

# **SOFTWARE VERIFICATION, VALIDATION AND TESTING**

## **TESTING DOCUMENTATION**

**TESTING TELEMACH WEBSITE**

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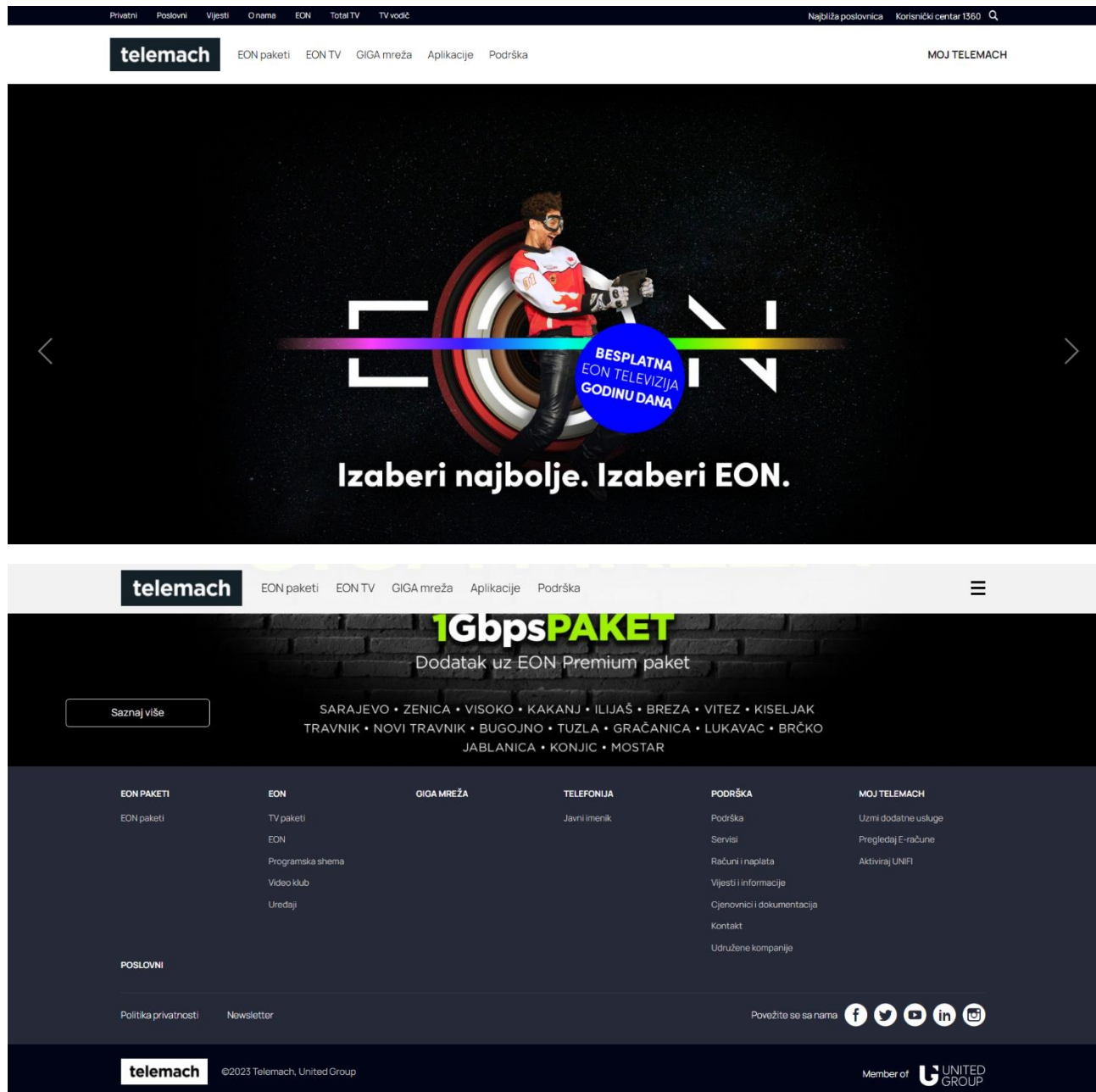
# 1. Introduction

## 1.1. About the Project

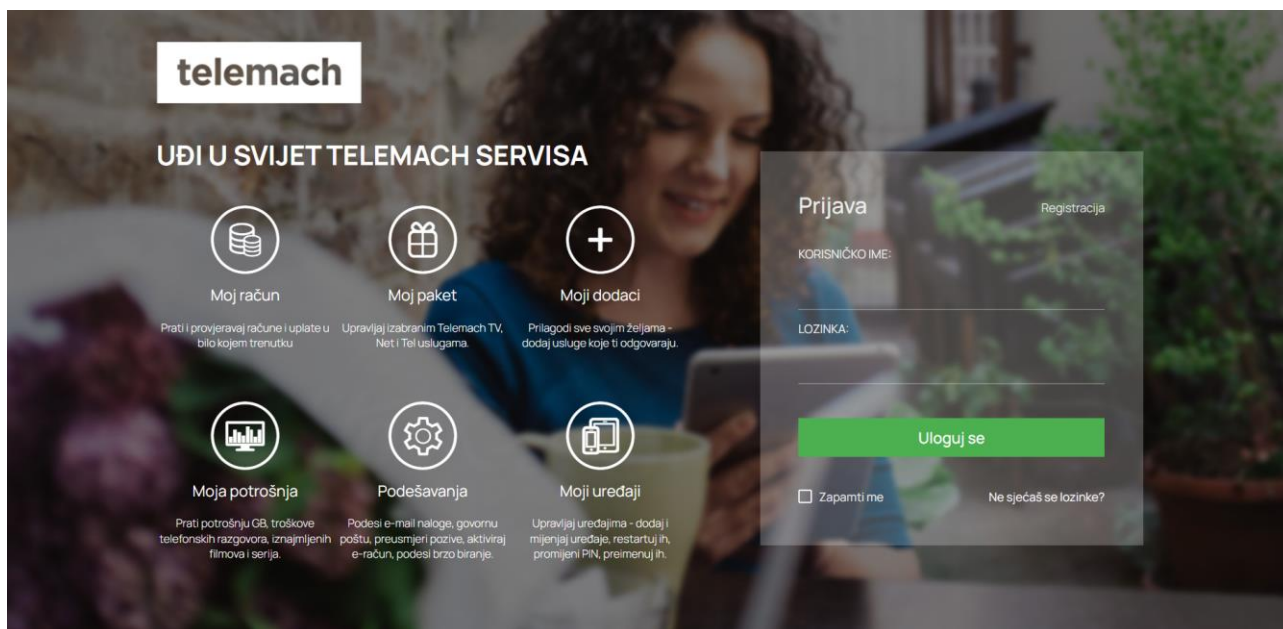
For this project we decided to test one of the most commonly used websites in Bosnia and Herzegovina, [www.telemach.ba](http://www.telemach.ba).

## 1.2. Project Functionalities and Screenshots

For this project we tested telemach.ba main page as well as its business page. We made sure we test mainly all important and functional parts this website such as buttons, external links, dropdown menus, forms etc.



