Univerzitet u Sarajevu
Elektrotehnički fakultet
Sarajevo

Projekat - treći dio:
Black box testiranje

Članovi tima:
1. Elma Nekić
2. Dinela Pešković
3. Elma Tirak
4. Adna Alihodžić
5. Zehra Buza

Za black box testiranje i analizu smo odabrale web stranicu prodavnice sportske opreme *Buzz* (https://www.buzzsneakers.ba/).

Osnovne funkcionalnosti koje nudi BUZZ stranica su:

- Prijava
- Registracija
- Pregled proizvoda po kategorijama
- Pregled blogova - Buzz crew
- Pregled prodavnica
- Dodavanje u omiljene proizvode
- Pregled omiljenih proizvoda
- Dodavanje u korpu
- Pregled korpe
- Pretraga proizvoda
- Pregled last buy proizvoda
- Prikaz pregledanih proizvoda (za prijavljene korisnike)
- Promjena lozinke (za prijavljene korisnike)
- Online plaćanje (za prijavljene korisnike)

Postavka

Zadatak 1:
Kreirati testne slučajeve (minimalno 5) primjenom tehnika za funkcionalno black box testiranje. Evidentirati ih sa svim neophodnim elementima za opis testnog scenarija na Azure DevOps platformi tako da se pokriju sve funkcionalnosti aplikacije. Identifikovane bagove na aplikaciji (minimalno 2) također dodati u Azure DevOps sa neophodnim elementima.

Zadatak 2:
Sve kreirane testne slučajeve iz prethodnog zadatka automatizirati kroz Selenium IDE a potom i kroz automation framework - Nunit Selenium. U testnom projektu koristiti POM i Singleton patern.

Zadatak 3:
Napisati API testove za odabranu aplikaciju koristeći Postman alat. Svaki član tima treba da kreira kolekciju od minimalno 3 API testa sa minimalno 4 validacije.

Zadatak 4:
Izvršiti stress i load testiranje aplikacije. Koristiti alat po izboru (Loadster, Pingdom, itd.). Izvršiti analizu rezultata (grafova i statistike) za oba tipa testiranja.

Izrada

Član tima: Elma Nekić
Zadatak 1:
Funkcionalnost: Registracija
Pri kreiranju računa na web stranici, potrebno je unijeti lozinku. Za validnost lozinke postoje sljedeći kriteriji: mora imati najmanje 8 karaktera, bar jedno veliko slovo, bar jedno malo slovo, bar jedan broj i bar jedan specijalni karakter. Da bismo odredili minimalan broj testnih slučajeva, koristit ćemo ekvivalentne particije, pri čemu su particije validne kada su ispunjeni kriteriji, a nevalidne u suprotnom.

Ulazni uslovi	Validna particija	Nevalidna particija

Dužina	8 i više karaktera - P1	Ispod 8 karaktera - P2
Sadrži karaktere	a-z - P3	Ne sadrži a-z - P4
Sadrži karaktere	A-Z - P5	Ne sadrži A-Z - P6
Sadrži karaktere	Specijalni -P7	Ne sadrži specijalne karaktere - P8
Sadrži karaktere	Broj -P9	Ne sadrži broj -P10

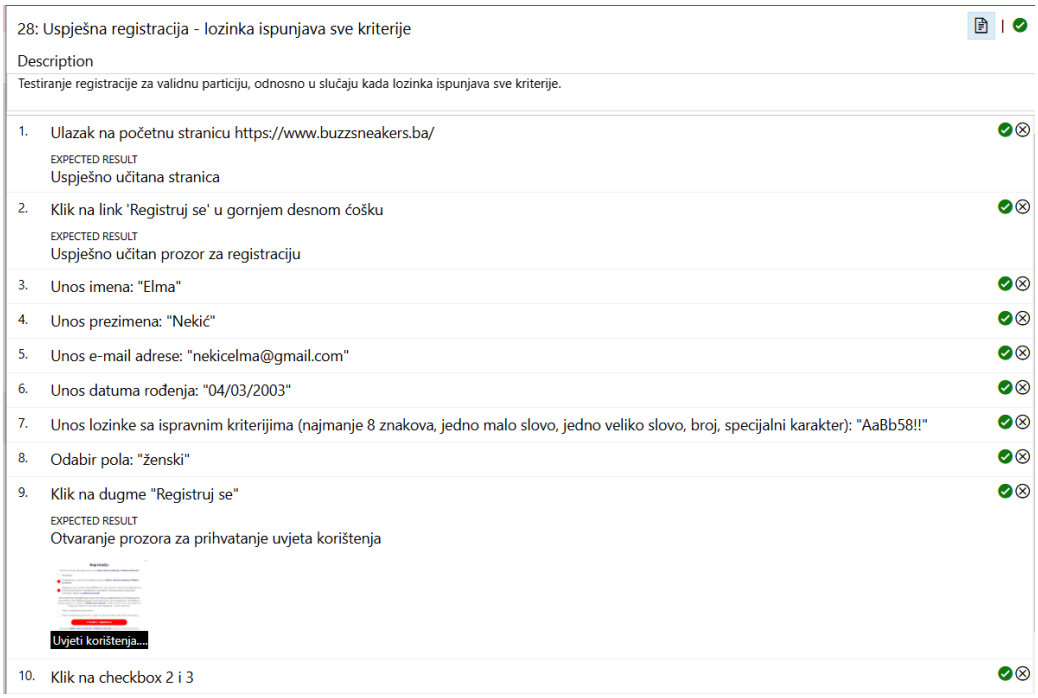
Validne particije se mogu spojiti u jedan testni slučaj, dok se nevalidne particije tertiraju u posebnim testnim slučajevima.

Azure DevOps:

Prvi testni slučaj:

- Lozinka zadovoljava sve kriterije, npr. “AaBb58!!”

(particije: P1, P3, P5, P7, P9)



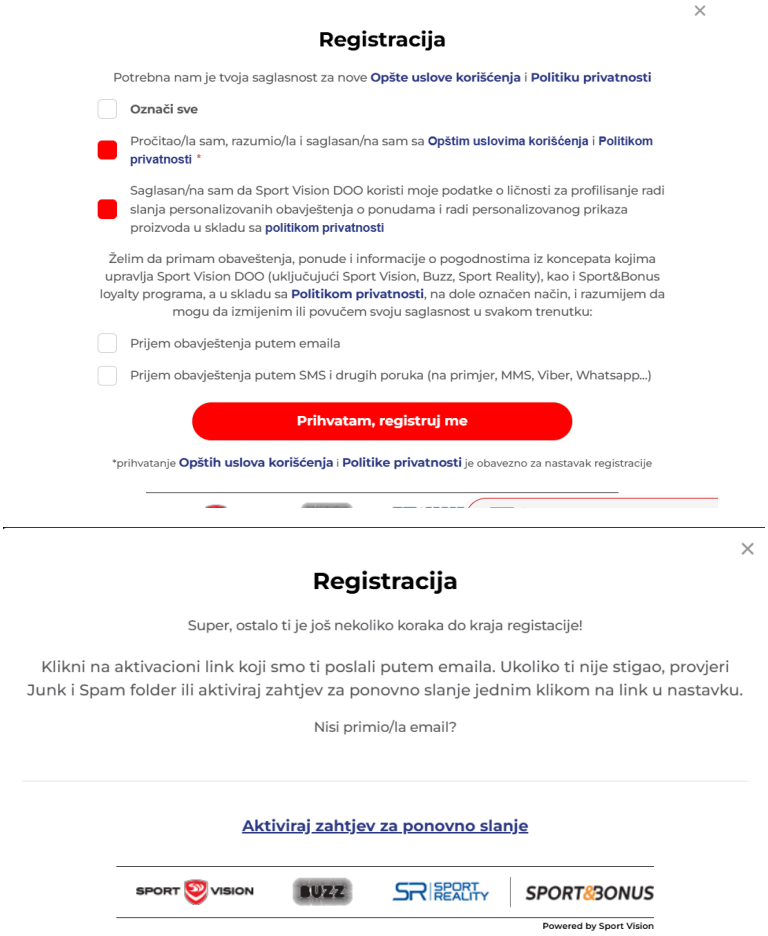
11. Klik na dugme "Prihvatam, registruj me"

EXPECTED RESULT

Kreiranje korisničkog računa i otvaranje prozora za potvrdu i aktivaciju profila

Aktivacijski prozor.png

Screenshoti očekivanog ponašanja:



Drugi testni slučaj:

-Lozinka nema dovoljan broj karaktera (particija P2)

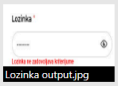
Save and close | Create bug

29: Neuspješna registracija - lozinka ne sadrži dovoljan broj karaktera

Description

Provjera validacije lozinke u slučaju da nije ispunjen kriterij za broj karaktera.

1. Ulazak na početnu stranicu https://www.buzzsneakers.ba/
   EXPECTED RESULT
   Uspješno učitana stranica
2. Klik na link 'Registruj se' u gornjem desnom ćošku
   EXPECTED RESULT
   Uspješno učitan prozor za registraciju
3. Unos imena: "Elma"
4. Unos prezimena: "Nekić"
5. Unos validne e-mail adrese: "nekicelma@gmail.com"
6. Unos datuma rođenja: "04/03/2003"
7. Unos lozinke koja ima manje od 8 karaktera: "Ab2!"
   EXPECTED RESULT
   Ispis poruke "Lozinka ne zadovoljava kriterijume"
8. Odabir pola: "ženski"
9. Klik na dugme "Registruj se"
   EXPECTED RESULT
   Račun nije kreiran, nema prelaska na stranicu sa potvrđenom registracijom, ispis poruke "Lozinka ne zadovoljava kriterijume"



Lozinka output.jpg

Treći testni slučaj:

-Lozinka ne sadrži malo slovo (P4)

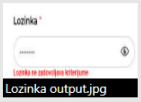
Save and close | Create bug

35: Neuspješna registracija - lozinka ne sadrži malo slovo

Description

Provjera validacije lozinke u slučaju da nije ispunjen kriterij za malo slovo.

1. Ulazak na početnu stranicu https://www.buzzsneakers.ba/
   EXPECTED RESULT
   Uspješno učitana stranica
2. Klik na link 'Registruj se' u gornjem desnom ćošku
   EXPECTED RESULT
   Uspješno učitan prozor za registraciju
3. Unos imena: "Elma"
4. Unos prezimena: "Nekić"
5. Unos e-mail adrese: "nekicelma@gmail.com"
6. Unos datuma rođenja: "04/03/2003"
7. Unos nevalidne lozinke bez malog slova: "AABB58!!"
8. Odabir pola: "ženski"
9. Klik na dugme "Registruj se"
   EXPECTED RESULT
   Račun nije kreiran, nema prelaska na stranicu sa potvrđenom registracijom, ispis poruke "Lozinka ne zadovoljava kriterijume"



Lozinka output.jpg

Četvrti testni slučaj:

-Lozinka ne sadrži veliko slovo (P6)

Save and close | Create bug

30: Neuspješna registracija - lozinka ne sadrži veliko slovo

Description

Provjera validacije lozinke u slučaju da nije ispunjen kriterij za veliko slovo.

1. Ulazak na početnu stranicu https://www.buzzsneakers.ba/

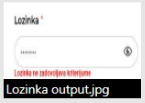
   EXPECTED RESULT
   Uspješno učitana stranica

2. Klik na link 'Registruj se' u gornjem desnom ćošku

   EXPECTED RESULT
   Uspješno učitan prozor za registraciju

3. Unos imena: "Elma"
4. Unos prezimena: "Nekić"
5. Unos e-mail adrese: "nekicelma@gmail.com"
6. Unos datuma rođenja: "04/03/2003"
7. Unos nevalidne lozinke bez velikog slova: "aabb58!!"
8. Odabir pola: "ženski"
9. Klik na dugme "Registruj se"

   EXPECTED RESULT
   Račun nije kreiran, nema prelaska na stranicu sa potvrđenom registracijom



Lozinka output.jpg

Peti testni slučaj:
-Lozinka ne sadrži specijalni karakter (P8)

Save and close | Create bug

37: Neuspješna registracija - lozinka ne sadrži specijalni karakter

Description

Provjera validacije lozinke u slučaju da nije ispunjen kriterij za specijalni karakter.

1. Ulazak na početnu stranicu https://www.buzzsneakers.ba/

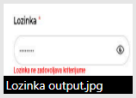
   EXPECTED RESULT
   Uspješno učitana stranica

2. Klik na link 'Registruj se' u gornjem desnom ćošku

   EXPECTED RESULT
   Uspješno učitan prozor za registraciju

3. Unos imena: "Elma"
4. Unos prezimena: "Nekić"
5. Unos e-mail adrese: "nekicelma@gmail.com"
6. Unos datuma rođenja: "04/03/2003"
7. Unos nevalidne lozinke bez velikog slova: "AaBb55555"
8. Odabir pola: "ženski"
9. Klik na dugme "Registruj se"

   EXPECTED RESULT
   Račun nije kreiran, nema prelaska na stranicu sa potvrđenom registracijom, ispis poruke "Lozinka ne zadovoljava kriterijume"



Lozinka output.jpg

Šesti testni slučaj:
-Lozinka ne sadrži broj (P10)

Save and close | Create bug

36: Neuspješna registracija - password ne sadrži broj

Description

Provjera validacije lozinke u slučaju da nije ispunjen kriterij za broj.

1. Ulazak na početnu stranicu https://www.buzzsneakers.ba/

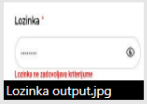
   EXPECTED RESULT
   Uspješno učitana stranica

2. Klik na link 'Registruj se' u gornjem desnom ćošku

   EXPECTED RESULT
   Uspješno učitan prozor za registraciju

3. Unos imena: "Elma"
4. Unos prezimena: "Nekić"
5. Unos e-mail adrese: "nekicelma@gmail.com"
6. Unos datuma rođenja: "04/03/2003"
7. Unos nevalidne lozinke bez broja: "ABABab!!"
8. Odabir pola: "ženski"
9. Klik na dugme "Registruj se"

   EXPECTED RESULT
   Račun nije kreiran, nema prelaska na stranicu sa potvrđenom registracijom, ispis poruke "Lozinka ne zadovoljava kriterijume"



Lozinka output.jpg

Screenshot očekivanog ponašanja za nevalidne particije:

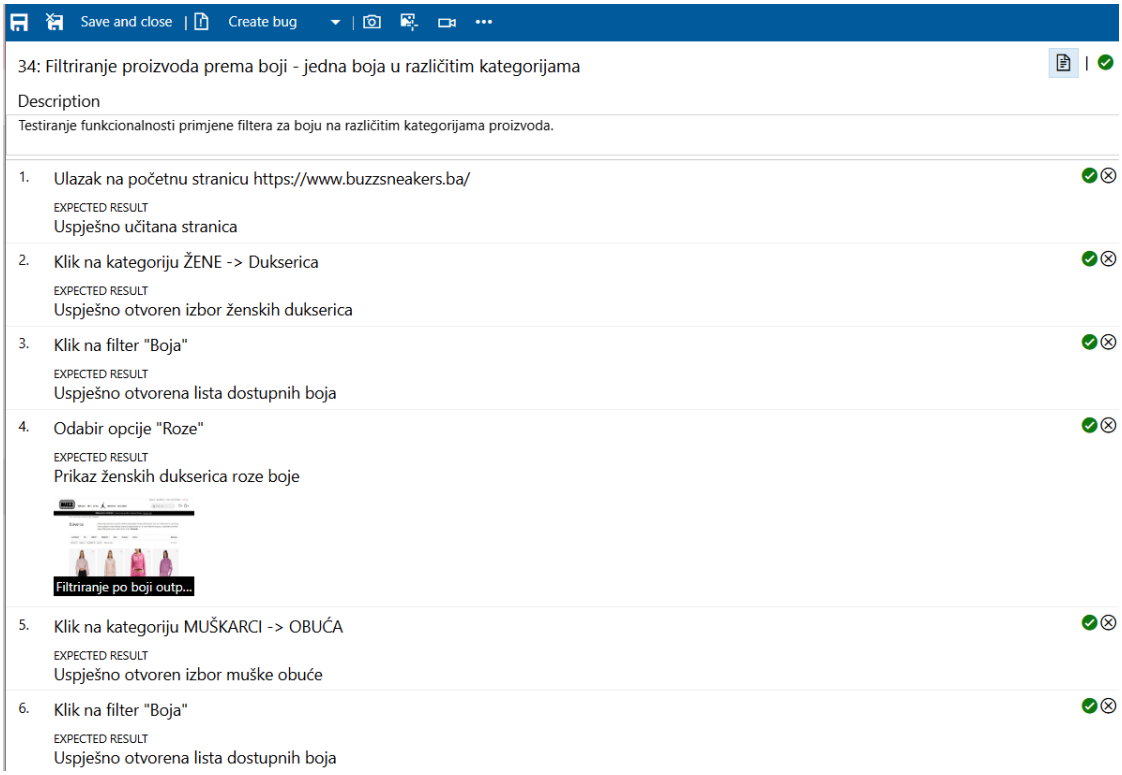
Funkcionalnost: Filtriranje po boji

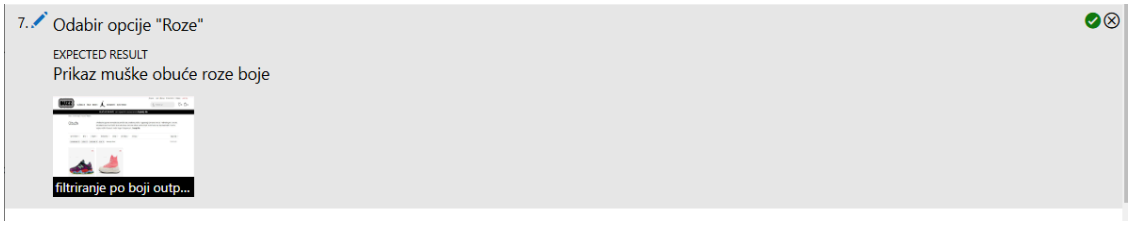
Buzz web stranica ima opciju filtriranja proizvoda po boji. Korištenjem tehnike testiranja na osnovu slučaja upotrebe, testni slučaj bi izgledao ovako:

	Korak	Opis
	1	A: Otvori početnu stranicu
	2	S: Prikaži početnu stranicu
	3	A: Odaberi kategoriju “Žene”

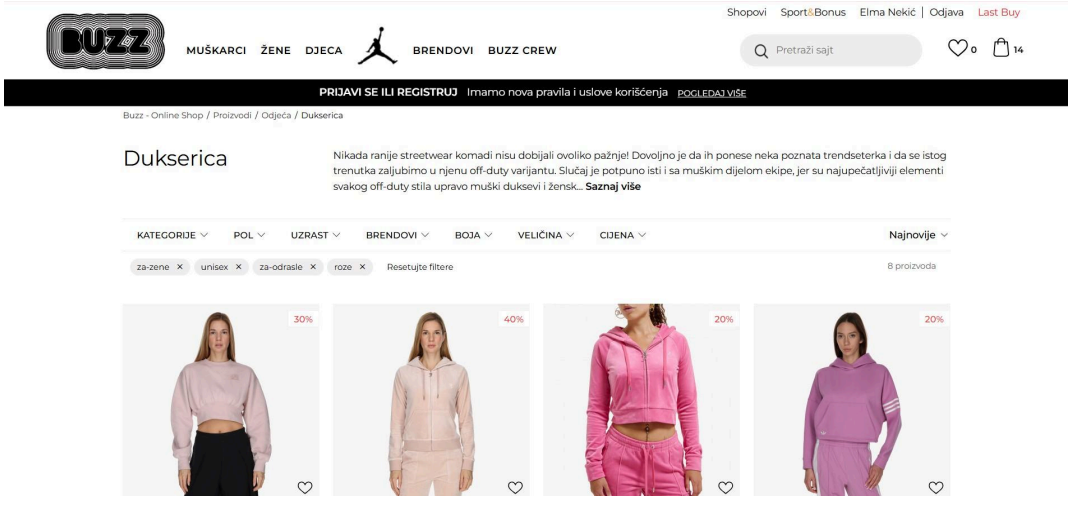
Osnovni (uspješni) scenarij	4	S: Prikaži vrste proizvoda u kategoriji “Žene”
	5	A: Odaberi vrstu “Dukserice”
	6	S: Prikaži proizvode vrste “Dukserice”
	7	A: Odaberi filter “Boja”
	8	S: Prikaži dostupne boje
	9	A: Odaberi boju “Roze”
	10	S: Prikaži dukserice u rozoj boji

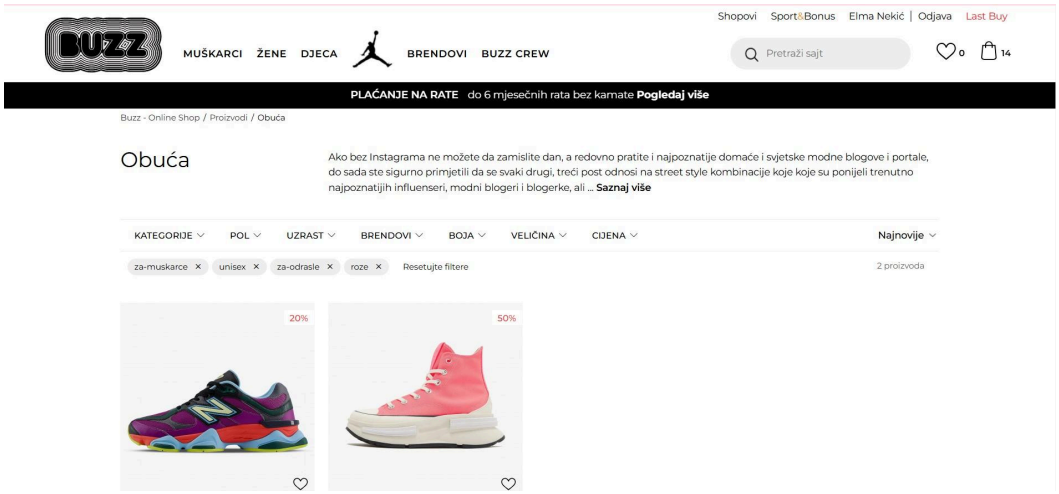
Azure DevOps:





Screenshoti očekivanog ponašanja:





Funkcionalnost: Dodavanje u korpu

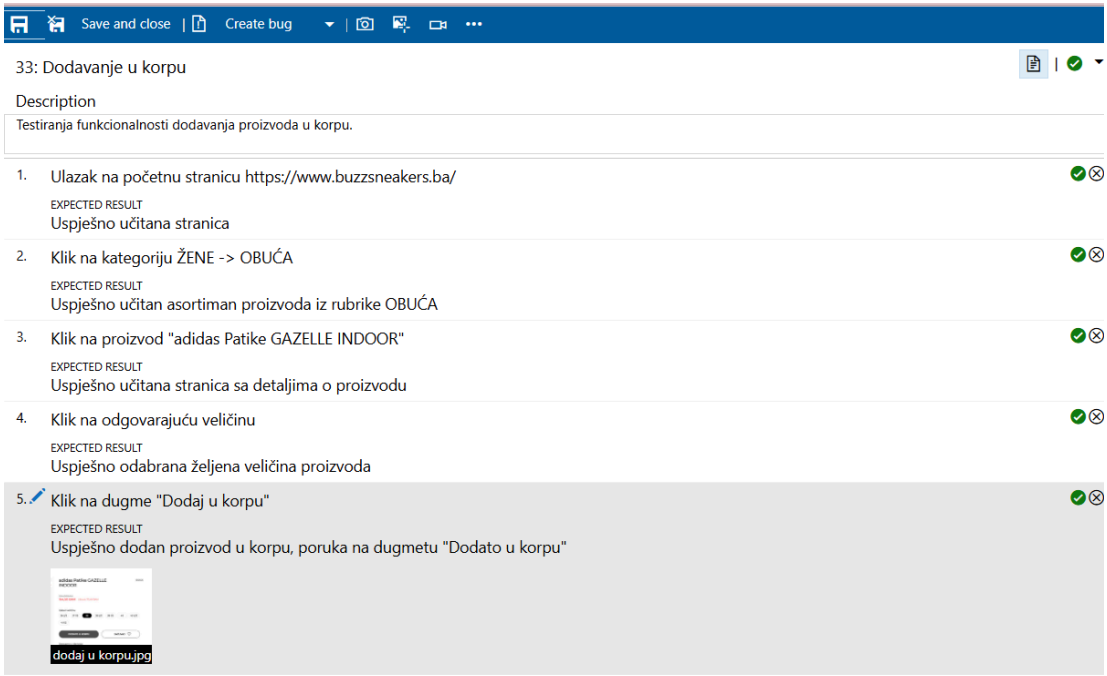
Pri pregledu proizvoda korisnik ima mogućnost da doda proizvod u korpu ako želi da ga kupi.

Korištenjem tehnike testiranja na osnovu slučaja upotrebe, testni slučaj bi izgledao ovako:

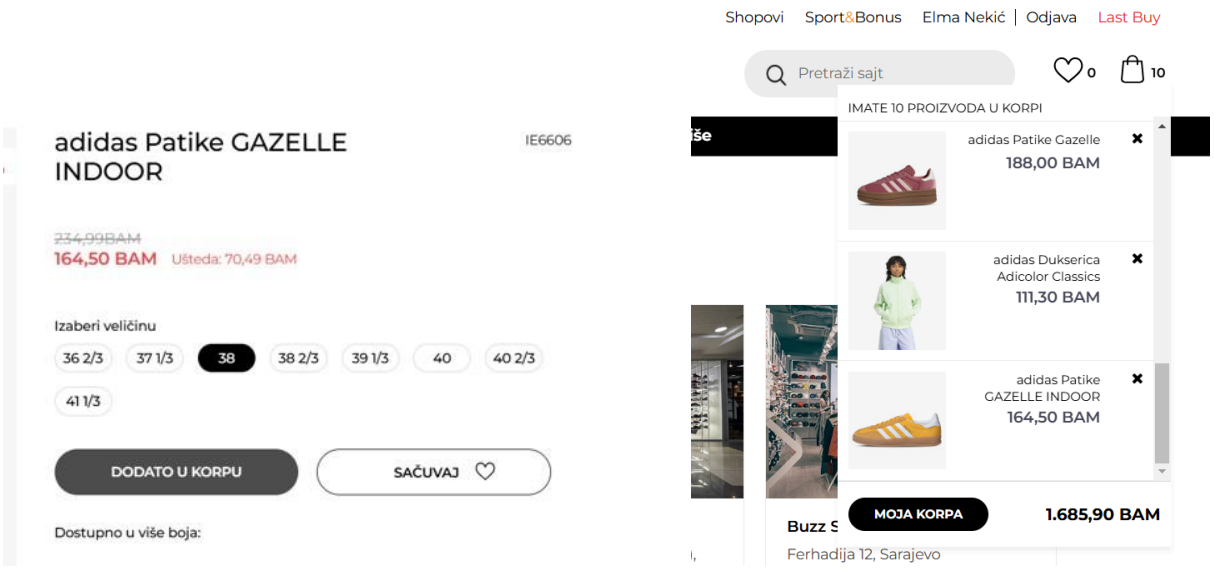
	Korak	Opis
	1	A: Otvori početnu stranicu
	2	S: Prikaži početnu stranicu

Osnovni (uspješni) scenarij	3	A: Odaberi kategoriju “Žene”
	4	S: Prikaži vrste proizvoda u kategoriji “Žene”
	5	A: Odaberi vrstu “Obuća”
	6	S: Prikaži proizvode vrste “Obuća”
	7	A: Odaberi proizvod
	8	S: Prikaži detalje o proizvodu
	9	A: Odaberi željenu veličinu
	10	A: Klikni na dugme “Dodaj u korpu”
	11	S: Dodaj proizvod u korpu

Azure DevOps:

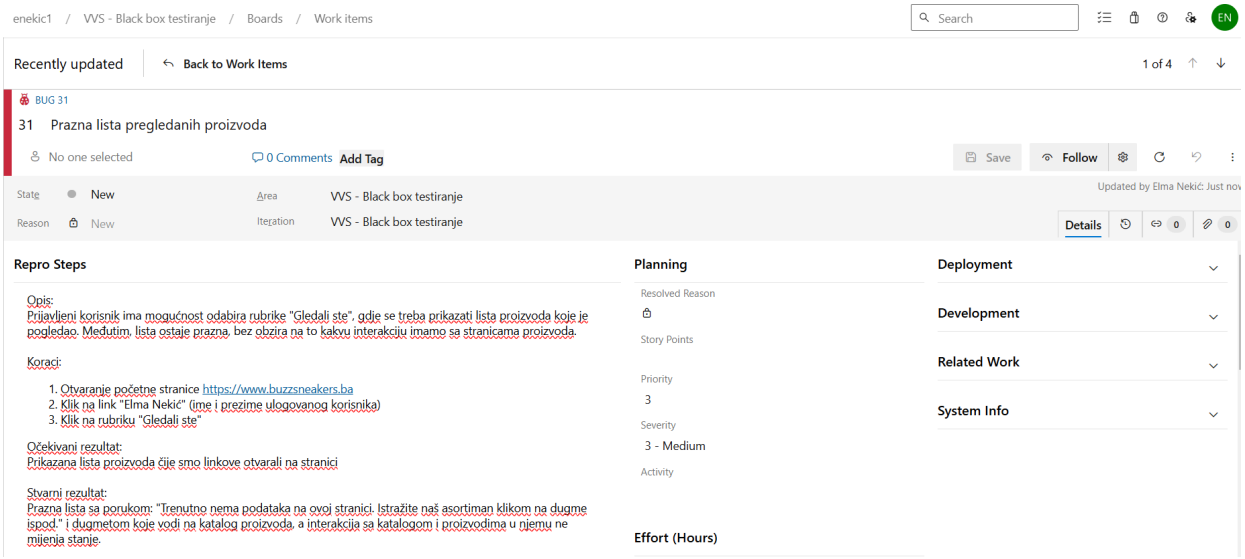


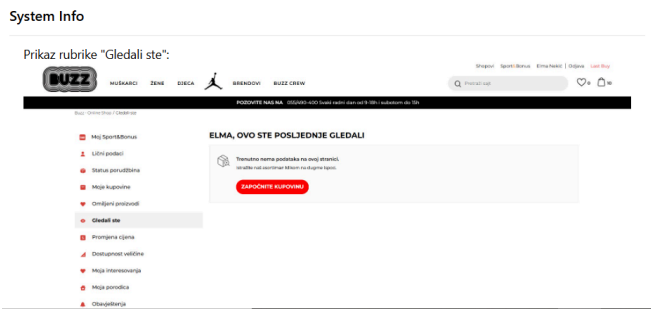
Screenshot očekivanog ponašanja:



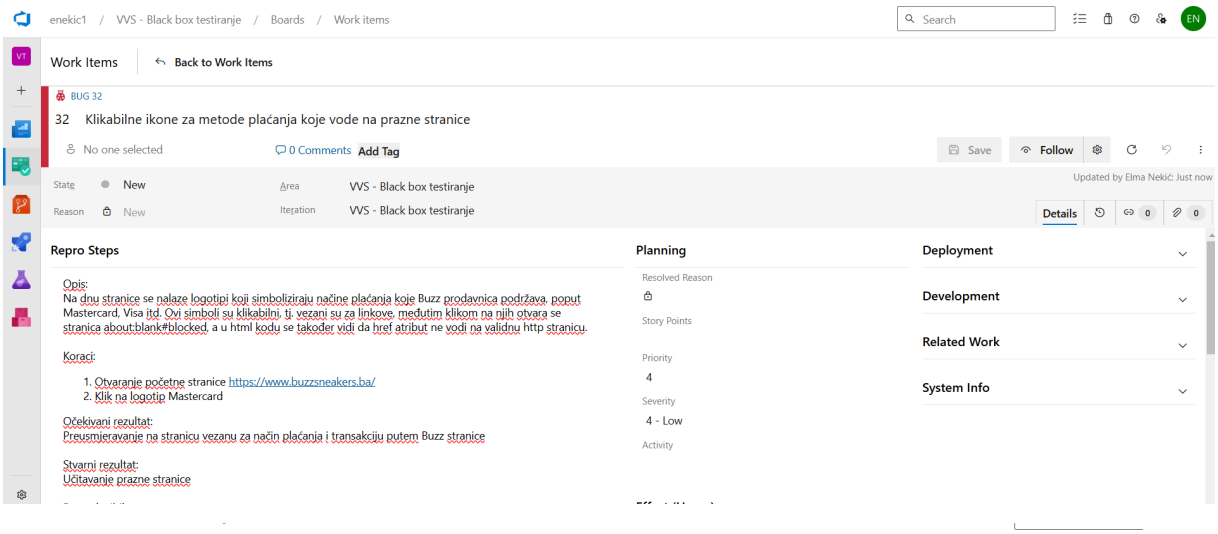
Pronađeni bugovi:

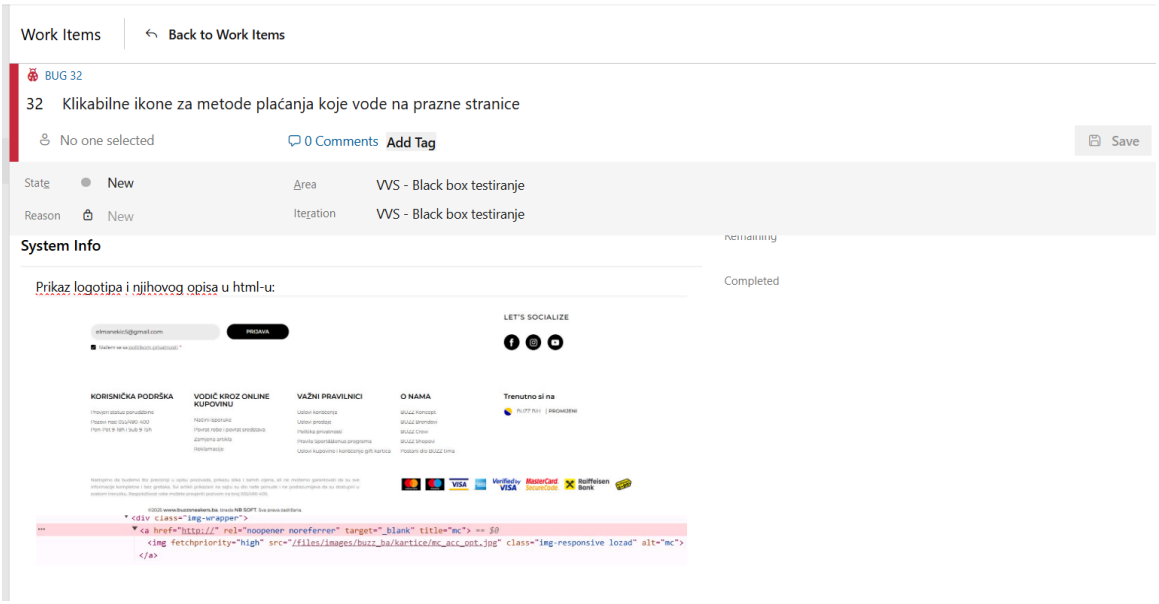
1. Lista pregledanih proizvoda je uvijek prazna





2. Ikone za podržane načine plaćanja su vezane za linkove koji vode na praznu stranicu





Zadatak 2:
Selenium IDE

Uspješna registracija - lozinka ima sve kriterije zadovoljene

Project: VVS - Black box*

Tests

Search tests...

- Dodavanje u korpu
- Filtriranje proizvoda po boji
- ✓ Neuspješna registracija - lozinka ne sadrži broj*
- ✓ Neuspješna registracija - lozinka ne sadrži malo slovo*
- ✓ Neuspješna registracija - lozinka ne sadrži specijalni ka
- ✓ Neuspješna registracija - lozinka ne sadrži veliko slovo
- ✓ Neuspješna registracija - lozinka nije dovoljno duga*
- ✓ Uspješna registracija - lozinka ispunjava sve kriterije*

https://www.buzzsneakers.ba

	Command	Target	Value
3	✓ click	linkText=Registrujte se	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-textbox-54536987280931150	
6	✓ type	id=gigya-textbox-54536987280931150	Elma
7	✓ click	id=gigya-textbox-57186723442001010	
8	✓ type	id=gigya-textbox-57186723442001010	Nekić
9	✓ click	id=gigya-loginID-117244647900807650	
10	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
11	✓ click	id=gigya-textbox-87599544251053630	
12	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
13	✓ click	id=gigya-password-87802173666082740	
14	✓ type	id=gigya-password-87802173666082740	AaBb58!!
15	✓ click	id=gigya-password-164620219341067500	
16	✓ type	id=gigya-password-164620219341067500	AaBb58!!
17	✓ click	css=#gigya-register-form .gigya-input-submit	

Neuspješna registracija - lozinka ne sadrži dovoljan broj karaktera

Search tests...

- Dodavanje u korpu
- Filtriranje proizvoda po boji
- Neuspješna registracija - lozinka ne sadrži veliko slovo
- ✓ Neuspješna registracija - lozinka nije dovoljno duga*

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1058x812	
3	✓ run script	window.scrollTo(0,0)	
4	✓ click	linkText=Registrujte se	
5	✓ run script	window.scrollTo(0,0)	
6	✓ click	id=gigya-textbox-54536987280931150	
7	✓ type	id=gigya-textbox-54536987280931150	Elma
8	✓ click	id=gigya-textbox-57186723442001010	
9	✓ type	id=gigya-textbox-57186723442001010	Nekić
10	✓ click	id=gigya-loginID-117244647900807650	
11	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
12	✓ click	id=gigya-textbox-87599544251053630	
13	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
14	✓ click	id=gigya-password-87802173666082740	
15	✓ type	id=gigya-password-87802173666082740	Ab2!
16	✓ click	id=gigya-password-164620219341067500	
17	✓ type	id=gigya-password-164620219341067500	Ab2!
18	✓ click	css=#gigya-register-form .gigya-input-submit	
19	✓ close		

Neuspješna registracija - lozinka ne sadrži malo slovo

- Dodavanje u korpu
- Filtriranje proizvoda po boji
- ✓ Neuspješna registracija - lozinka ne sadrži malo slovo*
- ✓ Neuspješna registracija - lozinka ne sadrži veliko slovo
- ✓ Neuspješna registracija - lozinka nije dovoljno duga*

	Command	Target	Value
7	✓ click	id=gigya-textbox-54536987280931150	
8	✓ type	id=gigya-textbox-54536987280931150	Elma
9	✓ click	id=gigya-textbox-57186723442001010	
10	✓ type	id=gigya-textbox-57186723442001010	Nekić
11	✓ click	id=gigya-loginID-117244647900807650	
12	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
13	✓ click	id=gigya-textbox-87599544251053630	
14	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
15	✓ click	id=gigya-password-87802173666082740	
16	✓ type	id=gigya-password-87802173666082740	AABB58!!
17	✓ click	id=gigya-password-164620219341067500	
18	✓ type	id=gigya-password-164620219341067500	AABB58!!
19	✓ click	css=#gigya-register-form .gigya-input-submit	
20	✓ close		

Neuspješna registracija - lozinka ne sadrži veliko slovo

Project: VVS - Black box

Tests

Search tests...

✓ Neuspješna registracija - lozinka ne sadrži veliko slovo

✓ Neuspješna registracija - lozinka nije dovoljno duga

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1058x812	
3	✓ click	linkText=Registrujte se	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-textbox-54536987280931150	
6	✓ type	id=gigya-textbox-54536987280931150	Elma
7	✓ click	id=gigya-textbox-57186723442001010	
8	✓ type	id=gigya-textbox-57186723442001010	Nekić
9	✓ click	id=gigya-loginID-117244647900807650	
10	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
11	✓ click	id=gigya-textbox-87599544251053630	
12	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
13	✓ click	id=gigya-password-87802173666082740	
14	✓ type	id=gigya-password-87802173666082740	aabb58!!
15	✓ click	id=gigya-password-164620219341067500	
16	✓ type	id=gigya-password-164620219341067500	aabb58!!
17	✓ click	css=#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img	
18	✓ click	css=#gigya-register-form .gigya-input-submit	
19	✓ close		

Neuspješna registracija - lozinka ne sadrži specijalni karakter

Tests

Search tests...

Run current test Ctrl+R

Dodavanje u korpu

Filtriranje proizvoda po boji

✓ Neuspješna registracija - lozinka ne sadrži broj*

✓ Neuspješna registracija - lozinka ne sadrži malo slovo*

✓ Neuspješna registracija - lozinka ne sadrži specijalni ka

✓ Neuspješna registracija - lozinka ne sadrži veliko slovo

✓ Neuspješna registracija - lozinka nije dovoljno duga*

	Command	Target	Value
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-textbox-54536987280931150	
6	✓ type	id=gigya-textbox-54536987280931150	Elma
7	✓ click	id=gigya-textbox-57186723442001010	
8	✓ type	id=gigya-textbox-57186723442001010	Nekić
9	✓ click	id=gigya-loginID-117244647900807650	
10	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
11	✓ click	id=gigya-textbox-87599544251053630	
12	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
13	✓ click	id=gigya-password-87802173666082740	
14	✓ type	id=gigya-password-87802173666082740	AaBb5555
15	✓ click	id=gigya-password-164620219341067500	
16	✓ type	id=gigya-password-164620219341067500	AaBb5555
17	✓ click	css=#gigya-register-form .gigya-input-submit	
18	✓ close		

Neuspješna registracija - lozinka ne sadrži broj

Tests

Search tests...

Run current test Ctrl+R

Dodavanje u korpu

Filtriranje proizvoda po boji

✓ Neuspješna registracija - lozinka ne sadrži broj*

✓ Neuspješna registracija - lozinka ne sadrži malo slovo*

✓ Neuspješna registracija - lozinka ne sadrži veliko slovo

✓ Neuspješna registracija - lozinka nije dovoljno duga*

	Command	Target	Value
8	✓ type	id=gigya-textbox-54536987280931150	Elma
9	✓ click	id=gigya-textbox-57186723442001010	
10	✓ type	id=gigya-textbox-57186723442001010	Nekić
11	✓ click	id=gigya-loginID-117244647900807650	
12	✓ type	id=gigya-loginID-117244647900807650	nekicelma@gmail.com
13	✓ click	id=gigya-textbox-87599544251053630	
14	✓ type	id=gigya-textbox-87599544251053630	04/03/2003
15	✓ click	id=gigya-password-87802173666082740	
16	✓ type	id=gigya-password-87802173666082740	ABABab!!
17	✓ click	css=#gigya-register-form .gigya-repeat-password > .gigya-label	
18	✓ click	id=gigya-password-164620219341067500	
19	✓ type	id=gigya-password-164620219341067500	ABABab!!
20	✓ click	css=#gigya-register-form .gigya-input-submit	
21	✓ close		

Dodavanje u korpu

Project: VVS - Black box*

Tests

Search tests...

- ✓ Dodavanje u korpu*
- Filtriranje proizvoda po boji
- Neuspješna registracija - lozinka ne sad
- Neuspješna registracija - lozinka nije do

https://www.buzzsneakers.ba

	Command	Target	Value
3	✓ click	css=.slider_menu_womens > a > span	
4	✓ run script	window.scrollTo(0,0)	
5	✓ mouse over	linkText=OBUĆA	
6	✓ click	linkText=OBUĆA	
7	✓ run script	window.scrollTo(0,297)	
8	✓ run script	window.scrollTo(0,1028)	
9	✓ run script	window.scrollTo(0,3566)	
10	✓ run script	window.scrollTo(0,4664)	
11	✓ click	css=.wrapper-grid-view:nth-child(52) .img-overlay	
12	✓ click	css=.ease:nth-child(6)	
13	✓ mouse over	id=nb_addToCartButton	
14	✓ click	id=nb_addToCartButton	
15	✓ mouse out	id=nb_addToCartButton	
16	✓ close		

Filtriranje proizvoda po boji:

Tests

Search tests...

- Dodavanje u korpu
- ✓ Filtriranje proizvoda po boji*
- Neuspješna registracija - lozinka ne sad
- Neuspješna registracija - lozinka nije do

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1552x840	
3	✓ run script	window.scrollTo(0,0)	
4	✓ click	linkText=Dukserica	
5	✓ click	css=#nb_f-attr-94 .title	
6	✓ click	css=.hover	
7	✓ mouse over	css=.wrapper-grid-view:nth-child(2) .img-overlay	
8	✓ mouse out	css=.wrapper-grid-view:nth-child(2) .img-overlay	
9	✓ mouse over	linkText=MUŠKARCI	
10	✓ mouse out	linkText=MUŠKARCI	
11	✓ mouse over	linkText=Patike	
12	✓ click	linkText=Patike	
13	✓ click	css=#nb_f-attr-94 .title	
14	✓ click	css=.hover	
15	✓ mouse over	css=.wrapper-grid-view:nth-child(2) .img-overlay	
16	✓ mouse out	css=.wrapper-grid-view:nth-child(2) .img-overlay	
17	✓ close		

NUnit Selenium WebDriverSingleton

```
namespace BlackBox
{
    3 references
    public class WebDriverSingleton
    {
        private static IWebDriver driver;

        0 references
        private WebDriverSingleton() { }

        1 reference
        public static IWebDriver GetDriver()
        {
            if (driver == null)
            {
                driver = new ChromeDriver();
                driver.Manage().Window.Maximize();
            }
            return driver;
        }

        1 reference
        public static void QuitDriver()
        {
            if (driver != null)
            {
                driver.Quit();
                driver.Dispose();
                driver = null;
            }
        }
    }

}
```

HomePage

```
namespace BlackBox
{
    3 references
    public class HomePage
    {
        private IWebDriver driver;
        private WebDriverWait wait;

        private By WomensMenu = By.CssSelector(".slider_menu_womens > a > span");
        private By ObucaLink = By.LinkText("OBUĆA");
        private By AddToCartButton = By.Id("nb_addToCartButton");

        1 reference
        public HomePage(IWebDriver driver)
        {
            this.driver = driver;
            wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));
        }

        1 reference | 1/1 passing
        public void ClickWomensMenu()
        {
            wait.Until(driver => driver.FindElement(WomensMenu)).Click();
        }

        1 reference | 1/1 passing
        public void ClickObucaLink()
        {
            wait.Until(driver => driver.FindElement(ObucaLink)).Click();
        }
```

```
1 reference
public void ScrollTo(int x, int y)
{
    ((IJavaScriptExecutor)driver).ExecuteScript($"window.scrollTo({x}, {y});");
}
```

ProductPage

```
namespace BlackBox
{
    2 references
    public class ProductPage
    {
        private IWebDriver driver;
        private WebDriverWait wait;

        // Selektori za elemente
        private By ProductImage = By.CssSelector(".wrapper-grid-view:nth-child(1) .img-overlay");
        private By AddToCartButton = By.Id("nb_addToCartButton");
        private By SizeSelector = By.CssSelector(".ease:nth-child(6)");
        private By ProductOverlay = By.CssSelector(".wrapper-grid-view:nth-child(2) .img-overlay");

        1 reference | 1/1 passing
        public ProductPage(IWebDriver driver)
        {
            this.driver = driver;
            wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));
        }


        1 reference | 1/1 passing
        public void ClickOnProduct()
        {
            var productImage = new WebDriverWait(driver, TimeSpan.FromSeconds(20))
        .Until(driver => driver.FindElement(ProductImage));

            productImage.Click();
        }

        1 reference | 1/1 passing
        public void SelectSize()
        {
            wait.Until(driver => driver.FindElement(SizeSelector)).Click();
        }

        1 reference | 1/1 passing
        public void ClickAddToCart()
        {
            wait.Until(driver => driver.FindElement(AddToCartButton)).Click();
        }


    }
}
```

Uspješna registracija - lozinka ispunjava sve kriterije
(Za ovaj test morala sam koristiti privremenu e-mail adresu da bi se mogla uspješno simulirati registracija)

```
[Test]
0 references
public void UspjesnaRegistracija_LozinkaZadovoljavaKriterije()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    //Popunjavanje forme za registraciju
    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("hw4dc@tohru.org");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("AaBb58!!");
    driver.FindElement(By.Id("gigya-password-164620219341067500")).SendKeys("AaBb58!!");

    Thread.Sleep(2000);
    homePage.ScrollTo(0, 0);

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    Thread.Sleep(2000);


        var checkBox1 = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
.Until(d => d.FindElement(By.Id("gigya-checkbox-163033287938201470")));
        checkBox1.Click();

        var checkBox2 = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
.Until(d => d.FindElement(By.Id("gigya-checkbox-36811369897838500")));
        checkBox2.Click();

        driver.FindElement(By.CssSelector("#gigya-profile-form .gigya-input-submit")).Click();

        var ciModal = driver.FindElements(By.Id("ci_modal"));

        var closeButton = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
            .Until(d => d.FindElement(By.CssSelector(".close-icon:nth-child(3)")));
        closeButton.Click();

        //Provjera da li se pojavio prozor za aktivaciju profila
        Assert.That(ciModal.Count > 0, Is.True, "Element sa ID-em 'ci_modal' nije pronađen.");
    }
```

Neuspješna registracija - lozinka ne sadrži dovoljan broj karaktera

```
[Test]
| 0 references
public void NeuspjesnaRegistracija_LozinkaNijeDovoljnoDuga()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("nekicelma@gmail.com");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("Ab2!");
    driver.FindElement(By.Id("gigya-password-164620219341067500")).SendKeys("Ab2!");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Neuspješna registracija - lozinka ne sadrži malo slovo

```
[Test]
| 0 references
public void NeuspjesnaRegistracija_LozinkaNemaMaloSlovo()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("nekicelma@gmail.com");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("AABB58!!");
    driver.FindElement(By.Id("gigya-password-164620219341067500")).SendKeys("AABB58!!");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Neuspješna registracija - lozinka ne sadrži veliko slovo

```
[Test]
| 0 references
public void NeuspjesnaRegistracija_LozinkaNemaVelikoSlovo()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("nekicelma@gmail.com");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("aabb58!!");
    driver.FindElement(By.Id("gigya-password-1646202193410675 00")).SendKeys("aabb58!!");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Neuspješna registracija - lozinka ne sadrži specijalni karakter

```
[Test]
| 0 references
public void NesupjesnaRegistracija_LozinkaNemaSpecijalniKarakter()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("nekicelma@gmail.com");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("AaBb5555");
    driver.FindElement(By.Id("gigya-password-1646202193410675 00")).SendKeys("AaBb5555");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Neuspješna registracija - lozinka ne sadrži broj

```
[Test]
| 0 references
public void NeuspjesnaRegistracija_LozinkaNemaBroj()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Elma");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Nekić");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("nekicelma@gmail.com");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/03/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("ABABab!!");
    driver.FindElement(By.Id("gigya-password-164620219341067500")).SendKeys("ABABab!!");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Dodavanje u korpu

```
[Test]
| 0 references
public void DodavanjeUKorpu()
{
    CloseCookiePopup();

    homePage.ClickWomensMenu();
    homePage.ClickObucaLink();

    var productPage = new ProductPage(driver);

    productPage.ClickOnProduct();

    string productUrlBefore = driver.Url;

    productPage.SelectSize();
    productPage.ClickAddToCart();

    Thread.Sleep(5000);

    driver.FindElement(By.CssSelector(".icon-wrapper > .fa-shopping-cart")).Click();

    var firstProductInCart = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
.Until(driver => driver.FindElement(By.CssSelector("#order_cart_content > " +
"div.cart-step.appear.appeared > div.table-responsive > table > tbody > tr:nth-child(1) > td.cart-product > div.product-item-title.text-left > a")));
    firstProductInCart.Click();
    Thread.Sleep(2000);

    string productUrlAfter = driver.Url;
    Assert.That(productUrlBefore, Is.EqualTo(productUrlAfter));
}
```

Filtriranje proizvoda po boji

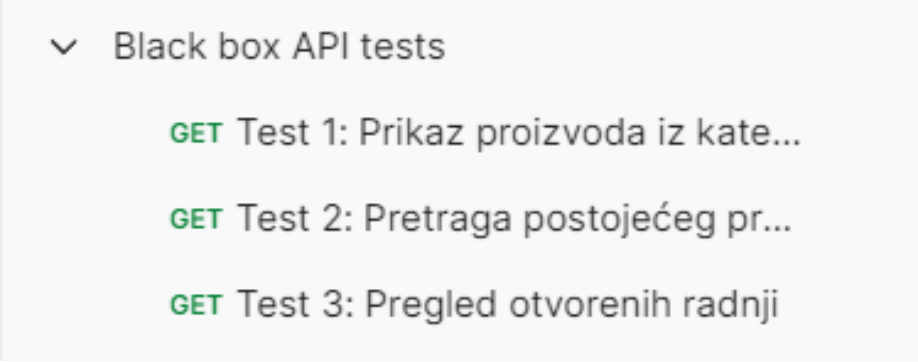
```
[Test]
0 references
public void FiltriranjePoBoji()
{
    CloseCookiePopup();

    var firstColor = FiltrirajIUzmiBoju("ŽENE", "Dukserica");
    var secondColor = FiltrirajIUzmiBoju("MUŠKARCI", "Patike");

    // Provjeri da su boje jednake
    Assert.That(firstColor, Is.EqualTo(secondColor));
    Assert.That(firstColor, Is.EqualTo("Roze"));
    Assert.That(secondColor, Is.EqualTo("Roze"));
}
```

```
// Pomoćna funkcija za otvaranje kategorije, biranje boje i vraćanje atributa boje
2 references | 1/1 passing
private string FiltrirajIUzmiBoju(string category, string subcategory)
{
    var categoryLink = driver.FindElement(By.LinkText(category));
    new Actions(driver).MoveToElement(categoryLink).Perform();

    var subcategoryLink = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(d => d.FindElement(By.LinkText(subcategory)));
    subcategoryLink.Click();

    var productTitle = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(driver => driver.FindElement(By.CssSelector("#nb_f-attr-94 .title")));
    productTitle.Click();

    var rozeLabel = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(d => d.FindElement(By.CssSelector("label[for='94_roze']")));
    new Actions(driver).MoveToElement(rozeLabel).Perform();
    rozeLabel.Click();

    Thread.Sleep(2000);

    var firstProductOverlay = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(d => d.FindElement(By.CssSelector(".wrapper-grid-view:nth-child(1) .img-overlay")));
    firstProductOverlay.Click();

    homePage.ScrollTo(0, 240);

    var panelToggle = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(d => d.FindElement(By.CssSelector(".panel:nth-child(1) .panel-toggle")));
    new Actions(driver).MoveToElement(panelToggle).Perform();
    panelToggle.Click();
```

```
    new Actions(driver).MoveToElement(panelToggle).MoveByOffset(0, 0).Perform();

    var color = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(d => d.FindElement(By.CssSelector(".attr-boja > td:nth-child(2)"))).Text;

    return color.Trim();
}
```

Zadatak 3:
API testovi u Postman alatu

Stranica ne daje pristup podacima u JSON formatu, pa su testovi izvršeni analizom parsiranog HTML sadržaja.



Test 1: Prikaz proizvoda iz kategorije “Obuća”

Black box API tests / Test 1: Prikaz proizvoda iz kategorije "Obuća"

Save | Share

GET https://www.buzzsneakers.ba/obuca/za-zene+unisex/za-odrasle Send

Params | Authorization | Headers (7) | Body | Scripts | Settings | Cookies

Pre-request | Post-response

```
pm.test("Provjera kod statusa", function () {
    pm.response.to.have.status(200);
});

// 2. Provjeravamo da li sadrži samo obuću
pm.test("Provjera kategorije proizvoda", function () {
    let responseBody = pm.response.text();
    let categoryBread = responseBody.match(/data-productCatBread="([^"]*)"/g);
     pm.expect(categoryBread.length).to.be.above(0);
      categoryBread.forEach(function (item) {
        pm.expect(item).to.include("Obuća");
    });
});

pm.test("Provjera da li svi proizvodi imaju cijenu", function () {
    let responseBody = pm.response.text();
    let prices = responseBody.match(/data-productPrice="(\d+,\d{2})"/g);

    pm.expect(prices).to.not.be.null;
    pm.expect(prices.length).to.be.above(0);
});


pm.test("Provjera jedinstvenosti ID", function () {
    let responseBody = pm.response.text();
    let productIds = responseBody.match(/data-product-item-id="([^"]+)"/g);

    let uniqueProductIds = new Set(productIds);
    pm.expect(uniqueProductIds.size).to.equal(productIds.length);
});
```

Body | Cookies (2) | Headers (20) | Test Results (4/4) | 200 OK | 1.39 s | 52.11 KB | Save Response

Testing your API endpoints one by one? Run your entire collection and test end-to-end workflows effortlessly. Learn more ↗ Run Collection

Filter Results

PASSED Provjera kod statusa

PASSED Provjera kategorije proizvoda

PASSED Provjera da li svi proizvodi imaju cijenu

PASSED Provjera jedinstvenosti ID

Test 2: Pretraga postojećeg proizvoda

GET Test 1: Prikaz proizvoda | GET Test 2: Pretraga postoje | No environment

Black box API tests / **Test 2: Pretraga postojećeg proizvoda** Save Share

GET https://www.buzzsneakers.ba/proizvodi?search=New+Balance+9060 Send

Params Authorization Headers (7) Body Scripts Settings Cookies

Pre-request

Post-response

```
pm.test("Provjera kod statusa", function () {
    pm.response.to.have.status(200);
});

pm.test("Provjera da li je pronađen bar jedan proizvod", function () {
    let responseBody = pm.response.text();
    let products = responseBody.match(/data-productposition="(\d+)"/g);

    pm.expect(products).to.not.be.null;
    pm.expect(products.length).to.be.above(0);
});

pm.test("Provjera da li svi proizvodi imaju traženi naziv", function () {
    let responseBody = pm.response.text();
    let searchTerm = "New Balance Patike 9060";
    let products = responseBody.match(/data-productName="([^"]*)"/g);
    console.log(products);
    pm.expect(products).to.not.be.null;


    let allMatch = products.every(product => {
        let productName = product.match(/data-productName="([^"]+)"/)[1];
        return productName.includes(searchTerm);
    });

    pm.expect(allMatch).to.be.true;
});


pm.test("Provjera da li svi proizvodi imaju istu početnu cijenu", function () {
    let responseBody = pm.response.text();
let prevPrices = responseBody.match(/data-productprevprice="([^"]+)"/g);
pm.expect(prevPrices).to.not.be.null;
pm.expect(prevPrices.length).to.be.above(0);

let prices = new Set(prevPrices);
pm.expect(prices.size).to.equal(1);
});
```

Body Cookies (2) Headers (20) Test Results (4/4) 200 OK 910 ms 29.36 KB Save Response

Testing your API endpoints one by one? Run your entire collection and test end-to-end workflows effortlessly. Learn more Run Collection

Filter Results

PASSED Provjera kod statusa

PASSED Provjera da li je pronađen bar jedan proizvod

PASSED Provjera da li svi proizvodi imaju traženi naziv

PASSED Provjera da li svi proizvodi imaju istu početnu cijenu

Test 3: Pregled otvorenih radnji

GET Test 1: Prikaz proizvoda GET Test 2: Pretraga postoje Black box API tests GET Test 3: Pregled otvoreni No environment

Black box API tests / Test 3: Pregled otvorenih radnji Save Sha

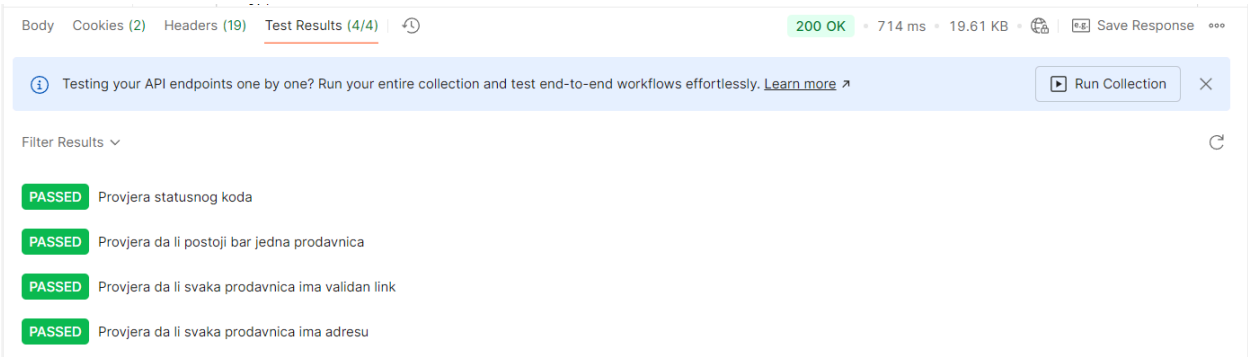
GET https://www.buzzsneakers.ba/radnje Send

Params Authorization Headers (8) Body Scripts Settings Cook

Pre-request

Post-response

