

SOFTWARE VERIFICATION, VALIDATION AND TESTING

TESTING DOCUMENTATION

Zara

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January 22, 2023

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1. Introduction

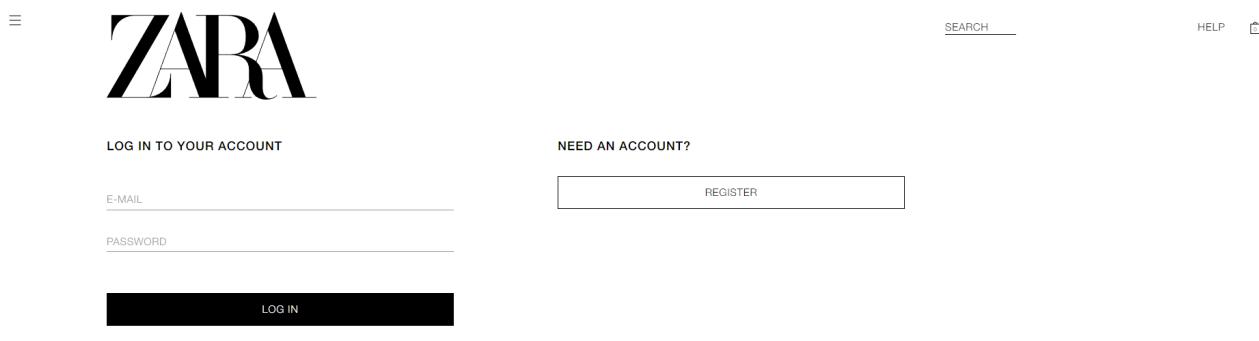
1.1. About the Project

Zara website is an online shopping site. Within it, it is possible to create your profile, view different items of clothing, search and filter, order products and so on. It is also possible to contact the Zara workers, subscribe to their newsletter as well as go to their social media (like tik tok, instagram, ...).

<https://www.zara.com/ba/en/>

1.2. Project Functionalities and Screenshots

Login and Register



Home page



Navigation menu with various links on the website



The screenshot shows a navigation menu from a website. At the top right are links for "SEARCH", "LOG IN", "HELP", and a user icon. On the left, there are category links: "WOMAN", "MAN", and "KIDS". A sidebar on the left lists categories under "NEW": BEST SELLERS, COATS | PUFFER JACKETS, BLAZERS, JACKETS | OVERTSHIRTS, DRESSES | JUMPSUITS, KNITWEAR, SHIRTS, T-SHIRTS, TOPS, BODYSUITS, SWEATSHIRTS, TROUSERS, JEANS, SKIRTS | SHORTS, SHOES, BAGS, ACCESSORIES, LINGERIE, and SKI COLLECTION. A large image of a woman wearing headphones and a dark jacket is centered on the page.

External links section



The screenshot shows the Zara website. At the top right are links for "SEARCH", "LOG IN", "HELP", and a user icon. The Zara logo is prominently displayed in the center. Below the logo is a "JOIN OUR NEWSLETTER" button. At the bottom, there are links for social media platforms: TIKTOK, INSTAGRAM, FACEBOOK, TWITTER, PINTEREST, YOUTUBE, and SPOTIFY. Small text at the very bottom includes "COOKIES SETTINGS", "PRIVACY AND COOKIES POLICY", and "TERMS OF USE".

Search and filters

ZARA

SHORT SATIN DRESS WITH PLEATS 59.95 BAM DRESS WITH CONTRAST FAUX LEATHER ■ +1 45.95 BAM DRESS WITH CONTRAST FAUX LEATHER ■ +1 45.95 BAM

COLOUR +
CHARACTERISTICS +
TYPE OF PRODUCT +
TYPE OF SLEEVE +
LENGTH +
SIZE +
COLLECTION +
PRICE 1 -
29.95 BAM → 90.00 BAM

VIEW RESULTS 88 CLEAR

ZARA

LOG IN HELP ☰

WOMAN MAN KIDS

DRESS

273 RESULTS FILTERS

SHIRT DRESS WITH BELT 89.95 BAM PLEATED MIDI DRESS 99.95 BAM SNAKE PRINT SATIN DRESS 79.95 BAM MID-LENGTH TUBE DRESS 59.95 BAM PLEATED LONG DRESS 99.95 BAM CONTRAST TULLE DRESS 49.95 BAM

Favorites/wishlist

≡

ZARA

CART FAVOURITES 

CREATE LIST BLJONKA'S LIST



Cart

CART (1) FAVOURITES

The items in your basket cannot be reserved until you complete your purchase.



CHAT

TOTAL 259.00 BAM
* INCLUDING VAT

CONTINUE

Contact Us



CUSTOMER SERVICE

CHAT

Currently not available.