Main page



## Login page – Moj telemach

telemach

≡

Izabrani paket je **EON FULL**

BESPLATNA EON TELEVIZIJA GODINU DANA

EON Full

**37,00 KM/mjesec**  
 Nakon 12 mjeseci 67.50 KM  
 Sve cijene su sa uračunatim PDV-om

▼

Tvoji podaci

Ime i prezime

Telefon

Email

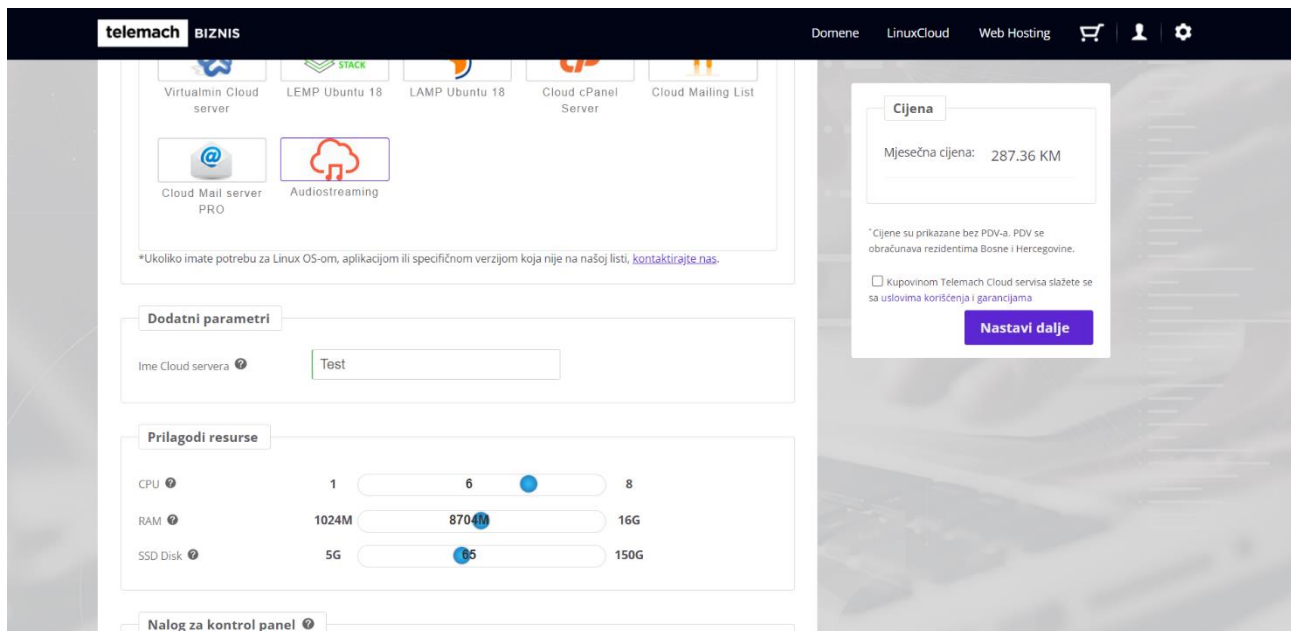
Naruči online

☐
Saglasan sam sa [općim uslovima poslovanja](#)

☐
Saglasan sam da primam obavještenja od Telemach-a

Vaša privatnost je važna za nas. Molimo vas da pročitate našu [politiku privatnosti](#). Mi nikada nećemo dijeliti vaše lične podatke

## Order package



Business page

## 2. Test Plan

### 2.1. Scope

We made sure to cover all important parts of the website. Our focus was to confirm all functionalities of given website work as intended. We separated tests so each one of them covers one functionality.

### 2.2. Testing Environment and Tools

For IDE we used Eclipse with JUnit 5 and Selenium. All tests are written using Java programming language.

## 3. Test Execution

### 3.1. Order EON package

<b>Test Name:</b> naruciEonPaket()				
<b>Description:</b> Ordering EON full package				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>	<b>Test Data:</b>	<b>Expected Result:</b>	<b>Actual Result:</b>	<b>Status:</b>
1. Press on "EON paketi" button. 2. Press "Naruči" button 3. Fill in "Ime i prezime", "Telefon" and "Email".	- Name, Surname, phone number and email of test user	-At the end of a test "EON full" package should be ordered.	-All functionalities work as intended but finalizing the order is not possible because of captcha	PASS

4. Open “Opći uslovi poslovanja”.
5. Check “Saglasan sam”.
6. Open “Politika privatnosti Telemacha”.
7. Check “Saglasan sam”.
8. Press “Naruči online” button.

```

@Test
void naručiEonPaket() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();

    Thread.sleep(2000);
    WebElement EONPaketiButton = webDriver.findElement(By.cssSelector("#siteHeader > div.container > div > div > nav > ul > li:nth-child(1) > a"));
    EONPaketiButton.click();

    Thread.sleep(2000);

    JavascriptExecutor scroll1 = (JavascriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,300)", "");
    Thread.sleep(2000);

    WebElement EONFULL = webDriver.findElement(By.xpath("/html/body/div[3]/section[1]/div[1]/div[1]/div[1]/h2"));
    String text2 = EONFULL.getText();
    assertEquals(text2, "EON FULL");

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(300,1400)", "");
    Thread.sleep(2000);

    WebElement naručiButton = webDriver.findElement(By.cssSelector("body > div.page-wrap > section.eon-vertical-packages.js-eon-vertical-packages.js-open-footprint.banner-sh"));
    naručiButton.click();
    Thread.sleep(2000);

    WebElement tvojiPodaci = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section/div/div[1]/div[3]/h5"));
    String text = tvojiPodaci.getText();
    assertEquals(text, "Tvoji podaci");

    WebElement ImeIPrezime = webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(1) > input"));
    ImeIPrezime.sendKeys("Test Tester");
    Thread.sleep(2000);

    WebElement Telefon = webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(2) > input"));
    Telefon.sendKeys("033 333 333");
    Thread.sleep(2000);

    WebElement Email = webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(3) > input"));
    Email.sendKeys("test.test@gmail.com");
    Thread.sleep(2000);

    JavascriptExecutor scroll2 = (JavascriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,300)", "");
    Thread.sleep(2000);

    String handle1 = webDriver.getWindowHandle();

    webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(5) > label > a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebElement saglasnost1 = webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(5) > label > span"));
    saglasnost1.click();
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section/div/div[1]/div[3]/form/div[7]/p/a")).click();

    for (String handle3: webDriver.getWindowHandles()) {
        if (!handle3.equals(handle1)) {
            webDriver.switchTo().window(handle3);
            break;
        }
    }

    Thread.sleep(4000);
    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebElement saglasnost2 = webDriver.findElement(By.cssSelector("#content > section > div > div.package-container > div.form-wrapper > form > div:nth-child(6) > label > span"));
    saglasnost2.click();
    Thread.sleep(2000);

    WebElement naručiOnlineButton = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section/div/div[1]/div[3]/form/div[4]/input"));
    naručiOnlineButton.click();
    Thread.sleep(2000);
}