```
pm.test("Provjera statusnog koda", function () {
    pm.response.to.have.status(200);
});

pm.test("Provjera da li postoji bar jedna prodavnica", function () {
    var responseBody = pm.response.text();
    pm.expect(responseBody).to.include('<div class="item-wrapper">');
});

pm.test("Provjera da li svaka prodavnica ima validan link", function () {
    var responseBody = pm.response.text();
    var regex = /<a href="([^"]+)"/g;
    var matches = [];
    var match;
    while (match = regex.exec(responseBody)) {
        matches.push(match[1]);
    }
    pm.expect(matches.length).to.be.greaterThan(0);
    matches.forEach(function(link) {
        pm.expect(link).to.not.be.empty;
    });
});

    });
});

pm.test("Provjera da li svaka prodavnica ima adresu", function () {
    var responseBody = pm.response.text();
    var prodavnice = responseBody.match(/<div class="item-wrapper">/g);
    var adrese = responseBody.match(/<div class="address">([^<]+)<\/div>/g);

    pm.expect(adrese).to.not.be.null;
    pm.expect(adrese.length).to.be.greaterThan(0);
      pm.expect(adrese.length).to.equal(prodavnice.length);

});
```



Pokretanje uz Postman CLI

```
→ Test 1: Prikaz proizvoda iz kategorije "Obuća"

  GET https://www.buzzsneakers.ba/obuca/za-zene+unisex/za-odrasle [200 OK, 54.17kB, 2s]
  √  Provjera kod statusa
  √  Provjera kategorije proizvoda
  √  Provjera da li svi proizvodi imaju cijenu
  √  Provjera jedinstvenosti ID

→ Test 2: Pretraga postojećeg proizvoda

  GET https://www.buzzsneakers.ba/proizvodi?search=New+Balance+9060 [200 OK, 29.25kB, 593ms]
  √  Provjera kod statusa
  √  Provjera da li je pronađen bar jedan proizvod
  │ [
  │   'data-productName="New Balance Patike 9060 "',
  │   'data-productName="New Balance Patike 9060 "'
  │ ]
  √  Provjera da li svi proizvodi imaju traženi naziv
  √  Provjera da li svi proizvodi imaju istu početnu cijenu

→ Test 3: Pregled otvorenih radnji

  GET https://www.buzzsneakers.ba/radnje [200 OK, 20.08kB, 764ms]
  √  Provjera statusnog koda
  √  Provjera da li postoji bar jedna prodavnica
  √  Provjera da li svaka prodavnica ima validan link
  √  Provjera da li svaka prodavnica ima adresu
```

	executed	failed
iterations	1	0
requests	3	0
test-scripts	3	0
prerequest-scripts	0	0
assertions	12	0
total run duration: 4.3s		
total data received: 101.13kB (approx)		
average response time: 1139ms [min: 593ms, max: 2s, s.d.: 655ms]		

2. Član tima: Dinela Pešković

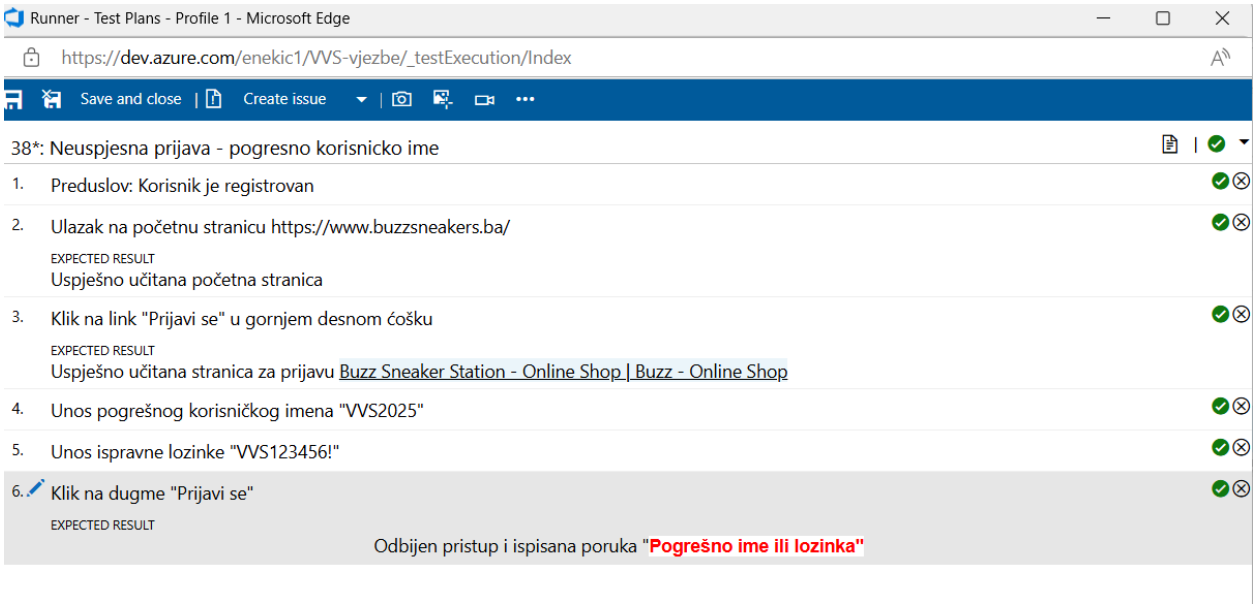
Zadatak 1.

- **Funkcionalnost:** Prijava
  Kako bi odredile testne slučajeve napravile smo sljedeću tabelu:

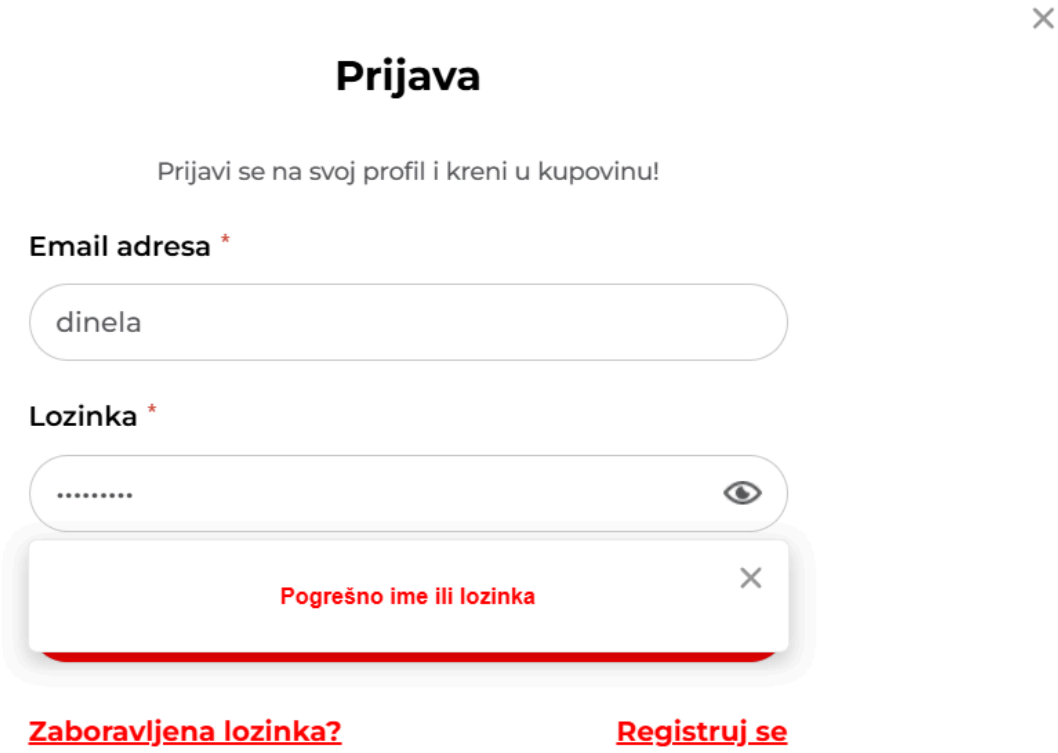
Uslov/Testni slučaj	1	2	3	4
Korisničko ime: T	1	1	0	0
Korisničko ime: N	0	0	1	1
Lozinka: T	1	0	1	0
Lozinka: N	0	1	0	1
Akcija				
Uspješna prijava	1	0	0	0
Neuspješna prijava	0	1	1	1

  Na osnovu tabele zaključujemo da imamo 4 testna slučaja: uspješna prijava, neuspješna prijava s netačnim korisničkim imenom, neuspješna prijava s netačnom lozinkom te neuspješna prijava s netačnom lozinkom i netačnim korisničkim imenom.

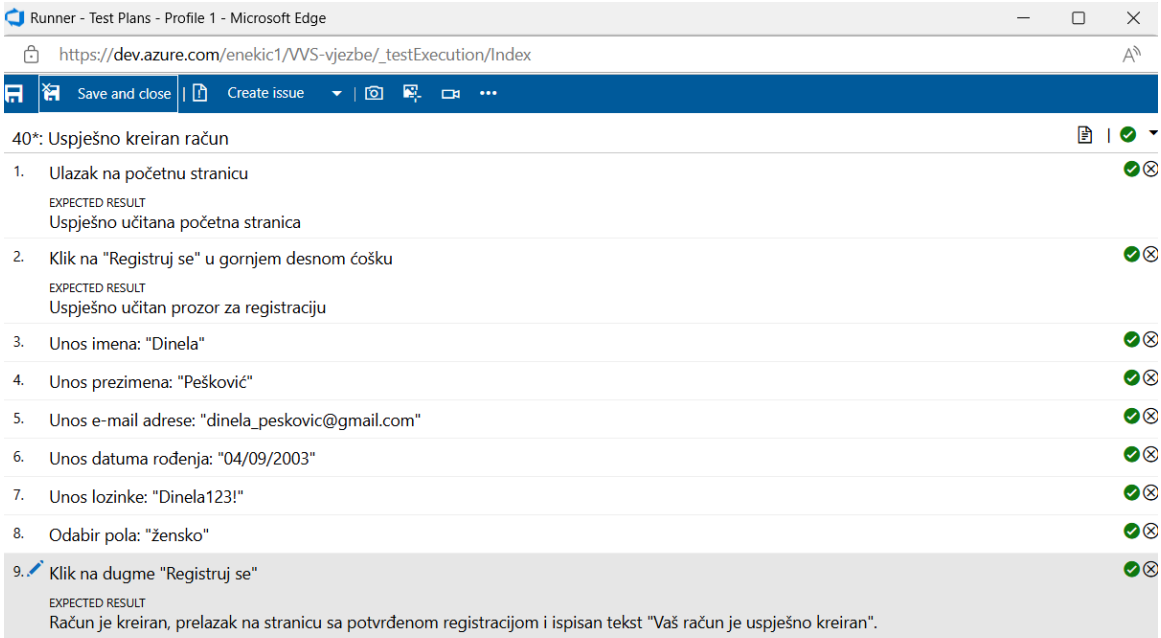
- **Testni slučaj:** Neuspješna prijava s netačnim korisničkim imenom
  Koristila sam testiranje na osnovu testnih slučajeva (*use case* metodu).



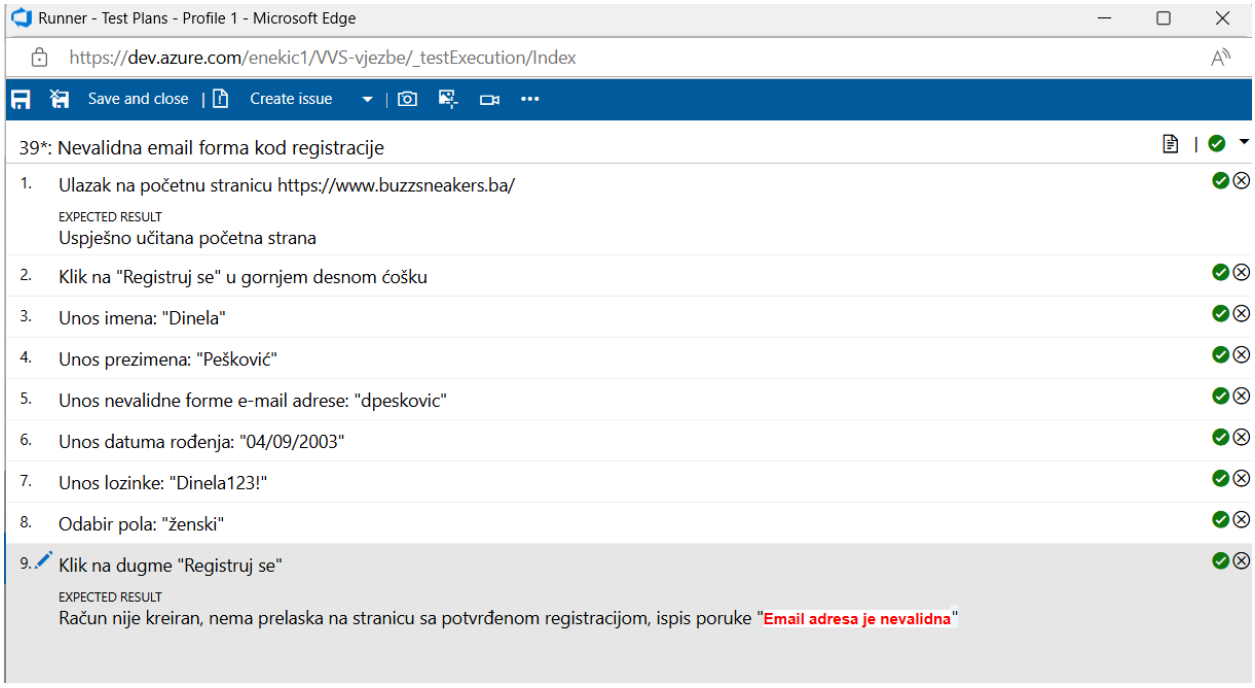
Screenshot očekivanog ponašanja:



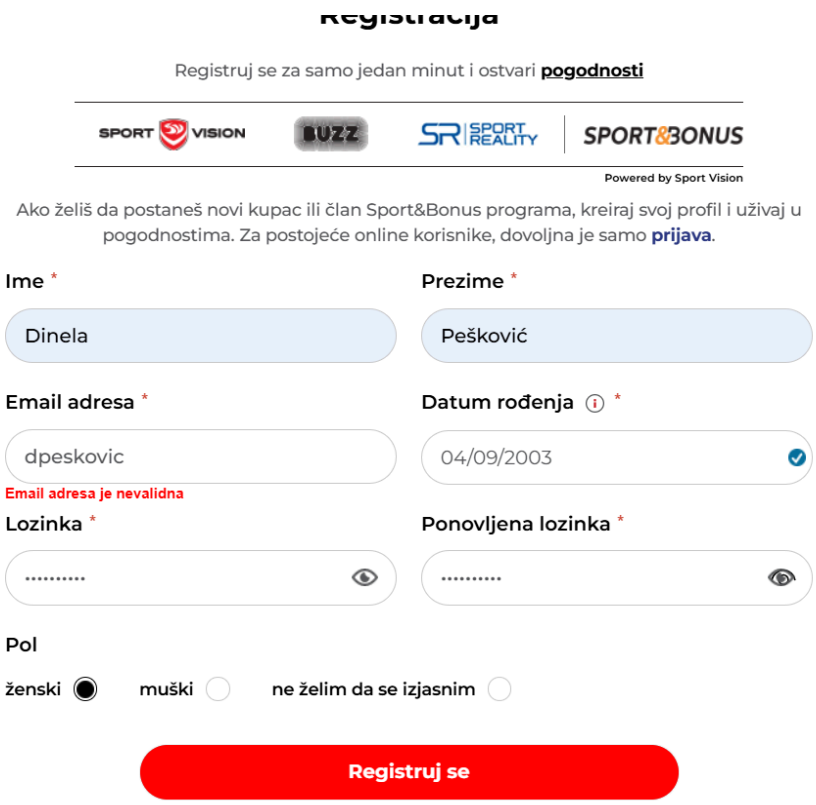
- **Funkcionalnost:** Registracija
- **Testni slučaj:** Uspješno kreiran račun



- **Testni slučaj:** Nevalidna forma e-mail adrese



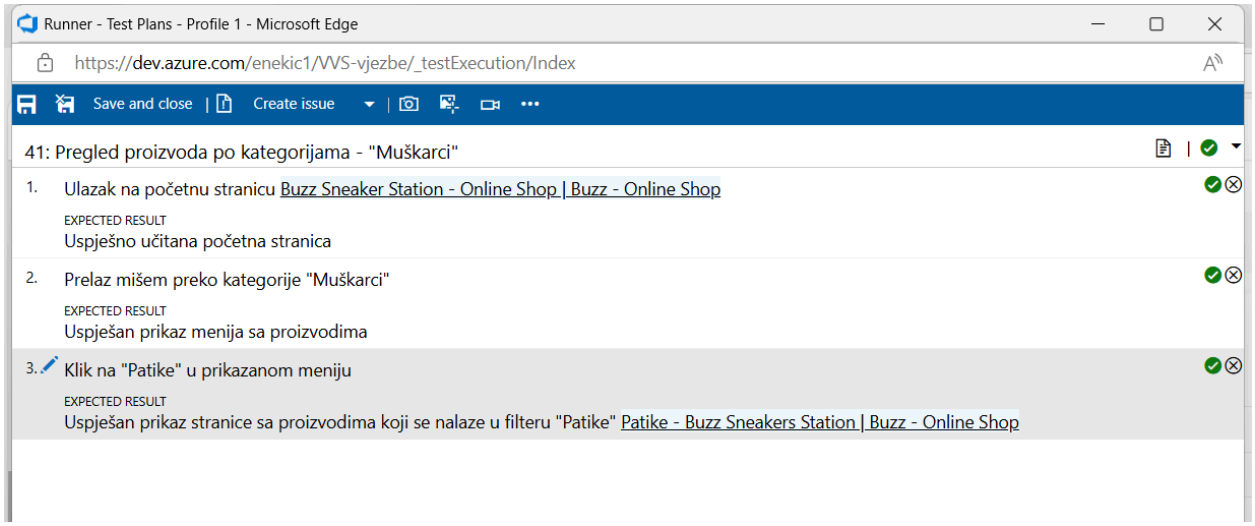
Screenshot očekivanog ponašanja:



- **Funkcionalnost:** Pregled proizvoda po kategorijama

	Korak	Opis
Osnovni (uspješni) scenarij	1	A: Otvori početnu stranicu
	2	S: Prikaži početnu stranicu
	3	A: Odaberi kategoriju “Muškarci”
	4	S: Prikaži vrste proizvoda u kategoriji “Muškarci”
	5	A: Odaberi vrstu “Patike”
	6	S: Prikaži proizvode vrste “Patike”

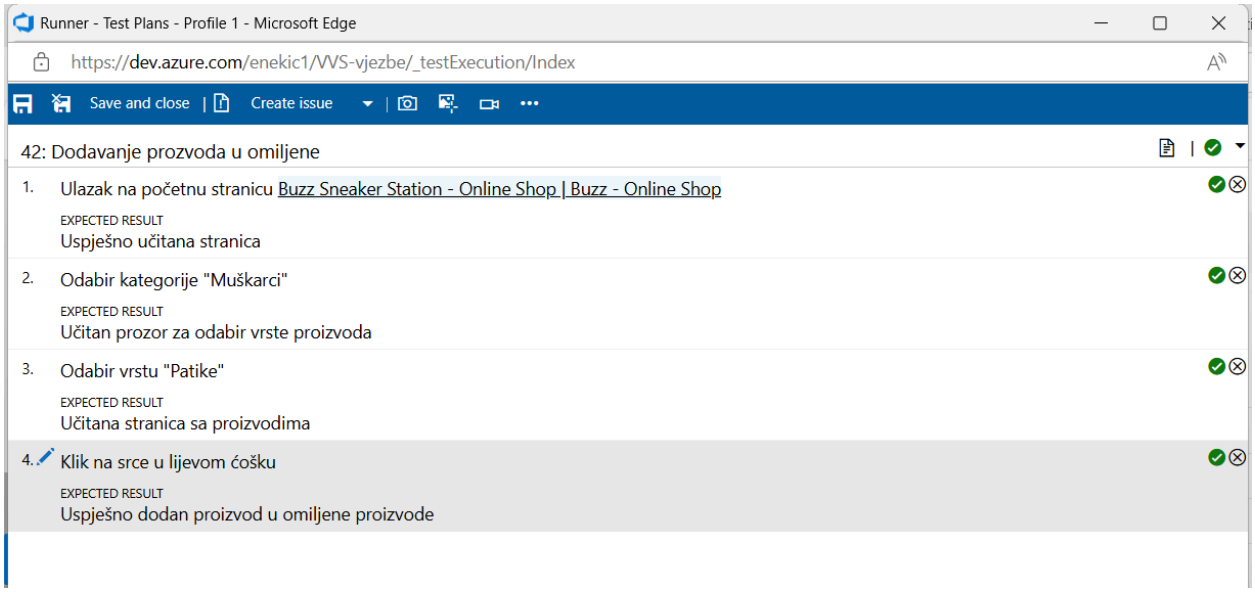
- **Testni slučaj:** Kategorija “Muškarci”



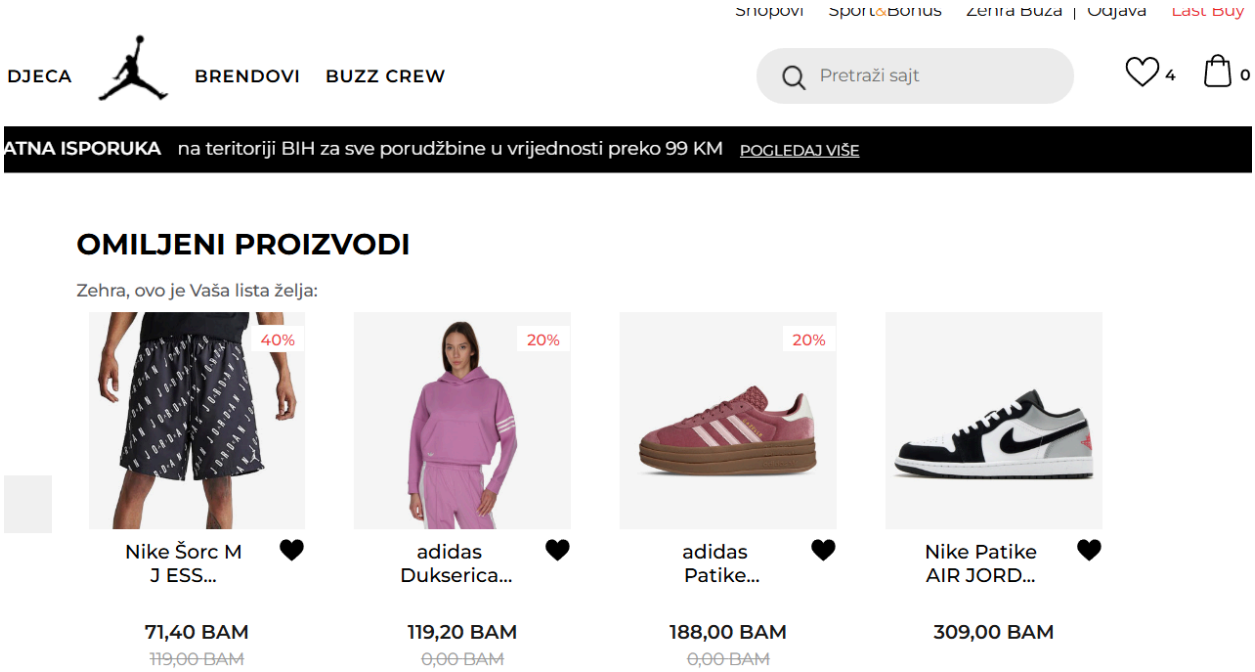
- **Funkcionalnost:** Dodavanje proizvoda u omiljene proizvode

	Korak	Opis
Osnovni (uspješni) scenarij	1	A: Otvori početnu stranicu
	2	S: Prikaži početnu stranicu
	3	A: Odaberi kategoriju “Mušarci”
	4	S: Prikaži vrste proizvoda u kategoriji “Muškarci”
	5	A: Odaberi vrstu “Patike”
	6	S: Prikaži proizvode vrste “Patike”
	7	A: Klik na srce u lijevom ćošku
	8	S: Proizvod uspješno dodan u omiljene

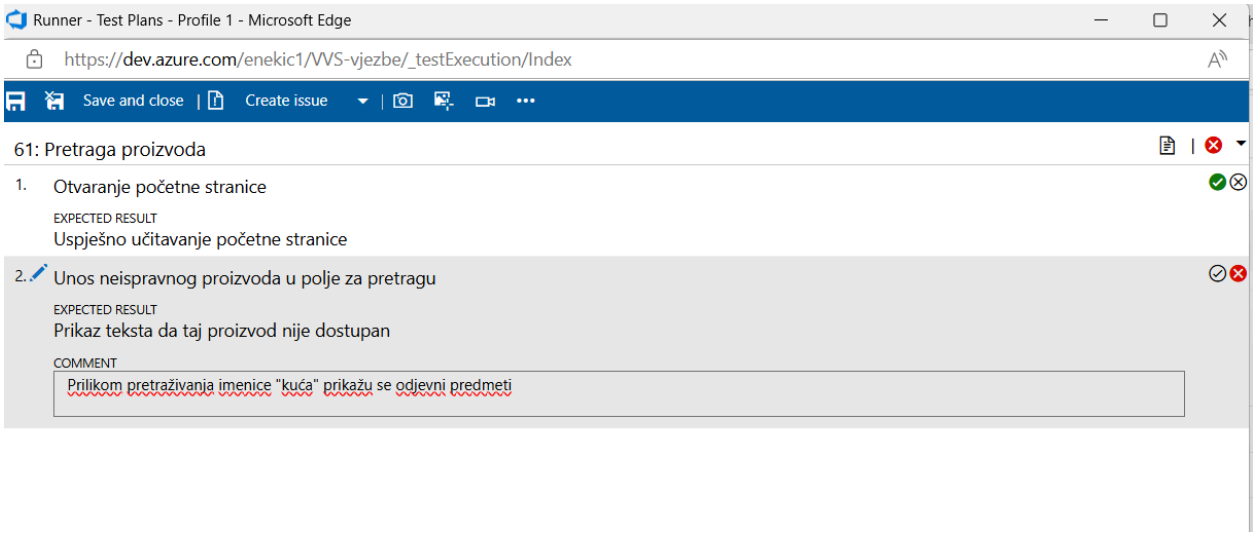
- **Testni slučaj:** Dodavanje proizvoda u omiljene proizvode



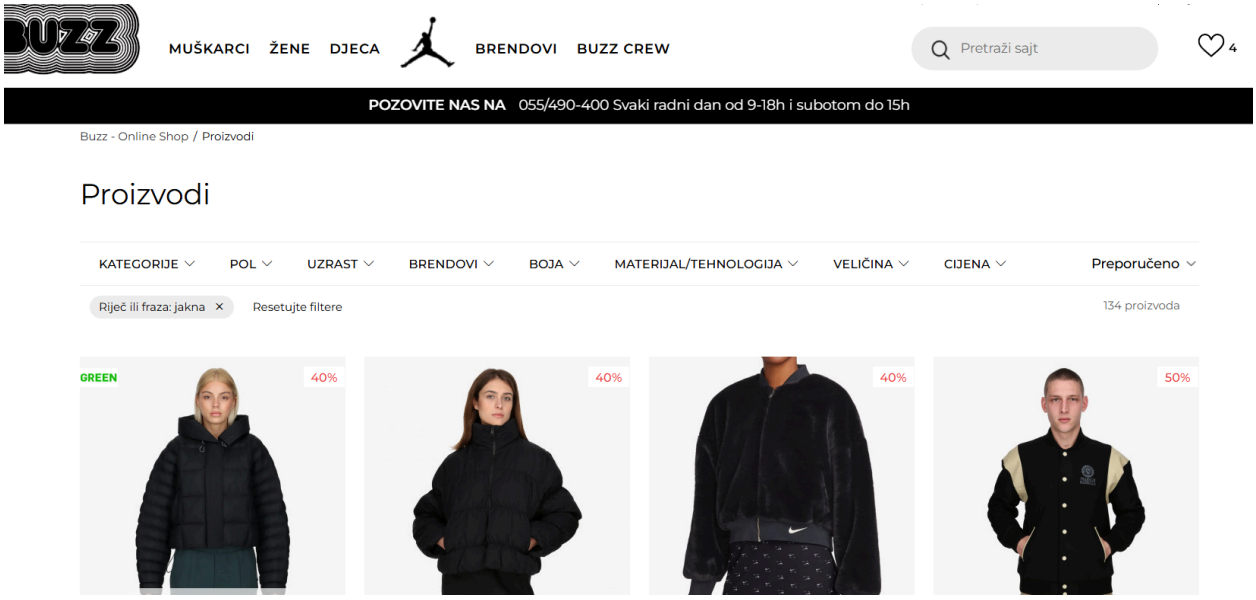
Screenshot očekivanog ponašanja:



- **Funkcionalnost:** Pretraga proizvoda
- **Testni slučaj:** Pretraga proizvoda kada se unese neispravan proizvod



Screenshot očekivanog ponašanja:



Bugs:

BUG 68

68 Greška pri pretrazi proizvoda

No one selected 0 Comments Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Repro Steps

Step no.	Result	Title
1.	Passed	Učitavanje stranice https://www.buzzsneakers.ba/ Expected Result Uspješno učitavanje stranice
2.	Failed	Unos neispravnog proizvoda u prostor za pretragu Trebalo bi da ispiše kako taj proizvod nije dostupan ili je nepostojeći, a zaparavo prikaže odjevne predmete.

Work Items | Back to Work Items

BUG 71

71 Filteri se međusobno ne isključuju

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Repro Steps

Step no.	Result	Title
1.	Passed	Učitavanje stranice https://www.buzzsneakers.ba/ Expected Result Uspješno učitavanje stranice
2.	Passed	Klik na kategoriju "Žene" u meniju Expected Result Uspješno otvara stranicu
3.	Passed	Klik na opciju "Patike"

3.	Passed	Klik na opciju "Patike" Expected Result Uspješno učitavanje stranice sa patika

4.	Failed	Klik na jedan filter, a zatim klik na drugi Expected Result: Očekivano bi trebao prethodno kliknut filter da se ugasi klikom na novi filter.

ZADATAK 2.
Selenium IDE:

Prijava sa neispravnim korisničkim imenom:

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1054x800	
3	✓ click	css=.login-btn > span	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-loginID-90368938222470240	
6	✓ type	id=gigya-loginID-90368938222470240	zbuza
7	✓ click	id=gigya-password-76204738278271680	
8	✓ type	id=gigya-password-76204738278271680	Zehraa2003!
9	✓ click	css=#gigya-login-form .gigya-input-submit	

Registracija sa nevalidnom e-mail formom:

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1051x798	
3	✓ click	linkText=Registrujte se	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-textbox-54536987280931150	
6	✓ type	id=gigya-textbox-54536987280931150	Dinela
7	✓ click	id=gigya-textbox-57186723442001010	
8	✓ type	id=gigya-textbox-57186723442001010	Pešković
9	✓ click	id=gigya-loginID-117244647900807650	
10	✓ type	id=gigya-loginID-117244647900807650	dpeskovic
11	✓ click	id=gigya-textbox-87599544251053630	
12	✓ type	id=gigya-textbox-87599544251053630	04/09/2003
13	✓ click	id=gigya-password-87802173666082740	
14	✓ type	id=gigya-password-87802173666082740	Dinela123!
15	✓ click	id=gigya-password-164620219341067500	

Prikaz proizvoda kategorije “Muškarci”:

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1051x798	
3	✓ mouse over	linkText=MUŠKARCI	
4	✓ mouse out	linkText=MUŠKARCI	
5	✓ click	css=.slider_menu_mens > a > span	
6	✓ run script	window.scrollTo(0,238.39999389648438)	
7	✓ mouse over	css=.col-xs-12:nth-child(10) .col-xs-12:nth-child(2) .main-img:nth-child(1) .img-responsive:nth-child(1)	
8	✓ click	css=.col-xs-12:nth-child(10) .col-xs-12:nth-child(2) .main-img:nth-child(1) .img-responsive:nth-child(1)	

Dodavanje proizvoda u omiljene:

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1051x798	
3	✓ run script	window.scrollTo(0,0)	
4	✓ mouse over	css=.slider_menu_mens > a > span	
5	✓ click	css=.slider_menu_mens > a > span	
6	✓ mouse over	css=.col-xs-12:nth-child(10) .col-xs-12:nth-child(2) .main-img:nth-child(1) .img-responsive:nth-child(1)	
7	✓ click	css=.col-xs-12:nth-child(10) .col-xs-12:nth-child(2) .main-img:nth-child(1) .img-responsive:nth-child(1)	
8	✓ run script	window.scrollTo(0,0.800000011920929)	
9	✓ click	css=.wrapper-grid-view:nth-child(1) .img-wrapper .favorite > .icon	
10	✓ click	css=.close-icon:nth-child(4)	

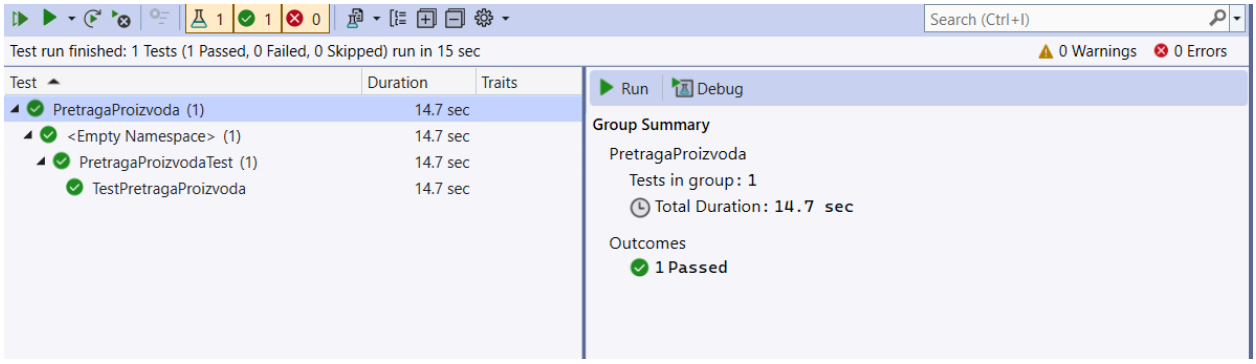
Pretraga proizvoda:

https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	1051x798	
3	✓ click	css=.block > .title	
4	✓ type	id=search-text	kuća
5	✓ send keys	id=search-text	${KEY_ENTER}

NUnit testovi:

Za pretragu proizvoda:
Prolaz testova:



POM Klasa za "BuzzSneakers"

