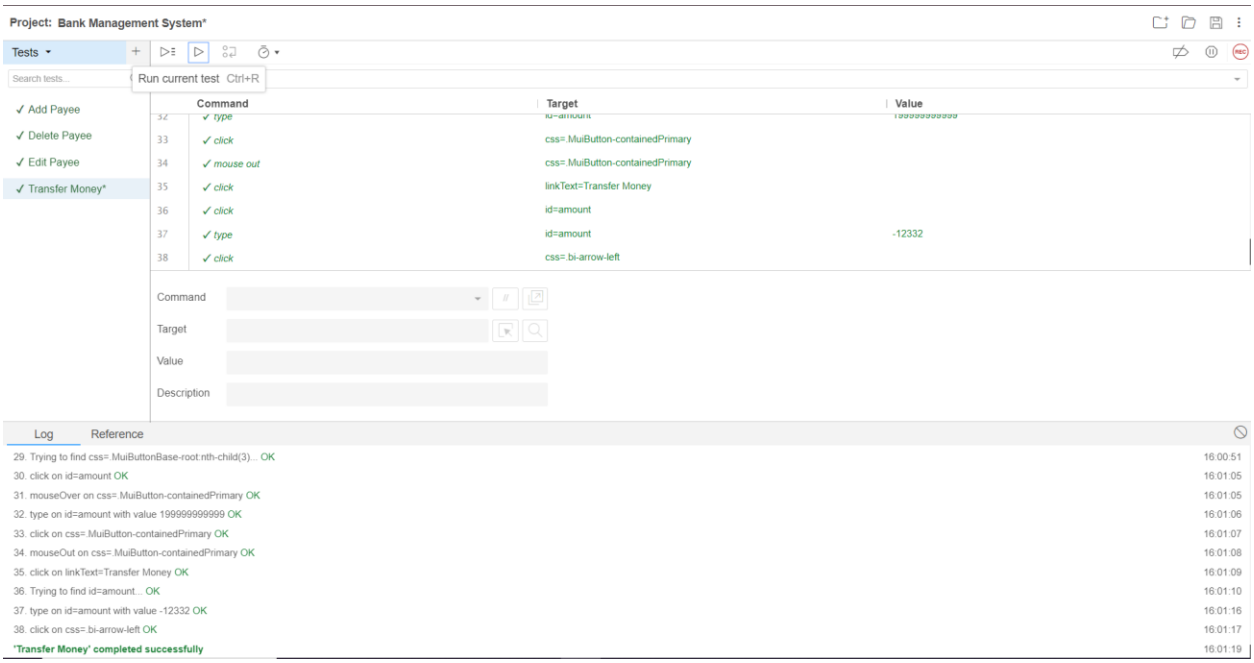
Delete Payee:

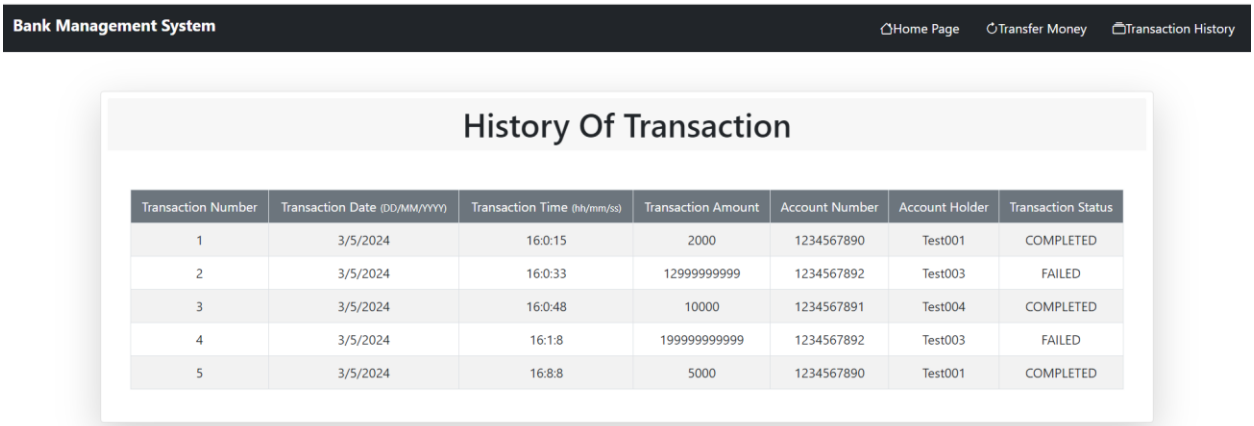




Transfer Money:







History Of Transaction

Transaction Number	Transaction Date (DD/MM/YYYY)	Transaction Time (hh/mm/ss)	Transaction Amount	Account Number	Account Holder	Transaction Status
1	3/5/2024	16:0:15	2000	1234567890	Test001	COMPLETED
2	3/5/2024	16:0:33	12999999999	1234567892	Test003	FAILED
3	3/5/2024	16:0:48	10000	1234567891	Test004	COMPLETED
4	3/5/2024	16:1:8	199999999999	1234567892	Test003	FAILED
5	3/5/2024	16:8:8	5000	1234567890	Test001	COMPLETED

Selenium in Backend:

AddPayeeTest.java:

```
package com.bms.selenium;

import org.junit.jupiter.api.Test;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class AddPayeeTest {

private WebDriver driver;

@Test
public void testAppPayee1() throws InterruptedException{

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("addPayee")).click();
driver.findElement(By.name("payeeName")).sendKeys("Test001");
driver.findElement(By.name("nickName")).sendKeys("TS1");
driver.findElement(By.name("accountNumber")).sendKeys("1234567890");
driver.findElement(By.name("addBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testAppPayee2() throws InterruptedException{

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("addPayee")).click();
driver.findElement(By.name("payeeName")).sendKeys("Test002");
driver.findElement(By.name("nickName")).sendKeys("TS2");
driver.findElement(By.name("accountNumber")).sendKeys("1234567891");
driver.findElement(By.name("addBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testAppPayee3() throws InterruptedException{
```

```
driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("addPayee")).click();
driver.findElement(By.name("payeeName")).sendKeys("Test003");
driver.findElement(By.name("addBtn")).click();
driver.findElement(By.name("nickName")).sendKeys("TS3");
driver.findElement(By.name("accountNumber")).sendKeys("1234567892");
Thread.sleep(2000);
driver.close();
}


@Test
public void testAppPayee4() throws InterruptedException{

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("addPayee")).click();
driver.findElement(By.name("payeeName")).sendKeys("Test001");
driver.findElement(By.name("nickName")).sendKeys("TS1");
driver.findElement(By.name("accountNumber")).sendKeys("1234567894");
driver.findElement(By.name("addBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testAppPayee5() throws InterruptedException{

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("addPayee")).click();
driver.findElement(By.name("payeeName")).sendKeys("Test004");
driver.findElement(By.name("nickName")).sendKeys("TS4");
driver.findElement(By.name("accountNumber")).sendKeys("1234567890");
driver.findElement(By.name("addBtn")).click();
Thread.sleep(2000);
driver.findElement(By.cssSelector(".MuiSvgIcon-
fontSizeSmall")).click();
```

```
driver.close();
}

}
```

EditPayeeTest.js

```
package com.bms.selenium;

import org.junit.jupiter.api.Test;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class EditPayeeTest {

private WebDriver driver;

@Test
public void testEditPayee1() throws InterruptedException {

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("edit1")).click();
driver.findElement(By.name("payeeName")).clear();
driver.findElement(By.name("payeeName")).sendKeys("Test006");
driver.findElement(By.name("nickName")).clear();
driver.findElement(By.name("nickName")).sendKeys("TS6");
driver.findElement(By.name("editBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testEditPayee2() throws InterruptedException {

driver = new ChromeDriver();
```

```
driver.get("http://localhost:4040");
driver.findElement(By.name("edit2")).click();
driver.findElement(By.name("payeeName")).clear();
driver.findElement(By.name("payeeName")).sendKeys("Test005");
driver.findElement(By.name("nickName")).clear();
driver.findElement(By.name("nickName")).sendKeys("TS5");
driver.findElement(By.name("editBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testEditPayee3() throws InterruptedException {

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("edit2")).click();
driver.findElement(By.name("payeeName")).clear();
driver.findElement(By.name("payeeName")).sendKeys("Test004");
driver.findElement(By.name("nickName")).clear();
driver.findElement(By.name("nickName")).sendKeys("TS5");
driver.findElement(By.name("cancelBtn")).click();
Thread.sleep(2000);
driver.close();
}

}
```

DeletePayeeTest.js:

package com.bms.selenium;

import org.junit.jupiter.api.Test;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

```
import org.openqa.selenium.chrome.ChromeDriver;

public class DeletePayeeTest {

private WebDriver driver;

@Test
public void testDeletePayee1() throws InterruptedException {
driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("delete1")).click();
Thread.sleep(2000);
driver.findElement(By.name("confirmBtn")).click();
Thread.sleep(2000);
driver.close();
}

@Test
public void testDeletePayee2() throws InterruptedException {
driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.name("delete2")).click();
Thread.sleep(2000);
```

driver.findElement(By.name("cancelBtn")).click();

Thread.sleep(2000);

driver.close();

}

@Test

public void testDeletePayee3() throws InterruptedException {

driver = new ChromeDriver();

driver.get("http://localhost:4040");

driver.findElement(By.name("delete2")).click();

Thread.sleep(2000);

driver.findElement(By.name("confirmBtn")).click();

Thread.sleep(2000);

driver.close();