```

### 3.2. See Telemach business offices

<b>Test Name:</b> vidiPoslovnice()				
<b>Description:</b> See available business offices and fill in the “contact us” form.				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>	<b>Test Data:</b>	<b>Expected Result:</b>	<b>Actual Result:</b>	<b>Status:</b>
1. Press “Najbliža poslovnica” button. 2. Choose city “Visoko”. 3. Press “korisnički centri” button. 4. Choose city “Travnik”. 5. Press “sjedište kompanije” button. 6. Press “kontaktirajte nas” button. 7. Press “pošaljite” button. 8. Fill in “ime i prezime”, “email”, “telefon”, “adresa”, “postanski broj”, “grad” fields. 9. Press “na šta se pitanje odnosi”. 10. Choose “primjedbe i sugestije” on dropdown menu. 11. Fill in the message inside “Poruka” menu. 12. Press “pošaljite” button.	-Name and surname, email, phone number, address, zipcode, city and message fields.	We expect to see selected business offices and their location on map. When we go to “kontaktirajte nas” we expect to see all required fields to be filled in.	This test proves that given functionalities work but contacting website provider is not possible because of captcha.	PASS
<b>Notes:</b> When “korisnički centri” is pressed it provides same result as pressing “poslovnice”.				





```

Grad.sendKeys("testni grad");
Thread.sleep(2000);

WebElement PitanjeSeOdnosiOtvori = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/div/div[1]/div/form/div[4]/div[2]/div/div/input"));
PitanjeSeOdnosiOtvori.click();
Thread.sleep(2000);

WebElement PrimjedbeiSugestije = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/div/div[1]/div/form/div[4]/div[2]/div/div/div[3]"));
PrimjedbeiSugestije.click();
Thread.sleep(2000);

WebElement Poruka = webDriver.findElement(By.cssSelector("#contact-form-general > div:nth-child(7) > div > textarea"));
Poruka.sendKeys("Ovo je testna poruka");
Thread.sleep(2000);

JavascriptExecutor scroll14 = (JavascriptExecutor) webDriver;
scroll14.executeScript("window.scrollTo(0,400)", "");
Thread.sleep(2000);

WebElement posaljite2=webDriver.findElement(By.cssSelector("#sbbContactFormSendBtn"));
posaljite2.click();
Thread.sleep(2000);
}

```

### 3.3. About us functionality

Test Name: oNamaTest				
Description: Check if “O nama” button works and leads to proper page and if basic information about employees is shown				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “O nama” button 2. Press “10 Godina sa vama” 3. Press “Zaposlenje” 4. Press “Menadzment” 5. Press “Procitajte vise” 6. Press “Hajdi Mostic” 7. Press “Seval Becirevic”		After clicking on employee name we expect to see basic information about them and we expect that the url link has changed as specified	The test proves these functionalities work	PASS
Notes:				

```

@Test
void oNamaTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement ONamaButton = webDriver.findElement(By.cssSelector("#siteHeader > div.header-top.hidden-md-down > div > nav > ul.hd-nav-container.top-left-nav > li:nth-child(4) > a"));
    ONamaButton.click();
    Thread.sleep(2000);

    WebElement GodinasaVamaButton = webDriver.findElement(By.cssSelector("#siteHeader > div.container > div > div > nav > ul > li:nth-child(1) > a"));
    GodinasaVamaButton.click();
    Thread.sleep(2000);

    WebElement ZaposlenjeButton = webDriver.findElement(By.cssSelector("#siteHeader > div.container > div > div > nav > ul > li:nth-child(3) > a:nth-child(2)"));
    ZaposlenjeButton.click();
    Thread.sleep(2000);

    WebElement menadzmentButton = webDriver.findElement(By.cssSelector("#siteHeader > div.container > div > div > nav > ul > li:nth-child(3) > a:nth-child(1)"));
    menadzmentButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(0,600)", "");
    Thread.sleep(2000);

    WebElement prociatajseVise = webDriver.findElement(By.cssSelector("#content > section.banner-about-us.about-us-margin-bottom > div > div:nth-child(1) > div.col-md-6.desc > a"));
    prociatajseVise.click();
    Thread.sleep(2000);

    WebElement menadzmentText = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div[4]/h2"));
    String text2 = menadzmentText.getText();
    assertEquals(text2, "Menadzment");

    JavascriptExecutor scroll1 = (JavascriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,100)", "");
    Thread.sleep(2000);

    WebElement HajdiMostic = webDriver.findElement(By.cssSelector("#content > section.container.story-page-wrapper > div > div.sidebar > ul > li:nth-child(1) > a > label"));
    HajdiMostic.click();
    Thread.sleep(2000);

    String url = webDriver.getCurrentUrl();
    assertEquals(url, "https://telemach.ba/menadzment/hajdi-mostic-2/");

    JavascriptExecutor scroll12 = (JavascriptExecutor) webDriver;
    scroll12.executeScript("window.scrollTo(0,100)", "");
    Thread.sleep(2000);

    WebElement SevalBecirevic = webDriver.findElement(By.cssSelector("#content > section.container.story-page-wrapper > div > div.sidebar > ul > li:nth-child(2) > a > label"));
    SevalBecirevic.click();
    Thread.sleep(2000);

    String url2 = webDriver.getCurrentUrl();
    assertEquals(url2, "https://telemach.ba/menadzment/seval-becirevic/");

    JavascriptExecutor scroll13 = (JavascriptExecutor) webDriver;
    scroll13.executeScript("window.scrollTo(0,100)", "");
    Thread.sleep(2000);
}

```

### 3.4. Public phonebook

Test Name: telefonijaTest				
Description: Check if “O nama” button works and leads to proper page and if basic information about employees is shown				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “Javni Imenik” button 2. Press “Poslovnj” 3. Fill in “pravno lice”, choose “Kiseljak” as place, fill in street, phone 4. Press “Trazite” 5. Press “Privatni” button 6. Fill in “ime”, “prezime”, choose “Capljina” as place, fill in street, phone 7. Press “Trazite”	Name, surname, city, street and phone fields	After filling in required fields we should see if the person can be found in public phonebook of Telemach	The test proves these functionalities work but the final result could not be seen because of captcha	PASS

Notes:				

```

@Test
void telefonijaTest() throws InterruptedException {

    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    JavaScriptExecutor scroll1 = (JavaScriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,1500)", "");
    Thread.sleep(2000);

    WebElement javniImenik = webDriver.findElement(By.cssSelector("#ft-navigation > li:nth-child(4) > ul > li > a"));
    javniImenik.click();
    Thread.sleep(2000);

    WebElement text = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section/div/div/div/div/div/div/div/div/div/h1"));
    String text2 = text.getText();
    assertEquals(text2,"BRZO I LAKO PRONAĐITE TELEFONSKI BROJ TELEMACH KORISNIKA");

    JavaScriptExecutor scroll2 = (JavaScriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,500)", "");
    Thread.sleep(2000);

    WebElement poslojniButton = webDriver.findElement(By.cssSelector("#myTab > li:nth-child(2) > a"));
    poslojniButton.click();
    Thread.sleep(2000);

    WebElement nazivPravnogLica = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div:nth-child(1) > input"));
    nazivPravnogLica.sendKeys("Test Tester");
    Thread.sleep(2000);

    WebElement paddingMenuMjesto = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div:nth-child(2) > div > div > input"));
    paddingMenuMjesto.click();
    Thread.sleep(2000);

    WebElement kiseljakMjesto = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div:nth-child(2) > div > ul > li:nth-child(15)"));
    kiseljakMjesto.click();
    Thread.sleep(2000);

    WebElement ulicaPravnogLica = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div:nth-child(3) > input"));
    ulicaPravnogLica.sendKeys("Testna Ulica");
    Thread.sleep(2000);
    WebElement telefonPravnogLica = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div:nth-child(4) > input"));
    telefonPravnogLica.sendKeys("033 333 333");
    Thread.sleep(2000);

    WebElement traziteButtonPravni = webDriver.findElement(By.cssSelector("#phonebook-app > div > form > div > div.field-wrapper.col-xs-12.col-sm-6.col-lg-6.clearfix > button"));
    traziteButtonPravni.click();
    Thread.sleep(2000);

    WebElement privatniButton = webDriver.findElement(By.cssSelector("#myTab > li:nth-child(1) > a"));
    privatniButton.click();
    Thread.sleep(2000);

    WebElement Ime = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(1) > input"));
    Ime.sendKeys("Test");
    Thread.sleep(2000);

    WebElement Prezime = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(2) > input"));
    Prezime.sendKeys("Tester");
    Thread.sleep(2000);

    WebElement paddingMenuzaMjesto = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(3) > div > div > input"));
    paddingMenuzaMjesto.click();
    Thread.sleep(2000);

    WebElement capljinaMjesto = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(3) > div > ul > li:nth-child(37)"));
    capljinaMjesto.click();
    Thread.sleep(2000);

    WebElement Ulica = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(4) > input"));
    Ulica.sendKeys("Testna Ulica");
    Thread.sleep(2000);

    WebElement Telefon = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div:nth-child(5) > input"));
    Telefon.sendKeys("033 333 333");
    Thread.sleep(2000);

    WebElement traziteButton = webDriver.findElement(By.cssSelector("#phonebook-private-app > div > form > div > div.field-wrapper.col-xs-12.col-sm-6.col-lg-6.clearfix > button"));
    traziteButton.click();
    Thread.sleep(2000);
}

