

AUTOMATSKI TESTOVI

Kako bi se okruženje Eclipse koristilo za kreiranje automatskih testova korišćenjem programskog jezika Java, neophodno je izvršiti sledeće radnje. Pre svega potrebno je instalirati Java Development Kit (JDK), koji se može preuzeti sa zvanične stranice Oracle. Zatim je neophodno instalirati Eclipse IDE sa zvanične stranice Eclipse-a.

Nakon kreiranja novog Java projekta (Java project), potrebno je dodati neophodne biblioteke (Add External JARs). U ovom slučaju biće neophodne Selenium biblioteke (npr. selenium-java.jar, selenium-server-standalone.jar itd.), kao što se vidi na sledećim slikama 1 i 2.

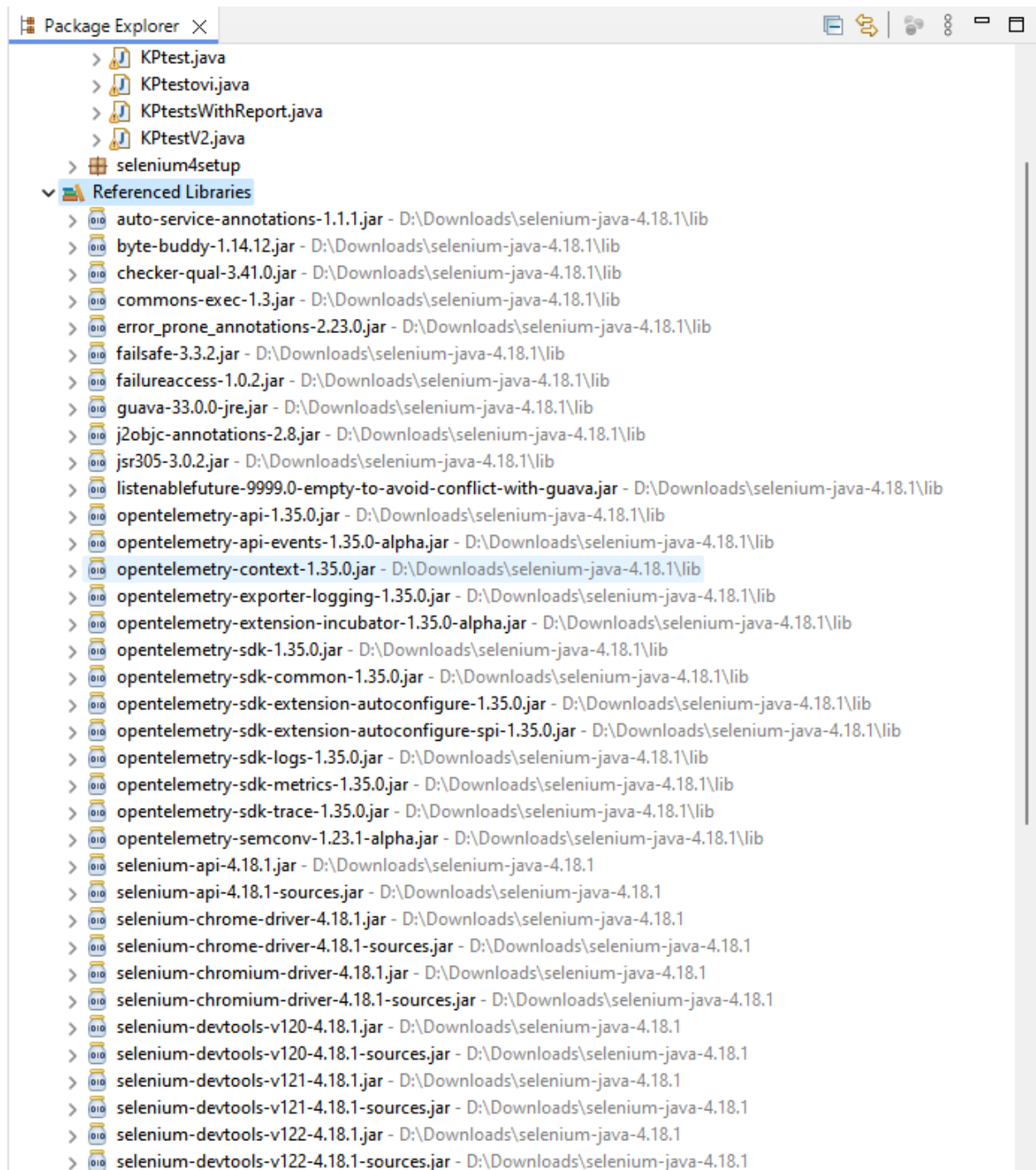
Prilikom pokretanja koda koristi se opcija Run koja u Eclipse okruženju služi za pokretanje programa.