}

}

TransferMoneyTest.java

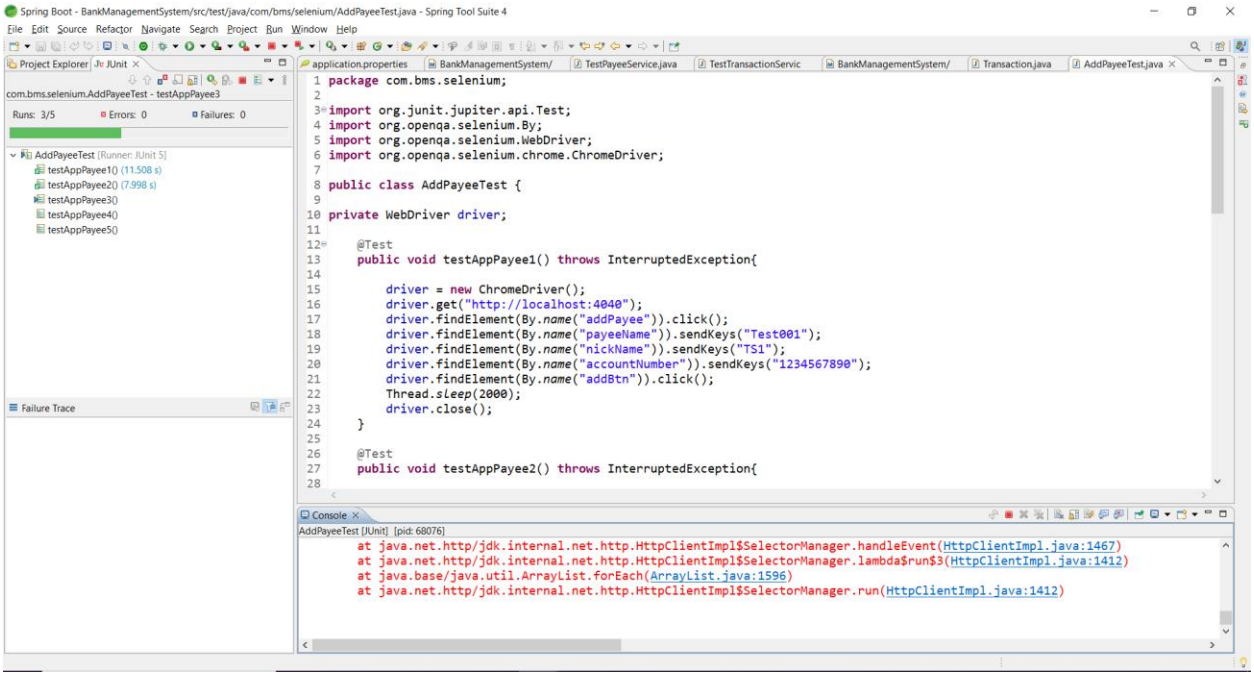
```
package com.bms.selenium;

import org.junit.jupiter.api.Test;
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.interactions.Actions;
```

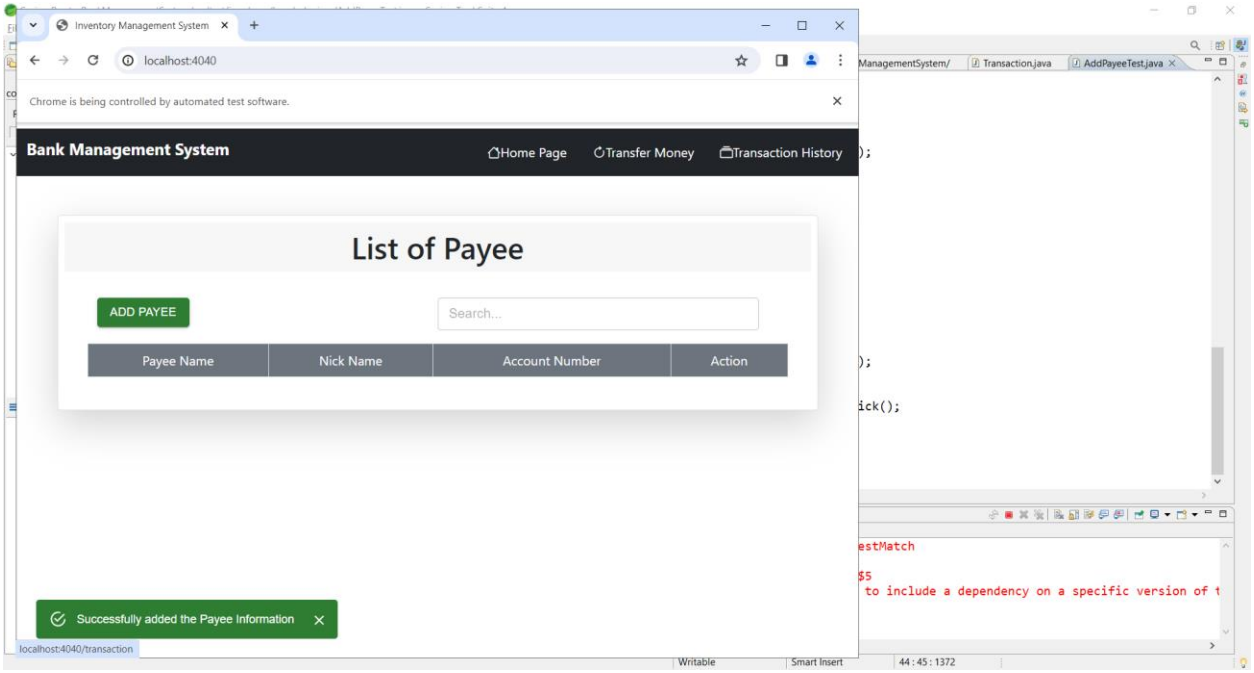
```
public class TransferMoneyTest {

private WebDriver driver;

@Test
public void testDoTransation1() throws InterruptedException {

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.linkText("Transfer Money")).click();
 driver.findElement(By.id("payeeId")).click();
 driver.findElement(By.name("TS1")).click();
 driver.findElement(By.id("amount")).click();
 {
 WebElement element = driver.findElement(By.cssSelector(".MuiButton-
containedPrimary"));
 Actions builder = new Actions(driver);
 builder.moveToElement(element).perform();
 }
 driver.findElement(By.id("amount")).sendKeys("2000");
 driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
Thread.sleep(3000);
driver.close();
}

@Test
public void testDoTransation2() throws InterruptedException {

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.linkText("Transfer Money")).click();
driver.findElement(By.id("payeeId")).click();
 driver.findElement(By.name("TS2")).click();
 driver.findElement(By.id("amount")).click();
 driver.findElement(By.id("amount")).sendKeys("20000000");
 driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
```