```

## 3.5. Customer support

<b>Test Name:</b> podrškaTest()
<b>Description:</b> Check if links for “Help” documents work and does search functionality work as intended.
<b>Pre-condition(s):</b>

Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press "Podrška" button. 2. Press "Televizija" button. 3. Press "D3 digitalna televizija". 4. Open and close "Kako da povezem digitalni prijemnik D3 mini" PDF file. 5. Press "Internet". 6. Press "Unifi". 7. Press "Email". 8. Open and close "Kako da podesim e-mail klijent Windows 8" PDF file. 9. Press "Telefonija" button. 10. Press "Unifon" button. 11. Open and close "Prva prijava na unifon" PDF file. 12. Press "Priključenje" button. 13. Inside search fill in "Test" and press enter.	-Filling in "Test" inside search	-We wanted to make sure all "Help" files open correctly and we check does typing "Test" inside search provide us correct results.	Works as expected	PASS
<b>Notes:</b>				

```

@Test
void podrskaTest() throws InterruptedException {
    WebDriver.get(baseUrl);
    WebDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement podrskaButton = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[5]/a"));
    podrskaButton.click();
    Thread.sleep(2000);

    WebElement televizijaButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div/div[2]/div[2]/ul/li[1]/a"));
    televizijaButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) WebDriver;
    scroll.executeScript("window.scrollTo(0,1000)", "");
    Thread.sleep(2000);

    WebElement d3digitalnatelevizija = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[2]/div[1]/div/ul/li[2]/a"));
    d3digitalnatelevizija.click();
    Thread.sleep(2000);

    String handle1 = WebDriver.getWindowHandle();

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[2]/div[3]/div[2]/div/div/div/div/section/div/div[3]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    JavascriptExecutor scroll2 = (JavascriptExecutor) WebDriver;
    scroll2.executeScript("window.scrollTo(0,-1000)", "");
    Thread.sleep(2000);

    WebElement internetButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div/div[1]/div[2]/ul/li[2]/a"));
    internetButton.click();
    Thread.sleep(2000);

    WebElement text = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div/div[1]/div[1]/h1"));
    String text2 = text.getText();
    assertEquals(text2,"Internet");

    JavascriptExecutor scroll3 = (JavascriptExecutor) WebDriver;
    scroll3.executeScript("window.scrollTo(0,1000)", "");
    Thread.sleep(2000);

    WebElement unifiButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[3]/div[1]/div/ul/li[2]/a"));
    unifiButton.click();
    Thread.sleep(2000);

    WebElement emailButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[3]/div[1]/div/ul/li[3]/a"));
    emailButton.click();
    Thread.sleep(2000);

    String handle2 = WebDriver.getWindowHandle();

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[3]/div[3]/div[3]/div/div/div/div/section/div/div[3]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle2)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle2);
    Thread.sleep(2000);

    JavascriptExecutor scroll4 = (JavascriptExecutor) WebDriver;
    scroll4.executeScript("window.scrollTo(0,-1000)", "");
    Thread.sleep(2000);

    WebElement telefonijaButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div/div[1]/div[2]/ul/li[3]/a"));
    telefonijaButton.click();
    Thread.sleep(2000);
}

```

```

JavaScriptExecutor scroll15 = (JavaScriptExecutor) webDriver;
scroll15.executeScript("window.scrollTo(0,1000)", "");
Thread.sleep(2000);

WebElement unifon = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[2]/div[1]/div/ul/li[2]/a"));
unifon.click();
Thread.sleep(2000);

String handle3 = webDriver.getWindowHandle();

webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/div[2]/div[3]/div[2]/div/div/div/div/section/div/div[2]/a")).click();

for(String handle: webDriver.getWindowHandles()) {
    if (!handle.equals(handle3)) {
        webDriver.switchTo().window(handle);
        break;
    }
}

Thread.sleep(4000);
webDriver.close();
webDriver.switchTo().window(handle3);
Thread.sleep(2000);

JavaScriptExecutor scroll16 = (JavaScriptExecutor) webDriver;
scroll16.executeScript("window.scrollTo(0,-1000)", "");
Thread.sleep(2000);

WebElement prikljucenjeButton = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[1]/div/div/div[1]/div[2]/ul/li[4]/a"));
prikljucenjeButton.click();
Thread.sleep(2000);

String url = webDriver.getCurrentUrl();
assertEquals(url, "https://telemach.ba/podrska/servisi/prikljucenje/");

WebElement searchPrikljucenje = webDriver.findElement(By.cssSelector("#google-search-app > div.js-google-custom-search-form.p-google-custom-search-form.clearfix > div > f
searchPrikljucenje.sendKeys("Test");
searchPrikljucenje.sendKeys(Keys.ENTER);
Thread.sleep(2000);
}

```

### 3.6. Login and registration for myTelemach

Test Name: aplikacijeImojTelemachTest()				
Description: Login and Registration inside “Moj Telemach”				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “Aplikacije” button. 2. Press “Moja televizija”, “Moj internet”, “Moja telefonija”, “Moji uređaji”, “Moji računi i uplate”, “Unifi”, “Eon” and “Unifon” buttons. 3. Press “Aktiviraj moj Telemach” button. 4. Insert “Korisničko ime” and “Lozinka” inside given fields. 5. Press “Zapamti me”. 6. Press “Uloguj se” button. 7. Press “Registracija” button. 8. Check and uncheck the checkbox. 9. Press “Registracija” button.	-Username, password in Login -User ID, contract number, email and password	-Login unsuccessful since we didn’t provide valid login information and registration unsuccessful since we filled in fictional data.	Works as expected	PASS