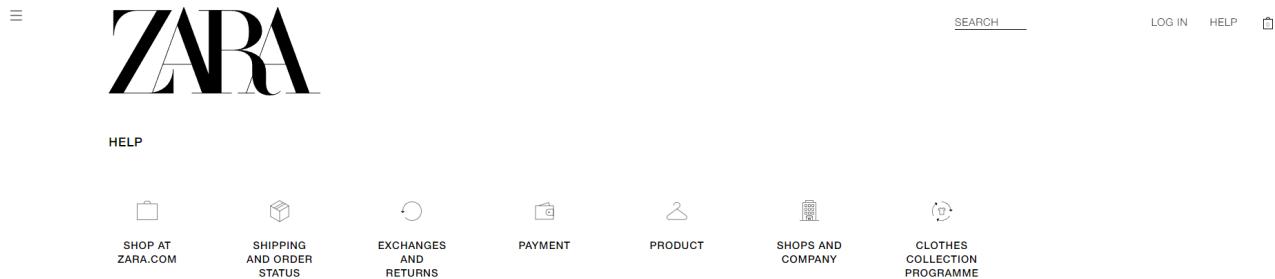
Mon-Fri: 9:00 am to 18:00 pm

Sat: 10:00 am to 16:00 pm

SOCIAL MEDIA

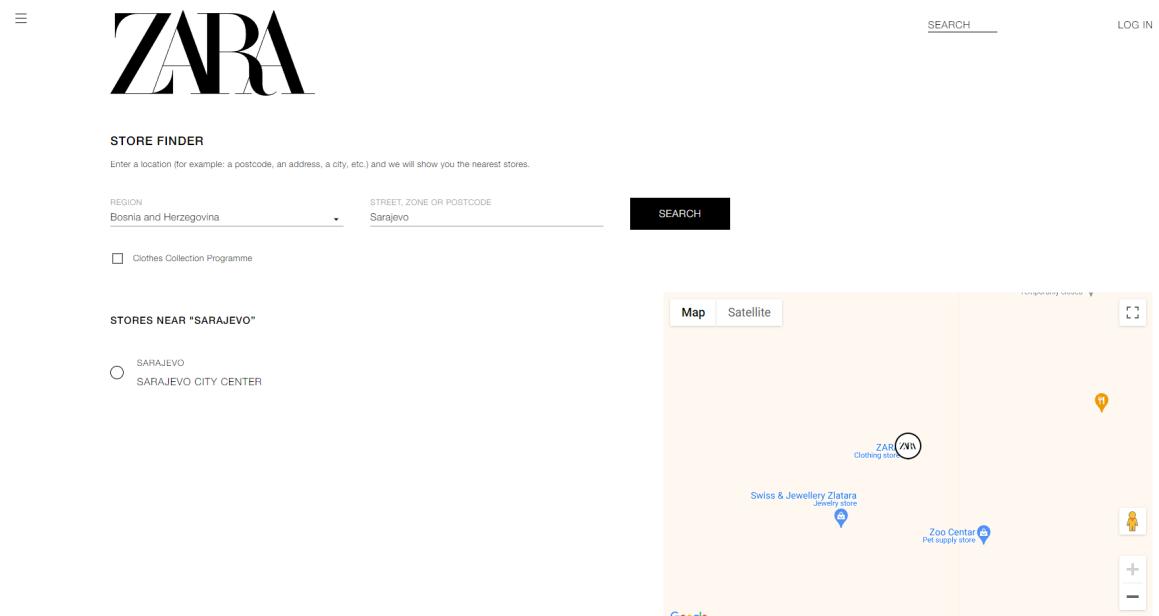
- @ ZARACare
- @Zara_care

Help page



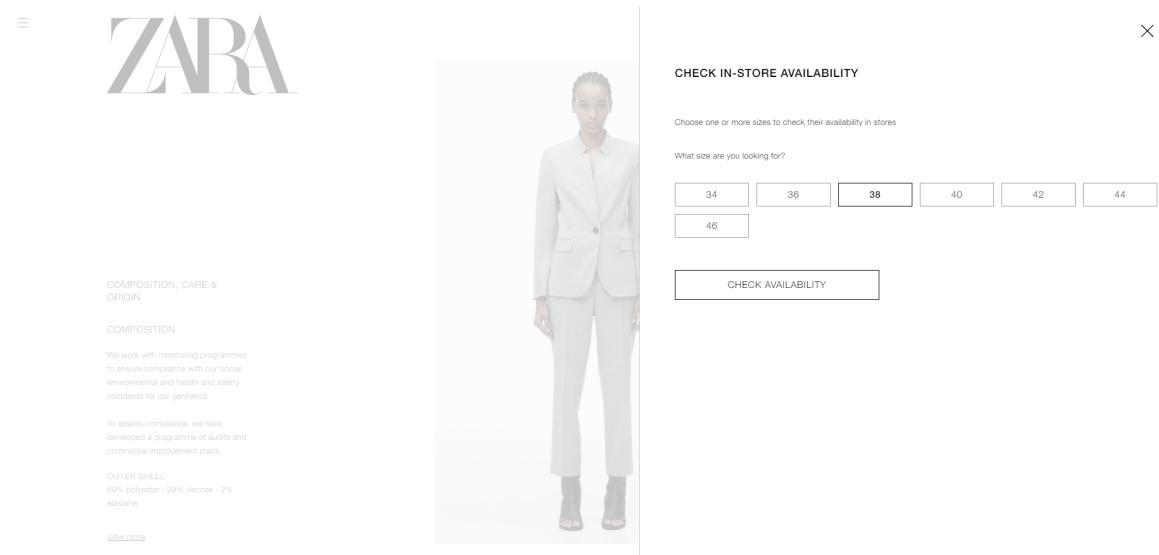
The Zara help page features a large 'ZARA' logo at the top left. To its right is a search bar labeled 'SEARCH'. On the far right are links for 'LOG IN', 'HELP', and a user icon. Below the logo, a 'HELP' section is titled 'HELP'. It contains six categories with icons: 'SHOP AT ZARA.COM' (bag), 'SHIPPING AND ORDER STATUS' (box), 'EXCHANGES AND RETURNS' (refresh circle), 'PAYMENT' (credit card), 'PRODUCT' (hanger), and 'SHOPS AND COMPANY' (building). A 'CLOTHES COLLECTION PROGRAMME' link is also present.

Store locations and change language



The Zara store location search interface includes a 'STORE FINDER' section. It asks for a location and provides a dropdown for 'REGION' (Bosnia and Herzegovina) and a text input for 'STREET, ZONE OR POSTCODE' (Sarajevo). A 'SEARCH' button is next to the input field. Below this, there's a checkbox for 'Clothes Collection Programme'. A map shows store locations near Sarajevo, including 'SARAJEVO' and 'SARAJEVO CITY CENTER'. Other nearby points of interest like 'Swiss & Jewellery Zlatara Jewelry store' and 'Zoo Center Pet supply store' are also marked.

In-Store availability



The in-store availability interface shows a woman in a white suit. To the left, there's a sidebar with sections for 'COMPOSITION, CARE & ORIGIN', 'COMPOSITION' (with a detailed paragraph about monitoring programs), 'OUTER SHELL' (material: 60% polyester, 29% viscose, 2% elastane), and a 'View more' link. The main area has a 'CHECK IN-STORE AVAILABILITY' heading. It asks to choose sizes (34, 36, 38, 40, 42, 44, 46) and a 'CHECK AVAILABILITY' button.

Newsletter

≡



NEWSLETTER

Select your interests and receive the latest news and trends each week.