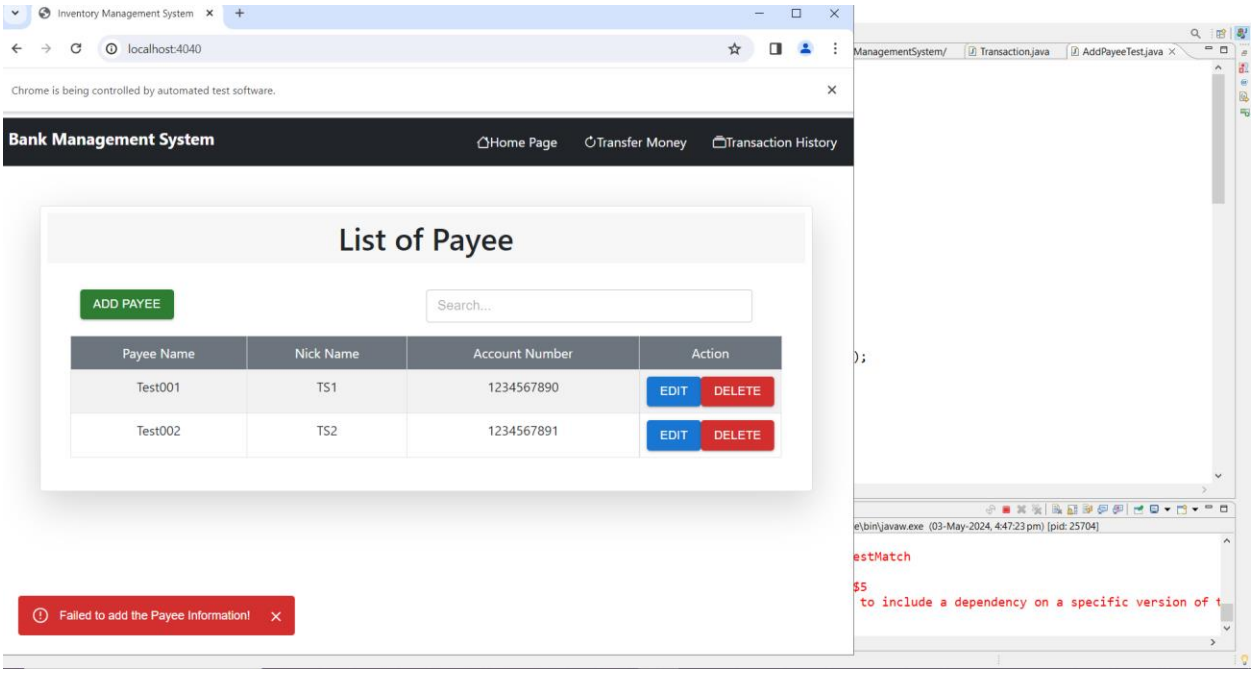
```
Thread.sleep(3000);
driver.close();
}


@Test
public void testDoTransation3() throws InterruptedException {

driver = new ChromeDriver();
driver.get("http://localhost:4040");
driver.findElement(By.linkText("Transfer Money")).click();
driver.findElement(By.id("payeeId")).click();
 driver.findElement(By.name("TS1")).click();
 driver.findElement(By.id("amount")).click();
 driver.findElement(By.id("amount")).sendKeys("2000111");
 driver.findElement(By.cssSelector(".MuiButton-
containedPrimary")).click();
Thread.sleep(3000);
driver.close();
}


}
```