**Notes:**

```

@Test
void aplikacijeImojTelemachTest() throws InterruptedException {
    WebDriver.get(baseUrl);
    WebDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement aplikacijeButton = WebDriver.findElement(By.cssSelector("#siteHeader > div.container > div > div > nav > ul > li:nth-child(4) > a"));
    aplikacijeButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) WebDriver;
    scroll.executeScript("window.scrollTo(0,1200)", "");
    Thread.sleep(2000);

    WebElement mojaTelevizijaButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[1]/li[1]/a/span"));
    mojaTelevizijaButton.click();
    Thread.sleep(2000);

    WebElement mojInternetButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[1]/li[2]/a/span"));
    mojInternetButton.click();
    Thread.sleep(2000);

    WebElement mojaTelefonijaButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[1]/li[3]/a/span"));
    mojaTelefonijaButton.click();
    Thread.sleep(2000);

    WebElement mojiUredjajiButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[1]/li[4]/a/span"));
    mojiUredjajiButton.click();
    Thread.sleep(2000);

    WebElement mojiRacuniiUplateButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[2]/li[1]/a/span"));
    mojiRacuniiUplateButton.click();
    Thread.sleep(2000);

    WebElement unifiButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[2]/li[2]/a/span"));
    unifiButton.click();
    Thread.sleep(2000);

    WebElement eonButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[2]/li[3]/a/span"));
    eonButton.click();
    Thread.sleep(2000);

    WebElement unifonButton = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div/div[2]/ul[2]/li[4]/a/span/span"));
    unifonButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll1 = (JavascriptExecutor) WebDriver;
    scroll1.executeScript("window.scrollTo(0,300)", "");
    Thread.sleep(2000);

    WebElement aktivirajMojTelemach = WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[4]/div/div/div/div[3]/a"));
    aktivirajMojTelemach.click();
    Thread.sleep(2000);

    WebElement text = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/div/h1"));
    String text2 = text.getText();
    assertEquals(text2, "Prijava");

    WebElement korisnickoIme = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/form/mat-form-field[1]/div/div[1]/div/input"));
    korisnickoIme.sendKeys("test.test@gmail.com");
    Thread.sleep(2000);

    WebElement lozinka = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/form/mat-form-field[2]/div/div[1]/div/input"));
    lozinka.sendKeys("testnalozinka");
    Thread.sleep(2000);

    WebElement zapamtiMe = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/form/div/mat-checkbox/label/div"));
    zapamtiMe.click();
    Thread.sleep(2000);

    WebElement ulogujSe = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/form/button"));
    ulogujSe.click();
    Thread.sleep(2000);

    WebElement registracijaButton = WebDriver.findElement(By.xpath("/html/body/app-root/app-login/div/div/div/div[2]/div/div/a"));
    registracijaButton.click();
    Thread.sleep(2000);

    String url = WebDriver.getCurrentUrl();
    assertEquals(url, "https://mojtelemach.ba/registration");

    WebElement IDKorisnika = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[1]/div[1]/mat-form-field[1]/div/div[1]/div/1"));
    IDKorisnika.sendKeys("333333");
    Thread.sleep(2000);

    WebElement brojUgovora = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[1]/div[1]/mat-form-field[2]/div/div[1]/div/1"));
    brojUgovora.sendKeys("e2345");
    Thread.sleep(2000);

    WebElement email = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[1]/div[2]/mat-form-field/div/div[1]/div/input"));
    email.sendKeys("test.test@gmail.com");
    Thread.sleep(2000);

    WebElement lozinkal = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[2]/mat-form-field[1]/div/div[1]/div/input"));
    lozinkal.sendKeys("test123");
    Thread.sleep(2000);

    WebElement opetlozinka = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[2]/mat-form-field[2]/div/div[1]/div/input"));
    opetlozinka.sendKeys("test123");
    Thread.sleep(2000);

    WebElement checkBox = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[2]/mat-checkbox/label/div"));
    checkBox.click();
    Thread.sleep(2000);

    WebElement checkBox1 = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[2]/mat-checkbox/label/div"));
    checkBox1.click();
    Thread.sleep(2000);

    WebElement registracijaButton1 = WebDriver.findElement(By.xpath("/html/body/app-root/app-registration/div/div/div/div[2]/div/form/div[3]/button"));
    registracijaButton1.click();
    Thread.sleep(2000);
}

```



### 3.7. Channel selection

Test Name: programskaShemaTest()				
Description: Testing channel selection				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press "EONTV" button. 2. Press "Programska shema" 3. Choose "Dokumentarni" as special category 4. Fill in search "discovery" 5. Press "Poništi pretragu" 6. Press "Start paket", "Osnovni paket", "Prosireni paket", "HBO paket", "Cinemax paket", "Pink paket", "HBO Premium", "Zadruga paket", "Cinestar premiere"	-Filling in search "discovery"	We wanted to make sure all channel categories work as intended and provide us with correct type of channels and we also checked functionality of search element	Works as expected	PASS

```

@Test
void programskaShemaTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement EONTVButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/a"));
    EONTVButton.click();
    Thread.sleep(2000);

    WebElement ProgramskaShemaButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[3]/a"));
    ProgramskaShemaButton.click();
    Thread.sleep(2000);

    String url = webDriver.getCurrentUrl();
    assertEquals(url, "https://telemach.ba/eon-tv/programska-shema/");

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(0,600)", "");
    Thread.sleep(2000);

    WebElement PosebnaVrstaKanala = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[2]/div[1]/div/div/div[1]/div/div[1]/div/div/input"));
    PosebnaVrstaKanala.click();
    Thread.sleep(2000);

    WebElement dokumentarni = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[2]/div[1]/div/div/div[1]/div/div[1]/div/div[1]/div/ul/li[2]"));
    dokumentarni.click();
    Thread.sleep(2000);

    WebElement search = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[2]/div[1]/div/div/div[1]/div/div[1]/div/div[2]/input"));
    search.sendKeys("discovery");
    Thread.sleep(2000);

    WebElement ponistiPretragu = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[2]/div[1]/div/div/div[1]/div/div[1]/div/div/button"));
    ponistiPretragu.click();
    Thread.sleep(2000);

    WebElement startPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[2]/a"));
    startPaket.click();
    Thread.sleep(2000);

    WebElement osnovniPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[3]/a"));
    osnovniPaket.click();
    Thread.sleep(2000);

    WebElement prosireniPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[4]/a"));
    prosireniPaket.click();
    Thread.sleep(2000);

    WebElement HBOpaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[5]/a"));
    HBOpaket.click();
    Thread.sleep(2000);

    WebElement CinemaxPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[6]/a"));
    CinemaxPaket.click();
    Thread.sleep(2000);

    WebElement PinkPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[7]/a"));
    PinkPaket.click();
    Thread.sleep(2000);

    WebElement HBOPremium = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[8]/a"));
    HBOPremium.click();
    Thread.sleep(2000);

    WebElement ZadrugaPaket = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[9]/a"));
    ZadrugaPaket.click();
    Thread.sleep(2000);

    WebElement CinestarPremiere = webDriver.findElement(By.xpath("/html/body/div[3]/main/div/form/section/div[2]/div[1]/div/ul/li[10]/a"));
    CinestarPremiere.click();
    Thread.sleep(2000);
}