E-MAIL

I have read and understand the [Privacy and Cookies Policy](#) and agree to receive personalised commercial communications from **ZARA** by email.

SECTIONS

- Woman
- Man
- Kids

SAVE

UNSUBSCRIBE

2. Test Plan

2.1. Scope

We are testing all of the main features, as well as some of the smaller importance. There are a few functionalities we are not able to test, since they are not available for our country. We are testing the registration as well as login and logout, search bar, some filtering options and external links along with page navigation links, help page, and many others. We will not be testing the purchase option.

2.2. Testing Environment and Tools

For testing this project, we are using Selenium and Java programming language, as well as Eclipse IDE.

3. Test Execution

3.1. Registration

Users want to be able to register.

Test Name: Test registration page				
Description: Check if user can register and input all of their registration information				
Pre-condition(s):				
Test Steps: 1. Go to the LOG IN page 2. Click REGISTER button 3. Enter required information in all fields 4. Accept privacy and policy cookies 5. Click on CREATE ACCOUNT button 6. Check if the URL is "https://www.zara.com/ba/en/"	Test Data: - we are using necessary data for registration (email, password, first and last name - it can be any data, as long as its format is correct)	Expected Result: The user is registered successfully and redirected to the homepage.	Actual Result: The user is registered and redirected to the correct URL.	Status: PASS
Notes: Before performing the first step, we wrote a line of code for removing cookies on the homepage so it would not cause any problems, but it is not mandatory to use it. Also, since the Zara website recognizes that the non-user controls the page, inside the setup (@Beforeall part) we also wrote options.addArguments("--disable-blink-features=AutomationControlled"); options.setExperimentalOption("excludeSwitches", Collections.singletonList("enable-automation")); options.setExperimentalOption("useAutomationExtension", false); lines of code, in order to prevent detection of automated testing.				

```

@Test
void test() throws InterruptedException {
    webDriver.get(baseUrl);

    //cookies
    webDriver.findElement(By.xpath("//html/body/div[2]/div[3]/div/div/div[2]/button")).click();

    Thread.sleep(3000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
    Thread.sleep(3000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div/div[2]/div[2]/section/button")).click();
    Thread.sleep(3000);

    //accept privacy
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div/form/div[1]/div/div/label/div")).click();

    webDriver.findElement(By.name("email")).sendKeys("ema9kd@gmail.com");
    webDriver.findElement(By.name("password")).sendKeys("Password123");
    webDriver.findElement(By.name("passwordConfirm")).sendKeys("Password123");
    webDriver.findElement(By.name("firstName")).sendKeys("Ema");
    webDriver.findElement(By.name("lastName")).sendKeys("Kavazovic");

    //create account
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div/form/div[2]/button/div/span")).click();
    Thread.sleep(3000);

    assertEquals("https://www.zara.com/ba/en/", webDriver.getCurrentUrl());
}

```

3.2. Login/Logout

Users want to be able to login and then logout.

Test Name: Test login and logout page				
Description: Check if the user can login and logout afterwards.				
Pre-condition(s): Have an already registered profile on Zara.				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Go to the LOG IN page 2. Fill in login fields (email, password) 3. Click on LOG IN button 4. Assert that text name (in this case "EMA") is located in the place of LOG IN (left of the HELP text) 5. Click on EMA 6. Go to Account 7. Click Sign out 8. Assert that text LOG IN is written again left to the HELP	- we are using email and password data for login (it can be any data, as long as there is a profile registeres with it on Zara website)	The user is logged in successfully and redirected to the homepage, and then logged out successfully and redirected to the homepage.	The user is logged in and logged out afterwards, and redirected to the correct URL both times.	PASS
Notes: Since the Zara website recognizes that the non-user controls the page, inside the setup (@Beforeall part) we also wrote options.addArguments("--disable-blink-features=AutomationControlled");options.setExperimentalOption("excludeSwitches", Collections.singletonList("enable-automation")); options.setExperimentalOption("useAutomationExtension", false); lines of code, in order to prevent detection of automated testing.				

```

    @Test
    void test() throws InterruptedException {
        webDriver.get(baseUrl);

        Thread.sleep(3000);
        //click on login
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
        Thread.sleep(1000);

        webDriver.findElement(By.name("logonId")).sendKeys("ema2kd@gmail.com");
        webDriver.findElement(By.name("password")).sendKeys("Password123");
        //login button
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[2]/button")).click();
        Thread.sleep(2000);

        String loggedIn = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).getText();
        assertEquals("EMA", loggedIn);
        Thread.sleep(2000);

        //click on profile
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
        Thread.sleep(1000);
        //click on account
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/div/nav/div/div/ul/li[2]/a")).click();
        Thread.sleep(1000);
        //signout
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/div/a")).click();

        String loggedOut = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).getText();
        assertEquals("LOG IN", loggedOut);
        Thread.sleep(2000);
    }
}

```

3.3. Contact us

Users want to be able to contact Zara workers for any additional information they might need.

Test Name: Test General Queries within Contact Us section				
Description: Check if the user can go to the general queries section.				
Pre-condition(s): Since the Customer Service has specific working hours, in order for this test to work it has to be tested during those hours.				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Click on three lines in the left upper corner (menu/navigation) 2. Select +Info 3. Go to the Contact us page 4. Click on Access 5. Select General Queries 5. Assert that the message contains "How can we help you?" text 6. Close the message container on X in the right corner 7. Click on Close		The user is redirected to the contact us page successfully and they can choose a General Queries option. The user can close the general queries container.	A successful redirect takes the user to the contact us page, where they can select the General Queries option. The container for general queries can be closed by the user.	PASS
Notes: Working hours of Customer Service is: Mon-Fri: 9:00 am to 18:00 pm				

Sat: 10:00 am to 16:00 pm

```

@Test
void test() throws InterruptedException {
    webDriver.get(baseUrl);

    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[29]/a/span")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[29]/ul/li[2]/a/span")).click();

    //access
    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div/div/ul/li[1]/div[3]/button/div")).click();

    //general queries
    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/section/div/div/div[2]/div/div/ul/li[5]/button/div/div/div")).click();

    Thread.sleep(3000);
    String message = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/section/div/div/div[2]/div/div[1]/ul/li[3]/div/div/span")).getText();
    assertTrue(message.contains("How can we help you?"));

    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/section/div/div/div/div[1]/button[1]")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/section/div/div/div/div[4]/div/button[2]/div")).click();

    Thread.sleep(2000);
}

```

3.4. Add to Cart

Users want to be able to add products to cart and check the total price of their cart.