```
using OpenQA.Selenium;

3 references
public class BuzzSneakersPage
{
    private IWebDriver driver;

    1 reference
    public BuzzSneakersPage(IWebDriver driver)
    {
        this.driver = driver;
    }

    1 reference
    private IWebElement SearchIcon => driver.FindElement(By.CssSelector(".block > .title"));
    2 references
    private IWebElement SearchInput => driver.FindElement(By.Id("search-text"));


    1 reference | 1/1 passing
    public void OpenPage(string url)
    {
        driver.Navigate().GoToUrl(url);
    }

    1 reference | 1/1 passing
    public void ClickSearchIcon()
    {
        SearchIcon.Click();
    }

    1 reference | 1/1 passing
    public void EnterSearchText(string text)
    {
        SearchInput.SendKeys(text);
        SearchInput.SendKeys(Keys.Enter);
    }
}
```

NUnit test:

```
using NUnit.Framework;

[TestFixture]
0 references
public class PretragaProizvodaTest
{
    private BuzzSneakersPage buzzPage;

    [SetUp]
    0 references
    public void SetUp()
    {
        buzzPage = new BuzzSneakersPage(WebDriverSingleton.Instance);
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.Quit();
    }

    [Test]
    0 references
    public void TestPretragaProizvoda()
    {
        buzzPage.OpenPage("https://www.buzzsneakers.ba/");


        buzzPage.ClickSearchIcon();

        buzzPage.EnterSearchText("kuća");


        Assert.IsTrue(WebDriverSingleton.Instance.PageSource.Contains("kuća"), "Rezultati pretrage ne sadrže 'kuća'.");
    }
}
```

Singleton WebDriver Klasa:

```
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;

4 references
public class WebDriverSingleton
{
    private static IWebDriver instance;

    0 references
    private WebDriverSingleton() { }

    2 references | 1/1 passing
    public static IWebDriver Instance
    {
        get
        {
            if (instance == null)
            {
                instance = new ChromeDriver();
                instance.Manage().Window.Maximize();
            }
            return instance;
        }
    }

    1 reference
    public static void Quit()
    {
        if (instance != null)
        {
            instance.Quit();
            instance = null;
        }
    }
}
```

Za neuspješnu prijavu:

Prolaz testova:

Test	Duration	Traits	Error Message
Pret...	19.3 sec		
<E...	19.3 sec		
P...	19.3 sec		
.	19.3 sec		

Run Debug

Test Detail Summary

PrijavaNeuspjesna

Source: PrijavaNeuspjesnaTest.cs line 16

Duration: 19.3 sec

POM Klasa za Login

```
using OpenQA.Selenium;
using OpenQA.Selenium.Support.UI;
using System;

3 references
public class LoginPage
{
    private IWebDriver driver;
    private WebDriverWait wait;


    1 reference
    public LoginPage(IWebDriver driver)
    {
        this.driver = driver;
        wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));
    }


    1 reference
    private By loginButton => By.CssSelector(".login-btn > span");
    2 references
    private By loginField => By.Id("gigya-loginID-90368938222470240");
    2 references
    private By passwordField => By.Id("gigya-password-762047382782716 80");
    3 references
    private By submitButton => By.CssSelector("#gigya-login-form .gigya-input-submit");
    2 references
    private By errorPopupCloseButton => By.CssSelector(".gigya-error-code-403042 > .close-icon");


    1 reference | 1/1 passing
    public void OpenLoginPage()
    {
        driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
        driver.Manage().Window.Size = new System.Drawing.Size(1054, 800);
    }

    1 reference | 1/1 passing
    public void ClickLoginButton()
    {
        driver.FindElement(loginButton).Click();
    }

    1 reference | 1/1 passing
    public void EnterLoginDetails(string username, string password)
    {

        wait.Until(d => d.FindElement(loginField).Displayed);
        driver.FindElement(loginField).SendKeys(username);

        wait.Until(d => d.FindElement(passwordField).Displayed);
        driver.FindElement(passwordField).SendKeys(password);
    }
```

```
    1 reference | 1/1 passing
    public void EnterLoginDetails(string username, string password)
    {

        wait.Until(d => d.FindElement(loginField).Displayed);
        driver.FindElement(loginField).SendKeys(username);

        wait.Until(d => d.FindElement(passwordField).Displayed);
        driver.FindElement(passwordField).SendKeys(password);
    }

    1 reference | 1/1 passing
    public void SubmitLoginForm()
    {
        wait.Until(d => d.FindElement(submitButton).Enabled);
        driver.FindElement(submitButton).Click();
    }

    1 reference | 1/1 passing
    public void CloseErrorPopup()
    {
        wait.Until(d => d.FindElement(errorPopupCloseButton).Displayed);
        driver.FindElement(errorPopupCloseButton).Click();
    }

    0 references
    public void WaitForPageToLoad()
    {
        wait.Until(d => d.FindElement(submitButton).Displayed);
    }
}
```

NUnit test:

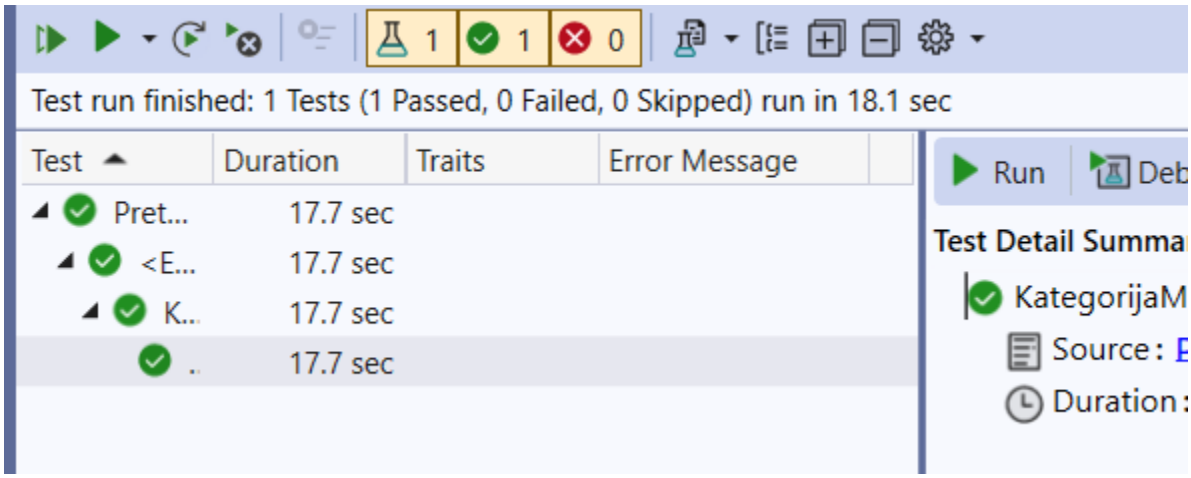
```
using NUnit.Framework;

[TestFixture]
0 references
public class PrijavaNeuspjesnaTest : DriverSingelton
{
    private LoginPage loginPage;

    [SetUp]
    0 references
    public new void SetUp()
    {
        base.SetUp();
        loginPage = new LoginPage(driver);
    }

    [Test]
    | 0 references
    public void PrijavaNeuspjesna()
    {
        loginPage.OpenLoginPage();


        loginPage.ClickLoginButton();


        loginPage.EnterLoginDetails("zbuzal", "Zehra123!");


        loginPage.SubmitLoginForm();

        loginPage.CloseErrorPopup();
    }
}
```

Singleton:

```
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using NUnit.Framework;

1 reference
public class DriverSingelton
{
    protected IWebDriver driver;
    private static IWebDriver singletonDriver;

    [SetUp]
    1 reference
    public void SetUp()
    {
        if (singletonDriver == null)
        {
            singletonDriver = new ChromeDriver();
        }
        driver = singletonDriver;
        driver.Manage().Window.Maximize();
    }

    [TearDown]
    0 references
    public void TearDown()
    {

    }
}
```

Za prikaz kategorije “Muškarci”:

Prolaz testova:



NUnit test:

```
using NUnit.Framework;

[TestFixture]
0 references
public class KategorijaMTest : DriverSingelton
{
    private HomePage homePage;

    [SetUp]
    0 references
    public new void SetUp()
    {
        base.SetUp();
        homePage = new HomePage(driver);
    }

    [Test]
    | 0 references
    public void KategorijaM()
    {

        homePage.NavigateToHomePage();

        homePage.HoverOverKategorijaMens();


        homePage.ClickKategorijaMens();


        homePage.HoverOverSliderMenuMens();


        homePage.HoverOverImageToClick();

        homePage.ClickImageToNavigate();
    }
}
```

POM Klasa za prikaz kategorije:

```
using OpenQA.Selenium;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using System;

3 references
public class HomePage
{
    private IWebDriver driver;
    private WebDriverWait wait;

    1 reference
    public HomePage(IWebDriver driver)
    {
        this.driver = driver;
        wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));
    }
    2 references
    private By kategorijaMensLink => By.LinkText("MUŠKARCI");
    1 reference
    private By sliderMenuMens => By.CssSelector(".slider_menu_mens > a > span");
    5 references
    private By imageToHover => By.CssSelector(".col-xs-12:nth-child(10) .col-xs-12:nth-child(2) .main-img:nth-child(1) .img-responsive:nth-child(1)");

    1 reference | 1/1 passing
    public void NavigateToHomePage()
    {
        driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
        driver.Manage().Window.Size = new System.Drawing.Size(1056, 800);
    }
    1 reference | 1/1 passing
    public void HoverOverKategorijaMens()
    {
        var element = driver.FindElement(kategorijaMensLink);
        Actions builder = new Actions(driver);
        builder.MoveToElement(element).Perform();
    }
    1 reference | 1/1 passing
    public void ClickKategorijaMens()
    {
        driver.FindElement(kategorijaMensLink).Click();
    }

    1 reference | 1/1 passing
    public void HoverOverSliderMenuMens()
    {
        var element = driver.FindElement(sliderMenuMens);
        Actions builder = new Actions(driver);
        builder.MoveToElement(element).Perform();
    }
```

```
    }

    1 reference | 1/1 passing
    public void HoverOverImageToClick()
    {
        var element = driver.FindElement(imageToHover);
        Actions builder = new Actions(driver);
        builder.MoveToElement(element).Perform();
    }

    1 reference | 1/1 passing
    public void ClickImageToNavigate()
    {

        wait.Until(d => d.FindElement(imageToHover).Displayed && d.FindElement(imageToHover).Enabled);
        try
        {
            driver.FindElement(imageToHover).Click();
        }
        catch (ElementClickInterceptedException)
        {
            IJavaScriptExecutor js = (IJavaScriptExecutor)driver;
            js.ExecuteScript("arguments[0].click();", driver.FindElement(imageToHover));
        }
    }

}
```

Za neuspješnu registraciju - Nevalidna e-mail forma

Prolaz testova:

Test	Duration	Traits	Error Message
Pret...	15 sec		
<E...	15 sec		
B...	15 sec		
.	15 sec		

NUnit test:

```
[Test]
public void NeuspjesnaRegistracija_NevalidnaEmailForma()
{
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    CloseCookiePopup();
    var registerLink = driver.FindElement(By.LinkText("Registrujte se"));
    registerLink.Click();
    Thread.Sleep(2000);
    string productUrlBeforeClick = driver.Url;

    driver.FindElement(By.Id("gigya-textbox-54536987280931150")).SendKeys("Dinela");
    driver.FindElement(By.Id("gigya-textbox-57186723442001010")).SendKeys("Pešković");
    driver.FindElement(By.Id("gigya-loginID-117244647900807650")).SendKeys("dpeskovic");
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).Clear();
    driver.FindElement(By.Id("gigya-textbox-87599544251053630")).SendKeys("04/09/2003");
    driver.FindElement(By.Id("gigya-password-87802173666082740")).SendKeys("Dinela1234!");
    driver.FindElement(By.Id("gigya-password-164620219341067500")).SendKeys("Dinela234!");

    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-layout-cell:nth-child(1) .js-passSwitch img")).Click();
    driver.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit")).Click();

    string productUrlAfterClick = driver.Url;
    var errorMessages = driver.FindElements(By.CssSelector(".gigya-error-msg.gigya-error-code-400009"));

    Assert.That(errorMessages.Count > 0, Is.True, "Poruka greške nije prisutna na stranici.");
    Assert.That(productUrlBeforeClick, Is.EqualTo(productUrlAfterClick));
}
```

Za dodavanje u omiljene:

Prolaz testova:

Test	Duration	Traits	Error Message
Pret...	17.7 sec		
<E...	17.7 sec		
K...	17.7 sec		
.	17.7 sec		

NUnit test:

```dotnet
public void DodavanjeUOmiljene()
{
    CloseCookiePopup();

    homePage.ClickWomensMenu();
    homePage.ClickObucaLink();

    var productPage = new ProductPage(driver);

    productPage.ClickOnProduct();

    string productUrlBefore = driver.Url;

    driver.FindElement(By.CssSelector(".product-favorite > .icon")).Click();

    Thread.Sleep(2000);

    driver.FindElement(By.CssSelector(".icon-wrapper > .fa-heart")).Click();

    var firstProductInFavorites = new WebDriverWait(driver, TimeSpan.FromSeconds(10))
        .Until(driver => driver.FindElement(By.CssSelector("#favorites_content > div.favorites-step.appear.appeared > div.table-responsive > table > tbody > tr:nth-child(1) > td.favorites-product > div.product-item-title.text-left > a")));
    firstProductInFavorites.Click();
    Thread.Sleep(2000);

    string productUrlAfter = driver.Url;

    Assert.That(productUrlBefore, Is.EqualTo(productUrlAfter));
}
```

ZADATAK 3:

API test za prijavu sa neispravnim korisničkim imenom:

```dotnet
pm.test("Status odgovora je 401 ili 200", function () {
    pm.expect([401, 200]).to.include(pm.response.code);
});


pm.test("Poruka greške je 'Neispravan korisnički nalog ili lozinka'", function () {
    if (pm.response.headers.get("Content-Type").includes("application/json")) {
        const responseBody = pm.response.json();
        pm.expect(responseBody.message).to.eql("Neispravan korisnički nalog ili lozinka");
    }
});


pm.test("Odgovor ne sadrži token", function () {
    if (pm.response.headers.get("Content-Type").includes("application/json")) {
        const responseBody = pm.response.json();
        pm.expect(responseBody).to.not.have.property("token");
    }
});


pm.test("Format odgovora je HTML", function () {
    if (!pm.response.headers.get("Content-Type").includes("application/json")) {
        pm.expect(pm.response.text()).to.include("<!DOCTYPE html>");
    }
});
```

Filter Results

PASSED Status odgovora je 401 ili 200

PASSED Poruka greške je 'Neispravan korisnički nalog ili lozinka'

PASSED Odgovor ne sadrži token

PASSED Format odgovora je HTML

API test za prikaz proizvoda kategorije “Muškarci”:

GET https://www.buzzsneakers.ba/

Params Authorization Headers (7) Body Scripts • Settings

Pre-request

Post-response •

```
pm.test("Status odgovora je 200 za kategoriju 'Muškarci'", function () {
    pm.expect(pm.response.code).to.eql(200);
});

pm.test("Proizvod je ispravno prikazan", function () {
    if (pm.response.headers.get("Content-Type").includes("application/json")) {
        const responseBody = pm.response.json();
        pm.expect(responseBody).to.have.property("name").that.is.a("string");
        pm.expect(responseBody).to.have.property("price").that.is.a("number");
        pm.expect(responseBody).to.have.property("description").that.is.a("string");
        pm.expect(responseBody).to.have.property("availability").that.is.a("boolean");
    }
});

pm.test("Proizvod pripada kategoriji 'Muškarci'", function () {
    if (pm.response.headers.get("Content-Type").includes("application/json")) {
        const responseBody = pm.response.json();
        pm.expect(responseBody.category).to.eql("Muškarci");
    }
});


pm.test("Odgovor je HTML stranica, a ne JSON", function () {
    if (!pm.response.headers.get("Content-Type").includes("application/json")) {
        pm.expect(pm.response.text()).to.include("<!DOCTYPE html>");
    }
});
```

Filter Results

PASSED Status odgovora je 200 za kategoriju 'Muškarci'

PASSED Proizvod je ispravno prikazan

PASSED Proizvod pripada kategoriji 'Muškarci'

PASSED Odgovor je HTML stranica, a ne JSON

API test za dodavanje proizvoda u omiljene:

```
1
2  pm.test("Status odgovora je 200 za dodavanje u omiljene", function () {
3      pm.expect(pm.response.code).to.eql(200);
4  });
5
6
7  pm.test("Proizvod je uspešno dodat u omiljene", function () {
8      if (pm.response.headers.get("Content-Type").includes("application/json")) {
9          const responseBody = pm.response.json();
10         pm.expect(responseBody).to.have.property("message").that.is.a("string");
11         pm.expect(responseBody.message).to.eql("Proizvod je dodat u omiljene");
12         pm.expect(responseBody).to.have.property("product").that.is.an("object");
13         pm.expect(responseBody.product).to.have.property("id").that.is.a("number");
14     }
15 });
16
17 pm.test("ID proizvoda u odgovoru odgovara poslatom ID-u", function () {
18     if (pm.response.headers.get("Content-Type").includes("application/json")) {
19         const requestBody = JSON.parse(pm.request.body.raw);
20         const responseBody = pm.response.json();
21         pm.expect(responseBody.product.id).to.eql(requestBody.productId);
22     }
23 });
```