Rezultat i tok testa biće prikazan u konzoli.

Nakon završetka prvog testa, neophodno je uneti link ka otvorenom oglasu odakle će započeti drugi test.

Kao što je prikazano na slikama 3 i 4, testovi su okončani uspešno u oba slučaja.

U slučaju prvog testa priloženi su i dodatni načini izbora kategorije i potkategorije, ali je takođe priložen i kod testa kada je biranje kategorije i potkategorije vrši najintuitivnijom metodom, tj direktnim klikom na traženo polje.



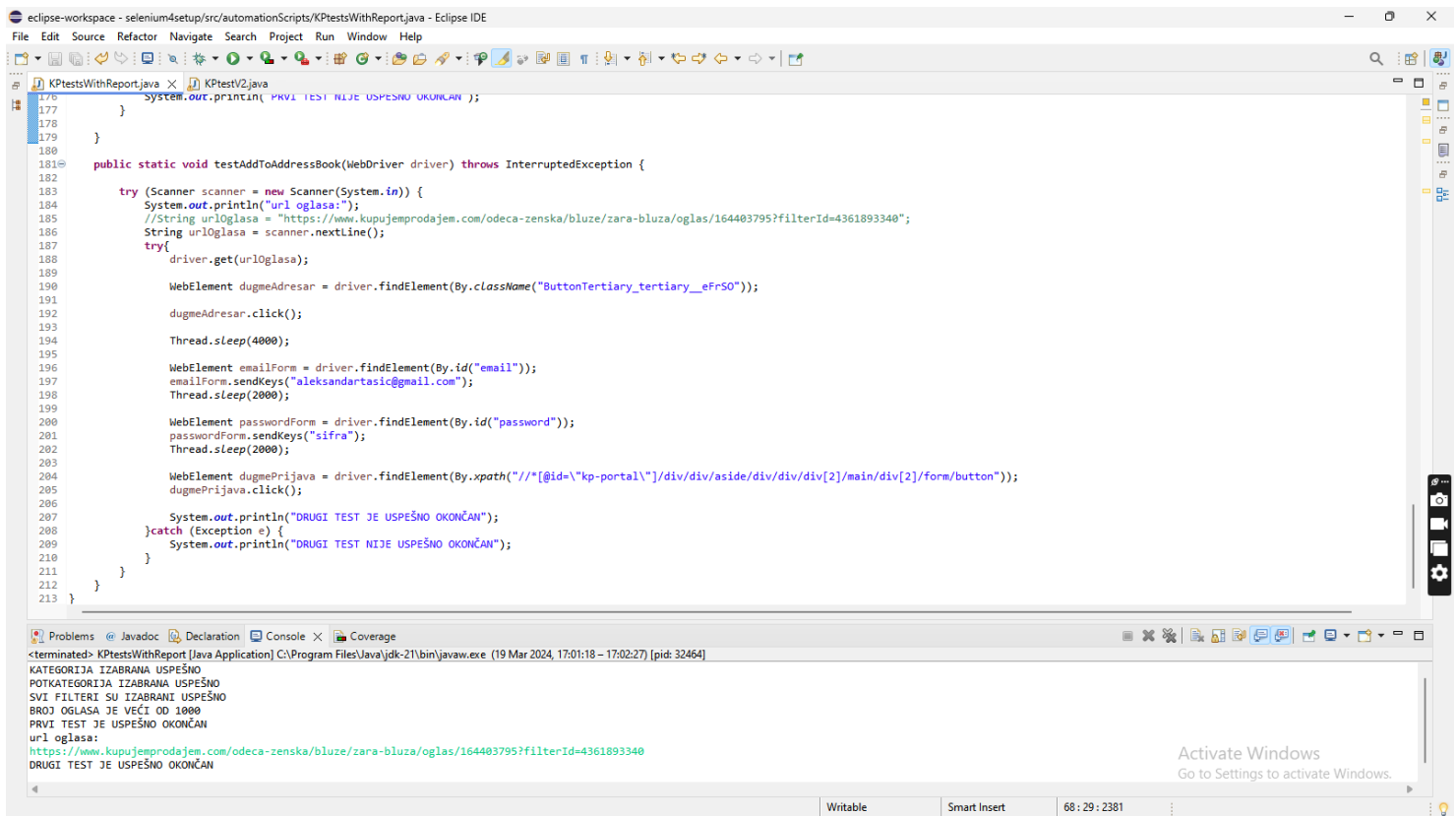
Slika 1

```

> opentelemetry-sdk-common-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-sdk-extension-autoconfigure-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-sdk-extension-autoconfigure-spi-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-sdk-logs-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-sdk-metrics-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-sdk-trace-1.35.0.jar - D:\Downloads\selenium-java-4.18.1\lib
> opentelemetry-semconv-1.23.1-alpha.jar - D:\Downloads\selenium-java-4.18.1\lib
> selenium-api-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-api-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-chrome-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-chrome-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-chromium-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-chromium-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v120-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v120-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v121-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v121-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v122-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v122-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v85-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-devtools-v85-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-edge-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-edge-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-firefox-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-firefox-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-http-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-http-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-ie-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-ie-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-java-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-java-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-json-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-json-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-manager-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-manager-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-os-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-os-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-remote-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-remote-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-safari-driver-4.18.1.jar - D:\Downloads\selenium-java-4.18.1
> selenium-safari-driver-4.18.1-sources.jar - D:\Downloads\selenium-java-4.18.1
> selenium-support-4.18.1.jar - D:\Downloads\selenium-java-4.18.1