Test Name: Test Cart				
Description: Check if the user can add items to cart and check total price.				
Pre-condition(s): The cart should be emptied before running this test in order for it to be successful (12. step). Also, have an already registered profile on Zara.				
Test Steps: <ol style="list-style-type: none"> Click on LOG IN Enter login data Click on LOG IN button Go to menu (3 lines in left upper corner) Select Bags Click on four squares in right upper corner to change the product view Choose Crossbody as a type of product Choose fourth product (RIGID BAG) Click on ADD TO BAG button Go back to the homepage Click on bag in the 	Test Data: <ul style="list-style-type: none"> - we are using email and password data for login (it can be any data, as long as there is a profile with it on Zara website) 	Expected Result: <p>The user can choose products from the menu bar and add them to the cart. The user can check the total price of the cart.</p>	Actual Result: <p>Products can be selected from the menu bar and placed in the shopping cart by the user. The user can view the cart's total cost.</p>	Status: PASS

right upper corner 12. Assert that the total price is "75.95 BAM"				
--	--	--	--	--

Notes: Since Zara website recognizes that the non-user controls the page, inside the setup (@Beforeall part) we also wrote

```
options.addArguments("--disable-blink-features=AutomationControlled");
options.setExperimentalOption("excludeSwitches",
Collections.singletonList("enable-automation"));
options.setExperimentalOption("useAutomationExtension", false);
```

lines of code, in order to prevent detection of automated testing.

```
@Test
void test() throws InterruptedException {
    webDriver.get(baseUrl);
    Thread.sleep(1000);

    //click on login
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
    Thread.sleep(1000);
    webDriver.findElement(By.name("logonId")).sendKeys("ema2kd@gmail.com");
    webDriver.findElement(By.name("password")).sendKeys("Password123");
    //login button
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[2]/button")).click();
    Thread.sleep(2000);
    //menu
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    Thread.sleep(1000);

    webDriver.findElement(By.linkText("BAGS")).click();
    Thread.sleep(1000);
    //product view
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div[2]/div/div/div[1]/button")).click();
    Thread.sleep(1000);
    //choose type of product
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div[1]/div[2]/section/nav/div/div/ul/li[3]/a")).click();
    Thread.sleep(1000);
    //select product
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/div[2]/main/article/div[2]/section[1]/ul/li[4]/div/div/div[1]/a")).click();
    Thread.sleep(1000);
    //add to bag
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/div[2]/main/article/div[2]/div/div[2]/div[1]/div[5]/button")).click();
    Thread.sleep(5000);

    webDriver.get(baseUrl);
    Thread.sleep(1000);
    //bag
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[3]")).click();
    Thread.sleep(2000);
    String total_price =
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/div[2]/main/article/div[2]/div[3]/div[2]/section/div[2]/p/span[2]/div")).getText();
    assertEquals("75.95 BAM", total_price);
    Thread.sleep(2000);

}
```

3.5. Check In-Store Availability

Users want to be able to check in-store availability of certain products.

Test Name: Test Check In-Store Availability				
Description: Test if the user can check the in-store availability of the product.				
Pre-condition(s):				
Test Steps: 1.Go to menu (3 lines in left upper corner) 2. Click on ACCESSORIES 3. Click on four squares in right upper corner to	Test Data: - we are using city data for search (we used Mostar for this test, it can be	Expected Result: The user can check the in-store availability for	Actual Result: For the chosen product and the entered city, the user can check the in-store	Status: PASS

change the product view 4. Choose the product: ROUND EARRINGS 5. Click on CHECK-IN STORE AVAILABILITY 6. Click on M button to choose a size 7. Click on CHECK AVAILABILITY button 8. Type in Mostar to search for a store 9. Click on SEARCH button 10. Assert that the output contains word MOSTAR	any other city but the assertion works only with this one)	input city and chosen product.	availability.	
--	--	--------------------------------	---------------	--

Notes:

```

@Test
void test() throws InterruptedException {
    webDriver.get(baseUrl);

    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    Thread.sleep(1000);
    webDriver.findElement(By.linkText("ACCESSORIES")).click();
    Thread.sleep(1000);
    //product view
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/div/div[1]/button")).click();
    Thread.sleep(1000);
    //select a product
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div[2]/section[1]/ul/li[4]/div/div/div[1]/a/h3")).click();
    Thread.sleep(1000);
    //check in-store availability
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div[2]/div/div[2]/ul/li[2]/button")).click();
    Thread.sleep(3000);
    //select a size
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[2]/div[2]/div/div/div[2]/div/form/div/div/div/div")).click();
    Thread.sleep(1000);
    //check availability
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[2]/div[2]/div/div/div[2]/div/form/div/button")).click();
    Thread.sleep(2000);
    //search store
    webDriver.findElement(By.name("search")).sendKeys("Mostar");
    //search button
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[2]/div[2]/div/div/div[2]/form/div[1]/button")).click();
    Thread.sleep(2000);
    String mostar =
        webDriver.findElement(By.xpath
            ("//html/body/div[1]/div[1]/div[2]/div[2]/div/div/div[2]/div[2]/fieldset/ul/li/div/div[1]/div/div/label/div[2]/div[1]")).getText();
    assertEquals("MOSTAR", mostar);

    Thread.sleep(2000);
}

```

3.6.Search Bar test

Users want to use the search bar in order to look up specific items that interest them and to find them quickly and easily

Test Name: Search Bar test
Description: Tests that the search results display items that match keyword and don't display wrong items
Pre-condition(s):

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
<ol style="list-style-type: none"> 1. Load the home page 2. Click search bar 3. Enter search keyword (dress) and hit enter 4. Wait until load 6. Loop through results and check that the titles match search 7. Check that titles don't show wrong results 	<p>-search value "dress" is used as input data to test the search results, and also "skirt" to test that the results don't show items that user didn't look for</p>	<p>User gets search results that match their keywords and contain correct links</p>	<p>Search results showed the correct keywords</p>	PASS