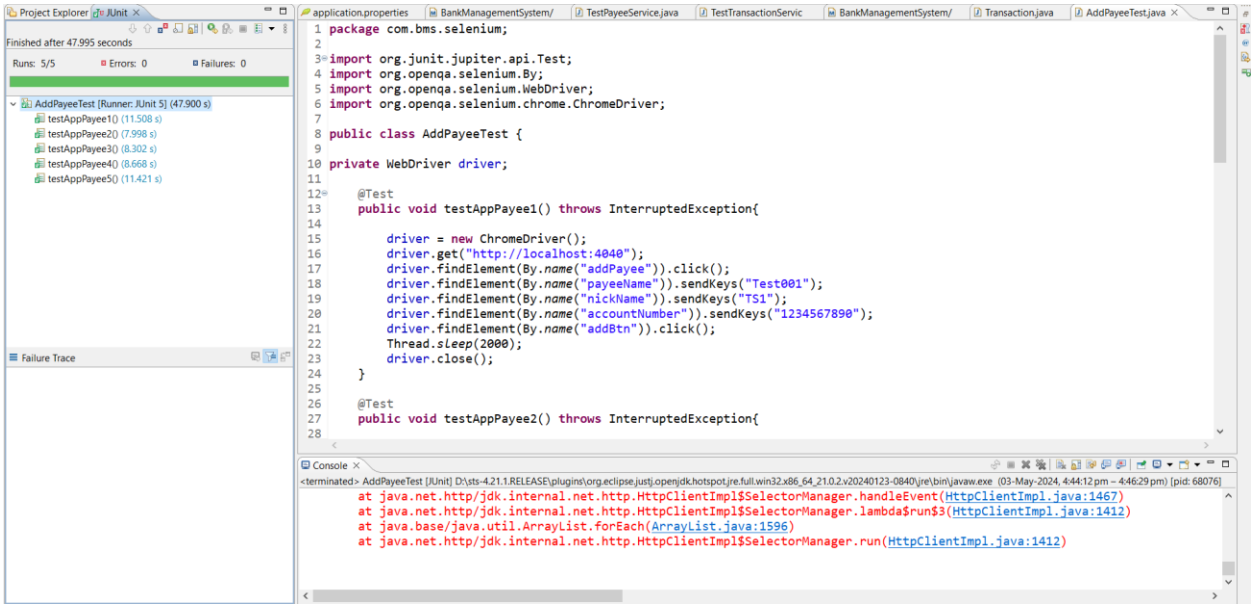
Output:

Add Payee

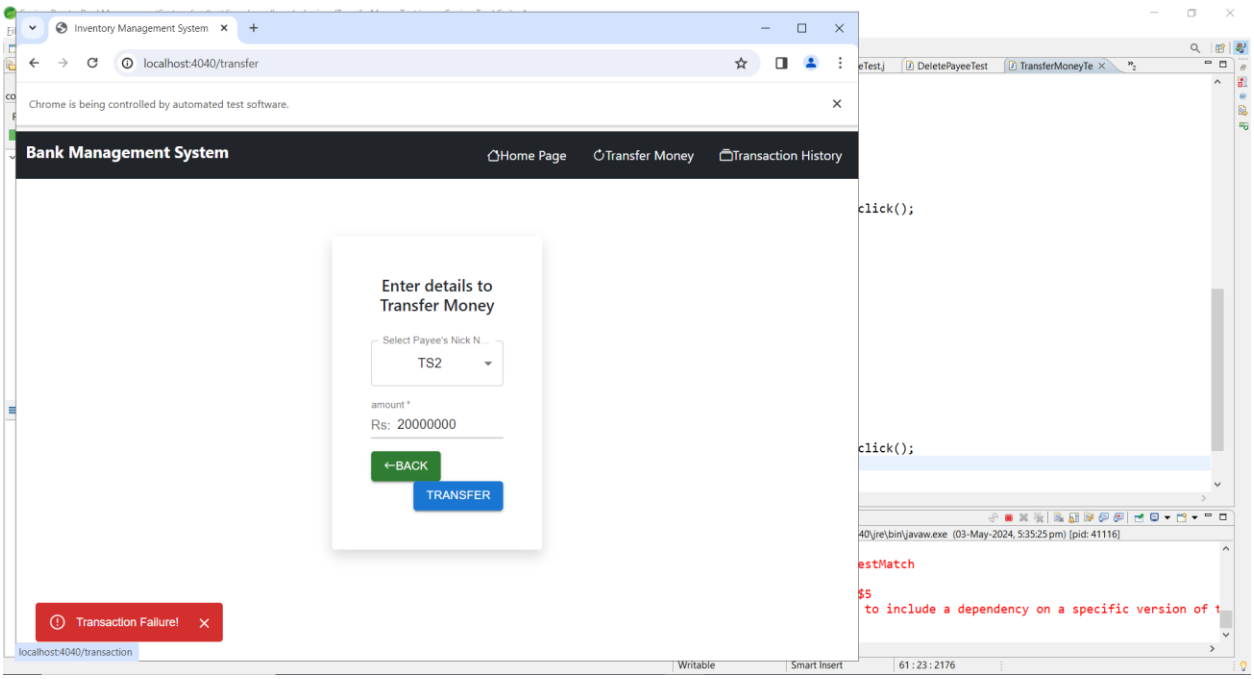

Spring Boot - BankManagementSystem/src/test/java/com/bms/selenium/AddPayeeTest.java - Spring Tool Suite 4
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
com.bms.selenium.AddPayeeTest - testAppPayee3
Runs: 3/5 Errors: 0 Failures: 0
AddPayeeTest [Runner: JUnit 5]
testAppPayee1() (11.508 s)
testAppPayee2() (7.998 s)
testAppPayee3()
testAppPayee4()
testAppPayee5()
Failure Trace
application.properties BankManagementSystem/ TestPayeeService.java TestTransactionServic BankManagementSystem/ Transaction.java AddPayeeTest.java
1 package com.bms.selenium;
2
3 import org.junit.jupiter.api.Test;
4 import org.openqa.selenium.By;
5 import org.openqa.selenium.WebDriver;
6 import org.openqa.selenium.chrome.ChromeDriver;
7
8 public class AddPayeeTest {
9
10 private WebDriver driver;
11
12 @Test
13 public void testAppPayee1() throws InterruptedException{
14
15 driver = new ChromeDriver();
16 driver.get("http://localhost:4040");
17 driver.findElement(By.name("addPayee")).click();
18 driver.findElement(By.name("payeeName")).sendKeys("Test001");
19 driver.findElement(By.name("nickName")).sendKeys("TS1");
20 driver.findElement(By.name("accountNumber")).sendKeys("1234567890");
21 driver.findElement(By.name("addBtn")).click();
22 Thread.sleep(2000);
23 driver.close();
24 }
25
26 @Test
27 public void testAppPayee2() throws InterruptedException{
28
Console
AddPayeeTest [JUnit] [pid: 68076]
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.handleEvent(HttpClientImpl.java:1467)
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.lambda$run$3(HttpClientImpl.java:1412)
at java.base/java.util.ArrayList.forEach(ArrayList.java:1596)
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.run(HttpClientImpl.java:1412)

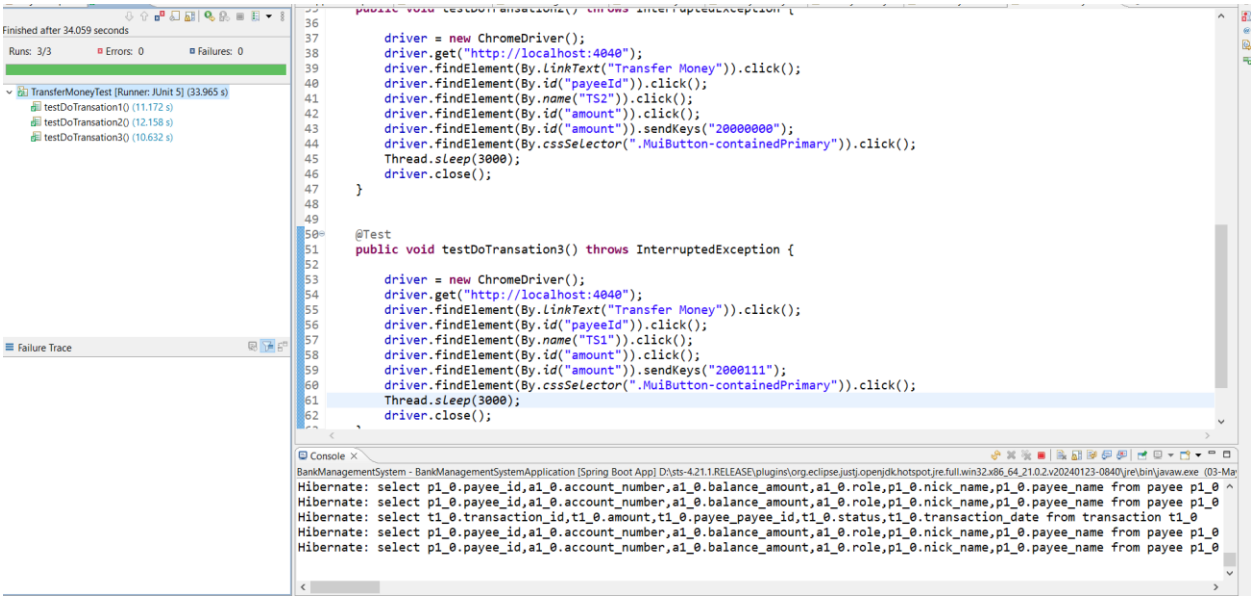

Inventory Management System
localhost:4040
Chrome is being controlled by automated test software.
Bank Management System
Home Page
Transfer Money
Transaction History
List of Payee
ADD PAYEE
Search...
Payee Name
Nick Name
Account Number
Action
Successfully added the Payee Information
localhost:4040/transaction
Writable
Smart Insert
44 : 45 : 1372