```
16
17  pm.test("ID proizvoda u odgovoru odgovara poslatom ID-u", function () {
18      if (pm.response.headers.get("Content-Type").includes("application/json")) {
19          const requestBody = JSON.parse(pm.request.body.raw);
20          const responseBody = pm.response.json();
21          pm.expect(responseBody.product.id).to.eql(requestBody.productId);
22      }
23  });
24
25  pm.test("Odgovor je HTML stranica, a ne JSON", function () {
26      if (!pm.response.headers.get("Content-Type").includes("application/json")) {
27          pm.expect(pm.response.text()).to.include("<!DOCTYPE html>");
28      } else {
29          pm.test("Odgovor je JSON, provera preskočena", function () {
30              pm.expect(true).to.eql(false);
31          });
32      }
33  });
```

Filter Results

PASSED Status odgovora je 200 za dodavanje u omiljene

PASSED Proizvod je uspešno dodat u omiljene

PASSED ID proizvoda u odgovoru odgovara poslatom ID-u

PASSED Odgovor je HTML stranica, a ne JSON

3. Član tima: Zehra Buza

Zadatak 1

- Funkcionalnost: Registracija

1. Testni slučaj: Prazno polje

Runner - Test Plans - Google Chrome

dev.azure.com/enekic1/VVS%20-%20Black%20box%20testiranje/_testExecution/Index

Save and close | Create bug

45*: Neuspješna registracija - Prazno polje

1. Ulazak na početnu stranicu: https://www.buzzsneakers.ba/

   EXPECTED RESULT
   Uspješno učitana početna stranica.

2. Klik na "Registruj se" u gornjem desnom ćošku.

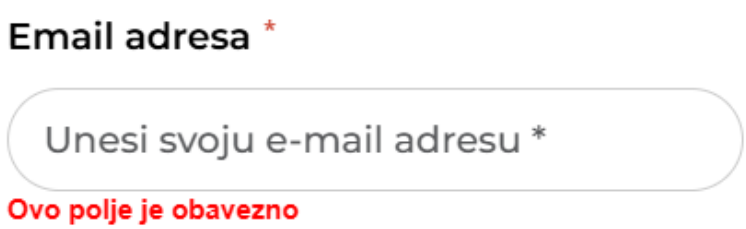
   EXPECTED RESULT
   Otvorena forma za registraciju.

3. Unos imena: "Zehra".
4. Unos prezimena : "Buza".
5. Ostavljanje polja e-mail adrese praznim.
6. Unos datuma rođenja: "15/01/2003".
7. Unos lozinke: "Zehra123!".
8. Unos ponovljene lozinke: "Zehra123!".
9. Odabir pola: "Ženski".
10. Klik na dugme "Registruj se".

    EXPECTED RESULT

    Račun nije kreiran i ne prelazi na stranicu za potvrdu registracije.
    Ispisuje se poruka: "Ovo polje je obavezno."

Screenshot očekivanog ponašanja za prazno polje:



2. Testni slučaj: Godina rodjenja(iznad 16)

Runner - Test Plans - Google Chrome

dev.azure.com/enekic1/VVS%20-%20Black%20box%20testiranje/_testExecution/Index

Save and close | Create bug

48*: Uspješna registracija - Godina rodjenja(iznad 16)

1. Ulazak na početnu stranicu: https://www.buzzsneakers.ba/

   EXPECTED RESULT
   Uspješno učitana početna stranica.

2. Klik na "Registruj se" u gornjem desnom ćošku.

   EXPECTED RESULT
   Otvorena forma za registraciju.

3. Unos imena: "Zehra".
4. Unos prezimena : "Buza".
5. Unos e-mail adrese: "zehrabuzaa@gmail.com".
6. Unos datuma rođenja: "01/01/2000" (godina rođenja iznad 16).
7. Unos lozinke: "Zehra123!".
8. Unos ponovljene lozinke: "Zehra123!".
9. Odabir pola: "Ženski".
10. Klik na dugme "Registruj se".

    EXPECTED RESULT
    Račun je uspješno kreiran i prelazak na stranicu za potvrdu registracije. Ispisuje se tekst "Vaš račun je uspješno kreiran."

- Funkcionalnost: Prijava

1. Testni slučaj: Uspješna prijava

Runner - Test Plans - Google Chrome

dev.azure.com/enekic1/VVS%20-%20Black%20box%20testiranje/_testExecution/Index

Save and close | Create bug

49*: Uspješna prijava

1. Preduslov: Korisnik je registrovan.
2. Ulazak na početnu stranicu: https://www.buzzsneakers.ba/

   EXPECTED RESULT
   Uspješno učitana početna stranica.
3. Klik na "Prijavi se" u gornjem desnom ćošku.

   EXPECTED RESULT
   Otvorena forma za prijavu.
4. Unos e-mail adrese: "zehrabuzaa@gmail.com".
5. Unos lozinke: "Zehra123!".
6. Klik na dugme "Prijavi se".

   EXPECTED RESULT
   Korisnik je uspješno prijavljen.
   Prelazi na korisnički dashboard ili početnu stranicu sa prikazom korisničkog imena.
   Ispisuje se poruka: "Dobrodošli, Zehra!"

2. Testni slučaj: Neuspješna prijava s netačnom lozinkom

Runner - Test Plans - Google Chrome

dev.azure.com/enekic1/VVS%20-%20Black%20box%20testiranje/_testExecution/Index

Save and close | Create bug

72*: Neuspješna prijava s netačnom lozinkom

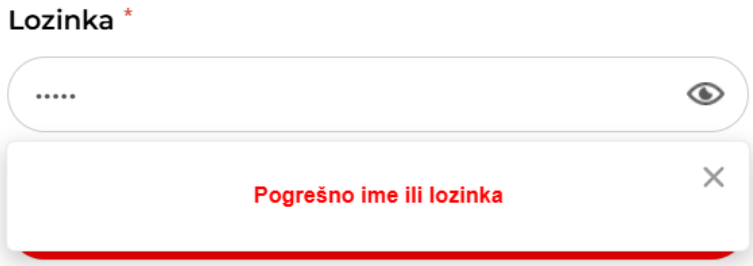
1. Preduslov: Korisnik je registrovan.
2. Ulazak na početnu stranicu: https://www.buzzsneakers.ba/

   EXPECTED RESULT
   Uspješno učitana početna stranica.
3. Klik na "Prijavi se" u gornjem desnom ćošku.

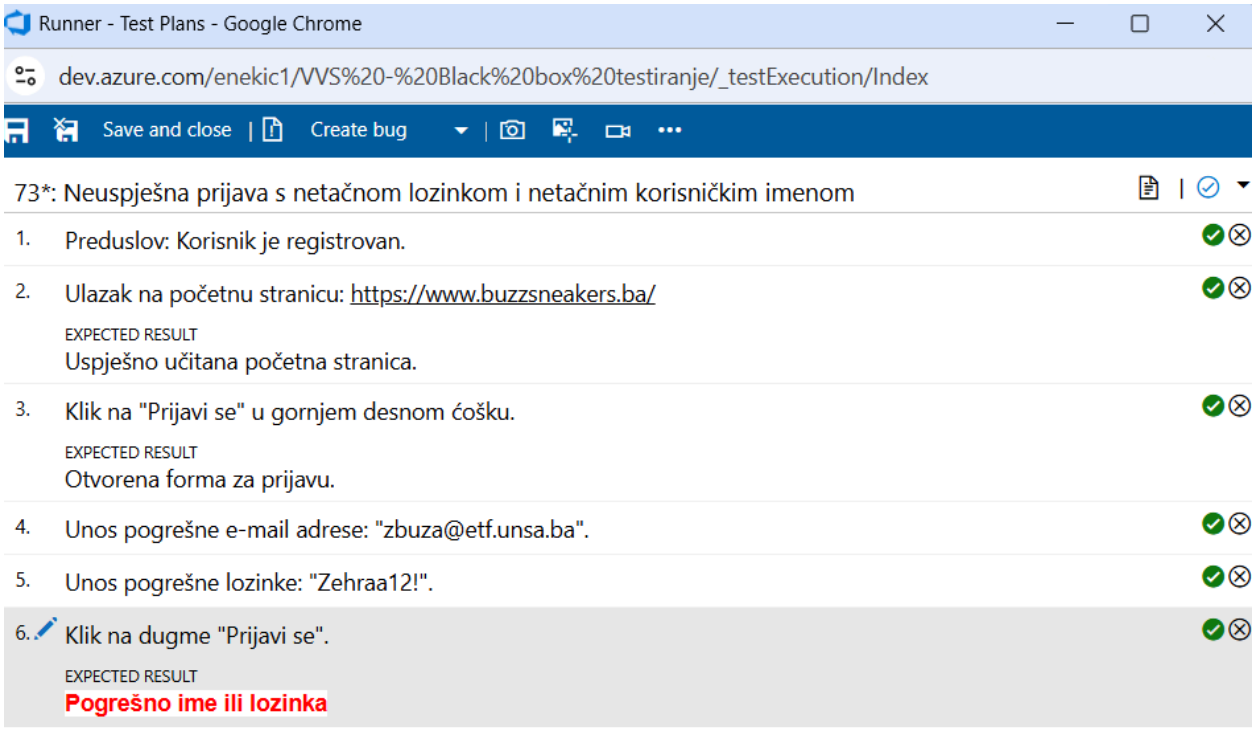
   EXPECTED RESULT
   Otvorena forma za prijavu.
4. Unos e-mail adrese: "zbuza1@etf.unsa.ba".
5. Unos pogrešne lozinke: "Zehraa12!".
6. Klik na dugme "Prijavi se".

   EXPECTED RESULT
   Odbijena prijava i ispisana poruka "**Pogrešno ime ili lozinka**"

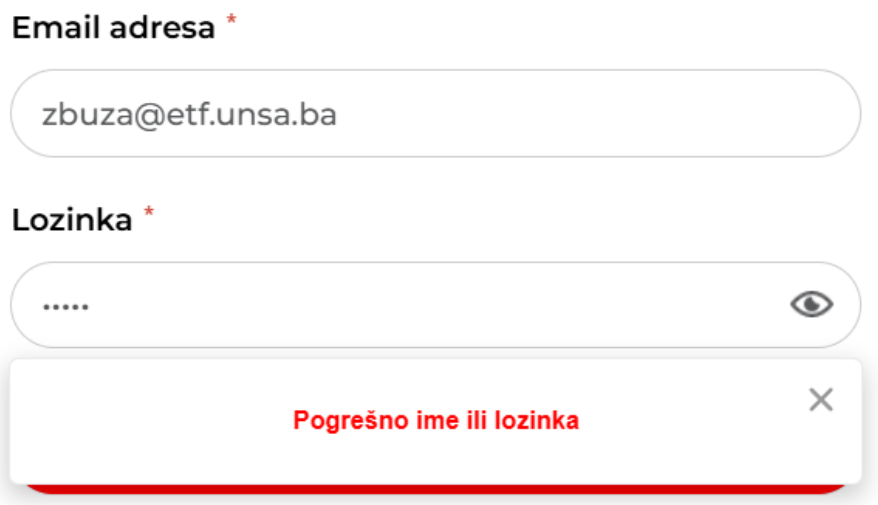
Screenshot očekivanog ponašanja za netačnu lozinku:



3. Testni slučaj: Neuspješna prijava s netačnom lozinkom i netačnim korisničkim imenom.

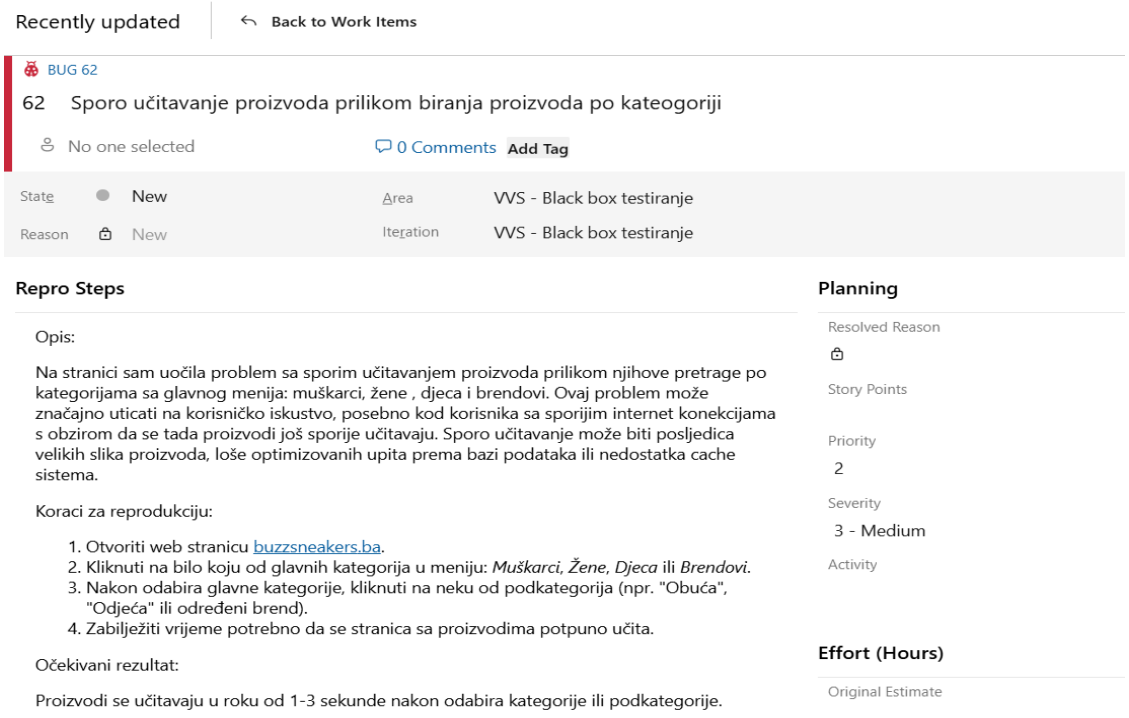


Screenshot očekivanog ponašanja za netačnu lozinku i netačno korisničko ime.



Pronađeni bugovi:

1. Sporo učitavanje proizvoda prilikom biranja proizvoda po kateogoriji



Recently updated | Back to Work Items

BUG 62

62 Sporo učitavanje proizvoda prilikom biranja proizvoda po kateogoriji

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Repro Steps

Opis:

Na stranici sam uočila problem sa sporim učitavanjem proizvoda prilikom njihove pretrage po kategorijama sa glavnog menija: muškarci, žene , djeca i brendovi. Ovaj problem može značajno uticati na korisničko iskustvo, posebno kod korisnika sa sporijim internet konekcijama s obzirom da se tada proizvodi još sporije učitavaju. Sporo učitavanje može biti posljedica velikih slika proizvoda, loše optimizovanih upita prema bazi podataka ili nedostatka cache sistema.

Koraci za reprodukciju:

1. Otvoriti web stranicu buzzsneakers.ba.
2. Kliknuti na bilo koju od glavnih kategorija u meniju: *Muškarci, Žene, Djeca* ili *Brendovi*.
3. Nakon odabira glavne kategorije, kliknuti na neku od podkategorija (npr. "Obuća", "Odjeća" ili određeni brend).
4. Zabilježiti vrijeme potrebno da se stranica sa proizvodima potpuno učita.

Očekivani rezultat:

Proizvodi se učitavaju u roku od 1-3 sekunde nakon odabira kategorije ili podkategorije.

Planning

Resolved Reason

Story Points

Priority
2

Severity
3 - Medium

Activity

Effort (Hours)

Original Estimate

BUG 62

62 Sporo učitavanje proizvoda prilikom biranja proizvoda po kategoriji

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Proizvodi se učitavaju u roku od 1-3 sekunde nakon odabira kategorije ili podkategorije.

Stvarni rezultat:

Proizvodi se učitavaju sporije od očekivanog vremena (5-10 sekundi).

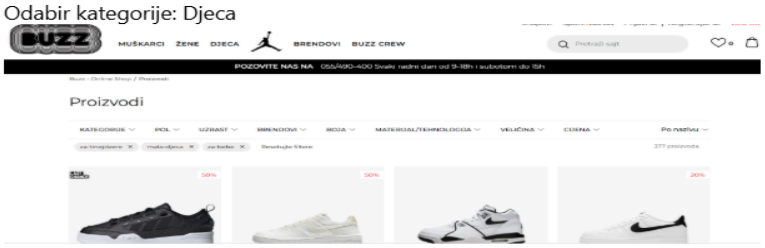
Original Estimate

Remaining

Completed

System Info

Odabir kategorije: Djeca



2. Dugo učitavanje prilikom prijavljivanja

Recently updated | Back to Work Items

BUG 70

70 Dugo učitavanje prilikom prijavljivanja

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

prijavljivanja može biti rezultat loše optimizovanog backend sistema, preopterećenja servera ili nepotrebnog učitavanja dodatnih resursa tokom procesa.

Koraci za reprodukciju

1. Otvoriti web stranicu buzzsneakers.ba.
2. Kliknuti na dugme "Prijavi se" koje se nalazi u gornjem desnom uglu stranice.
3. Unijeti važeći email i lozinku u odgovarajuća polja.
4. Kliknite na dugme **"Prijava"**.
5. Zabilježite koliko vremena je potrebno da sistem završi proces prijavljivanja i prikaže početnu stranicu.

Očekivani rezultat:

Nakon klika na dugme "Prijavi se", proces prijavljivanja traje najviše 2-3 sekunde.

Stvarni rezultat:

Nakon klika na dugme "Prijavi se", proces traje duže od očekivanog (6-10 sekundi).

Story Points

Priority
2

Severity
3 - Medium

Activity

Effort (Hours)

Original Estimate

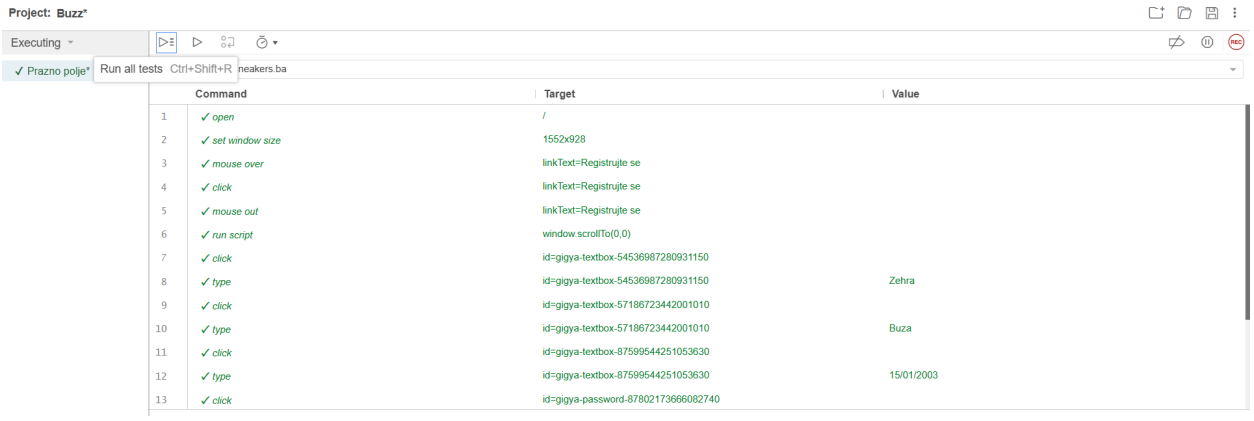
Remaining

Completed

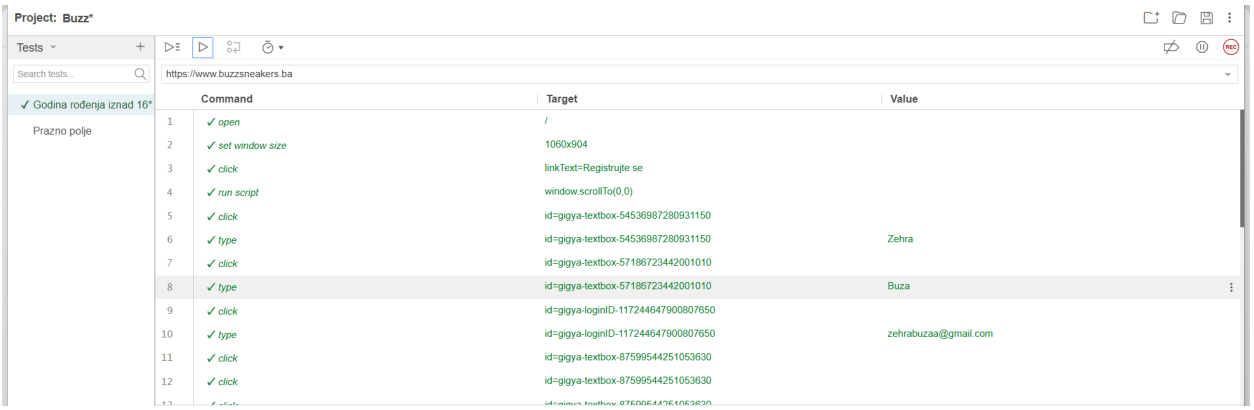
Zadatak 2

Selenium IDE

1. Neuspješna registracija - Prazno polje



2. Uspješna registracija - Godina rodjenja(iznad 16)



3. Uspješna prijava

Tests

Search tests...

✓ Uspješna prijava*

https://www.buzzsneakers.ba/

	Command	Target	Value
1	✓ open	https://www.buzzsneakers.ba/	
2	✓ set window size	1060x904	
3	✓ click	css=.login-btn > span	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-loginID-90368938222470240	
6	✓ type	id=gigya-loginID-90368938222470240	zbuza1@etf.unsa.ba
7	✓ click	id=gigya-password-76204738278271680	
8	✓ type	id=gigya-password-76204738278271680	Zehraa2003!
9	✓ click	css=#gigya-login-form .gigya-input-submit	
10	✓ mouse over	css=#gigya-login-form .gigya-input-submit	
11	✓ close		

4. Neuspješna prijava s netačnom lozinkom

Tests

Search tests...

✓ Neuspješna prijava s netačnom lozinkom*

✓ Uspješna prijava*

https://www.buzzsneakers.ba/

	Command	Target	Value
1	✓ open	https://www.buzzsneakers.ba/	
2	✓ set window size	1060x904	
3	✓ click	css=.login-btn > span	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	id=gigya-loginID-90368938222470240	
6	✓ type	id=gigya-loginID-90368938222470240	zbuza1@etf.unsa.ba
7	✓ click	id=gigya-password-76204738278271680	
8	✓ type	id=gigya-password-76204738278271680	zehraa2003
9	✓ click	css=#gigya-login-form .gigya-input-submit	

5. Neuspješna prijava s netačnom lozinkom i netačnim korisničkim imenom

Tests

Search tests...

✓ Neuspješna prijava s netačnom lozinkom*

✓ Neuspješna prijava s netačnom lozinkom i netačnim

✓ Uspješna prijava*

https://www.buzzsneakers.ba/

	Command	Target	Value
1	✓ open	https://www.buzzsneakers.ba/	
2	✓ set window size	1060x904	
3	✓ mouse over	css=.login-btn > span	
4	✓ click	css=.login-btn > span	
5	✓ mouse out	css=.login-btn > span	
6	✓ run script	window.scrollTo(0,0)	
7	✓ click	id=gigya-loginID-90368938222470240	
8	✓ type	id=gigya-loginID-90368938222470240	zehrabuza@gmail.com
9	✓ click	id=gigya-password-76204738278271680	
10	✓ type	id=gigya-password-76204738278271680	zehraa2003
11	✓ click	css=#gigya-login-form .gigya-input-submit	

NUnit Selenium WebDriverSingleton

```
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace zehra
{
    2 references
    public class WebDriverSingleton
    {
        private static IWebDriver _driver;
        private static readonly object LockObject = new object();

        1 reference
        public static IWebDriver Instance
        {
            get
            {
                if (_driver == null)
                {
                    lock (LockObject)
                    {
                        if (_driver == null)
                        {
                            _driver = new ChromeDriver(); // Možete koristiti bilo koji driver
                        }
                    }
                }
                return _driver;
            }
        }

        1 reference
        public static void Quit()
        {
            if (_driver != null)
            {
                _driver.Quit();
                _driver = null;
            }
        }
    }
```

HomePage

```
using OpenQA.Selenium;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace zehra
{
    2 references
    public class HomePage
    {
        private readonly IWebDriver _driver;

        1 reference | 1/1 passing
        public HomePage(IWebDriver driver)
        {
            _driver = driver;
        }

        1 reference | 1/1 passing
        public void NavigateToHomePage()
        {
            _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
            _driver.Manage().Window.Size = new System.Drawing.Size(1552, 832);
        }

        1 reference | 1/1 passing
        public RegistrationPage GoToRegistrationPage()
        {
            _driver.FindElement(By.LinkText("Registrujte se")).Click();
            return new RegistrationPage(_driver);
        }
    }

}
```

RegistrationPage

```
using OpenQA.Selenium;
using OpenQA.Selenium.Interactions;
using OpenQA.Selenium.Support.UI;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace zehra
{
    3 references
    public class RegistrationPage
    {
        private readonly IWebDriver _driver;
        private WebDriverWait _wait;

        1 reference
        public RegistrationPage(IWebDriver driver)
        {
            _driver = driver;
            _wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));
        }

        1 reference | 1/1 passing
        public void FillRegistrationForm(string firstName, string lastName, string birthDate, string password)
        {
            // Čekanje da element postane prisutan na stranici
            var firstNameField = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.Id("gigya-textbox-545369072809311 50")));
            firstNameField.SendKeys(firstName);

            var lastNameField = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.Id("gigya-textbox-57186723442001010")));
            lastNameField.SendKeys(lastName);

            var birthDateField = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.Id("gigya-textbox-875995442510536 30")));
            birthDateField.SendKeys(birthDate);

            var passwordField = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.Id("gigya-password-87802173666082740")));
            passwordField.SendKeys(password);

            var confirmPasswordField = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.Id("gigya-password-16462021934106750 0")));
            confirmPasswordField.SendKeys(password);
        }

        1 reference | 1/1 passing
        public void SubmitForm()
        {
            var submitButton = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementToBeClickable(By.CssSelector("#gigya-register-form .gigya-input-submit")))
            submitButton.Click();
        }

        1 reference | 1/1 passing
        public void ClosePopup()
        {
            var closeButton = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementToBeClickable(By.CssSelector(".close-icon:nth-child(4)")));
            closeButton.Click();
        }
    }

}
```

Neuspješna registracija - Prazno polje

```
    [Test]
    | 0 references
    public void TestRegistration()
    {
        var homePage = new HomePage(_driver);
        homePage.NavigateToHomePage();

        var registrationPage = homePage.GoToRegistrationPage();
        registrationPage.FillRegistrationForm("Zehra", "Buza", "15/01/2003", "Lozinka123.");
        registrationPage.SubmitForm();
        registrationPage.ClosePopup();
    }
}
```

Uspješna registracija - Godina rodjenja(iznad 16)

```
[Test]
| 0 references
public void TestRegistrationWithValidData()
{
    var homePage = new HomePage(_driver);
    homePage.NavigateToHomePage();

    var registrationPage = homePage.GoToRegistrationPage();
    registrationPage.FillRegistrationForm("Zehra", "Buza", "15/01/2003", "zbuza1@etf.unsa.ba", "Zehraa2003!");
    registrationPage.SubmitForm();

    // Add assertion to validate the email error message
    var errorMessage = _driver.FindElement(By.CssSelector(".gigya-error-code-400009"));
    Assert.IsTrue(errorMessage.Displayed, "Email validation error is not displayed.");
}
```

Uspješna prijava

```
[Test]
| 0 references
public void TestUspjenaprijava()
{
    _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    _driver.Manage().Window.Size = new System.Drawing.Size(1060, 904);

    var loginButton = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementToBeClickable(By.CssSelector(".login-btn > span")));
    loginButton.Click();

    var loginPage = new LoginPage(_driver);
    loginPage.EnterEmail("zbuza1@etf.unsa.ba");
    loginPage.EnterPassword("Zehraa2003!");
    loginPage.SubmitLoginForm();

    var element = _wait.Until(SeleniumExtras.WaitHelpers.ExpectedConditions.ElementIsVisible(By.CssSelector("#gigya-login-form .gigya-input-submit")));
    Actions builder = new Actions(_driver);
    builder.MoveToElement(element).Perform();

    _driver.Close();
}
```

Neuspješna prijava s netačnom lozinkom

```
[Test]
| 0 references
public void NeuspjesnaPrijavaSaNetacnomLozinkom()
{
    // Navigate to the website
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    driver.Manage().Window.Size = new System.Drawing.Size(1060, 904);

    // Click on the login button
    driver.FindElement(By.CssSelector(".login-btn > span")).Click();

    // Scroll to the top of the page
    js.ExecuteScript("window.scrollTo(0,0)");

    // Enter email
    driver.FindElement(By.Id("gigya-loginID-90368938222470240")).Click();
    driver.FindElement(By.Id("gigya-loginID-90368938222470240")).SendKeys("zbuza1@etf.unsa.ba");

    // Enter incorrect password
    driver.FindElement(By.Id("gigya-password-76204738278271680")).Click();
    driver.FindElement(By.Id("gigya-password-76204738278271680")).SendKeys("zehraa2003"); // Incorrect password

    // Click on login submit button
    driver.FindElement(By.CssSelector("#gigya-login-form .gigya-input-submit")).Click();

    // Wait for the page to load after clicking submit
    WebDriverWait wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));

    // Check if there is an error message displayed
    try
    {
        IWebElement errorMessage = wait.Until(d => d.FindElement(By.CssSelector(".gigya-error-message"))); // Assuming the error message has this class
        Assert.IsTrue(errorMessage.Displayed, "Error message should be displayed when invalid credentials are provided.");
```

Neuspješna prijava s netačnom lozinkom i netačnim korisničkim imenom

```
[Test]
0 references
public void NeuspjesnaPrijavaSaNetacnomlozinkomINetacnimKorisnickimImenom()
{
    // Navigate to the login page
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");


    // Hover over login button and click
    var loginButton = driver.FindElement(By.CssSelector(".login-btn > span"));
    Actions builder = new Actions(driver);
    builder.MoveToElement(loginButton).Perform();
    loginButton.Click();

    // Scroll to top of the page
    js.ExecuteScript("window.scrollTo(0,0)");

    // Enter email and password (incorrect email or password)
    driver.FindElement(By.Id("gigya-loginID-90368938222470240")).Click();
    driver.FindElement(By.Id("gigya-loginID-90368938222470240")).SendKeys("zehrabuza@gmail.com");
    driver.FindElement(By.Id("gigya-password-76204738278271680")).Click();
    driver.FindElement(By.Id("gigya-password-76204738278271680")).SendKeys("zehraa2003");

    // Click submit button
    driver.FindElement(By.CssSelector("#gigya-login-form .gigya-input-submit")).Click();

    // Wait for some time for the response
    WebDriverWait wait = new WebDriverWait(driver, TimeSpan.FromSeconds(10));

    try
    {
```

Zadatak 3:
API testovi u Postman alatu

Test 1: Neuspješna registracija - Prazno polje

https://buzz.com/api/auth/register

POST https://buzz.com/api/auth/register

Params Authorization Headers (8) Body Scripts Settings

Pre-request

Post-response

```
1
2  pm.test("Status je 200 (OK)", function () {
3      pm.response.to.have.status(200);
4  });
5
6  pm.test("Validacija odgovora sadrži 'email' grešku", function () {
7      var body = pm.response.text();
8      pm.expect(body).to.include("email");
9  });
10
11 pm.test("Tijelo odgovora je HTML format", function () {
12     var body = pm.response.text();
13     pm.expect(body).to.include('<!doctype html>');
14 });
15
16 Ctrl+Alt+P for Postbot
17 pm.test("Email polje je prazno", function () {
18     if (pm.response.headers.get("Content-Type").includes("application/json")) {
19         var jsonData = pm.response.json();
20         pm.expect(jsonData.email).to.equal("");
21     } else {
22         console.log("Odgovor nije JSON, Content-Type: ", pm.response.headers.get
               ("Content-Type"));
23         pm.expect.fail("Odgovor nije u JSON formatu.");
24     }
25 });
```

Filter Results

PASSED Status je 200 (OK)

PASSED Validacija odgovora sadrži 'email' grešku

PASSED Tijelo odgovora je HTML format

PASSED Email polje je prazno

Test 2: Uspješna registracija - Godina rodjenja(iznad 16)

POST https://buzz.com/api/auth/register

Params Authorization Headers (9) Body Scripts Settings

Pre-request

Post-response

```
pm.test("Status je 200 (OK)", function () {
    pm.response.to.have.status(200);
});

pm.test("Email je validan", function () {
    var jsonData = pm.response.json();
    pm.expect(jsonData).to.have.property("email");
    pm.expect(jsonData.email).to.match(/^[\w-]+(\.[\w-]+)*@([\w-]+\.)+[a-zA-Z]{2,7}$/);
});

pm.test("Lozinka je dovoljno duga", function () {
    var jsonData = pm.response.json();
    pm.expect(jsonData).to.have.property("password");
    pm.expect(jsonData.password.length).to.be.above(7);
});


pm.test("Godina rođenja je iznad 16", function () {
    var jsonData = pm.response.json();
    var currentYear = new Date().getFullYear();
    var birthYear = new Date(jsonData.dateOfBirth).getFullYear();
    var age = currentYear - birthYear;
    pm.expect(age).to.be.above(16); // Godine iznad 16
});
```

Filter Results

PASSED Status je 200 (OK)

PASSED Email je validan

PASSED Lozinka je dovoljno duga

PASSED Godina rođenja je iznad 16

Test 3: Uspješna prijava