Notes: Titles are in caps lock so that is used as expected value, it should be noted that it is a clothing website so some searches may show results such as "shirt dresses" so other items(skirts and dresses) were used to test this functionality. Test checks both if the test returns searched items and also that it doesn't return items that the user didn't look for.

```

@test
void testSearch() throws InterruptedException {
    webDriver.get(baseURL);
    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/div/a/span[1]/span")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div/section/div[1]/div[1]/div/form/div/div/input")).sendKeys("Dress", Keys.ENTER);
    wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//html/body/div[1]/div[1]/div[1]/div[2]/main/article/div/div/section/div[2]/ul")));
    List<WebElement> results = webDriver.findElements(By.cssSelector(".product-grid-product-info__main-info"));
    for (int i = 0; i < results.size(); i++) {
        assertTrue(results.get(i).getText().contains("DRESS"));
        assertFalse(results.get(i).getText().contains("SKIRT"));
    }
    Thread.sleep(2000);
}

```

3.7.External links test

Users want to visit Zara's social media profiles that are linked at the bottom of a page in order to follow them and stay up-to-date with Zara's new products.

Test Name: External links test				
Description: Tests that the links at the bottom of the page lead to correct pages (Zara's profiles)				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
<ol style="list-style-type: none"> 1.Load the home page 2.Scroll until external links div is visible 3.Loop through all of the links and check if link contains word zara as user and name of the page as well (example tiktok/zara) and close tab after checking 		<p>Expected that all links lead to the correct website and Zara's profile on that website</p>	<p>All tests were successful, meaning that all links lead to the proper Url</p>	PASS

4.Separately check that Zara's spotify page loads at the last external link

Notes: Handles had to be used as clicking on these links opens a new tab. Spotify has a different way of linking users so a separate test had to be written, but rest is in a loop

```

18 @Test
19 void linkTest() throws InterruptedException {
20     webDriver.get(baseUrl);
21     String home = webDriver.getWindowHandle();
22     js.executeScript("arguments[0].scrollIntoView(true)", webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/main/article/div[2]/ul/li[3]/ul/li[9]/div[2]/div[1]/div[2]/div/div/u1")));
23     Thread.sleep(3000);
24
25     //loop
26
27     String[] links = {"TIKTOK", "INSTAGRAM", "FACEBOOK", "TWITTER", "PINTEREST", "YOUTUBE"};
28
29     for (String link : links) {
30         webDriver.findElement(By.linkText(link)).click();
31         for (String handle : webDriver.getWindowHandles()) {
32             if (!handle.equals(home)) {
33                 webDriver.switchTo().window(handle);
34             }
35         }
36         Thread.sleep(3000);
37         String url = webDriver.getCurrentUrl().toLowerCase();
38         assertTrue(url.contains("zara"));
39         assertTrue(url.contains(link.toLowerCase()));
40         webDriver.close();
41         webDriver.switchTo().window(home);
42         Thread.sleep(3000);
43     }
44
45     webDriver.findElement(By.linkText("SPOTIFY")).click();
46     for (String handle : webDriver.getWindowHandles()) {
47         if (!handle.equals(home)) {
48             webDriver.switchTo().window(handle);
49         }
50     }
51     Thread.sleep(3000);
52     assertEquals("https://open.spotify.com/user/r6ivwuv9ebk346hhx0446pbv", webDriver.getCurrentUrl());
53     webDriver.close();
54     webDriver.switchTo().window(home);
55     Thread.sleep(3000);
56 }
57
58 }
```

3.8.Price filter test

User wants to browse Zara's products by price so that they can pick items that are within their budget

Test Name: Price filter test

Description: Tests that the price range filter works correctly, showing that the items only fall within the specified price range

Pre-condition(s):

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
<p>1.Open Zara's homepage 2.Open the side menu 3.Open the dresses/jumpsuits page 4.Click on filters menu 5.Move the price range slider by 2 values 6.Iterate through results to check if the prices match the price range</p>		<p>Zara's results page shows only items that fall within the specified price range</p>	<p>Zara's result page showed only items within the price range</p>	PASS

Notes: Zara's page is not optimized the best so many sleeps were used and also the

menu button sometimes has to be clicked multiple times (Not double clicked!) in order to open it so the click command was used two times for it. Important: Zara changes its content often so the tests may not be valid and the test inputs need to be changed often

```
@Test
void testPriceFilter() throws InterruptedException{
    webDriver.get(baseUrl);
    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    //zara's nav button doesn't work properly, must be clicked at least two times to open the menu
    //some of these need wait since Zara is constantly changing
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[7]/a")).click();
    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div[2]/div/div/div[2]/button")).click();
    Thread.sleep(1000);

    WebElement slider = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[2]/section/form/div/div[8]/div/div/fieldset/div/div[2]/div/button[2]"));

    for (int i = 1; i <= 2 ; i++) {
        slider.sendKeys(Keys.ARROW_LEFT);
    }

    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[2]/section/section/button[1]")).click();
    Thread.sleep(2000);

    List<WebElement> results = webDriver.findElements(By.cssSelector(".money-amount__main"));

    for (int i = 0; i < results.size(); i++) {
        //gets string from element
        String priceS = results.get(i).getText();
        //gets rid of BAM from string
        priceS = priceS.replaceAll("\u20ac.*", "");
        //Converts to double
        double price = Double.parseDouble(priceS);
        assertTrue(price > 29 && price < 90);
        assertFalse(price < 29 || price > 120);
    }
    Thread.sleep(3000);
}
```

3.9. Discounts Test

A user wants to shop at a discount without having to check the new prices themselves