```

### 3.8. EON TV

Test Name: EONTVTest()				
Description: Testing “EONTV” basic functionalities				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “EONTV” button. 2. Press “EON Aplikacija” and “Dodatni uredjaji” 3. Press “EON” 4. Press “Programska		All buttons work as intended and both questions are successfully opened and closed	Works as expected	PASS

shema” 5. Press “Videoklub” 6. Press “Uredjaji” 7. Press “smartTV”, “tablet/mobillni”, “pc/maca”, “streaming uredjaji” 8. Press “Personalizacija” 9. Press “EON Kids” 10. Open and close two frequently asked questions				
--	--	--	--	--

```

WebElement smartTV = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div[1]/div/ul/li[2]/a"));
smartTV.click();
Thread.sleep(3000);

WebElement tablet_mobilni = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div[1]/div/ul/li[3]/a"));
tablet_mobilni.click();
Thread.sleep(2000);

WebElement pc_mac = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div[1]/div/ul/li[4]/a"));
pc_mac.click();
Thread.sleep(2000);

WebElement streaming_uredjaji = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div[1]/div/ul/li[5]/a"));
streaming_uredjaji.click();
Thread.sleep(2000);

WebElement personalizacija = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[6]/a"));
personalizacija.click();
Thread.sleep(2000);

WebElement EONKids = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[7]/a"));
EONKids.click();
Thread.sleep(2000);

JavascriptExecutor scroll3 = (JavascriptExecutor) webDriver;
scroll3.executeScript("window.scrollTo(0,5000)", "");
Thread.sleep(2000);

WebElement EONKidsPitanje3 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[10]/div/section/div/div[3]/div[1]/h4/a"));
EONKidsPitanje3.click();
Thread.sleep(2000);

WebElement EONKidsPitanje33 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[10]/div/section/div/div[3]/div[1]/h4/a/span"));
EONKidsPitanje33.click();
Thread.sleep(2000);

JavascriptExecutor scroll4 = (JavascriptExecutor) webDriver;
scroll4.executeScript("window.scrollTo(0,200)", "");
Thread.sleep(2000);

WebElement EONKidsPitanje5 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[10]/div/section/div/div[5]/div[1]/h4/a"));
EONKidsPitanje5.click();

@Test
void EONTVTest() throws InterruptedException {
    webDriver.get(BaseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement EONTVButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/a"));
    EONTVButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(0,1800)", "");
    Thread.sleep(2000);

    WebElement EONApplikacija = webDriver.findElement(By.xpath("/html/body/div[3]/section[2]/div[2]/div/ul/li[2]/a"));
    EONApplikacija.click();
    Thread.sleep(2000);

    WebElement Dodatniuredjaji = webDriver.findElement(By.xpath("/html/body/div[3]/section[2]/div[2]/div/ul/li[3]/a"));
    Dodatniuredjaji.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll1 = (JavascriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,-1800)", "");
    Thread.sleep(2000);

    WebElement EON = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[2]/a"));
    EON.click();
    Thread.sleep(2000);

    WebElement Programskashema = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[3]/a"));
    Programskashema.click();
    Thread.sleep(2000);

    WebElement Videoklub = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[4]/a"));
    Videoklub.click();
    Thread.sleep(2000);

    WebElement uredjaji = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[2]/ul/li[5]/a"));
    uredjaji.click();
    Thread.sleep(3000);

    JavascriptExecutor scroll2 = (JavascriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,600)", "");
    Thread.sleep(3000);

```

### 3.9. Expandable menu

<b>Test Name:</b> menuTest()				
<b>Description:</b> Testing expandable menu				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>  1. Press menu button. 2. Press “WiFi Mesh” 3. Open and close three frequently asked questions	<b>Test Data:</b>	<b>Expected Result:</b>  -Login unsuccessful since we didn’t provide valid login information and registration unsuccessful since we filled in fictional data.	<b>Actual Result:</b>  Works as expected	<b>Status:</b>  PASS

```

@Test
void menuTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(3000);

    JavaScriptExecutor scroll1 = (JavaScriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,400)", "");
    Thread.sleep(2000);

    WebElement menuButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/button[2]"));
    menuButton.click();
    Thread.sleep(2000);

    WebElement wifiMesh = webDriver.findElement(By.xpath("/html/body/div[3]/header/section/nav/ul/li[1]/ul/li[1]/ul/li[4]/a"));
    wifiMesh.click();
    Thread.sleep(2000);

    JavaScriptExecutor scroll2 = (JavaScriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,3200)", "");
    Thread.sleep(2000);

    WebElement pitanja = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/h3"));
    String text2 = pitanja.getText();
    assertEquals(text2, "NAUČEŠĆE POSTAVLJENA PITANJA");

    WebElement pitanje2 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[2]/div[1]/h4/a/span"));
    pitanje2.click();
    Thread.sleep(2000);

    WebElement pitanje22 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[2]/div[1]/h4/a/span"));
    pitanje22.click();
    Thread.sleep(2000);

    JavaScriptExecutor scroll3 = (JavaScriptExecutor) webDriver;
    scroll3.executeScript("window.scrollTo(0,300)", "");
    Thread.sleep(2000);

    WebElement pitanje3 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[3]/div[1]/h4/a/span"));
    pitanje3.click();
    Thread.sleep(2000);

    WebElement pitanje33 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[3]/div[1]/h4/a/span"));
    pitanje33.click();
    Thread.sleep(2000);

    WebElement pitanje4 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[4]/div[1]/h4/a/span"));
    pitanje4.click();
    Thread.sleep(2000);

    WebElement pitanje44 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div/section/div/div[4]/div[1]/h4/a/span"));
    pitanje44.click();
    Thread.sleep(2000);
}

```

### 3.10. External links and newsletter

Test Name: EONTotatTVVodic()				
Description: Testing external links and newsletter				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “EON” button 2. Press “Total TV” button 3. Press “TV Vodič” 4. Press search button and enter “Test” 5. Press United Group icon 6. Press Newsletter 7. Enter “Test” in email field 8. Close Newsletter	Input “Test” inside search Input “Test” inside email field in Newsletter	All external links send us to correct page and newsletter works as intended	Works as expected	PASS

```

@Test
void EONTotalTVVodic() throws InterruptedException {
    WebDriver.get(baseUrl);
    WebDriver.manage().window().maximize();
    Thread.sleep(2000);

    String handle1 = WebDriver.getWindowHandle();

    WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/ul[1]/li[5]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);

    String url1 = WebDriver.getCurrentUrl();
    assertEquals(url1, "https://bh.eon.tv/");

    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/ul[1]/li[6]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/ul[1]/li[7]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebElement search = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/aside/div/div/div/form/table/tbody/tr/td[2]/button"));
    search.click();
    Thread.sleep(2000);

    WebElement searchText = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/aside/div/div/div/form/table/tbody/tr/td[1]/div/table/tbody/tr/td[1]/input"));
    searchText.sendKeys("Test");
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) WebDriver;
    scroll.executeScript("window.scrollTo(0,1800)", "");
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/footer/div/div/div/div[2]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);

    String url2 = WebDriver.getCurrentUrl();
    assertEquals(url2, "https://united.group/");

    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebElement newsletter = WebDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/ul/li[2]/a"));
    newsletter.click();
    Thread.sleep(2000);

    WebElement email = WebDriver.findElement(By.xpath("/html/body/div[7]/div/div/div[2]/form/input"));
    email.sendKeys("Test");
    Thread.sleep(2000);

    WebElement close = WebDriver.findElement(By.xpath("/html/body/div[7]/div/div/div[1]/button"));
    close.click();
    Thread.sleep(2000);
}