```

Slika 2



Slika3

```
package automationScripts;
```

```
import java.util.List;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.chrome.ChromeOptions;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.Select;
```

```
public class KPtestsWithReport {

    public static void main(String[] args) throws InterruptedException {

        // System.setProperty("webdriver.chrome.driver", "path_to_chromedriver.exe");
        ChromeOptions options = new ChromeOptions();
        options.addArguments("--start-maximized");
        WebDriver driver = new ChromeDriver(options);

        // Scenario 1:
        testSearchCriteria(driver);

        // Scenario 2:
        testAddToAddressBook(driver);

        driver.quit();
    }
}
```

```

    }

    private static void findDivs(WebDriver driver, String link1) { // služi za nalaženje divova koji se
dinamički menjaju.

        WebElement parentElementSelectCategory2 = driver.findElement(By.xpath(link1));

        List<WebElement> selectElementsSelectCategory =
parentElementSelectCategory2.findElements(By.xpath(".*"));

        System.out.println("Number of <select>1 elements found: " + selectElementsSelectCategory.size());

        for (WebElement selectElement1 : selectElementsSelectCategory) {
            System.out.println("Select podcat element text: " + selectElement1.getText());
            System.out.println("Select1 element tag name: " + selectElement1.getTagName());
        }
    }

    public static void testSearchCriteria(WebDriver driver) throws InterruptedException {

        try {
            driver.get("https://www.kupujemprodajem.com");

            WebElement button = driver.findElement(By.className("Button_children__tDTVo"));

            button.click();

            Thread.sleep(2000);

            String link
            ="/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[
1]/span/div[1]/div/section/div";
            // osnova za dalji rad sa input poljem gde se bira kategorija

            WebElement button1 = driver.findElement(By.xpath(link+"/div/div[2]"));
            button1.click();

            Thread.sleep(2000);

            WebElement parentElementSelectCategory =
driver.findElement(By.xpath(link+"/div[2]/div/div/div/div[3]/div[3]"));
            parentElementSelectCategory.click();

            Thread.sleep(1000);

            //Ovo je drugi nacin, da se direktno unese u input polje//

            WebElement fieldInput = driver.findElement(By.xpath("//*[@id=\"react-select-categoryId-
input\"]"));
            fieldInput.sendKeys("Odeća | Ženska");
            Thread.sleep(1000);

            fieldInput.sendKeys(Keys.ENTER);

            Thread.sleep(1000);

            // moguće je koristiti i dugme ARROW DOWN//

            Actions actions = new Actions(driver);

            for (int i = 0; i < 85; i++) {
                actions.keyDown(fieldInput, Keys.ARROW_DOWN).perform();
            }

            fieldInput.sendKeys(Keys.ENTER);