Test Name: Discounts Test				
Description: Tests to see if the discounted prices are correct with respect to the provided percentage				
Pre-condition(s):				
Test Steps: 1. Open Zara's home page 2. Open Zara's side menu 3. Click on SALE 4. Click the link with sales starting from 60% off 5. Loop through the items checking each one individually, calculate new price and compare it with the one	Test Data:	Expected Result: All of Zara's discounts are calculated accordingly, showing correct discounted prices	Actual Result: The test fails and the discounted prices do not match up with the correct values	Status: FAIL

provided on the website				
Notes: Zara's website is not optimized the best so it is necessary to click the nav menu at least twice (not double clicking) to ensure that the menu will open. This discounted prices test fails because Zara needs to round up prices for easier checkout and purchasing, however some numbers are rounded up and some down, making it really unpredictable. The reason why the prices are not correctly calculated could be because Zara also wants to market items better, so for buyers it's better to see that the new price is 39.95 than 40.33 for example.				

```

@Test
void testDiscount() throws InterruptedException{
    webDriver.get(baseUrl);
    Thread.sleep(3000);
    //clicking two times cuz zara is crusty
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();

    js.executeScript("arguments[0].scrollIntoView(true)", webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[23]")));
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[23]/a")).click();
    Thread.sleep(1000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[23]/ul/li[1]/a")).click();
    Thread.sleep(3000);

    List<WebElement> oldprice = webDriver.findElements(By.cssSelector(".money-amount_main"));
    List<WebElement> newP = webDriver.findElements(By.cssSelector(".price-current_amount"));
    List<WebElement> percentage = webDriver.findElements(By.cssSelector(".price-current_discount-percentage"));

    for (int i = 0; i < oldprice.size(); i++) {
        try {
            String opriceS = oldprice.get(i).getText();
            opriceS = opriceS.replaceAll("\\s+", " ");
            double oprice = Double.parseDouble(opriceS);

            String ns = percentage.get(i).getText();
            ns = ns.replaceAll("[^0-9]", "");
            double n = Double.parseDouble(ns);

            String newpriceS = newP.get(i).getText();
            newpriceS = newpriceS.replaceAll("\\s+", " ");
            double newprice = Double.parseDouble(newpriceS);

            double expected = oprice - (oprice*(n/100));
            assertEquals(expected,newprice);
            //assertNotEquals(expected,newprice);
        }
        catch(IndexOutOfBoundsException e) {
        }
    }
    Thread.sleep(5000);
}

```

3.10 Navbar Test

User wants to navigate to various parts of the website through the navigation menu without having to return back to the home page to visit another section of the page

Test Name: Navbar Test				
Description: Tests the Navigation menu to check if the user can navigate the webpage from any part of it without issues				
Pre-condition(s):				
Test Steps: 1.Open the homepage 2.Click the navigation menu 3.Click on shirts 4.Check if the url we are redirected to contains the word	Test Data: -In this test, test inputs are "dresses", "bags" and "shirts" which are used to make sure that	Expected Result: Redirected to the correct pages by clicking on the link in the navigation menu	Actual Result: The navigation menu links lead to the correct pages and they do not load wrong pages	Status: PASS

<p>"shirt" and does not contain the word "dresses"</p> <p>5.Click on the navigation menu</p> <p>6.Click on shoes</p> <p>7.Check if current url contains word "shoes" and not for example "bags"</p> <p>8.Click on the navigation menu again</p> <p>9.Click on bags</p> <p>10.Check that the current url contains the word "bags" and not for example "shirts"</p>	<p>the menu button did not open the wrong page</p>	<p>and each link contains the word corresponding to the one in the button link</p>		
---	--	--	--	--

Notes: Zara is not very optimized so the navigation menu on the home page had to be clicked at least two times (not double clicked) to make sure that the menu is opened. Also many thread.sleeps had to be used in order for the page to be loaded correctly

```

@Test
void testNav() throws InterruptedException{
    webDriver.get(baseUrl);
    Thread.sleep(2000);
    // gotta click menu button a few times because it's SCREWY
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[1]/button")).click();

    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[9]/a")).click();
    assertTrue(webDriver.getCurrentUrl().contains("shirts"));
    assertFalse(webDriver.getCurrentUrl().contains("dresses"));
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div[1]/div[1]/button")).click();
    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[17]/a")).click();
    assertTrue(webDriver.getCurrentUrl().contains("shoes"));
    assertFalse(webDriver.getCurrentUrl().contains("bags"));
    Thread.sleep(2000); // ZARA is not very optimized so it's necessary to use sleep all the time, and using waits would be complicating the code too much

    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div[1]/div[1]/button")).click();
    Thread.sleep(2000);
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[18]/a")).click();
    assertTrue(webDriver.getCurrentUrl().contains("bags"));
    assertFalse(webDriver.getCurrentUrl().contains("shirts"));
    Thread.sleep(2000);

}

```

3.11 Adding to favorites test

User wants to add items to favorites / wish lists so they can access them at a later time.

Test Name: AddingFavorites

Description: Adding items from store to favorites / wishlist

Pre-condition(s): User needs to be logged in.

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Turn-off cookies notification 2. Log-in 3. Enter email 4. Enter password 5. Enter sign-in 6. Enter menu 7. Select “Man” 8. Select “Jackets” 9. Select second picture 10. Add-to favorites 11. Click on cart 12. Select Favorites 13. Test if there is jacket in the favorites	- Login credentials	Jacket added to favorites	Jacket was added to favorites	PASS