```

### 3.11. Tidal

<b>Test Name:</b> tidalTest()				
<b>Description:</b> Testing functionality of Tidal component				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>  1. Press “Aplikacije” button 2. Press “Tidal” 3. Press five different media buttons 4. Press “Saznaj vise” in FAQ section 5. Open and close two frequently asked questions	<b>Test Data:</b>	<b>Expected Result:</b>  All buttons work as expected and answers are shown after pressing on questions	<b>Actual Result:</b>  Works as expected	<b>Status:</b>  PASS



```

@Test
void tidalTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(3000);

    WebElement aplikacijeButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[4]/a"));
    aplikacijeButton.click();
    Thread.sleep(2000);

    WebElement tidalButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[4]/ul/li[7]/a"));
    tidalButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll1 = (JavascriptExecutor) webDriver;
    scroll1.executeScript("window.scrollTo(0,800)", "");
    Thread.sleep(2000);

    WebElement button1 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[1]/div/ol/li[2]"));
    button1.click();
    Thread.sleep(2000);

    WebElement button2 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[1]/div/ol/li[3]"));
    button2.click();
    Thread.sleep(2000);

    WebElement button3 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[1]/div/ol/li[4]"));
    button3.click();
    Thread.sleep(2000);

    WebElement button4 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[1]/div/ol/li[5]"));
    button4.click();
    Thread.sleep(2000);

    WebElement button5 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[1]/div/ol/li[6]"));
    button5.click();
    Thread.sleep(2000);

    WebElement text = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[2]/div/div[2]/div[6]/div/div[2]/h1"));
    String text2 = text.getText();
    assertEquals(text2, "Video & live stream");

    JavascriptExecutor scroll2 = (JavascriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,2000)", "");
    Thread.sleep(2000);

    WebElement saznajVise = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[5]/div/div/div/div/div/div/div/div[2]/div/div/div[1]/a"));
    saznajVise.click();
    Thread.sleep(2000);

    WebElement tidalPitanje = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[5]/div/div/div/div/div/div/div/div[2]/div/section/div/section/div/div[1]/a"));
    tidalPitanje.click();
    Thread.sleep(2000);

    WebElement tidalPitanjel = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[5]/div/div/div/div/div/div/div/div[2]/div/section/div/section/div/div[1]/a"));
    tidalPitanjel.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll3 = (JavascriptExecutor) webDriver;
    scroll3.executeScript("window.scrollTo(0,500)", "");
    Thread.sleep(2000);

    WebElement pitanje2 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[5]/div/div/div/div/div/div/div/div[2]/div/div/div[2]/section/div/section/div/div[1]/a"));
    pitanje2.click();
    Thread.sleep(2000);

    WebElement pitanje22 = webDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[5]/div/div/div/div/div/div/div/div[2]/div/div/div[2]/section/div/section/div/div[1]/a"));
    pitanje22.click();
    Thread.sleep(2000);
}

```

### 3.12. Social media links

Test Name: socijalneMreze()				
Description: Testing functionality of external social network links				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press Facebook icon 2. Press Twitter icon 3. Press Youtube icon 4. Press LinkedIn icon 5. Press Instagram icon		All icon presses lead to expected urls and social media profiles	Works as expected	PASS

```

@Test
void socialMediaTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(0,3000)", "");
    Thread.sleep(2000);

    String handle1 = webDriver.getWindowHandle();

    webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/div/ul/li[1]/a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);

    String url1 = webDriver.getCurrentUrl();
    assertEquals(url1, "https://www.facebook.com/TelemachBH");

    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/div/ul/li[2]/a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/div/ul/li[3]/a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/div/ul/li[4]/a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div[2]/div/ul/li[5]/a")).click();

    for (String handle: webDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            webDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    String url2 = webDriver.getCurrentUrl();
    assertEquals(url2, "https://www.instagram.com/telemachbh/");

    webDriver.close();
    webDriver.switchTo().window(handle1);
    Thread.sleep(2000);
}

```

### 3.13. External links

<b>Test Name:</b> externalLinks()				
<b>Description:</b> Testing Google play, Apple store, App Gallery and external company links				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>	<b>Test Data:</b>	<b>Expected Result:</b>	<b>Actual Result:</b>	<b>Status:</b>

1. Press “Aplikacije” button 2. Press “EONConnect” button 3. Press App store icon 4. Press Google play icon 5. Press “App Gallery” 6. Press menu button 7. Press “Udružene kompanije” option 8. Press “KATVHS” button 9. Press “HKB-NET” button		All icons and options lead to correct external pages	Works as expected	PASS
---	--	--	-------------------	------

```

@Test
void externalLinks() throws InterruptedException {
    WebDriver.get(baseUrl);
    WebDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement aplikacijeButton = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[4]/a"));
    aplikacijeButton.click();
    Thread.sleep(2000);

    WebElement EONConnect = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/nav/ul/li[4]/ul/li[2]/a"));
    EONConnect.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) WebDriver;
    scroll.executeScript("window.scrollTo(0,3800)", "");
    Thread.sleep(2000);

    String handle1 = WebDriver.getWindowHandle();

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div[1]/div[1]/div/div/div[2]/div/div[4]/a[1]/img")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);

    String url = WebDriver.getCurrentUrl();
    assertEquals(url, "https://apps.apple.com/hr/app/eon-connect/id1500805349?l=hr");

    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div[1]/div[1]/div/div/div[2]/div/div[4]/a[2]/img")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[9]/div[1]/div[1]/div/div/div[2]/div/div[4]/a[3]/img")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle1);
    Thread.sleep(2000);

    WebElement menu = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[2]/div/div/button[2]"));
    menu.click();
    Thread.sleep(2000);

    WebElement udruzeneKompanije = WebDriver.findElement(By.xpath("/html/body/div[3]/header/section/nav/ul/li[1]/ul/li[7]/ul/li[6]/a"));
    udruzeneKompanije.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll3 = (JavascriptExecutor) WebDriver;
    scroll3.executeScript("window.scrollTo(0,1300)", "");
    Thread.sleep(2000);

    String handle2 = WebDriver.getWindowHandle();

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[3]/div[1]/div/div[2]/div[3]/div/div[2]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);

    String url2 = WebDriver.getCurrentUrl();
    assertEquals(url2, "http://www.hs-ktv.ba/?page_id=4626");

    WebDriver.close();
    WebDriver.switchTo().window(handle2);
    Thread.sleep(2000);

    JavascriptExecutor scroll4 = (JavascriptExecutor) WebDriver;
    scroll4.executeScript("window.scrollTo(0,800)", "");
    Thread.sleep(2000);

    WebDriver.findElement(By.xpath("/html/body/div[3]/div[2]/main/section[4]/div[1]/div/div[2]/div[3]/div/div[2]/a")).click();

    for(String handle: WebDriver.getWindowHandles()) {
        if (!handle.equals(handle1)) {
            WebDriver.switchTo().window(handle);
            break;
        }
    }

    Thread.sleep(4000);
    WebDriver.close();
    WebDriver.switchTo().window(handle2);
    Thread.sleep(2000);
}