```

```

Thread.sleep(2000);

System.out.println("KATEGORIJA IZABRANA USPEŠNO");

String linkInputSubcategory =
"/html/body/div[1]/div/div[1]/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[1]/span/d
iv[2]/div/section/div";

WebElement divZaBiranjeVrsteOdece = driver.findElement(By.xpath(linkInputSubcategory +
"/div[2]/div[1]"));
divZaBiranjeVrsteOdece.click();
Thread.sleep(2000);

//findDivs(driver, linkDoInputPoljaZaPodkategoriju+"/div[2]/div[1]/div[1]/div[1]/div[1]/div");

WebElement SelectSubcategory = driver.findElement(By.xpath(linkInputSubcategory
+"/div[2]/div[1]/div[1]/div[1]/div[1]/div"));
SelectSubcategory.click();
Thread.sleep(4000);

WebElement fieldBluze = driver.findElement(By.xpath("///*[@id=\"react-select-groupId-
input\"]"));
fieldBluze.sendKeys("Bluze");
Thread.sleep(2000);
fieldBluze.sendKeys(Keys.ENTER);

Thread.sleep(500);
WebElement minPrice = driver.findElement(By.id("priceFrom"));
minPrice.sendKeys("100");
Thread.sleep(500);

System.out.println("POTKATEGORIJA IZABRANA USPEŠNO");

String linkCurrency =
"/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[2]/span/d
iv[1]/div[3]/section/div";

WebElement dugmeValute = driver.findElement(By.xpath(linkCurrency+"/div/div[2]/div"));
dugmeValute.click();
Thread.sleep(2000);

//findDivs(driver, linkDoPolja + "/div[2]" );

WebElement divValute = driver.findElement(By.xpath(linkCurrency+"/div[2]/div/div"));
divValute.click();
Thread.sleep(2000);

//checkbox samo sa cenom
WebElement cb =
driver.findElement(By.xpath("/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/
div/div/div[1]/div[2]/span/div[2]/div[1]/span/label/span[1]"));
cb.click();
Thread.sleep(500);

String
linkSelectCondition="/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/
div[1]/div[3]/span/div[1]/div/section/div";

WebElement sel = driver.findElement(By.xpath(linkSelectCondition+"/div[1]/div[2]"));
sel.click();
Thread.sleep(2000);

WebElement KaoNovo = driver.findElement(By.xpath(linkSelectCondition+"/div[2]/div/div[2]"));
KaoNovo.click();/// selektuje prvi element
Thread.sleep(2000);
WebElement Novo= driver.findElement (By.xpath(linkSelectCondition+"/div[2]/div"));
Novo.click();
Thread.sleep(2000);///detektuje drugi trazeni element za selekciju