Notes: Since Zara website recognizes that the non-user controls the page, inside the setup (@Beforeall part) we also wrote options.addArguments("--disable-blink-features=AutomationControlled");
options.setExperimentalOption("excludeSwitches",
Collections.singletonList("enable-automation"));
options.setExperimentalOption("useAutomationExtension", false);
lines of code, in order to prevent detection of automated testing.

```

1<!-- import static org.junit.jupiter.api.Assertions.*; -->
2
3
4 class AddingFavorites {
5
6     private static WebDriver webDriver;
7     private static String baseUrl;
8
9     @BeforeAll
10    static void setupBeforeClass() throws Exception {
11        System.setProperty("webdriver.chrome.driver", "/Users/nox/Downloads/chromedriver_mac_arm64/chromedriver");
12        ChromeOptions options = new ChromeOptions();
13        options.addArguments("--start-maximized");
14        options.addArguments("--disable-blink-features=AutomationControlId");
15        options.setExperimentalOption("useAutomationExtension", Collections.singletonList("enable-automation"));
16        options.setExperimentalOption("useAutomationExtension", false);
17        baseUrl = "https://www.zara.com/ba/en/";
18        webDriver = new ChromeDriver(options);
19
20    }
21
22    @AfterAll
23    static void tearDownAfterClass() throws Exception {
24        webDriver.quit();
25    }
26
27    @Test
28    void test() throws InterruptedException {
29        webDriver.get(baseUrl);
30        Thread.sleep(3000);
31        webDriver.findElement(By.xpath("//html/body/div[2]/div[3]/div/div/div[2]/button")).click();
32        Thread.sleep(3000); // log in
33        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[2]/a[1]")).click();
34        Thread.sleep(3000); // login
35        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[1]/div[1]/div/div/div[1]/input")).sendKeys("kenan.p996@gmail.com");
36        Thread.sleep(3000); // under password
37        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[2]/button")).click();
38        Thread.sleep(3000); // sign in
39        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
40        Thread.sleep(3000); // sign in
41        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/aside/div/div/nav/div/ul/li[1]/a")).click();
42        Thread.sleep(3000); // man
43        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/aside/div/div/nav/u/l[12]/ul/li[6]/a")).click();
44        Thread.sleep(3000); // jackets
45        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/ul/li[1]/div[1]/a")).click();
46        Thread.sleep(3000); // klimke na drugu sliku
47        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/div[1]/button")).click();
48        Thread.sleep(3000); // klimke na drugu sliku
49        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/div[1]/a")).click();
50        Thread.sleep(3000); // kora
51        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/nav/div/ul/li[2]/a")).click();
52        Thread.sleep(3000); // jacket
53        String fav = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/ul/li/div[2]/div[1]/div[1]/a/span")).getText();
54        assertEquals(true,fav.contains("JACKET - LIMITED EDITION"));
55        Thread.sleep(3000);
56    }
57
58    }
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3.12 Help page test

In this test we are looking for help page and testing it's functionality

Test Name: HelpPage				
Description: Testing the functionality and navigating to help page				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Disable cookies notification 2. Open menu 3. Select help 4. Check if there is "General Information" present	- None	General information is present	General Information was present	PASS
Notes:				

```
3@ import static org.junit.jupiter.api.Assertions.*;■
14
15 class HelpPage {
16
17     private static WebDriver webDriver;
18     private static String baseUrl;
19
20@    @BeforeAll
21    static void setUpBeforeClass() throws Exception {
22        System.setProperty("webdriver.chrome.driver", "/Users/nox/Downloads/chromedriver_mac_arm64/chromedriver");
23        ChromeOptions options = new ChromeOptions();
24        options.addArguments("--start-maximized");
25        baseUrl="https://www.zara.com/ba/en/";
26        webDriver = new ChromeDriver(options);
27    }
28
29@    @AfterAll
30    static void tearDownAfterClass() throws Exception {
31        webDriver.quit();
32    }
33
34@    @Test
35    void test() throws InterruptedException {
36        webDriver.get(baseUrl);
37        Thread.sleep(3000);
38        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[2]")).click();
39        Thread.sleep(3000);
40        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/div[2]/main/article/div/nav/ul/li[6]/button/span/div/div/img")).click();
41        Thread.sleep(3000);
42        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div/div[2]/main/article/div/nav/ul/li[1]/button/span/div/div/img")).click();
43        Thread.sleep(3000);
44        String general_info = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/h2")).getText();
45        assertTrue(general_info.contains("GENERAL INFORMATION"));
46        Thread.sleep(3000);
47    }
48
49
50 }
```

3.13 Newsletter test

In this test we are testing the functions of subscribing to newsletter option.

Test Name: Newsletter

Description: Testing the functionality of newsletter option

Pre-condition(s):

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
<ol style="list-style-type: none"> 1. Disable the cookies notification 2. Open menu 3. Open info 4. Select newsletter 5. Input email 6. Check privacy box 7. Select newsletter option 8. Save changes 	- Email	Will subscribe to newsletter	Subscribed to newsletter	PASS

Notes:

```

import static org.junit.jupiter.api.Assertions.*;
import org.junit.jupiter.api.AfterAll;
import org.junit.jupiter.api.AfterEach;
import org.junit.jupiter.api.BeforeAll;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.Test;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.chrome.ChromeOptions;

class NewsLetter {
    private static WebDriver webDriver;
    private static String baseUrl;

    @BeforeAll
    static void setUpBeforeClass() throws Exception {
        System.setProperty("webdriver.chrome.driver","/Users/nox/Downloads/chromedriver_mac_arm64/chromedriver");
        ChromeOptions options = new ChromeOptions();
        options.addArguments("--start-maximized");
        baseUrl="https://www.zara.com/ba/en/";
        webDriver = new ChromeDriver(options);
    }

    @AfterAll
    static void tearDownAfterClass() throws Exception {
        webDriver.quit();
    }

    @Test
    void test() throws InterruptedException {
        webDriver.get(baseUrl);
        Thread.sleep(3000);
        webDriver.findElement(By.xpath("//html/body/div[2]/div[3]/div/div/div[2]/button")).click();
        Thread.sleep(3000); //cookies
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
        Thread.sleep(3000); // menu
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/nav/div/ul/li[1]/ul/li[29]/a")).click();
        Thread.sleep(3000); // newsletter
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/nav/div/ul/li[1]/ul/li[29]/ul/li[1]/a"));
        Thread.sleep(3000); // newsletter
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/main/article/div[2]/form/div/div[1]/div/div/div[1]/input")).sendKeys("kenan.piljevic@stu.ibu.edu.ba");
        Thread.sleep(3000); //email
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/div[2]/form/div/div/label/div")).click();
        Thread.sleep(3000); //privacy check
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/div[2]/form/div/fieldset/ul/li[2]/div/div/label/div"));
        Thread.sleep(3000); // man selection
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/div[2]/form/div/label/div")).click();
        Thread.sleep(3000); // save
    }
}

```

3.14 Store location test

In this test we are testing the website to look for stores available near us

Test Name: StoreLocator

Description: Testing the functionality of locating the stores

Pre-condition(s):

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Disable the cookies notification 2. Open menu 3. Open info 4. Select stores 5. Input city name 6. Click to show on map 7. Open Map	- None	Will show on map available stores	Map showed available stores	PASS
Notes:				