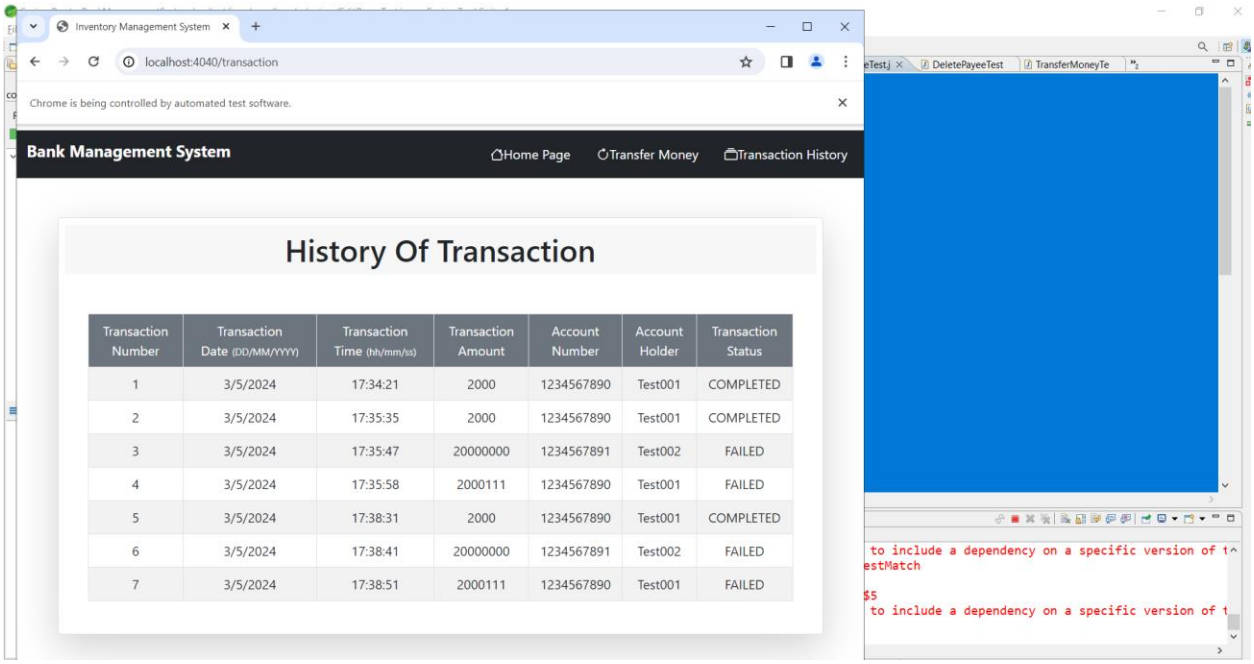


Transfer Money:

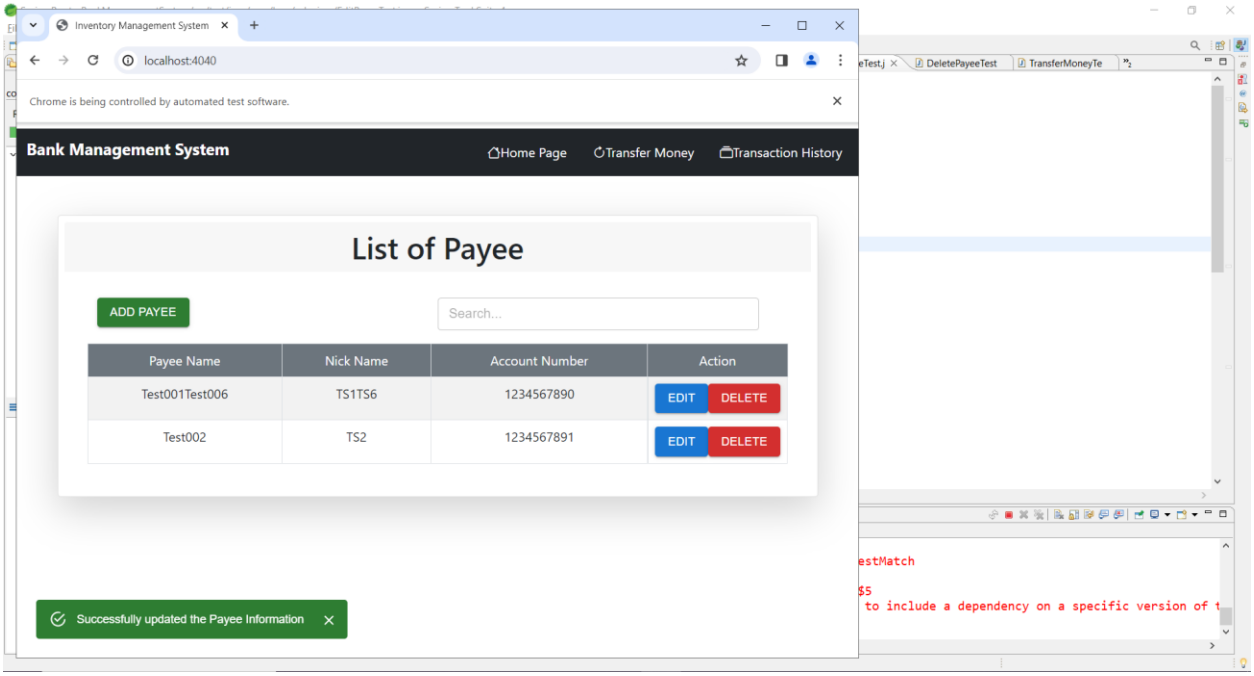


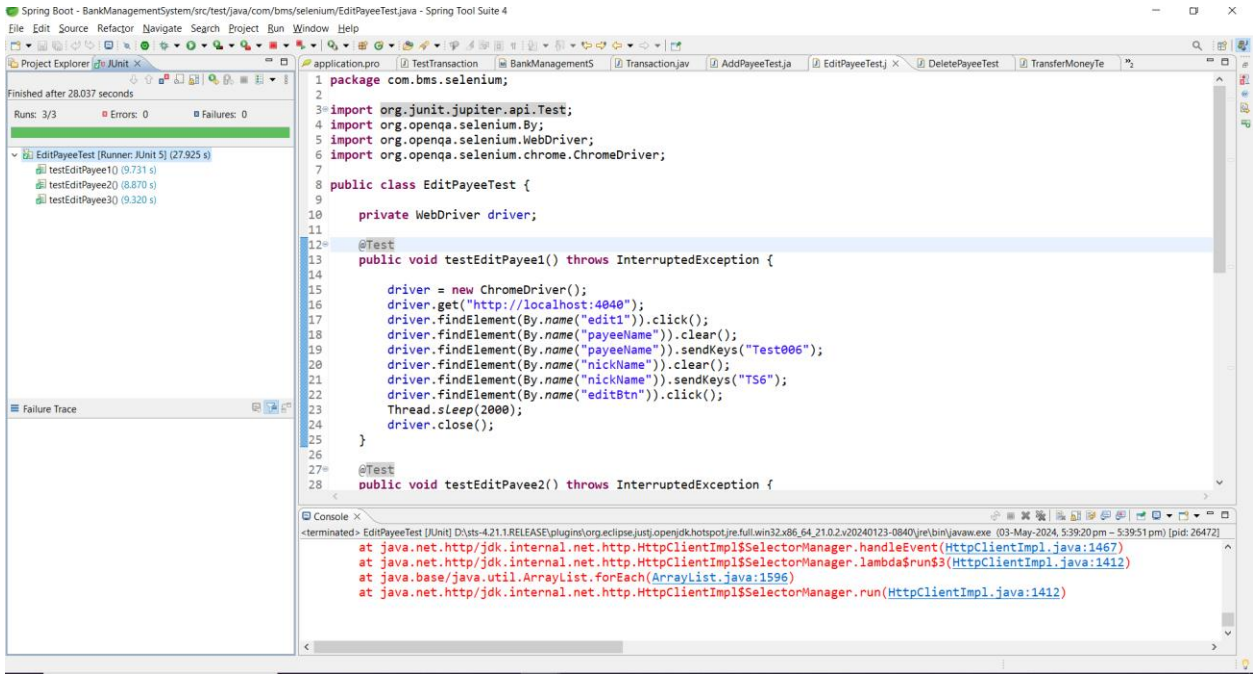


Transaction History:


Inventory Management System
localhost:4040/transaction
Chrome is being controlled by automated test software.
Bank Management System
Home Page
Transfer Money
Transaction History
History Of Transaction
Transaction Number
Transaction Date (DD/MM/YYYY)
Transaction Time (hh/mm/ss)
Transaction Amount
Account Number
Account Holder
Transaction Status
1 3/5/2024 17:34:21 2000 1234567890 Test001 COMPLETED
2 3/5/2024 17:35:35 2000 1234567890 Test001 COMPLETED
3 3/5/2024 17:35:47 20000000 1234567891 Test002 FAILED
4 3/5/2024 17:35:58 2000111 1234567890 Test001 FAILED
5 3/5/2024 17:38:31 2000 1234567890 Test001 COMPLETED
6 3/5/2024 17:38:41 20000000 1234567891 Test002 FAILED
7 3/5/2024 17:38:51 2000111 1234567890 Test001 FAILED

Edit Payee:


Inventory Management System
localhost:4040
Chrome is being controlled by automated test software.
Bank Management System
Home Page
Transfer Money
Transaction History
List of Payee
ADD PAYEE
Search...
Payee Name
Nick Name
Account Number
Action
Test001Test006 TS1TS6 1234567890 EDIT DELETE
Test002 TS2 1234567891 EDIT DELETE
Successfully updated the Payee Information


Spring Boot - BankManagementSystem/src/test/java/com/bms/selenium/EditPayeeTest.java - Spring Tool Suite 4
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
Finished after 28.037 seconds
Runs: 3/3
Errors: 0
Failures: 0
EditPayeeTest [Runner: JUnit 5] (27.925 s)
testEditPayee1() (9.731 s)
testEditPayee2() (8.870 s)
testEditPayee3() (9.320 s)
Failure Trace
application.pro
TestTransaction
BankManagementS
Transaction.jav
AddPayeeTest.ja
EditPayeeTest.j
DeletePayeeTest
TransferMoneyTe
1 package com.bms.selenium;
3 import org.junit.jupiter.api.Test;
4 import org.openqa.selenium.By;
5 import org.openqa.selenium.WebDriver;
6 import org.openqa.selenium.chrome.ChromeDriver;
8 public class EditPayeeTest {
10 private WebDriver driver;
12 @Test
13 public void testEditPayee1() throws InterruptedException {
15 driver = new ChromeDriver();
16 driver.get("http://localhost:4040");
17 driver.findElement(By.name("edit1")).click();
18 driver.findElement(By.name("payeeName")).clear();
19 driver.findElement(By.name("payeeName")).sendKeys("Test006");
20 driver.findElement(By.name("nickName")).clear();
21 driver.findElement(By.name("nickName")).sendKeys("TS6");
22 driver.findElement(By.name("editBtn")).click();
23 Thread.sleep(2000);
24 driver.close();
25 }
27 @Test
28 public void testEditPayee2() throws InterruptedException {
Console
<terminated> EditPayeeTest [JUnit] D:\sts-4.21.1.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.2.v20240123-0840\jre\bin\javaw.exe (03-May-2024, 5:39:20 pm – 5:39:51 pm) [pid: 26472]
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.handleEvent(HttpClientImpl.java:1467)
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.lambda$run$3(HttpClientImpl.java:1412)
at java.base/java.util.ArrayList.forEach(ArrayList.java:1596)
at java.net.http/jdk.internal.net.http.HttpClientImpl$SelectorManager.run(HttpClientImpl.java:1412)