```

```

        //findDivs(driver,
        "/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[3]/span/div[1]/div/section/div/div[2]"); //dodato za traženje child elemenata za select

        WebElement buttonFinalElement =
driver.findElement(By.xpath("/html/body/div[1]/div/div[1]/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[2]/button[2]"));
        buttonFinalElement.click();

        System.out.println("SVI FILTERI SU IZABRANI USPEŠNO");
        Thread.sleep(5000);

        WebElement spanElement =
driver.findElement(By.xpath("//*[ @id = \"__next\"] /div/div[3]/div/div/div[2]/div[1]/div/div/span/div/span"));
        String spanText = spanElement.getText();
        String numberStr = spanText.replaceAll("[^0-9]", "");
        int number = Integer.parseInt(numberStr);

        if (number > 1000) {
            System.out.println("BROJ OGLASA JE VEĆI OD 1000");
        } else {
            System.out.println("BROJ OGLASA JE MANJI OD 1000");
        }

        System.out.println("PRVI TEST JE USPEŠNO OKONČAN");

    } catch (Exception e) {
        System.out.println("PRVI TEST NIJE USPEŠNO OKONČAN");
    }

}

public static void testAddToAddressBook(WebDriver driver) throws InterruptedException {

    try (Scanner scanner = new Scanner(System.in)) {
        System.out.println("url oglasa:");
        //String urlOglasa = "https://www.kupujemprodajem.com/odeca-zenska/bluze/zara-bluza/oglas/164403795?filterId=4361893340";
        String urlOglasa = scanner.nextLine();
        try{
            driver.get(urlOglasa);

            WebElement dugmeAdresar =
driver.findElement(By.className("ButtonTertiary_tertiary_eFrS0"));

            dugmeAdresar.click();
            Thread.sleep(4000);

            WebElement emailForm = driver.findElement(By.id("email"));
            emailForm.sendKeys("aleksandartasic@gmail.com");
            Thread.sleep(2000);

            WebElement passwordForm = driver.findElement(By.id("password"));
            passwordForm.sendKeys("sifra");
            Thread.sleep(2000);

            WebElement dugmePrijava = driver.findElement(By.xpath("//*[ @id = \"kp-portal\"] /div/div/aside/div/div/div[2]/main/div[2]/form/button"));
            dugmePrijava.click();

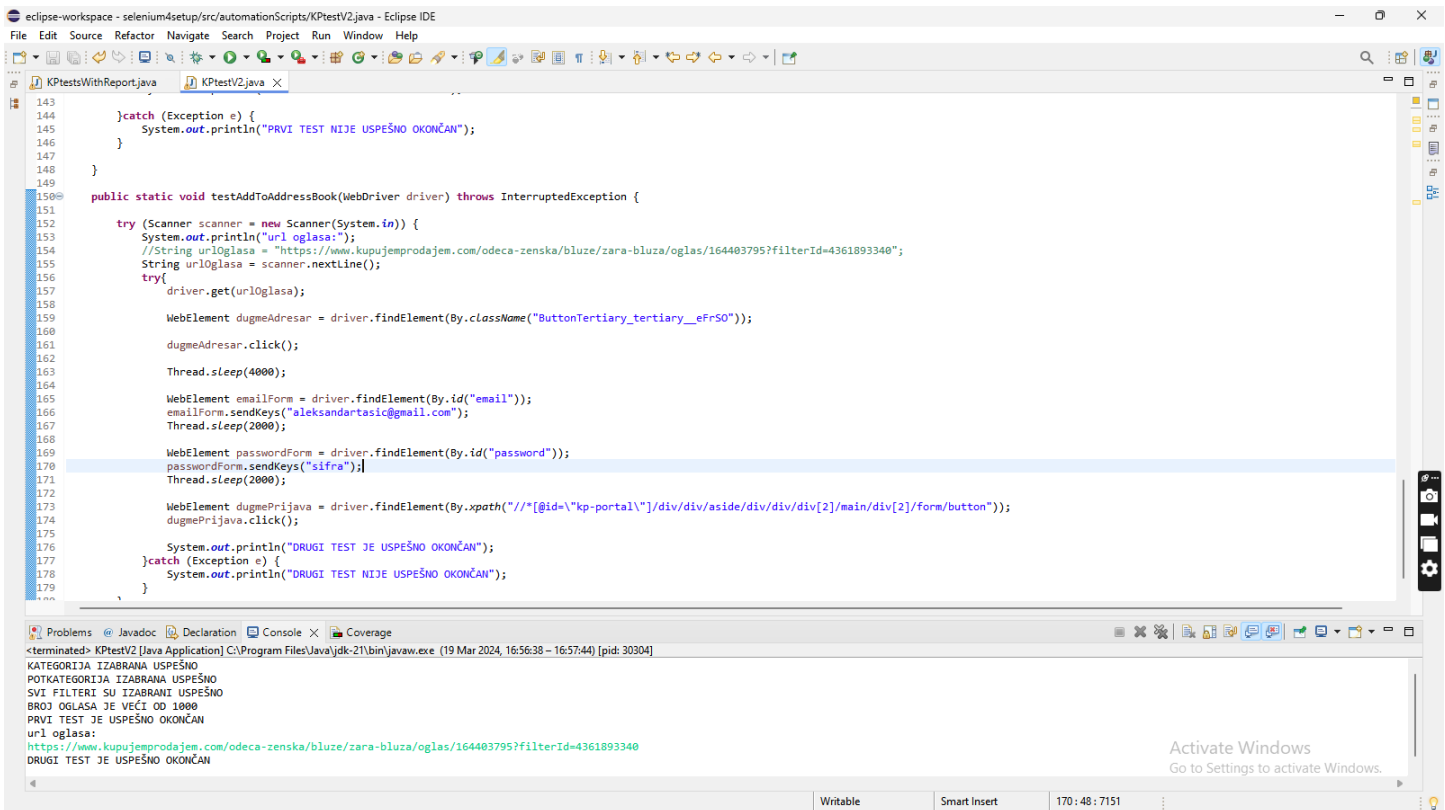
            System.out.println("DRUGI TEST JE USPEŠNO OKONČAN");
        } catch (Exception e) {
            System.out.println("DRUGI TEST NIJE USPEŠNO OKONČAN");
        }

    }

}

}
}