```

④ import static org.junit.jupiter.api.Assertions.*;
class StoreLocator {
  private static WebDriver webDriver;
  private static String baseUrl;
  ④ @BeforeAll
  static void setUpBeforeClass() throws Exception {
    System.setProperty("webdriver.chrome.driver","/Users/nox/Downloads/chromedriver_mac_arm64/chromedriver");
    ChromeOptions options = new ChromeOptions();
    options.addArguments("--start-maximized");
    baseUrl="https://www.zara.com/ba/en/";
    webDriver = new ChromeDriver(options);
  }
  ④ @AfterAll
  static void tearDownAfterClass() throws Exception {
    webDriver.quit();
  }
  ④ @Test
  void test() throws InterruptedException {
    webDriver.get(baseUrl);
    Thread.sleep(3000);
    webDriver.findElement(By.xpath("//html/body/div[2]/div[3]/div/div/div[2]/button")).click();
    Thread.sleep(3000); //cookies
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[1]/button")).click();
    Thread.sleep(3000); //menu
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[29]/a")).click();
    Thread.sleep(3000); //info
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/aside/div/div/nav/div/ul/li[1]/ul/li[29]/ul/li[3]/a")).click();
    Thread.sleep(3000); // stores
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/form/div[1]/div[2]/div/div[1]/input")).sendKeys("Sarajevo");
    Thread.sleep(3000); // input Sarajevo
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div/div[2]/main/article/form/div[1]/button")).click();
    Thread.sleep(3000); // click to show on map
    webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/div[2]/main/article/div[2]/fieldset/ul/li/div/div/label/div[1]")).click();
    Thread.sleep(3000); // open map
  }
}

```

3.15 Change language test

In this test we are testing the option to change language of the website.

Test Name: ChangLang
Description: Changing the language on the website
Pre-condition(s): User must be logged in

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
<ol style="list-style-type: none"> 1. Turn-off cookies notification 2. Log-in 3. Enter email 4. Enter password 5. Hit sign-in 6. Go to “my profile” 7. Enter settings 8. From drop-down menu choose “B/H/S” 9. Assure that B/H/S is chosen 	- Sign-in credentials	Language is changed	Language changes only for news & alerts	PASS
Notes: Since there is no full webpage translation to B/H/S language, change is only partial. But, successful nevertheless.				

```

import static org.junit.jupiter.api.Assertions.*;
class ChangLang {
    private static WebDriver webDriver;
    private static String baseURL;

    @BeforeAll
    static void setUpBeforeClass() throws Exception {
        System.setProperty("webdriver.chrome.driver", "/Users/nox/Downloads/chromedriver_mac_arm64/chromedriver");
        ChromeOptions options = new ChromeOptions();
        options.addArguments("--start-maximized");
        options.addArguments("--disable-blink-features=AutomationControlled");
        options.setExperimentalOption("excludeSwitches", Collections.singletonList("enable-automation"));
        options.setExperimentalOption("useAutomationExtension", false);
        baseURL = "https://www.zara.com/ba/en/";
        webDriver = new ChromeDriver(options);
    }

    @AfterAll
    static void tearDownAfterClass() throws Exception {
        webDriver.quit();
    }

    @Test
    void test() throws InterruptedException {
        webDriver.get(baseURL);
        Thread.sleep(3000);
        webDriver.findElement(By.xpath("//html/body/div[2]/div[3]/div/div/div[2]/button")).click();
        Thread.sleep(3000); // cookies
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
        Thread.sleep(3000); // log-in
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[1]/div[1]/div/div/input")).sendKeys("kenan.p996@gmail.com");
        Thread.sleep(2000); // unos mella
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[1]/div[2]/div/div/div[1]/div/input")).sendKeys("5VyRfjkZzuKQG");
        Thread.sleep(2000); // unos password
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div[2]/main/article/div/div[2]/div[1]/section/form/div[2]/button")).click();
        Thread.sleep(3000); // sign-in
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div/header/div/div[2]/div/a[1]")).click();
        Thread.sleep(3000); // sign-in file
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div[2]/main/article/div/nav[1]/div/ul/li[3]/a")).click();
        Thread.sleep(3000); // settings
        webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div[2]/main/article/div/nav[2]/ul/li[2]/button/div/div/div[1]")).click();
        Thread.sleep(3000); // lang set
        Select cl = new Select(webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div[1]/div/div[2]/main/article/div/div[2]/form/div/div/div/select")));
        cl.selectByValue("180");
        Thread.sleep(1000);
        WebElement BHS = webDriver.findElement(By.xpath("//html/body/div[1]/div[1]/div/div[2]/main/article/div/div[2]/form/div/div/div/select/option[1]"));
        assertEquals(true, BHS.isSelected());
    }
}

```

4. Conclusion

4.1. Testing Summary

Testing Tool	Total Tests	Passed Tests	Failed Tests
Selenium	15	14	1

One of the tests for Zara's website technically failed. The name of the test is Discounts test, and it tests to see if the new price is calculated correctly according to the percentage of the discount provided on the website. The test failed, as Zara rounds up numbers in a way that the prices are more convenient for their users.

4.2. Final Thoughts

There are some very obvious flaws with the Zara website. It proved very difficult to test and the overall organization of the website seemed cluttered, which caused it to load very slow. Some testing code had to be improvised if it involved clicking certain buttons as the website doesn't immediately register the click (for example opening menus takes a few clicks and some time to load or even start an animation). One thing that actually surprised us is the fact that Zara could detect an automated testing software, so we had to add extra lines of code in order to mask it as a real user. We had to change our code about two times since we started the test because Zara's page updates frequently and the tests need to be re-done in order for them to be valid, and these changes affect the tests. Many waits and sleeps had to be used as it takes an excruciatingly long time to load the page, and omitting the use of these commands would compromise the tests.

In the end, the website is content-packed so not much could be changed in order to optimize it better, and optimizing it more would make it more difficult to analyze and we don't really need that considering that we already found issues with targeting certain elements.