```

### 3.14. Ordering business solution

<b>Test Name:</b> poslovniTest()				
<b>Description:</b> Testing business solutions site from Telemach and ordering of one solution				
<b>Pre-condition(s):</b>				
<b>Test Steps:</b>  1. Press "Poslovni" button 2. Press "Mail rjesenja" 3. Press "Narucite" button 4. Press "AudioStreaming" button 5. Fill in cloud server name with "Test" 6. Select CPU to be 5 7. Select RAM to be 8704 8. Select SSD to be 85 9. Fill in name and password 10. Press checkbox	<b>Test Data:</b>  -Cloud server name, CPU, SSD and RAM slide option, name and password fields	<b>Expected Result:</b>  All buttons work as intended and service can be ordered successfully when correct data is entered	<b>Actual Result:</b>  Works as expected	<b>Status:</b>  PASS

```

@Test
void poslovniTest() throws InterruptedException {
    webDriver.get(baseUrl);
    webDriver.manage().window().maximize();
    Thread.sleep(2000);

    WebElement poslovniButton = webDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/ul[1]/li[2]/a"));
    poslovniButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) webDriver;
    scroll.executeScript("window.scrollTo(0,3000)", "");
    Thread.sleep(2000);

    WebElement mailRjesenja = webDriver.findElement(By.xpath("/html/body/div[3]/footer/nav/div/ul/li[6]/ul/li[3]/a"));
    mailRjesenja.click();
    Thread.sleep(2000);

    String url = webDriver.getCurrentUrl();
    assertEquals(url, "https://poslovni.telemach.ba/poslovna-rjesenja/mail-rjesenja/");

    JavascriptExecutor scroll2 = (JavascriptExecutor) webDriver;
    scroll2.executeScript("window.scrollTo(0,1500)", "");
    Thread.sleep(2000);

    WebElement naruciteButton = webDriver.findElement(By.xpath("/html/body/div[3]/div/main/section[3]/div[1]/div/div/div/div/div/div/div/div/div[1]/div/div/div[3]/a"));
    naruciteButton.click();
    Thread.sleep(2000);

    WebElement Audiostreaming = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[1]/div[2]/div[2]/div/ul/li[7]/div"));
    Audiostreaming.click();
    Thread.sleep(2000);

    WebElement imeCloudServera = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[2]/div[1]/input"));
    imeCloudServera.sendKeys("Test");
    Thread.sleep(2000);

    WebElement CPU = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[3]/div[1]/div[2]/div/span"));
    CPU.click();
    Thread.sleep(2000);

    WebElement RAM = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[3]/div[2]/div[2]/div"));
    RAM.click();
    Thread.sleep(2000);

    WebElement SSD = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[3]/div[4]/div"));
    SSD.click();
    Thread.sleep(2000);

    WebElement cijena = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[2]/div/div/div/div/div[1]/div[2]/div/span"));
    String text2 = cijena.getText();
    assertEquals(text2, "289.86 KM");

    JavascriptExecutor scroll3 = (JavascriptExecutor) webDriver;
    scroll3.executeScript("window.scrollTo(0,500)", "");
    Thread.sleep(2000);

    WebElement korisnickoIme = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[4]/div[1]/input"));
    korisnickoIme.sendKeys("Test");
    Thread.sleep(2000);

    WebElement lozinka = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/fieldset[4]/div[2]/input"));
    lozinka.sendKeys("Test");
    Thread.sleep(2000);

    WebElement checkBox = webDriver.findElement(By.xpath("/html/body/div[2]/div[2]/div/div/form/div/div[1]/div/div/div[2]/p/input"));
    checkBox.click();
    Thread.sleep(2000);
}

```

### 3.15. Contact us form

Test Name: poslovniTest2()				
Description: Testing contact us option for businesses				
Pre-condition(s):				
Test Steps:	Test Data:	Expected Result:	Actual Result:	Status:
1. Press “Poslovni” button. 2. Press “Kontaktirajte nas” button. 3. Fill in “Ime kompanije”, “PDV”, “ID”, “Općina”,	-Insert company name, PDV, ID, municipality, place, street name, street number, phone number -Insert name,	Checking functionality of input fields for company and person filling in form.	Works as expected	PASS

<p>“Naselje”, “Naziv ulice”, “Kucni broj” fields.</p> <p>4. Fill in “Ime”, “Prezime”, “Kontakt telefon”, “Email”, “Napomena” fields.</p> <p>5. Press “Pošaljite” button.</p> <p>6. Close modal.</p>	<p>surname, contact number, email and note</p>			
---	--	--	--	--

```

@Test
void poslovniTest2() throws InterruptedException {
    WebDriver.get(baseUrl);
    WebDriver.manage().window().maximize();
    Thread.sleep(2000);

    JavascriptExecutor js=(JavascriptExecutor) WebDriver;

    WebElement poslovniButton = WebDriver.findElement(By.xpath("/html/body/div[3]/header/div[1]/div/nav/ul/li[2]/a"));
    poslovniButton.click();
    Thread.sleep(2000);

    JavascriptExecutor scroll = (JavascriptExecutor) WebDriver;
    scroll.executeScript("window.scrollTo(0,2000)", "");
    Thread.sleep(2000);

    WebElement kontaktirajteNas = WebDriver.findElement(By.xpath("/html/body/div[3]/div/main/section[3]/div[1]/div[1]/div/div/div[2]/div/div[2]/div/div/a"));
    kontaktirajteNas.click();
    Thread.sleep(2000);

    WebElement adresa = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/h4[1]"));
    String text2 = adresa.getText();
    assertEquals(text2,"Adresa korištenja odabrane usluge");

    WebElement nazivKompanije = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[1]/input"));
    nazivKompanije.sendKeys("Test Tester");
    Thread.sleep(2000);

    WebElement PDV = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[2]/input"));
    PDV.sendKeys("3333");
    Thread.sleep(2000);

    WebElement ID = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[3]/input"));
    ID.sendKeys("3333");
    Thread.sleep(2000);

    WebElement opcina = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[4]/input"));
    opcina.sendKeys("Testna");
    Thread.sleep(2000);

    WebElement naselje = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[5]/input"));
    naselje.sendKeys("Test");
    Thread.sleep(2000);

    WebElement nazivUlice = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[6]/input"));
    nazivUlice.sendKeys("Test Tester");
    Thread.sleep(2000);

    WebElement kućniBroj = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[1]/div[7]/input"));
    kućniBroj.sendKeys("8");
    Thread.sleep(2000);

    WebElement kontaktPodaci = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/h4[2]"));
    String text3 = kontaktPodaci.getText();
    assertEquals(text3,"Kontakt podaci");

    WebElement Ime = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[2]/div[1]/input"));
    Ime.sendKeys("Test");
    Thread.sleep(2000);

    WebElement Prezime = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[2]/div[2]/input"));
    Prezime.sendKeys("Tester");
    Thread.sleep(2000);

    WebElement kontaktTelefon = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[2]/div[3]/input"));
    kontaktTelefon.sendKeys("033 333 333");
    Thread.sleep(2000);

    WebElement email = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[2]/div[4]/input"));
    email.sendKeys("test.testster@test.com");
    Thread.sleep(2000);

    WebElement scroll2=WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[3]/div[2]/button"));
    js.executeScript("arguments[0].scrollIntoView(true);",scroll2);
    Thread.sleep(2000);

    WebElement napomena = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[2]/div[5]/textarea"));
    napomena.sendKeys("Test!");
    Thread.sleep(2000);

    WebElement posaljite = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/div/section/form/div[3]/div[2]/button"));
    posaljite.click();
    Thread.sleep(2000);
    Thread.sleep(2000);

    WebElement scroll3=WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/button/span"));
    js.executeScript("arguments[0].scrollIntoView(true);",scroll3);
    Thread.sleep(2000);

    WebElement close = WebDriver.findElement(By.xpath("/html/body/div[4]/div/div/div/button/span"));
    close.click();
    Thread.sleep(2000);
}

```



## 4. Conclusion

### 4.1. Testing Summary

Testing Tool	Total Tests	Passed Tests	Failed Tests
Selenium, Junit and Eclipse with Java programming language	15	15	0

### 4.2. Final Thoughts

All things considered, testing of “Telemach” website was successful. Every part of website we tested, worked as expected so we can conclude that the given website is working properly. We are happy that we had the opportunity to do these tests as a part of this course since this project gave us some valuable experience for the future.