```
pm.test("Statusni kod je 200", function () {
    pm.response.to.have.status(200);
});

pm.test("Odgovor je u JSON formatu", function () {
    pm.response.to.have.header("Content-Type", /application\/json/);
});

pm.test("Token postoji u odgovoru", function () {
    const jsonData = pm.response.json();
    pm.expect(jsonData).to.have.property("token");
    pm.expect(jsonData.token).to.be.a("string").and.not.empty;
});

pm.test("Email korisnika se poklapa sa emailom za prijavu", function () {
    const jsonData = pm.response.json();
    pm.expect(jsonData).to.have.property("user");
    pm.expect(jsonData.user).to.have.property("email", "johndoe@example.com");
});
```

Filter Results

PASSED Statusni kod je 200

PASSED Odgovor je u JSON formatu

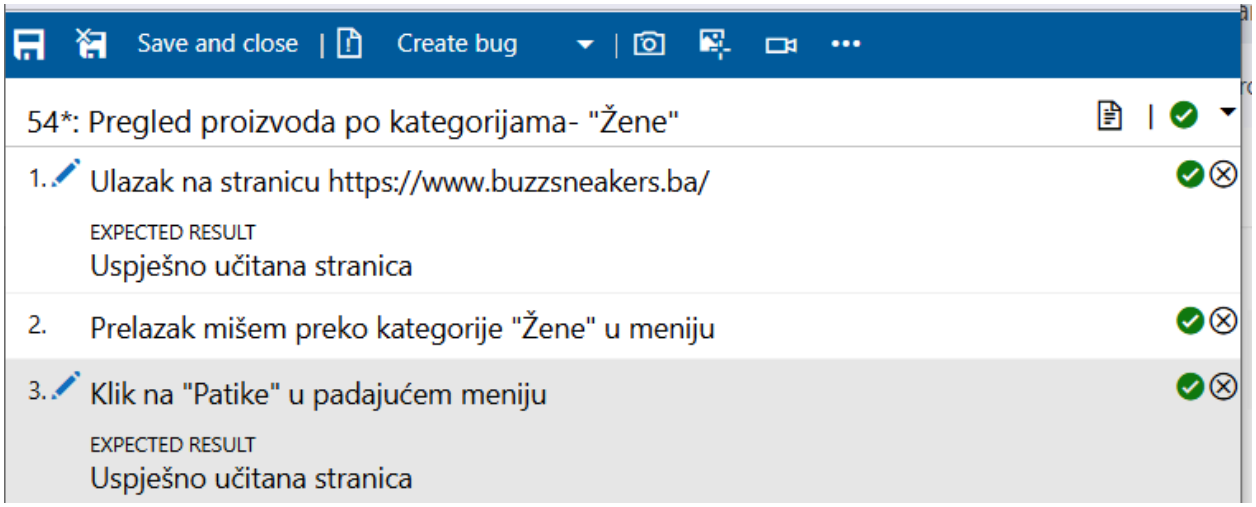
PASSED Token postoji u odgovoru

PASSED Email korisnika se poklapa sa emailom za prijavu

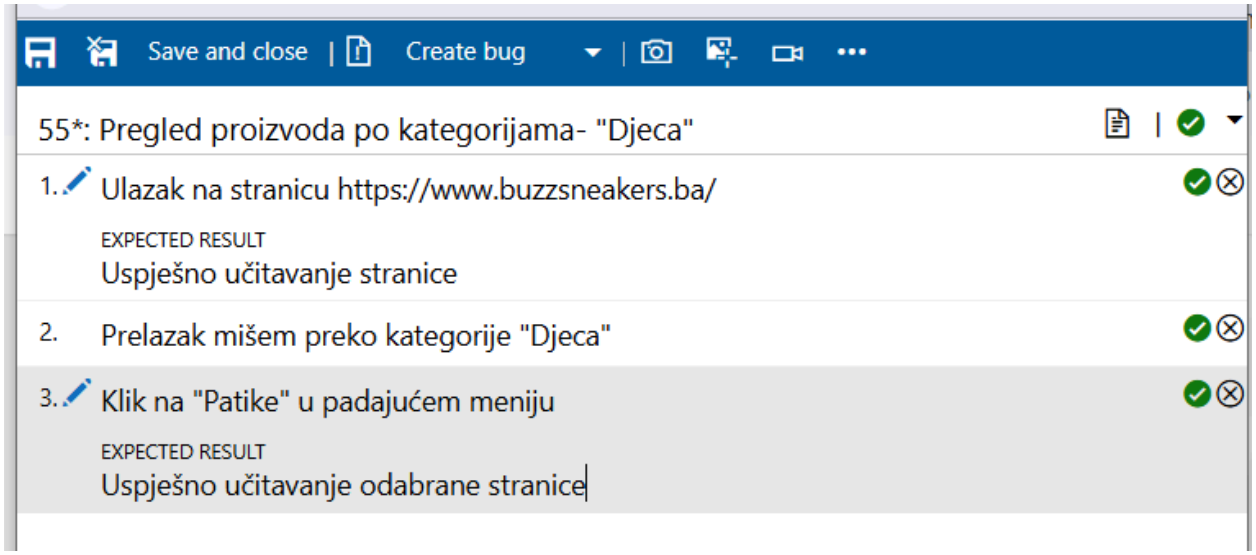
4. Član tima: Elma Tirak

Zadatak 1:

Funkcionalnost: Pregled proizvoda po kategorijama
Testni slučaj: Kategorija “Žene”



Funkcionalnost: Pregled proizvoda po kategorijama
Testni slučaj: Kategorija “Djeca”



Funkcionalnost: Otvaranje Brendova

Testni slučaj: Odabir opcije Adidas

Save and close | Create bug

58: Brendovi

1. Učitavanje na stranicu https://www.buzzsneakers.ba/

EXPECTED RESULT

Uspješno učitana stranica

2. Klik u meniju na "BRENDOVI"

EXPECTED RESULT

Uspješno otvaranje

3. Klik na ponuđeni brend "Adidas"

EXPECTED RESULT

Uspješno otvaranje

Funkcionalnost: Registracija

Testni slučaj: Unošenje već postojeće mail adrese

Save and close | Create bug

59*: Unošenje mail adrese pri registraciji koja već postoji

1. Učitavanje stranice https://www.buzzsneakers.ba/

EXPECTED RESULT

Uspješno učitana stranica

2. Klik na polje "REGISTRUJ SE"

3. Unos podataka za Ime: Hana

4. Unos podataka za Prezime: Hanić

5. Unos email adrese: etirak1@etf.unsa.ba

6. Unos datuma rođenja: 20/12/2004

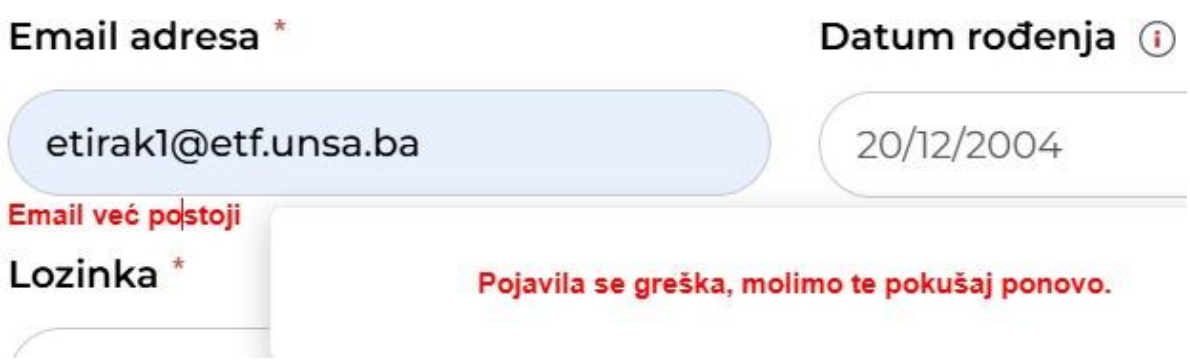
7. Unos lozinke i ponovljene lozinke: Maligrad1#

8. Klik na dugme "Registruj se"

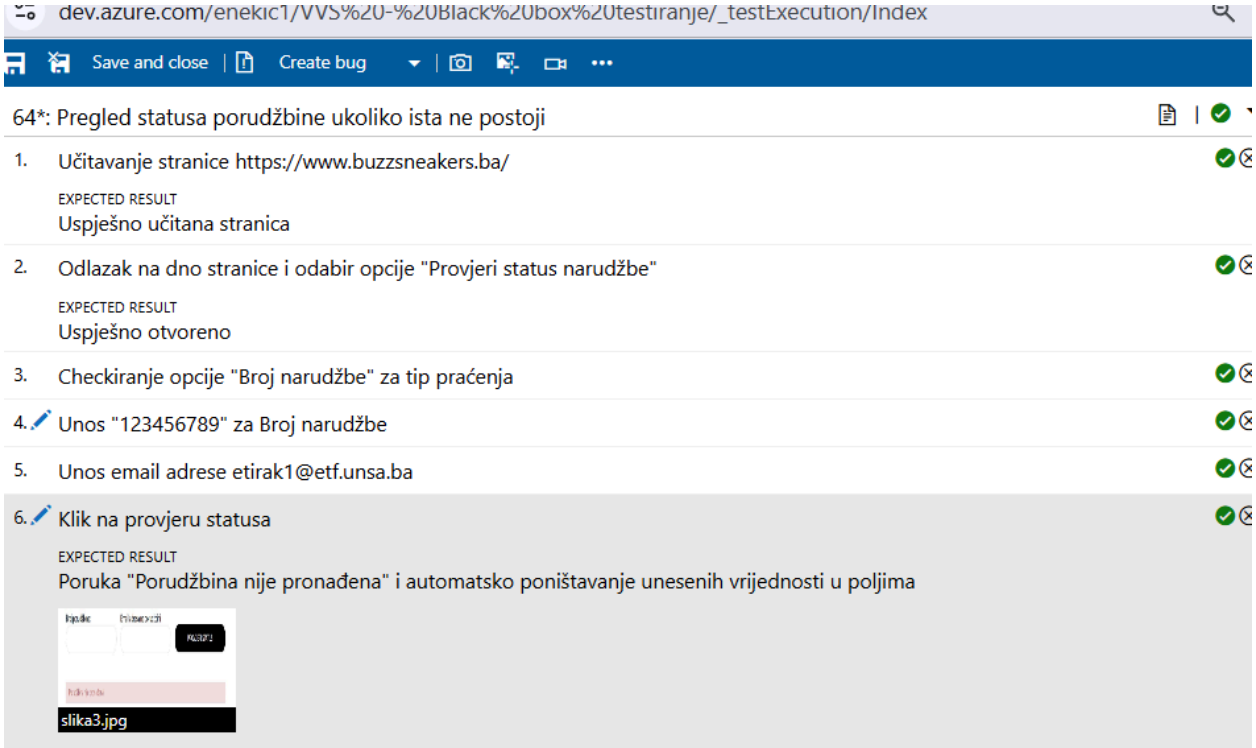
EXPECTED RESULT

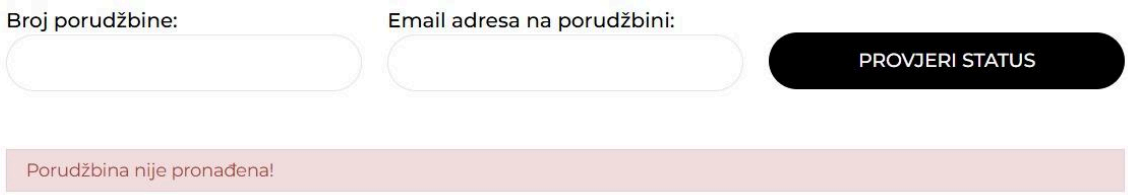
Neizvršena registracija i prikaz poruke da je email već postojeći

slika1.jpg

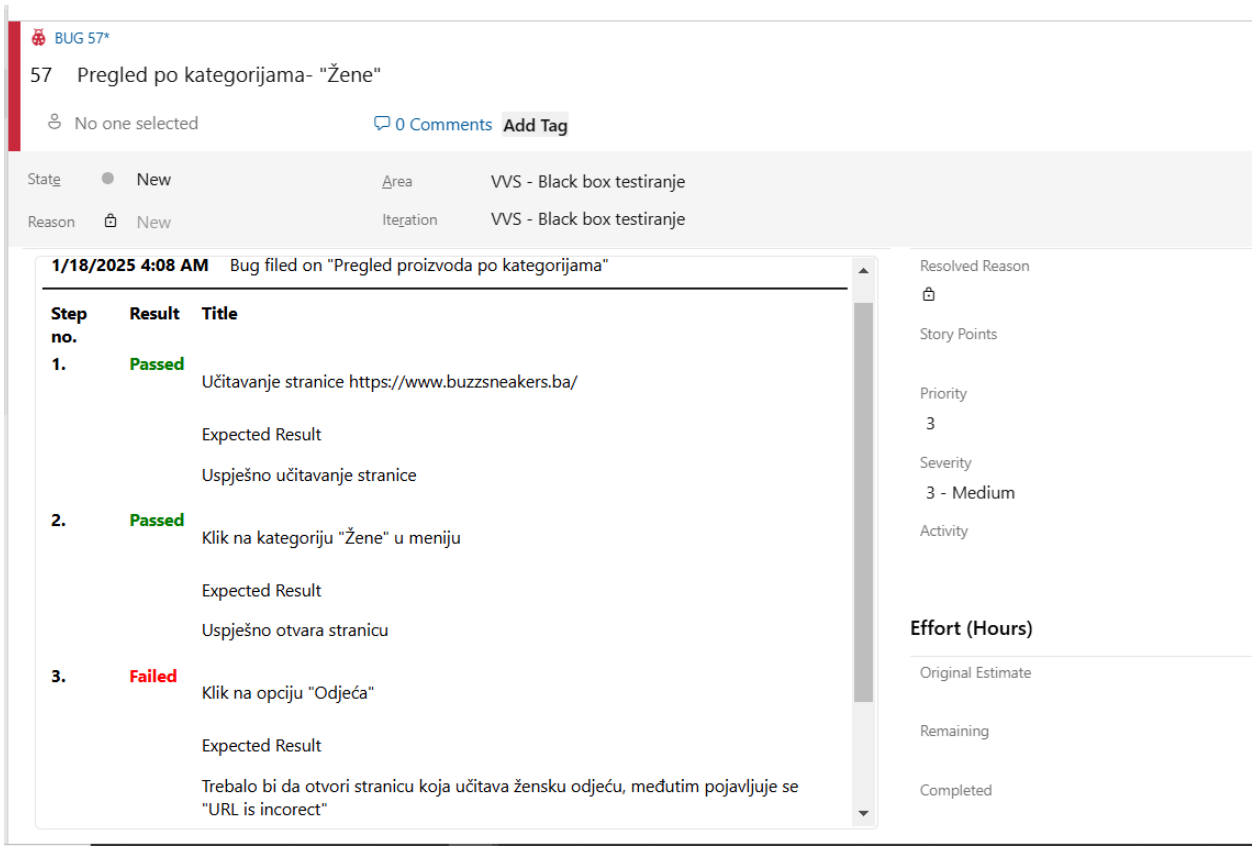


Funkcionalnost: Pregled statusa porudžbine
Testni slučaj: Unos parametara svih polja, iako narudžbina ne postoji





Pronađeni bugovi:



BUG 57*

57 Pregled po kategorijama- "Žene"

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

1/18/2025 4:08 AM Bug filed on "Pregled proizvoda po kategorijama"

Step no.	Result	Title
1.	Passed	Učitavanje stranice https://www.buzzsneakers.ba/ Expected Result Uspješno učitavanje stranice
2.	Passed	Klik na kategoriju "Žene" u meniju Expected Result Uspješno otvara stranicu
3.	Failed	Klik na opciju "Odjeća" Expected Result Trebalo bi da otvori stranicu koja učitava žensku odjeću, međutim pojavljuje se "URL is incorect"

Resolved Reason

Story Points

Priority
3

Severity
3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

Completed

buzzsneakers.ba/odjeca/za-zene+unisex/za-odrasle/nova_kolekcija

mJAlpha Dashboard Google диск https://c9.etf.unsa.b... Programski jezik C D:/Work_Projects/St... pouigffuyuc Petlja Riješeni zadi

URL IS INCORECT

website: https://www.buzzsneakers.ba

GO TO HOME

BUG 76

76 Buzz Crew

No one selected

1 Comment Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Activity

Discussion

ET

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

ET

Elma Tirak commented just now

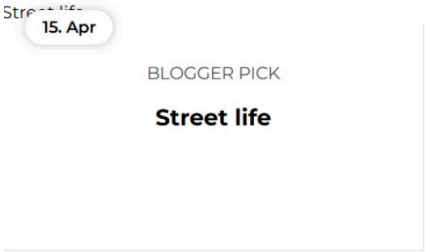
Poslednji blogovi bi, također, trebali da imaju sliku u naslovu, međutim nemaju .

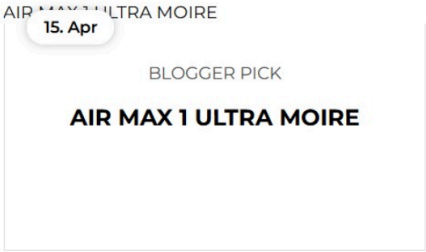
Effort (Hours)

Original Estimate

Remaining

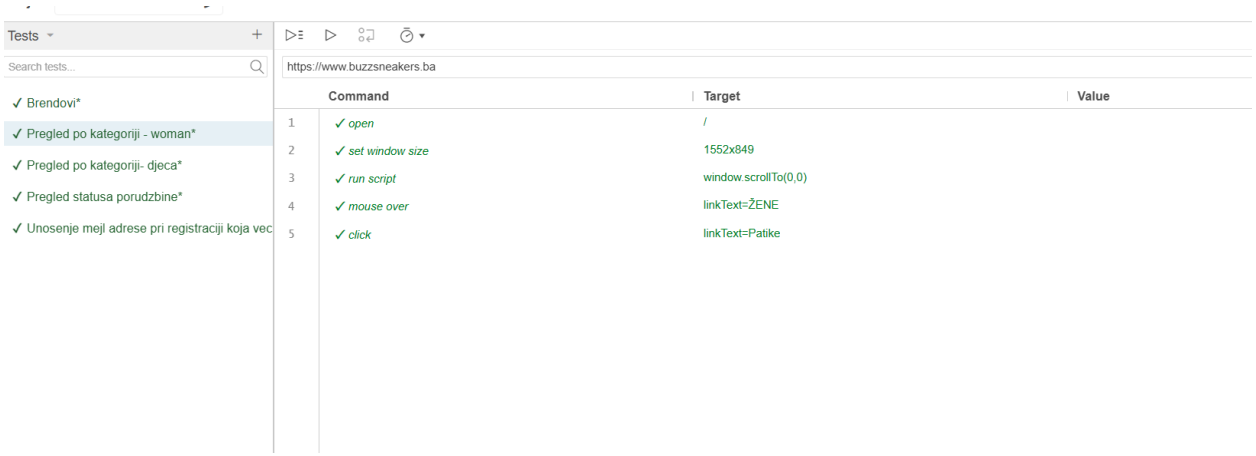
Completed





Zadatak 2:
Selenium IDE:

Funkcionalnost: Pregled proizvoda po kategorijama- “Žene”



Funkcionalnost: Unos email adrese koja se već koristi pri registeraciji

Executing

✓ Unosenje mejl adrese pri registraciji koja

Run current test Ctrl+R

rs.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	788x835	
3	✓ run script	window.scrollTo(0,0)	
4	✓ click	linkText=Registrujte se	
5	✓ click	id=gigya-textbox-54536987280931150	
6	✓ type	id=gigya-textbox-54536987280931150	Hana
7	✓ click	id=gigya-textbox-57186723442001010	
8	✓ type	id=gigya-textbox-57186723442001010	Hanić
9	✓ click	id=gigya-loginID-1172446479008076 50	
10	✓ type	id=gigya-loginID-1172446479008076 50	etirak1@etf.unsa.ba
11	✓ click	id=gigya-textbox-87599544251053630	
12	✓ type	id=gigya-textbox-87599544251053630	20/12/2004
13	✓ type	id=gigya-password-87802173666082740	Maligrad1#
14	✓ type	id=gigya-password-164620219341067500	Maligrad1#
15	✓ click	css=#gigya-register-form .gigya-input-submit	

Funkcionalnost: Brendovi(otvaranje iz menija)

Tests

Search tests...

✓ Brendovi*

✓ Pregled po kategoriji - woman*

✓ Pregled po kategoriji- djeca*

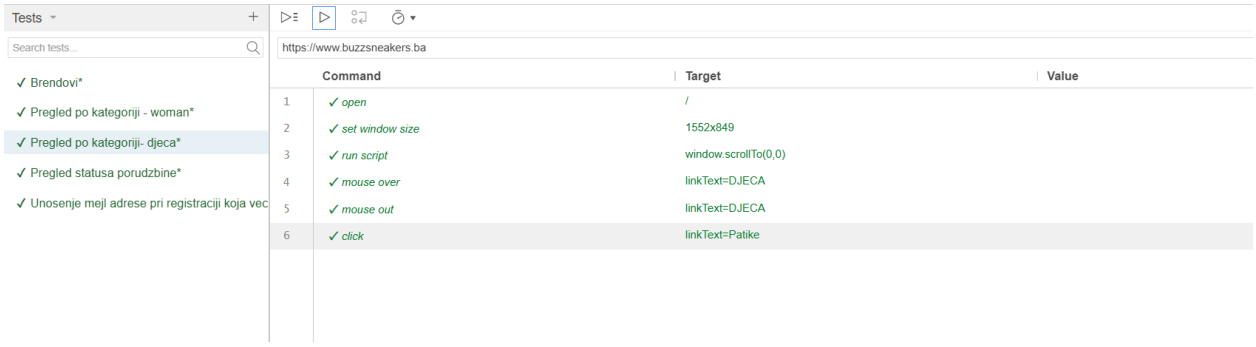
✓ Pregled statusa porudzbine*

✓ Unosenje mejl adrese pri registraciji koja vec

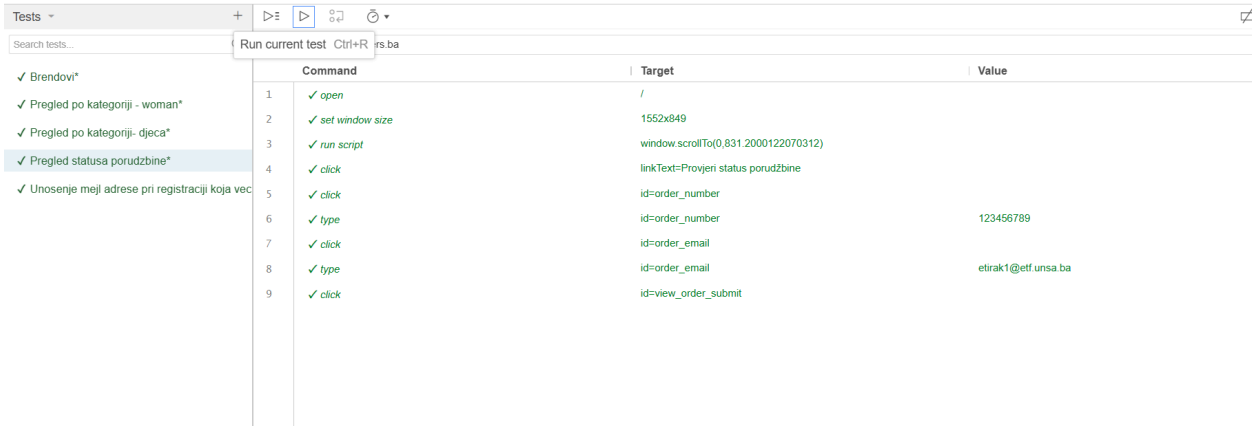
https://www.buzzsneakers.ba

	Command	Target	Value
1	✓ open	/	
2	✓ set window size	788x835	
3	✓ run script	window.scrollTo(0,0)	
4	✓ run script	window.scrollTo(0,0)	
5	✓ click	css=li:nth-child(8) span:nth-child(1)	
6	✓ click	css=.col-xs-6:nth-child(2) img	

Funkcionalnost: Pregled proizvoda po kategorijama- “Djeca”



Funkcionalnost: Pregled statusa porudžbine



Nunit testovi:

WebDriverManager:

```
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium;

public class WebDriverManager
{
    private static IWebDriver _driver;

    private WebDriverManager() { }

    public static IWebDriver GetDriver()
    {
        if (_driver == null)
        {
            _driver = new ChromeDriver();
        }
        return _driver;
    }

    public static void QuitDriver()
    {
        _driver?.Quit();
        _driver = null;
    }
}
```

PageObjects.cs

```
using OpenQA.Selenium.Interactions;
using OpenQA.Selenium;
using OpenQA.Selenium.Support.UI;
using System.Drawing.Imaging;

public class WomenPage
{
    private readonly IWebDriver _driver;

    public WomenPage(IWebDriver driver)
    {
        _driver = driver;
    }

    public void GoToUrl(string url)
    {
        _driver.Navigate().GoToUrl(url);
    }

    public void HoverOverWomenLink()
    {
        var element = _driver.FindElement(By.LinkText("ŽENE"));
        Actions builder = new Actions(_driver);
        builder.MoveToElement(element).Perform();
    }

    public void ClickOnShoes()
    {
        _driver.FindElement(By.LinkText("Patike")).Click();
    }
}
```

Funkcionalnost: Pregled po kategoriji-”Žene”

```
// Generated by Selenium IDE
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Threading;
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;
[TestFixture]
public class PregledpokategorijiwomanTest {
  private IWebDriver driver;
  public IDictionary<string, object> vars {get; private set;}
  private IJavaScriptExecutor js;
  [SetUp]
  public void SetUp() {
    driver = new ChromeDriver();
    js = (IJavaScriptExecutor)driver;
    vars = new Dictionary<string, object>();
  }
  [TearDown]
  protected void TearDown() {
    driver.Quit();
  }
  [Test]
  public void pregledpokategorijiwoman() {
    driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    driver.Manage().Window.Size = new System.Drawing.Size(1552, 849);
    js.ExecuteScript("window.scrollTo(0,0)");
    {
      var element = driver.FindElement(By.LinkText("ŽENE"));
      Actions builder = new Actions(driver);
      builder.MoveToElement(element).Perform();
    }
    driver.FindElement(By.LinkText("Patike")).Click();
  }
}
```

Funkcionalnost: Brendovi

```
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;
[TestFixture]
public class BrendoviTest
{
    private IWebDriver driver;
    private BrandPage brandPage;

    [SetUp]
    public void SetUp()
    {
        driver = WebDriverManager.GetDriver();
        brandPage = new BrandPage(driver);
    }

    [TearDown]
    public void TearDown()
    {
        WebDriverManager.QuitDriver();
    }

    [Test]
    public void Brendovi()
    {
        brandPage.NavigateToWebsite();
        brandPage.ScrollToTop();

        try
        {
            brandPage.ClickBrand(8);
            brandPage.ClickBrandImage(2);
        }
        catch (ElementNotInteractableException)
        {
            Assert.Fail("Element nije interaktivan.");
        }
    }
}
```

BrandPage.cs

```
using OpenQA.Selenium;
using OpenQA.Selenium.Support.UI;
using System;
using System.Drawing;
public class BrandPage
{
    private readonly IWebDriver _driver;
    private readonly WebDriverWait _wait;

    public BrandPage(IWebDriver driver)
    {
        _driver = driver;
        _wait = new WebDriverWait(driver, TimeSpan.FromSeconds(15));
    }

    public void NavigateToWebsite()
    {
        _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
        _driver.Manage().Window.Size = new Size(788, 835);
    }

    public void ScrollToTop()
    {
        IJavaScriptExecutor js = (IJavaScriptExecutor)_driver;
        js.ExecuteScript("window.scrollTo(0,0)");
    }

    public void ScrollToElement(By selector)
    {
        IJavaScriptExecutor js = (IJavaScriptExecutor)_driver;
        var element = _driver.FindElement(selector);
        js.ExecuteScript("arguments[0].scrollIntoView(true);", element);
    }

    private void WaitForElementToBeClickable(By selector)
    {
        for (int i = 0; i < 15; i++)
        {
            try
```

```
35      private void WaitForElementToBeClickable(By selector)
36      {
37          for (int i = 0; i < 15; i++)
38          {
39              try
40              {
41                  var element = _driver.FindElement(selector);
42                  if (element.Enabled && element.Displayed)
43                  {
44                      return;
45                  }
46              }
47              catch (NoSuchElementException)
48              {
49
50              }
51              catch (StaleElementReferenceException)
52              {
53
54              }
55              Thread.Sleep(1000);
56          }
57          throw new Exception("Element nije klikabilan.");
58      }
59
60      public void ClickBrand(int index)
61      {
62          var brandSelector = $"li:nth-child({index}) span:nth-child(1)";
63          WaitForElementToBeClickable(By.CssSelector(brandSelector));
64          var brandElement = _driver.FindElement(By.CssSelector(brandSelector));
65          ScrollToElement(By.CssSelector(brandSelector));
66          brandElement.Click();
67      }
68
69      public void ClickBrandImage(int index)
70      {
71          var imageSelector = $".col-xs-6:nth-child({index}) img";
72          WaitForElementToBeClickable(By.CssSelector(imageSelector));
73          var imageElement = _driver.FindElement(By.CssSelector(imageSelector));
74          ScrollToElement(By.CssSelector(imageSelector));
75          imageElement.Click();
76      }
77  }
```

Funkcionalnost: Provjera statusa porudžbine

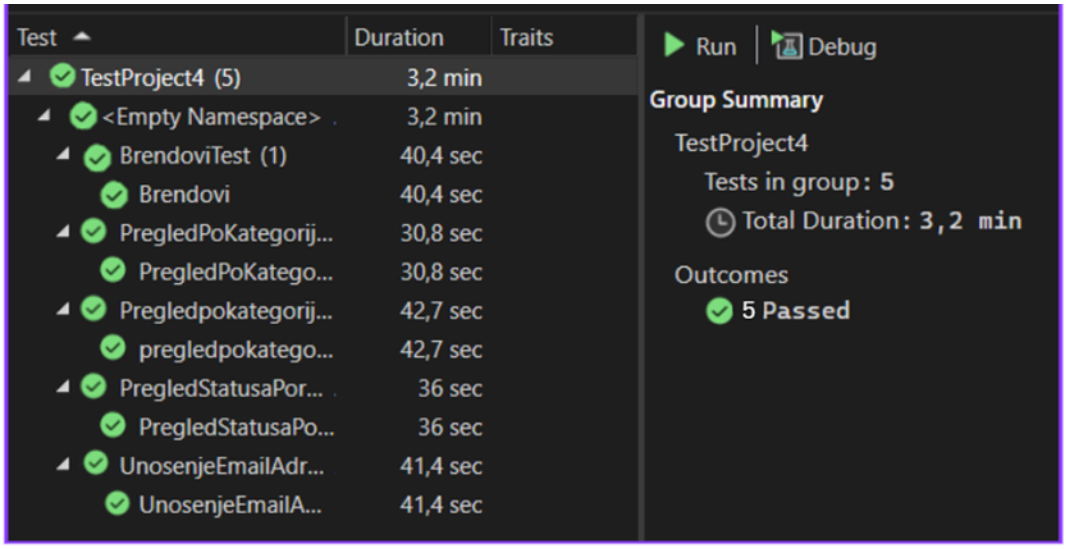
```
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium;

[TestFixture]
public class PregledStatusaPorudzbineTest
{
    private static IWebDriver _driver;

    [SetUp]
    public void SetUp()
    {
        _driver = WebDriverManager.GetDriver();
    }

    [TearDown]
    public void TearDown()
    {
        WebDriverManager.QuitDriver();
    }

    [Test]
    public void PregledStatusaPorudzbine()
    {
        try
        {
            _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
            _driver.Manage().Window.Size = new System.Drawing.Size(1552, 849);


            IJavaScriptExecutor js = (IJavaScriptExecutor)_driver;
            js.ExecuteScript("window.scrollTo(0, document.body.scrollHeight);");


            WebDriverWait wait = new WebDriverWait(_driver, TimeSpan.FromSeconds(10));
            IWebElement proveriStatusPorudzbineLink = wait.Until(driver => driver.FindElement(By.LinkText("Provjeri status porudžbine")));
            proveriStatusPorudzbineLink.Click();


            wait.Until(driver => driver.FindElement(By.Id("order_number")));
            _driver.FindElement(By.Id("order_number")).SendKeys("123456789");
            _driver.FindElement(By.Id("order_email")).SendKeys("etirak1@etf.unsa.ba");
            _driver.FindElement(By.Id("view_order_submit")).Click();
        }
        catch (NoSuchElementException e)
        {
            Assert.Fail($"Element nije pronadjen: {e.Message}");
        }
        catch (WebDriverTimeoutException e)
        {
            Assert.Fail($"Istek vremena: {e.Message}");
        }
        catch (Exception e)
        {
            Assert.Fail($"Desila se neočekivana greška: {e.Message}");
        }

    }
}
```

Funkcionalnost: Pregled po kategoriji- “Djeca”

```
using OpenQA.Selenium.Interactions;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium;

[TestFixture]
public class PregledPoKategorijiDecaTest
{
    private static IWebDriver _driver;

    [SetUp]
    public void SetUp()
    {
        _driver = WebDriverManager.GetDriver();
    }

    [TearDown]
    public void TearDown()
    {
        WebDriverManager.QuitDriver();
    }

    [Test]
    public void PregledPoKategorijiDeca()
    {
        try
        {
            _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
            _driver.Manage().Window.Size = new System.Drawing.Size(1552, 849);


            WebDriverWait wait = new WebDriverWait(_driver, TimeSpan.FromSeconds(10));
            IWebElement decaLink = wait.Until(d => d.FindElement(By.LinkText("DJECA")));


            Actions actions = new Actions(_driver);
            actions.MoveToElement(decaLink).Perform();

            IWebElement patikeLink = wait.Until(d => d.FindElement(By.LinkText("Patike")));
            patikeLink.Click();

