

**МІНІСТЕРСТВО ОСВІТИ ТА НАУКИ УКРАЇНИ  
ЖИТОМИРСЬКИЙ ДЕРЖАВНИЙ  
ТЕХНОЛОГІЧНИЙ УНІВЕРСИТЕТ**

кафедра  
програмного забезпечення  
обчислювальної техніки  
група ПІ-48

**Лабораторна робота №5-7  
Автоматизація процесу тестування**

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### Лабораторна робота №5-7

Клас де зберігаються методи управління тестами за допомогою Selenium:

```
package org.example.test;

import org.openqa.selenium.*;
import com.thoughtworks.selenium.*;

import junit.framework.Assert;

import java.util.Random;
import java.util.regex.Pattern;

import java.util.regex.Pattern;
import java.util.concurrent.TimeUnit;
import org.junit.*;
import static org.junit.Assert.*;
//import static org.hamcrest.CoreMatchers.*;
import org.openqa.selenium.*;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.support.ui.Select;

@SuppressWarnings("deprecation")
public class AppManager extends SeleneseTestCase {

    public void setUp() throws Exception {
        setUp("http://test.local", "*firefox");
    }

    public void openMainPage(){
        selenium.open("/index.php");
        selenium.waitForPageToLoad("300000");
    }

    public void openGroupPage(){
        selenium.click("link=groups");
        selenium.waitForPageToLoad("3000000");
    }

    private void clickDeleteGroupBtn() {
        selenium.click("name=delete");
    }
}
```

```

private void selectAllCheckboxes(int count) {
    for (int i=1; i<count + 1;i++){
        selenium.click("xpath=("//input[@name='selected[]'][" + i + "]);
    }
}

private int getAllCheckboxes() {
    return selenium.getXpathCount("//input[@type='checkbox']").intValue();
}

public void initGroupCreation(){
    selenium.click("name=new");
    selenium.waitForPageToLoad("3000000");
}

private void returnToGroupList() {
    selenium.click("link=groups");
    selenium.waitForPageToLoad("3000000");
}

private void submitCreation() {
    selenium.click("name=submit");
    selenium.waitForPageToLoad("3000000");
}

private void fillForm(GroupData group) {
    selenium.type("name=group_name", group.groupName);
    selenium.type("name=group_header", group.groupHeader);
    selenium.type("name=group_footer", group.groupFooter);
}

private void clickUpdateBtn() {
    selenium.click("name=update");
    selenium.waitForPageToLoad("3000000");
}

private void clickEditGroupBtn() {
    selenium.click("name=edit");
    selenium.waitForPageToLoad("3000000");
}

private void selectGroupById(String groupId) {
    selenium.click("xpath=("//input[@name='selected[]'][" + groupId + "]);
}

```

```

private void clickAddNewUserBtn() {
    selenium.click("link=add new");
    selenium.waitForPageToLoad("3000000");
}

private void clickEditUserBtn() {
    selenium.click("css=img[alt=\"Edit\"]");
    selenium.waitForPageToLoad("3000000");
}

private void getUserById(String userId) {
    selenium.click("id=" + userId);
}

private void clickDeleteUserBtn() {
    selenium.click("xpath=(//input[@name='update'])[2]");
    selenium.waitForPageToLoad("3000000");
}

private void fillForm(UserData user) {
    selenium.type("name=firstname", user.firstName);
    selenium.type("name=lastname", user.lastName);
    selenium.type("name=address", user.address);
    selenium.type("name=home", user.homePhone);
    selenium.type("name=mobile", user.mobilePhone);
    selenium.type("name=work", user.workPhone);
    selenium.type("name=email", user.email);
    selenium.type("name=email2", user.email2);
    selenium.select("name=bmonth", "label=" + user.bmonth);
    selenium.select("name=bday", "label=" + user.bday);
    selenium.type("name=byear", user.byear);
    if(user.new_group != null)
        selenium.select("name=new_group", "label=" + user.new_group);
    selenium.type("name=address2", user.address2);
    selenium.type("name=phone2", user.phone2);
}

public void testDeleteAllUser(){
    openMainPage();
    int count = getAllCheckboxes();
    while (count!=0){
        openMainPage();
        clickEditUserBtn();
        clickDeleteUserBtn();
        count = getAllCheckboxes();
    }
}