```

Slika 4

```
package automationScripts;
```

```
import java.util.List;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.chrome.ChromeOptions;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.Select;
```

```
public class KPtstV2 {
```

```
    public static void main(String[] args) throws InterruptedException {
```

```
        // System.setProperty("webdriver.chrome.driver", "path_to_chromedriver.exe");
        ChromeOptions options = new ChromeOptions();
        options.addArguments("--start-maximized");
        WebDriver driver = new ChromeDriver(options);
```

```
        // Scenario 1:
        testSearchCriteria(driver);
```



```

// Scenario 2:
testAddToAddressBook(driver);

driver.quit();
}

private static void findDivs(WebDriver driver, String link1) { // služi za nalaženje divova koji se
dinamički menjaju

    WebElement parentElementSelectCategory2 = driver.findElement(By.xpath(link1));

    List<WebElement> selectElementsSelectCategory =
parentElementSelectCategory2.findElements(By.xpath(".*"));

    System.out.println("Number of <select>1 elements found: " + selectElementsSelectCategory.size());

    for (WebElement selectElement1 : selectElementsSelectCategory) {
        System.out.println("Select podcat element text: " + selectElement1.getText());
        System.out.println("Select1 element tag name: " + selectElement1.getTagName());
    }
}

public static void testSearchCriteria(WebDriver driver) throws InterruptedException {

    try {
        driver.get("https://www.kupujemprodajem.com");

        WebElement button = driver.findElement(By.className("Button_children__tDTVo"));

        button.click();
        Thread.sleep(2000);

        String link
        ="/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[
1]/span/div[1]/div/section/div";
        // osnova za dalji rad sa input poljem gde se bira kategorija

        WebElement button1 = driver.findElement(By.xpath(link+"/div/div[2]"));
        button1.click();

        Thread.sleep(2000);

        WebElement parentElementSelectCategory =
driver.findElement(By.xpath(link+"/div[2]/div/div/div/div[3]/div[3]"));
        parentElementSelectCategory.click();

        Thread.sleep(1000);

        String linkInputSubcategory =
"/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[1]/span/d
iv[2]/div/section/div";

        WebElement divSubcategory = driver.findElement(By.xpath(linkInputSubcategory +
"/div[2]/div[1]"));
        divSubcategory.click();
        Thread.sleep(2000);

        System.out.println("KATEGORIJA IZABRANA USPEŠNO");
        //findDivs(driver, linkDoInputPoljaZaPodkategoriju+"/div[2]/div[1]/div[1]/div[1]/div[1]/div");

        WebElement SelectSubcategory = driver.findElement(By.xpath(linkInputSubcategory
+"/div[2]/div[1]/div[1]/div[1]/div[1]/div"));
        SelectSubcategory.click();
        Thread.sleep(4000);

        System.out.println("POTKATEGORIJA IZABRANA USPEŠNO");
    }
}