        }
        catch (NoSuchElementException e)
        {
            Assert.Fail($"Element nije pronađen: {e.Message}");
        }
        catch (WebDriverTimeoutException e)
        {
            Assert.Fail($"Istek vremena čekanja: {e.Message}");
        }
        catch (Exception e)
        {
            Assert.Fail($"Desila se neočekivana greška: {e.Message}");
        }
    }
}
```

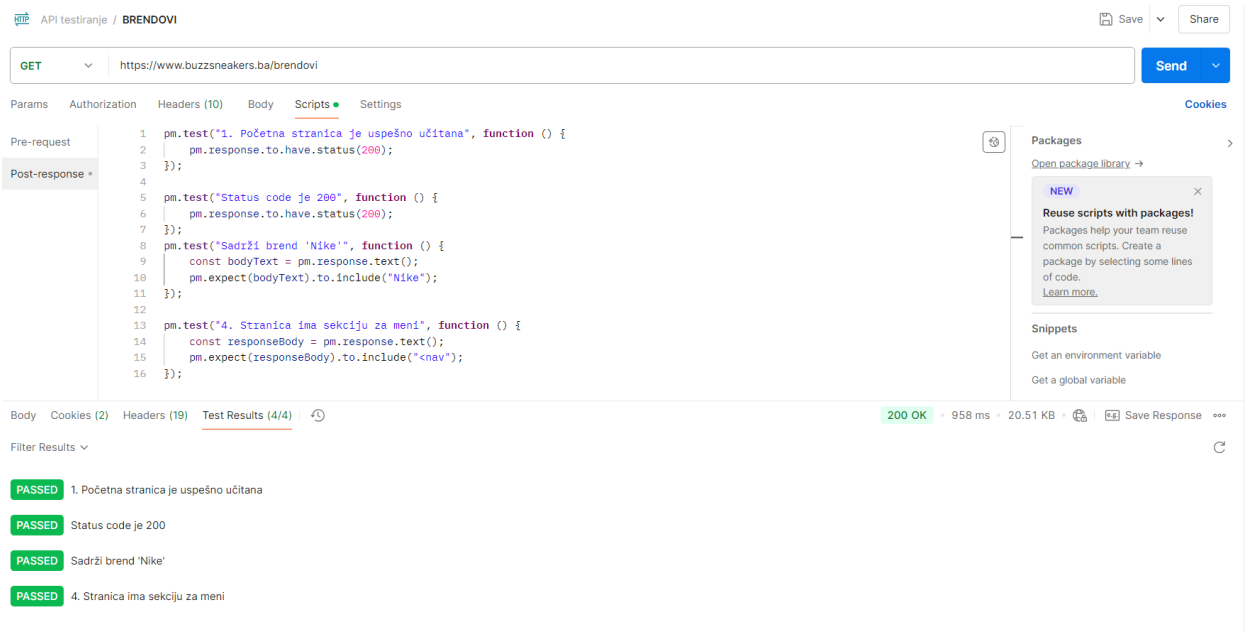
Funkcionalnost: Registracija sa već korištenom mail adresom

```
using System;
using NUnit.Framework;
using OpenQA.Selenium;
using OpenQA.Selenium.Support.UI;

[TestFixture]
public class UnosenjeEmailAdresePriRegistracijiTest
{
    private static IWebDriver _driver;

    [SetUp]
    public void SetUp()
    {
        _driver = WebDriverManager.GetDriver();
    }

    [TearDown]
    public void TearDown()
    {
        WebDriverManager.QuitDriver();
    }

    [Test]
    public void UnosenjeEmailAdresePriRegistraciji()
    {
        try
        {
            _driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
            _driver.Manage().Window.Size = new System.Drawing.Size(788, 835);


            WebDriverWait wait = new WebDriverWait(_driver, TimeSpan.FromSeconds(10));


            wait.Until(d => d.FindElement(By.LinkText("Registrujte se"))).Click();

            wait.Until(d => d.FindElement(By.Id("gigya-textbox-54536987280931150"))).SendKeys("Hana");
            wait.Until(d => d.FindElement(By.Id("gigya-textbox-57186723442001010"))).SendKeys("Hanić");
            wait.Until(d => d.FindElement(By.Id("gigya-loginID-117244647900807650"))).SendKeys("etirak1@etf.unsa.ba");
            wait.Until(d => d.FindElement(By.Id("gigya-textbox-87599544251053630"))).SendKeys("20/12/2004");
            wait.Until(d => d.FindElement(By.Id("gigya-password-878021736660827 40"))).SendKeys("Maligrad1#");
            wait.Until(d => d.FindElement(By.Id("gigya-password-164620219341067500"))).SendKeys("Maligrad1#");

            wait.Until(d => d.FindElement(By.CssSelector("#gigya-register-form .gigya-input-submit"))).Click();



        }
        catch (NoSuchElementException e)
        {
            Assert.Fail($"Element nije pronađen: {e.Message}");
        }
        catch (WebDriverTimeoutException e)
        {
            Assert.Fail($"Istek vremena čekanja: {e.Message}");
        }
        catch (Exception e)
        {
            Assert.Fail($"Desila se neočekivana greška: {e.Message}");
        }
    }
}
```



3. Zadatak

Funkcionalnost: Otvaranje brendova iz menija



Funkcionalnost: Pregled po kategoriji- “Žene”

Overview | API testiranje | GET BRENDOVI | GET Kategorija-žene | GET Provjera statusa narudž | No environment

API testiranje / **Kategorija-žene** | Save | Share

GET https://www.buzzsneakers.ba/patike/za-zene+unisex/za-odrasle/ **Send**

Params | Authorization | Headers (8) | Body | Scripts | Settings | Cookies

Pre-request | Post-response

```
const cheerio = require('cheerio');
const $ = cheerio.load(pm.response.text());
pm.test("1. Početna stranica je uspešno učitana", function () {
    pm.response.to.have.status(200);
});

pm.test("Status code je 200", function () {
    pm.response.to.have.status(200);
});

pm.test("Stranica sadrži products", function () {
    const products = $('.product-item');
    pm.expect(products.length).to.be.greaterThan(0);
});

pm.test("HTML stranica sadrži osnovne elemente", function () {
    const body = $('body');
    pm.expect(body.length).to.be.greaterThan(0);
});
```

Packages — Open package library → — NEW — **Reuse scripts with packages!** Packages help your team reuse common scripts. Create a package by selecting some lines of code. Learn more.

Snippets — Get an environment variable — Get a global variable — Get a variable

Body | Cookies (2) | Headers (20) | Test Results (4/4) — 200 OK · 1.76 s · 52.27 KB | Save Response

Filter Results

- PASSED 1. Početna stranica je uspešno učitana
- PASSED Status code je 200
- PASSED Stranica sadrži products
- PASSED HTML stranica sadrži osnovne elemente

Funkcionalnost: Provjera statusa narudžbe

Overview | API testiranje | GET BRENDOVI | GET Kategorija-žene | GET Provjera statusa narudž | No environment

API testiranje / **Provjera statusa narudžbine** | Save | Share

GET https://www.buzzsneakers.ba/pregled-statusa-porudzbine **Send**

Params | Authorization | Headers (8) | Body | Scripts | Settings | Cookies

Pre-request | Post-response

```
const cheerio = require('cheerio');
const $ = cheerio.load(pm.response.text());
pm.test("1. Početna stranica je uspješno učitana", function () {
    pm.response.to.have.status(200);
});
pm.test("2. HTML sadrži footer sekciju", function () {
    const $ = cheerio.load(pm.response.text());
    const footer = $('footer');
    pm.expect(footer.length).to.be.greaterThan(0);
});
pm.test("5. Stranica sadrži opciju 'Odaberite tip praćenja'", function () {
    const bodyText = pm.response.text();
    pm.expect(bodyText).to.include("Odaberite tip praćenja");
});

pm.test("7. Stranica sadrži tekst 'Šifra pošiljke'", function () {
    const bodyText = pm.response.text();
    pm.expect(bodyText).to.include("Šifra pošiljke");
});
```

Packages — Open package library → — NEW — **Reuse scripts with packages!** Packages help your team reuse common scripts. Create a package by selecting some lines of code. Learn more.

Snippets — Get an environment variable — Get a global variable — Get a variable

Body | Cookies (2) | Headers (19) | Test Results (4/4) — 200 OK · 1.09 s · 18.92 KB | Save Response

Filter Results

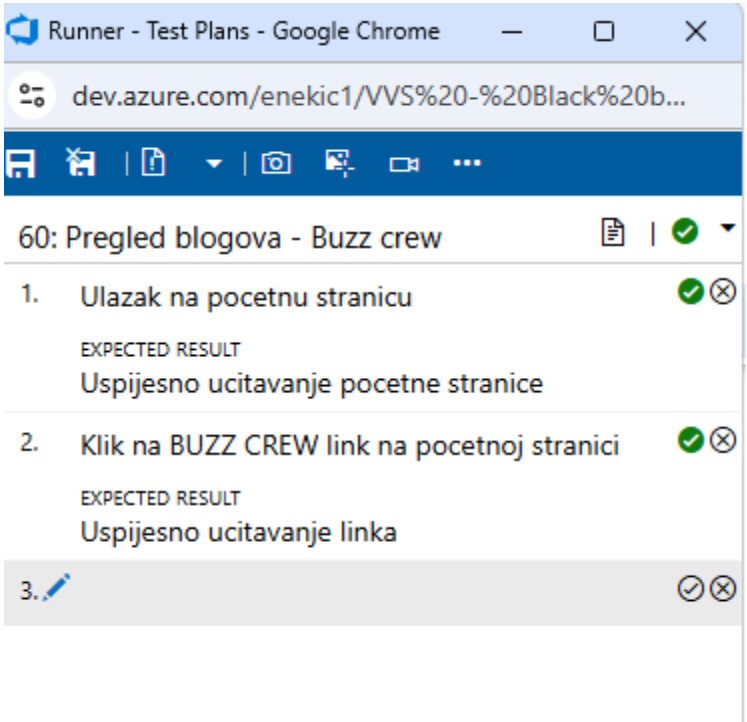
- PASSED 1. Početna stranica je uspješno učitana
- PASSED 2. HTML sadrži footer sekciju
- PASSED 5. Stranica sadrži opciju 'Odaberite tip praćenja'
- PASSED 7. Stranica sadrži tekst 'Šifra pošiljke'

Adna Alihodzic

Zadatak 1:

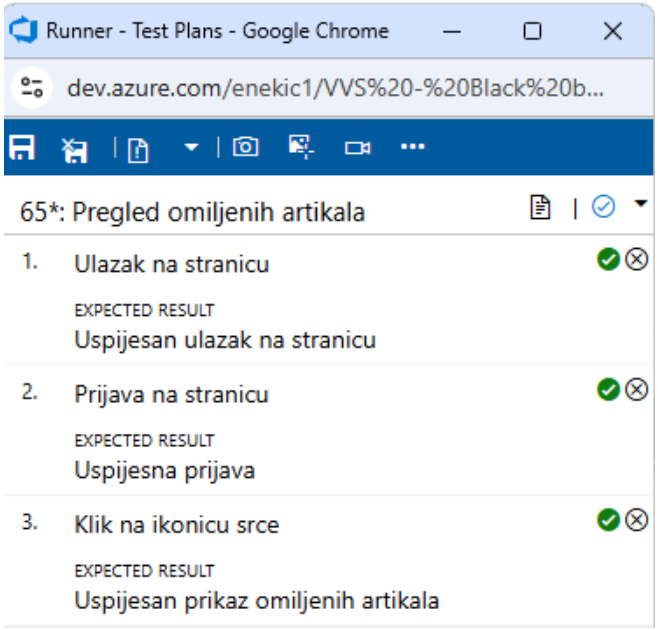
Test 1 : Pregled blogova - Buzz crew

Azure DevOps:



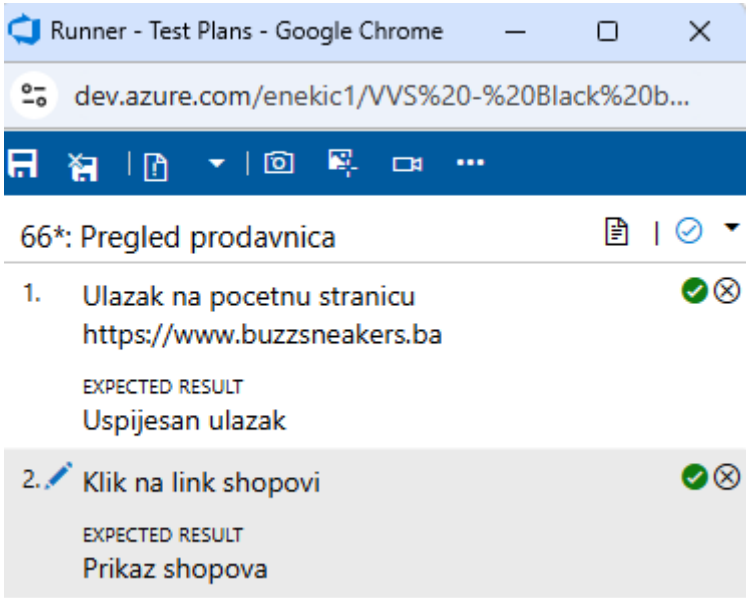
Test 2 : Pregled omiljenih artikala

Azure DevOps:



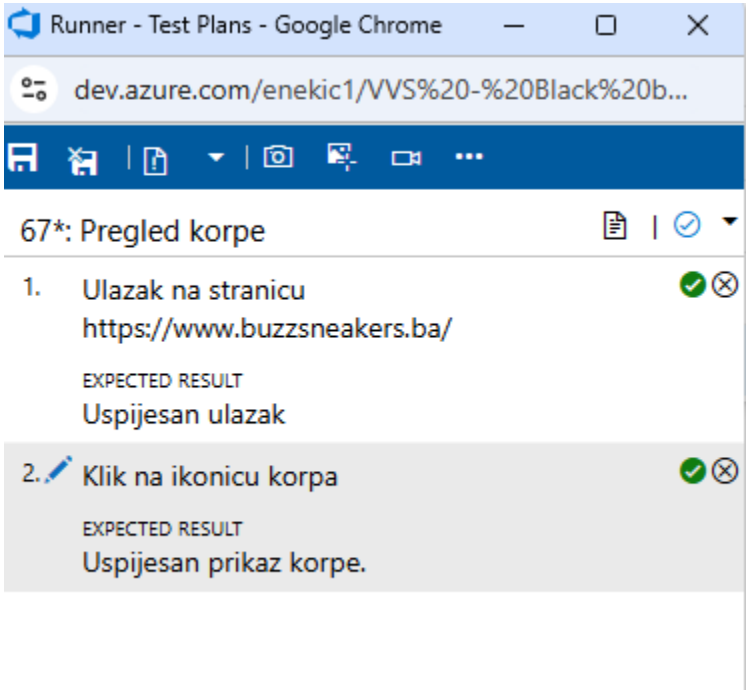
Test 3 : Pregled prodavnica

Azure DevOps:

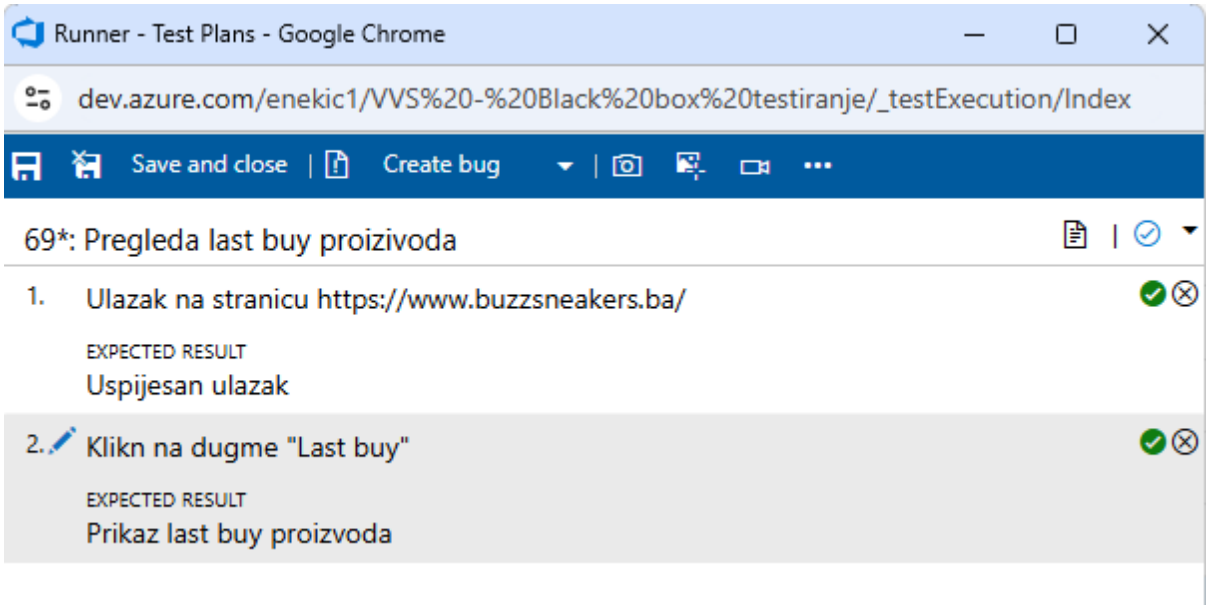


Test 4 : Pregled korpe

Azure DevOps:



Test 5 : Pregled last buy proizvoda



Bugs:

Prvi:

NEW BUG *

Problem s funkcionalnošću košarice na stranici Buzz Sneakers

No one selected | 0 Comments | Add Tag

State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Repro Steps

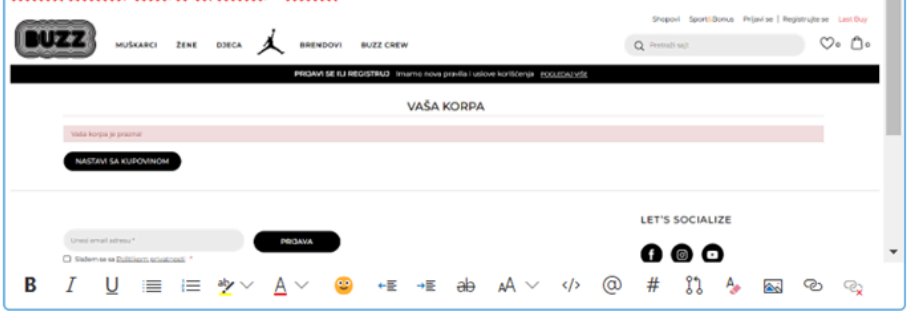
Opis: Kada korisnik doda artikle u košaricu. i uđe u stranica nista se ne prikazuje.

Koraci za reprodukciju:

1. Posjetiti stranicu buzzsneakers.ba.
2. Dodati bilo koji proizvod u košaricu.
3. Kliknuti na ikonu košarice u gornjem desnom kutu.
4. Kliknuti na dugme nista se ne prikazuje.

Očekivani rezultat: Korisniku bi se trebali pokazati svi proizvodi koje je stavio u kosaricu.

Stvarni rezultat: Nista se ne prikaze u kosarici.



Planning

Resolved Reason

Story Points

Priority
2

Severity
3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

Completed

Drugi:

NEW BUG *

Neispravan filter proizvoda

No one selected | 0 Comments | Add Tag

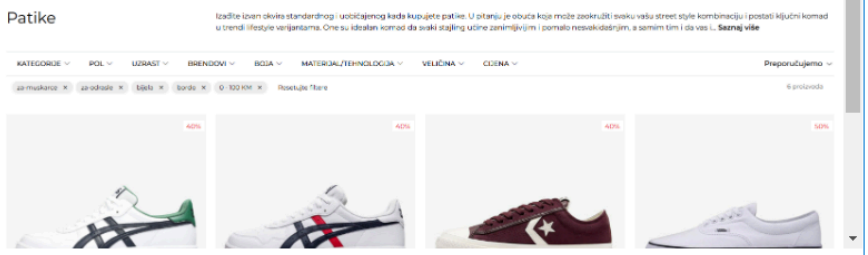
State	New	Area	VVS - Black box testiranje
Reason	New	Iteration	VVS - Black box testiranje

Repro Steps

Opis: Filteri za filtriranje proizvoda (po boji, veličini ili cijeni) ne funkcionišu ispravno. Nakon što korisnik odabere određene opcije, stranica ne ažurira rezultate ili se prikazuju proizvodi koji ne odgovaraju odabranim kriterijima.

Koraci za reprodukciju:

1. Otvorite bilo koju kategoriju proizvoda.
2. Odaberite filter za boju ili veličinu.
3. Provjerite rezultate.
   Očekivani rezultat: Stranica treba prikazivati samo proizvode koji odgovaraju postavljenim filterima.
   Stvarni rezultat: Stranica prikaže proizvode koji ne odgovaraju filterima.



Planning

Resolved Reason

Story Points

Priority
2

Severity
3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

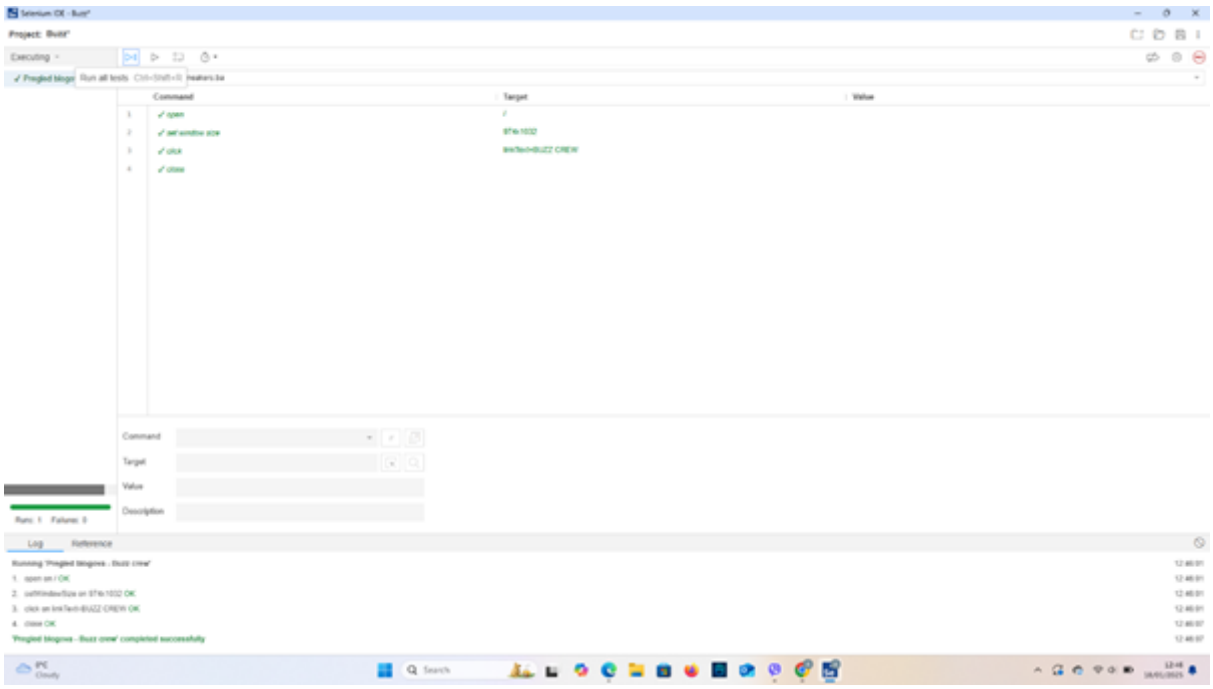
Completed

Zadatak 2:

a) Pregled blogova - Buzz crew

Selenium IDE

Uspijesno ucitavanje linka



NUnit Selenium

HomePage.cs

PregledprodavnicaTest.cs* | BuzzCrewTest.cs* | HomePage.cs* | WebDriverSingleton.cs

TestProject1 | HomePage

```
using OpenQA.Selenium;

3 references
public class HomePage
{
    private IWebDriver driver;

    1 reference
    public HomePage(IWebDriver driver)
    {
        this.driver = driver;
    }

    1 reference
    private IWebElement BuzzCrewLink => driver.FindElement(By.LinkText("BUZZ CREW"));

    1 reference | 1/1 passing
    public void Open()
    {
        driver.Navigate().GoToUrl("https://www.buzzsneakers.ba/");
    }

    1 reference | 1/1 passing
    public void ClickBuzzCrew()
    {
        int attempts = 0;
        while (attempts < 3)
        {
            try
            {
                BuzzCrewLink.Click();
                return;
            }
            catch (ElementClickInterceptedException)
            {
                attempts++;
                System.Threading.Thread.Sleep(1000);
            }
        }
    }

    1 reference | 1/1 passing
    public bool IsBuzzCrewPageDisplayed()
    {
        return driver.PageSource.Contains("BUZZ CREW");
    }
}
```

83 % | No issues found

Output

WebDriverSingleton.cs

```
BuzzCrewTest.cs    HomePage.cs    WebDriverSingleton.cs
TestProject1                                  WebDriverSingleton

using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;

3 references
public class WebDriverSingleton
{
    private static IWebDriver driver;

    0 references
    private WebDriverSingleton() { }

    1 reference
    public static IWebDriver GetDriver()
    {
        if (driver == null)
        {
            driver = new ChromeDriver();
            driver.Manage().Window.Maximize();
        }
        return driver;
    }

    1 reference
    public static void QuitDriver()
    {
        if (driver != null)
        {
            driver.Quit();
            driver.Dispose();
            driver = null;
        }
    }
}
```

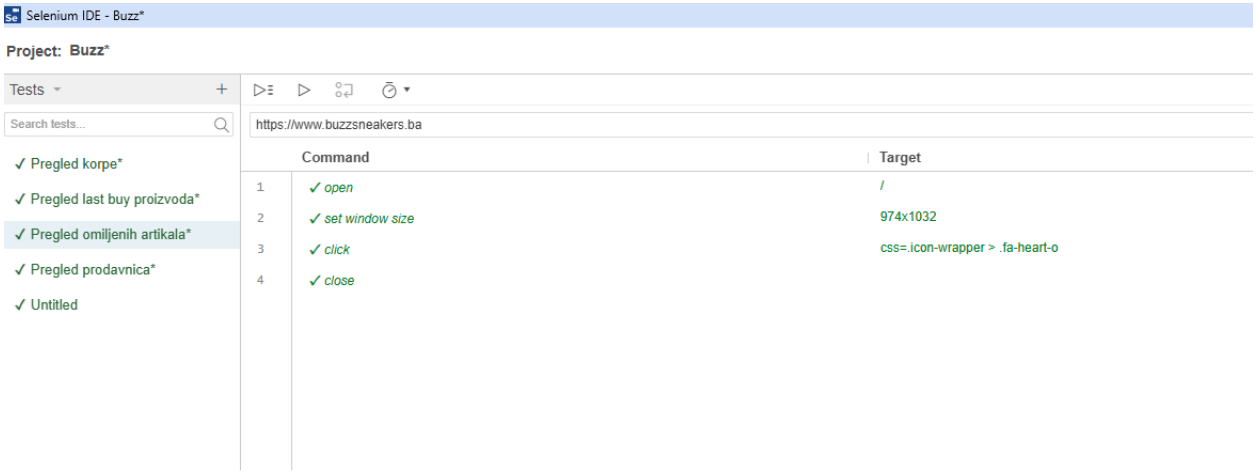
BuzzCrewTest.cs

```
TestProject1                                   BuzzCrewTest                                   Test

using NUnit.Framework;
using OpenQA.Selenium;

[TestFixture]
0 references
public class BuzzCrewTest
{
    private HomePage homePage;

    [SetUp]
    0 references
    public void SetUp()
    {
        homePage = new HomePage(WebDriverSingleton.GetDriver());
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.QuitDriver();
    }

    [Test]
    0 references
    public void TestBuzzCrewNavigation()
    {
        homePage.Open();
        homePage.ClickBuzzCrew();

        Assert.IsTrue(homePage.IsBuzzCrewPageDisplayed(), "Navigation to Buzz Crew page failed.");
    }
}

110 %    No issues found
```

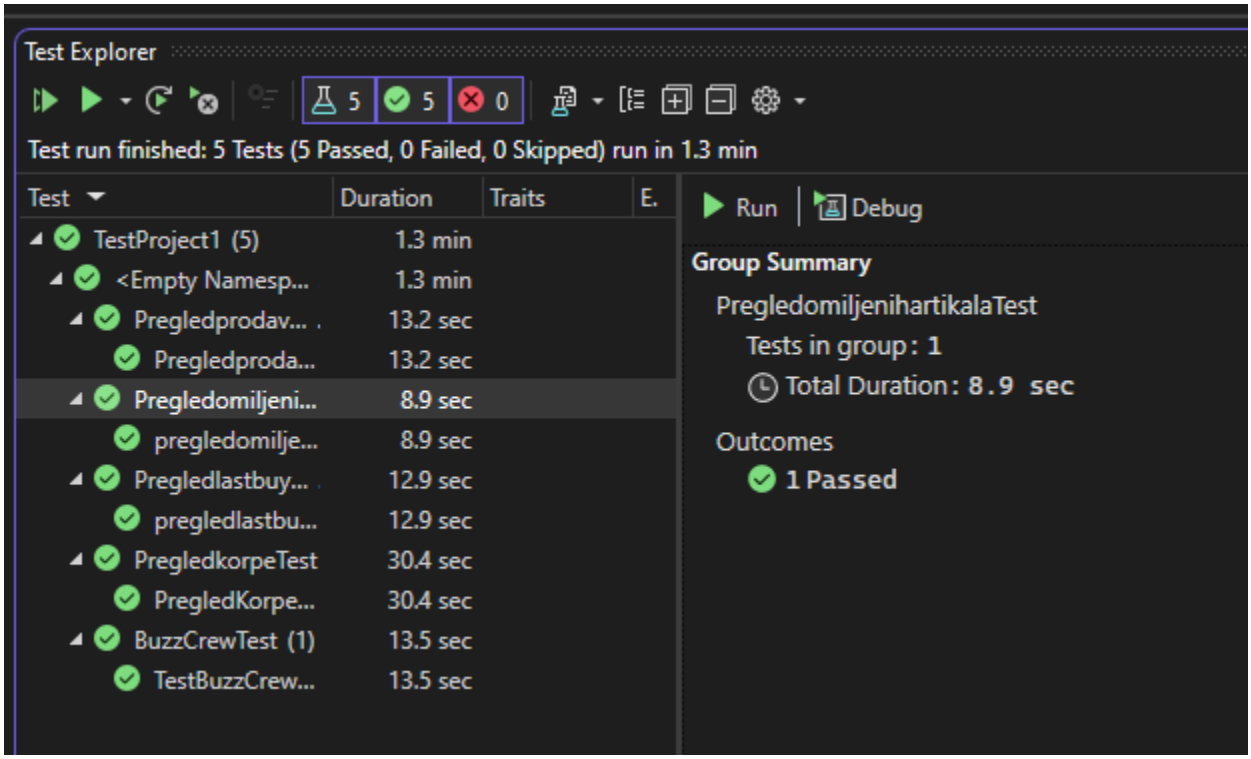
```
Test Explorer
1  1  0                                                    Search (Ctrl+I)
Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 11.8 sec        0 Warnings   0 Errors