```

```

    }
    openMainPage();
    count = getAllCheckboxes();
    try{
        Assert.assertEquals(0,count);
    }
    catch (AssertionError err){
        System.out.println(err);
    }
}

```

```

public void testDeleteAllGroups(){
    openMainPage();
    openGroupPage();
    int count = getAllCheckboxes();
    selectAllCheckboxes(count);
    clickDeleteGroupBtn();
    openMainPage();
    openGroupPage();
    count = getAllCheckboxes();
    try{
        Assert.assertEquals(0,count);
    }
    catch (AssertionError err){
        System.out.println(err);
    }
}

```

```

public void testAddGroup() throws Exception {
    Random rnd = new Random();
    //Prepare test data
    GroupData group = new GroupData();
    group.groupName="a"+rnd.nextInt();
    group.groupHeader="header"+rnd.nextInt();
    group.groupFooter ="footer"+rnd.nextInt();
    //prepare state
    openMainPage();
    openGroupPage();
    //test action
    initGroupCreation();
    fillForm(group);
    submitCreation();
    returnToGroupList();
}

```

```

    try{
        Assert.assertEquals(true,selenium.isTextPresent(group.groupName));
    }
    catch (AssertionError err){
        System.out.println(err);
    }
}

```

```

public void testUpdateGroupId() throws Exception {
    updateGroup("1");
}

```

```

public void updateGroup(String groupId) throws Exception {
    Random rnd = new Random();
    //Prepare test data
    GroupData group = new GroupData();
    group.groupName="a"+rnd.nextInt();
    group.groupHeader="header"+rnd.nextInt();
    group.groupFooter ="footer"+rnd.nextInt();
    //prepare state
    openMainPage();
    openGroupPage();
    selectGroupById(groupId);
    clickEditGroupBtn();
    fillForm(group);
    clickUpdateBtn();
}

```

```

public void testDeleteGroup() throws Exception{
    deleteGroup("1");
}

```

```

public void deleteGroup(String groupId) throws Exception {
    openMainPage();
    openGroupPage();
    int count1 = getAllCheckboxes();
    selectGroupById(groupId);
    clickDeleteGroupBtn();
    openMainPage();
    openGroupPage();
    int count2 = getAllCheckboxes();
    try{
        Assert.assertEquals(count2,count1-1);
    }
}

```

```

        catch (AssertionError err){
            System.out.println(err);
        }
    }
}

```

```

public void testAddUser() throws Exception {
    Random rnd = new Random();
    UserData user = new UserData(
        "firstname" + rnd.nextInt(), "Dux" + rnd.nextInt(), "gdfhfh" + rnd.nextInt(), "543454" +
        rnd.nextInt(), "453454345" + rnd.nextInt(), "45343453" + rnd.nextInt(), "sf@dsf" +
        rnd.nextInt(), "sf@dsf", "August", "12", "2000", null, "dgdr rgdr rd rg r", "547474"
    );
    openMainPage();
    clickAddNewUserBtn();
    fillForm(user);
    submitCreation();
    try{
        Assert.assertEquals(true, selenium.isTextPresent(user.firstName));
    }
    catch (AssertionError err){
        System.out.println(err);
    }
}

```

```

public void testUpdateUserWithId28() throws Exception{
    updateUser("id28");
}

public void updateUser(String userId) throws Exception {
    Random rnd = new Random();
    UserData user = new UserData(
        "firstname" + rnd.nextInt(), "Dux" + rnd.nextInt(), "gdfhfh" + rnd.nextInt(), "543454" +
        rnd.nextInt(), "453454345" + rnd.nextInt(), "45343453" + rnd.nextInt(), "sf@dsf" +
        rnd.nextInt(), "sf@dsf", "August", "12", "2000", null, "dgdr rgdr rd rg r", "547474"
    );
    openMainPage();
    getUserById(userId);
    clickEditUserBtn();
    fillForm(user);
    clickUpdateBtn();
}