```

```

Thread.sleep(500);
WebElement minPrice = driver.findElement(By.id("priceFrom"));
minPrice.sendKeys("100");
Thread.sleep(500);

String linkCurrency =
"/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[2]/span/div[1]/div[3]/section/div";

WebElement dugmeValute = driver.findElement(By.xpath(linkCurrency+"/div/div[2]/div"));
dugmeValute.click();
Thread.sleep(2000);

//findDivs(driver,linkDoPolja + "/div[2]" );

WebElement divValute = driver.findElement(By.xpath(linkCurrency+"/div[2]/div/div"));
divValute.click();
Thread.sleep(2000);

//checkbox samo sa cenom
WebElement cb =
driver.findElement(By.xpath("/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[2]/span/div[2]/div[1]/span/label/span[1]"));
cb.click();
Thread.sleep(500);

String
linkSelectCondition="/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[3]/span/div[1]/div/section/div";

WebElement sel = driver.findElement(By.xpath(linkSelectCondition+"/div[1]/div[2]"));
sel.click();
Thread.sleep(2000);

WebElement KaoNovo = driver.findElement(By.xpath(linkSelectCondition+"/div[2]/div/div[2]"));
KaoNovo.click();/// selektuje prvi element
Thread.sleep(2000);
WebElement Novo= driver.findElement (By.xpath(linkSelectCondition+"/div[2]/div"));
Novo.click();
Thread.sleep(2000);///detektuje drugi trazeni element za selekciju

//findDivs(driver,
"/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[1]/div[3]/span/div[1]/div/section/div/div[2]");///dodato za trazenje child elemenata za select

WebElement buttonFinalElement =
driver.findElement(By.xpath("/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[2]/form/section/div/div[2]/div/div/div[2]/button[2]"));
buttonFinalElement.click();

System.out.println("SVI FILTERI SU IZABRANI USPEŠNO");
Thread.sleep(5000);

WebElement spanElement =
driver.findElement(By.xpath("/div/div[3]/div/div/div[2]/div[1]/div/div/span/div/span"));
String spanText = spanElement.getText();
String numberStr = spanText.replaceAll("[^0-9]", "");
int number = Integer.parseInt(numberStr);

if (number > 1000) {
    System.out.println("BROJ OGLASA JE VEĆI OD 1000");
} else {
    System.out.println("BROJ OGLASA JE MANJI OD 1000");
}

System.out.println("PRVI TEST JE USPEŠNO OKONČAN");

}catch (Exception e) {

```

```

        System.out.println("PRVI TEST NIJE USPEŠNO OKONČAN");
    }
}

public static void testAddToAddressBook(WebDriver driver) throws InterruptedException {
    try (Scanner scanner = new Scanner(System.in)) {
        System.out.println("url oglasa:");
        //String urlOglasa = "https://www.kupujemprodajem.com/odeca-zenska/bluze/zara-
        bluza/oglas/164403795?filterId=4361893340";
        String urlOglasa = scanner.nextLine();
        try{
            driver.get(urlOglasa);

            WebElement dugmeAdresar =
driver.findElement(By.className("ButtonTertiary_tertiary__eFrS0"));

            dugmeAdresar.click();

            Thread.sleep(4000);

            WebElement emailForm = driver.findElement(By.id("email"));
            emailForm.sendKeys("aleksandartasic@gmail.com");
            Thread.sleep(2000);

            WebElement passwordForm = driver.findElement(By.id("password"));
            passwordForm.sendKeys("sifra");
            Thread.sleep(2000);

            WebElement dugmePrijava = driver.findElement(By.xpath("//*[@id=\"kp-
portal\"]/div/div/aside/div/div/div[2]/main/div[2]/form/button"));
            dugmePrijava.click();

            System.out.println("DRUGI TEST JE USPEŠNO OKONČAN");
        }catch (Exception e) {
            System.out.println("DRUGI TEST NIJE USPEŠNO OKONČAN");
        }
    }
}
}

```