```

```

public void testDeleteIdWithId28() throws Exception{
    deleteUser("id28");
}
public void deleteUser(String userId) throws Exception {

    openMainPage();
    int count1 = getAllCheckboxes();
    getUserById(userId);
    clickEditUserBtn();
    clickDeleteUserBtn();
    openMainPage();
    int count2 = getAllCheckboxes();

    try{
        Assert.assertEquals(count2,count1-1);
    }
    catch (AssertionError err){
        System.out.println(err);
    }

}
}

```

#### GroupData.java

```

package org.example.test;

public class GroupData {
    public String groupName, groupHeader, groupFooter;
    public GroupData(String groupName, String groupHeader, String groupFooter){
        this.groupName = groupName;
        this.groupHeader = groupHeader;
        this.groupFooter = groupFooter;
    }
    public GroupData(){
    }
}

```

#### UserData.java

```

package org.example.test;

public class UserData {
    public String firstName, lastName, address, homePhone, mobilePhone,
    workPhone, email, email2, bmonth, bday,
    byear, new_group, address2, phone2;
}

```



```
public UserData(String firstName, String lastName, String address, String homePhone,
String mobilePhone, String workPhone, String email, String email2, String bmonth, String
bday, String byear, String groupe, String address2, String phone2) {
    this.firstName = firstName;
    this.lastName = lastName;
    this.address = address;
    this.homePhone = homePhone;
    this.mobilePhone = mobilePhone;
    this.workPhone = workPhone;
    this.email = email;
    this.email2 = email2;
    this.bmonth = bmonth;
    this.bday = bday;
    this.byear = byear;
    this.new_group = groupe;
    this.address2 = address2;
    this.phone2 = phone2;
}
}
```

## Відео:

Добавлення групи: [https://drive.google.com/open?id=0B\\_neBIBINmOvTHpISXQ2MXIwOUk](https://drive.google.com/open?id=0B_neBIBINmOvTHpISXQ2MXIwOUk)

Редагування групи: [https://drive.google.com/open?id=0B\\_neBIBINmOvNI9RdXhBb0RmTkk](https://drive.google.com/open?id=0B_neBIBINmOvNI9RdXhBb0RmTkk)

Видалення групи: [https://drive.google.com/open?id=0B\\_neBIBINmOvRmZkbUpZYnBpZm8](https://drive.google.com/open?id=0B_neBIBINmOvRmZkbUpZYnBpZm8)

Видалення всіх груп:

[https://drive.google.com/open?id=0B\\_neBIBINmOvaXhfcnBUYUdIN0U](https://drive.google.com/open?id=0B_neBIBINmOvaXhfcnBUYUdIN0U)

Добавлення користувача:

[https://drive.google.com/open?id=0B\\_neBIBINmOvQ3pNVkRZOExXQVE](https://drive.google.com/open?id=0B_neBIBINmOvQ3pNVkRZOExXQVE)

Редагування користувача:

[https://drive.google.com/open?id=0B\\_neBIBINmOvZ0s0Y3k3b3NqekE](https://drive.google.com/open?id=0B_neBIBINmOvZ0s0Y3k3b3NqekE)

Видалення користувача:

[https://drive.google.com/open?id=0B\\_neBIBINmOvYVRpTTUzRnJ5Qjg](https://drive.google.com/open?id=0B_neBIBINmOvYVRpTTUzRnJ5Qjg)

Видалення всіх користувачів:

[https://drive.google.com/open?id=0B\\_neBIBINmOvaXhfcnBUYUdIN0U](https://drive.google.com/open?id=0B_neBIBINmOvaXhfcnBUYUdIN0U)