Test                    Duration   Traits   Error Message
TestProject1 (1)        11.5 sec
<Empty Namesp...        11.5 sec
BuzzCrewTest (1)        11.5 sec
TestBuzzCrew...         11.5 sec

Run   Debug
Group Summary
  TestProject1
    Tests in group: 1
    Total Duration: 11.5 sec
  Outcomes
    1 Passed
```

b) Pregled omiljenih artikala

Selenium IDE



NUnit Selenium



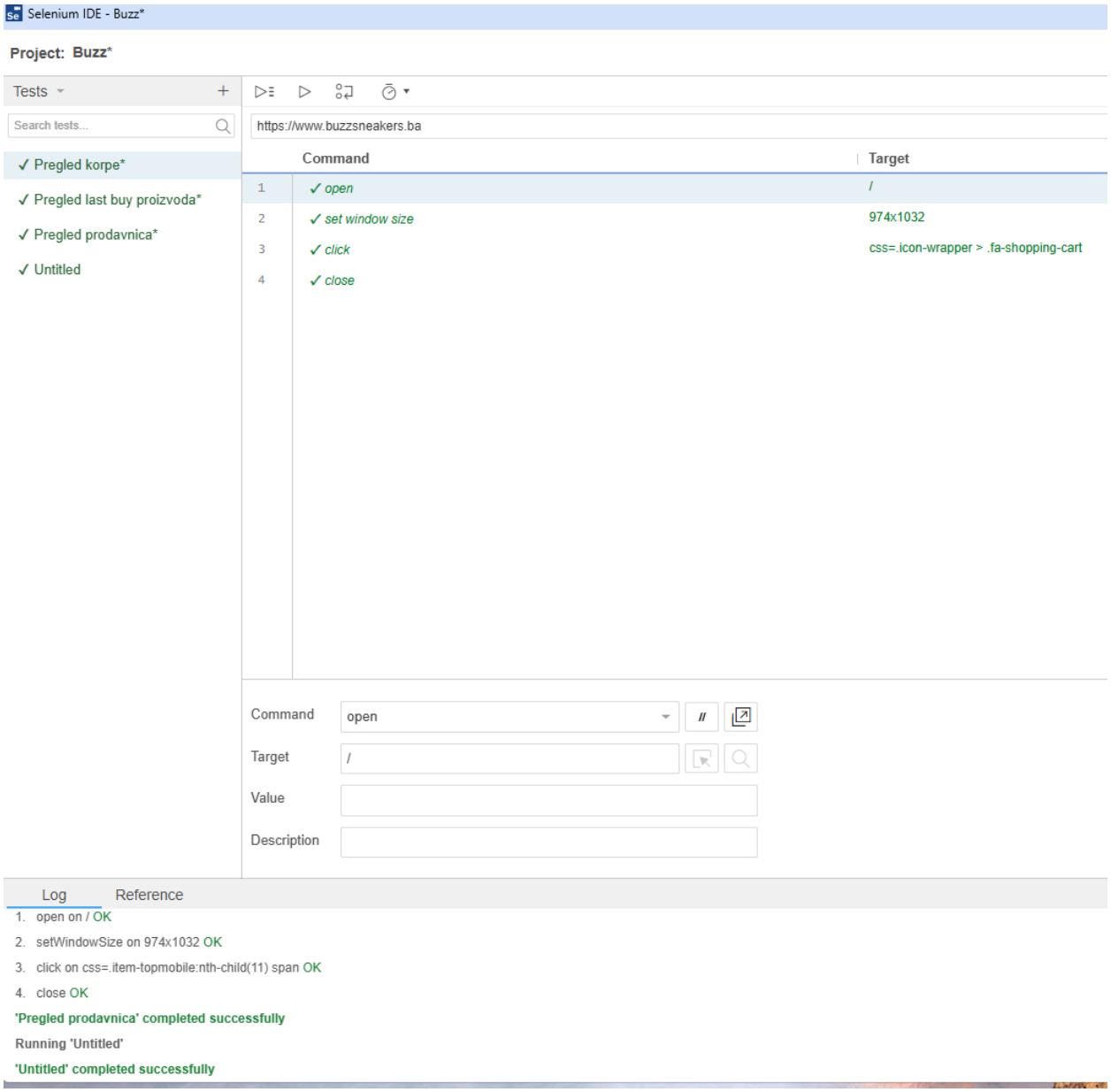
Pregledomilje...rtikalaTest.cs* | PregledprodavnicaTest.cs | PregledlastbuyproizvodaTest.cs | PregledkorpeTe

TestProject1 | PregledomiljenihartikalaTest

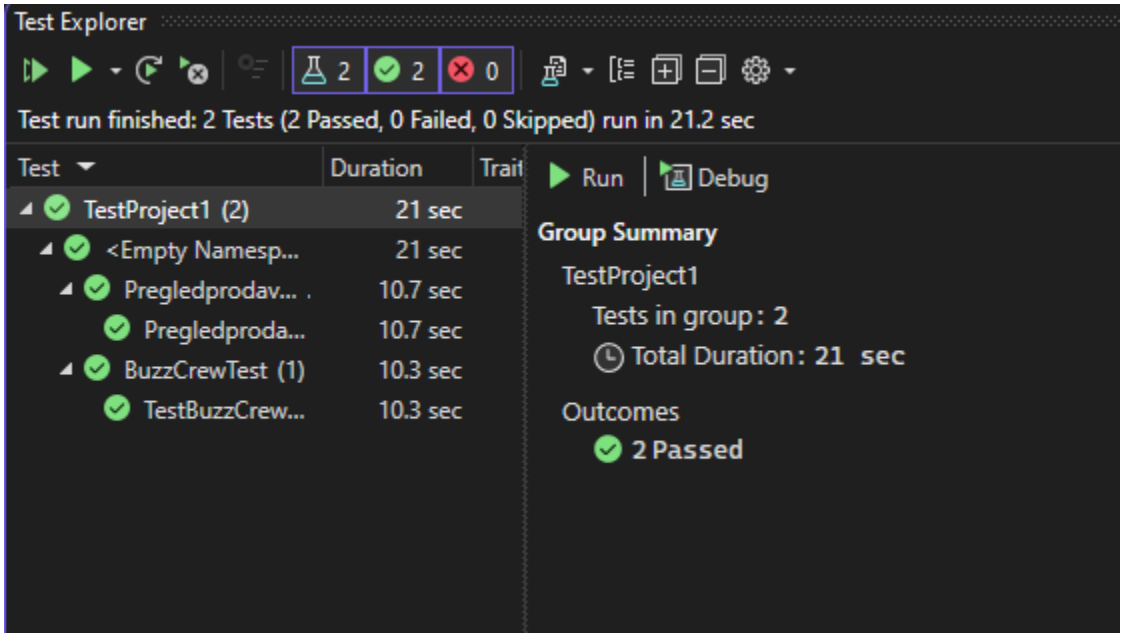
```
// Generated by Selenium IDE
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Threading;
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;
using NUnit.Framework;
using OpenQA.Selenium;

[TestFixture]
0 references
public class PregledomiljenihartikalaTest
{
    private IWebDriver driver;
    private HomePage homePage;

    [SetUp]
    0 references
    public void SetUp()
    {
        driver = WebDriverSingleton.GetDriver();
        homePage = new HomePage(driver);
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.QuitDriver();
    }

    [Test]
    0 references
    public void pregledomiljenihartikala()
    {

        homePage.Open();

        driver.FindElement(By.CssSelector(".icon-wrapper > .fa-heart-o")).Click();

        driver.Close();
    }
}
```

c) Pregled prodavnica

Selenium IDE



NUnit Selenium

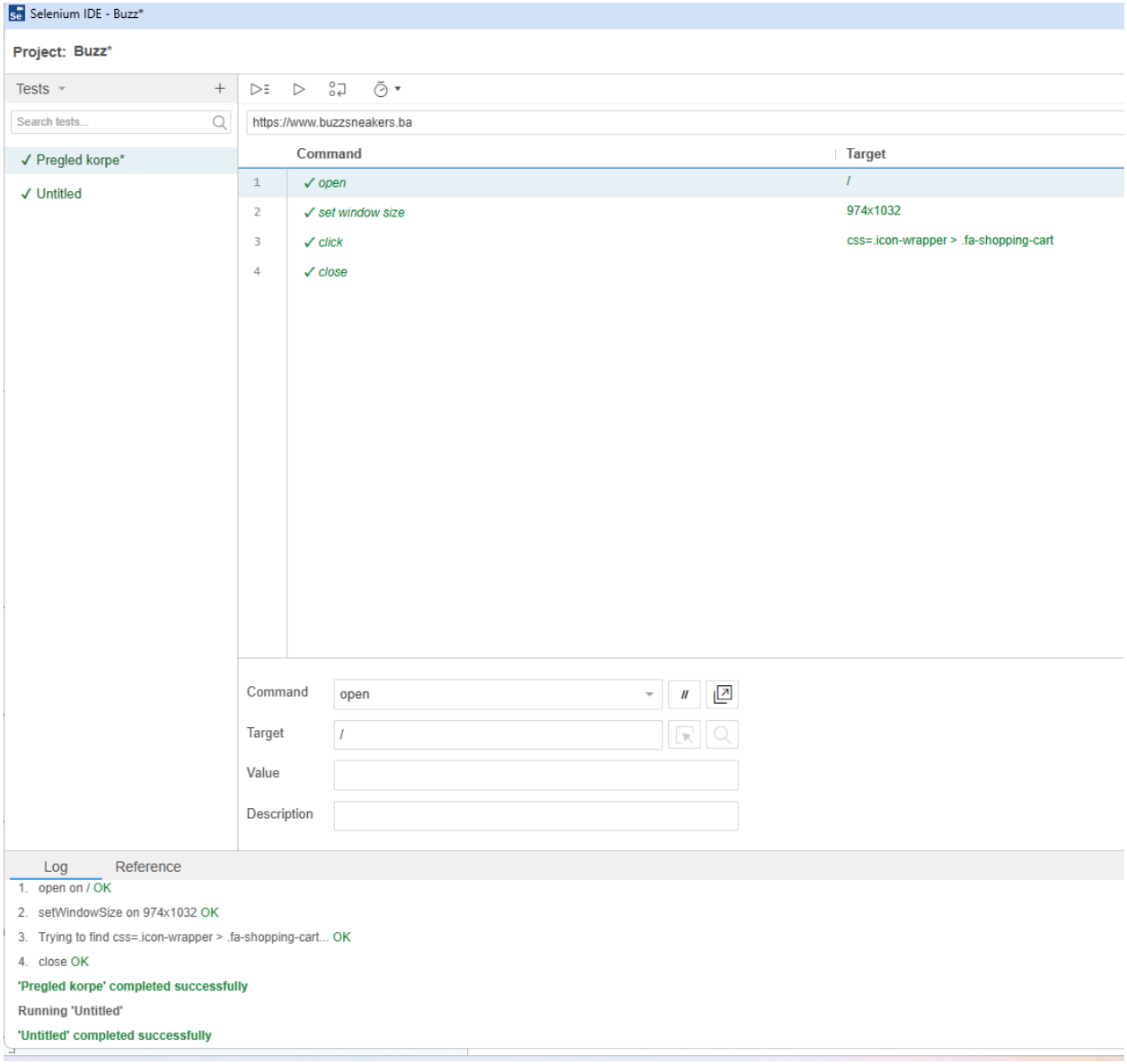


PregledprodavnicaTest.cs

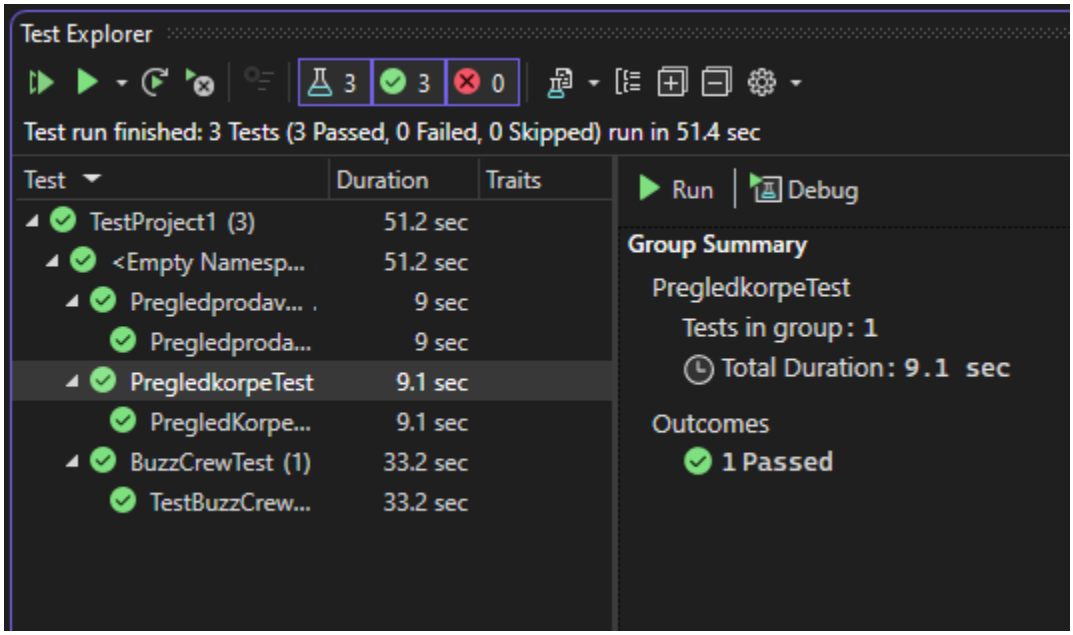
```
PregledprodavnicaTest.cs*   Pregledlastbu...oizvodaTest.cs*   PregledkorpeTest.cs*   BuzzCrewTest.cs   HomePa
TestProject1                                                   PregledprodavnicaTest

// Generated by Selenium IDE
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Threading;
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;

using NUnit.Framework;

[TestFixture]
0 references
public class PregledprodavnicaTest
{
    private IWebDriver driver;
    private HomePage homePage;

    [SetUp]
    0 references
    public void SetUp()
    {

        driver = WebDriverSingleton.GetDriver();
        homePage = new HomePage(driver);
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.QuitDriver();
    }

    [Test]
    | 0 references
    public void Pregledprodavnica()
    {

        homePage.Open();
        homePage.ClickBuzzCrew();
        Assert.IsTrue(homePage.IsBuzzCrewPageDisplayed(), "The 'BUZZ CREW' page is not displayed.");
    }
}
```

d) Pregled korpe

Selenium IDE



NUnit Selenium



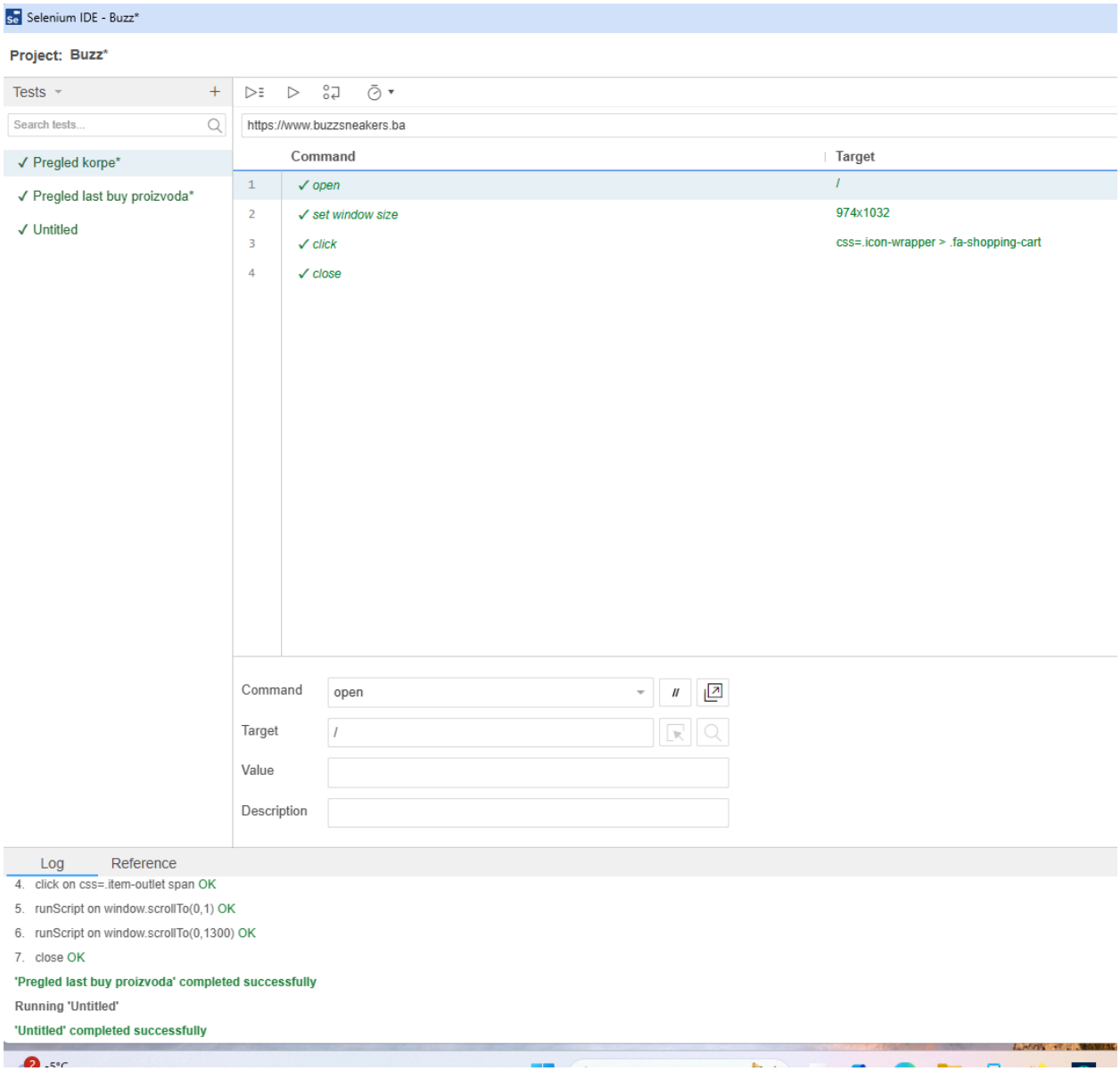
PregledkorpeTest.cs* | BuzzCrewTest.cs | HomePage.cs | WebDriverSingleton.cs

TestProject1 | PregledkorpeTest

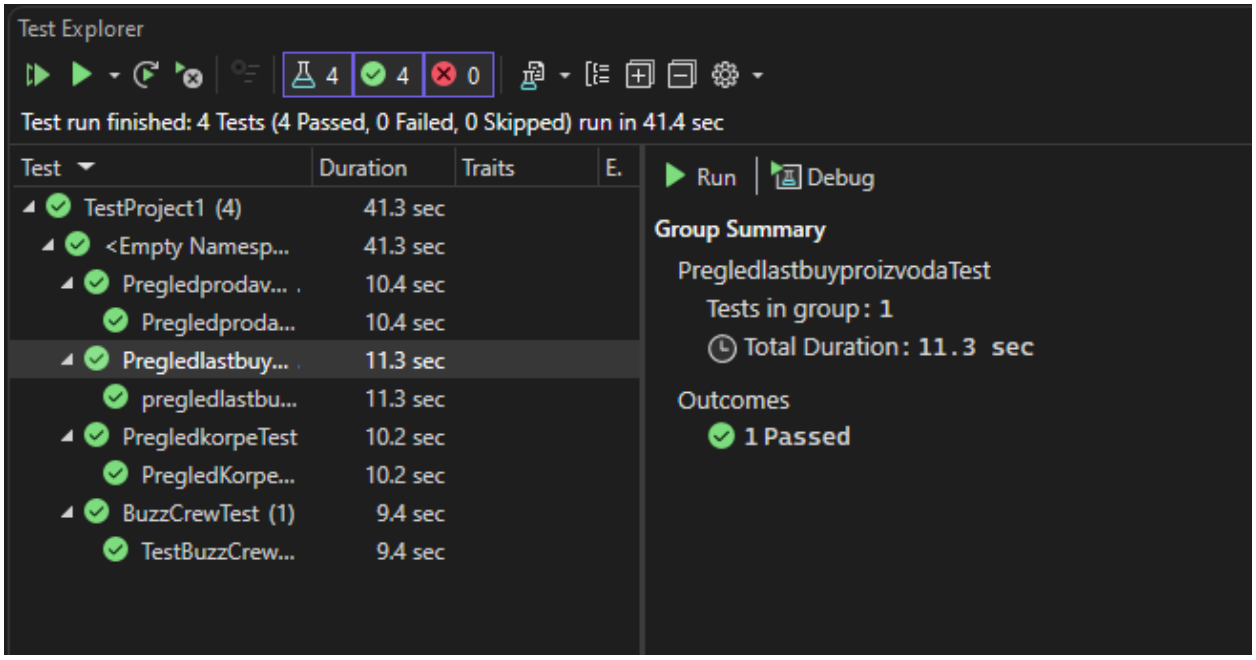
```
// Generated by Selenium IDE
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Threading;
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;
using NUnit.Framework;
using OpenQA.Selenium;
using System;

[TestFixture]
0 references
public class PregledkorpeTest
{
    private IWebDriver driver;
    private HomePage homePage;


    [SetUp]
    0 references
    public void SetUp()
    {
        driver = WebDriverSingleton.GetDriver();
        homePage = new HomePage(driver);
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.QuitDriver();
    }

    [Test]
    | 0 references
    public void PregledKorpeTest()
    {

        homePage.Open();


        driver.FindElement(By.CssSelector(".icon-wrapper > .fa-shopping-cart")).Click();

    }
}
```

e) Pregled last buy proizvoda

Selenium IDE



NUnit Selenium



PregledprodavnicaTest.cs | Pregledlastbu...oizvodaTest.cs | PregledkorpeTest.cs | BuzzCrewTest.cs | HomePage.cs

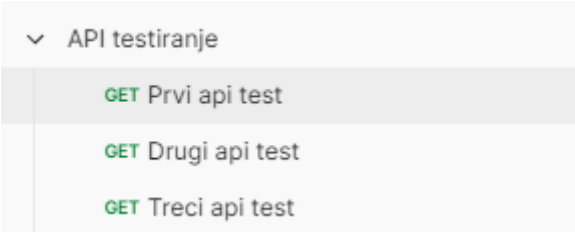
TestProject1 | PregledlastbuyproizvodaTest

```
// Generated by Selenium IDE
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Threading;
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Firefox;
using OpenQA.Selenium.Remote;
using OpenQA.Selenium.Support.UI;
using OpenQA.Selenium.Interactions;
using NUnit.Framework;
using NUnit.Framework;
using System.Threading;

[TestFixture]
0 references
public class PregledlastbuyproizvodaTest
{
    private IWebDriver driver;
    private HomePage homePage;

    [SetUp]
    0 references
    public void SetUp()
    {
        driver = WebDriverSingleton.GetDriver();
        homePage = new HomePage(driver);
    }

    [TearDown]
    0 references
    public void TearDown()
    {
        WebDriverSingleton.QuitDriver();
    }

    [Test]
    | 0 references
    public void pregledlastbuyproizvoda()
    {
        homePage.Open();
        homePage.ClickBuzzCrew();
        Thread.Sleep(2000);

        bool isBuzzCrewPageDisplayed = homePage.IsBuzzCrewPageDisplayed();
        Assert.IsTrue(isBuzzCrewPageDisplayed, "The BUZZ CREW page was not displayed successfully.");
    }
}
```

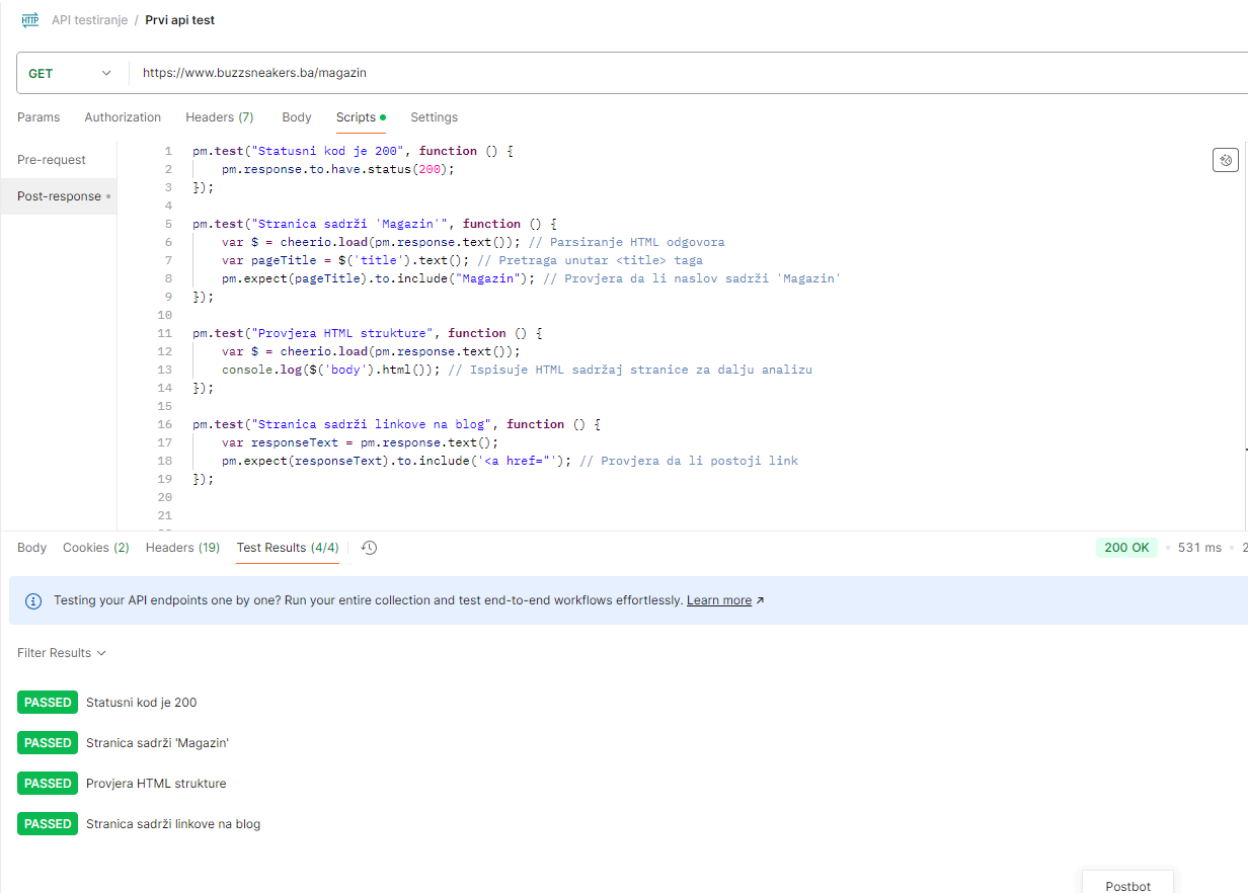
Zadatak 3.

API testovi u Postman alatu

Stranica ne daje pristup podacima u JSON formatu, pa su testovi izvršeni analizom parsiranog HTML sadržaja.



Test 1 : Pregled blogova - Buzz crew



Test 2 : Pregled prodavnica

API testiranje / **Drugi api test**

GET https://www.buzzsneakers.ba/radnje

Params Authorization Headers (7) Body Scripts Settings

Pre-request

Post-response

```
pm.test("Statusni kod je 200", function () {
    pm.response.to.have.status(200);
});

pm.test("Odgovor sadrži listu prodavnica", function () {
    var responseBody = pm.response.text();
    pm.expect(responseBody).to.include("shop");
});

pm.test("Odgovor sadrži omiljene stavke", function () {
    var responseBody = pm.response.text();
    pm.expect(responseBody).to.include("favorite");
});

pm.test("Odgovor je u HTML formatu", function () {
    pm.expect(pm.response.headers.get('Content-Type')).to.include('text/html');
});
```

Body Cookies (2) Headers (19) Test Results (4/4) 200 OK 889 ms

Testing your API endpoints one by one? Run your entire collection and test end-to-end workflows effortlessly. Learn more

Filter Results

PASSED Statusni kod je 200

PASSED Odgovor sadrži listu prodavnica

PASSED Odgovor sadrži omiljene stavke

PASSED Odgovor je u HTML formatu

Test 3 : Pregleda last buy proizivoda

API testiranje / **Treci api test**

GET https://www.buzzsneakers.ba/proizvodi/last_buy

Params Authorization Headers (7) Body Scripts Settings

Pre-request

Post-response

```
// 1. Validacija statusnog koda (200 OK)
pm.test("Statusni kod je 200", function () {
    pm.response.to.have.status(200);
});

// 2. Validacija Content-Type zaglavlja
pm.test("Zaglavlje Content-Type je ispravno", function () {
    pm.expect(pm.response.headers.has("Content-Type")).to.be.true;
    const contentType = pm.response.headers.get("Content-Type");
    pm.expect(contentType).to.satisfy((type) => type.includes("json") || type.includes("html"));
});

// 3. Provjera tipa odgovora i validnosti
pm.test("Odgovor je HTML ili validan JSON", function () {
    const contentType = pm.response.headers.get("Content-Type");
    const responseBody = pm.response.text().toLowerCase();

    if (contentType.includes("html")) {
        // Provera za prisustvo ključnih HTML oznaka
        pm.expect(responseBody).to.satisfy((body) => body.includes("<!doctype html>") || body.includes("<html>"),
            "Očekivano je da HTML sadrži '<!doctype html>' ili '<html>'.");
    } else if (contentType.includes("json")) {
        // Provera validnosti JSON-a
        const jsonData = pm.response.json();
        pm.expect(jsonData).to.be.an("object", "JSON odgovor treba da bude validan objekat.");
    } else {
```

Body Cookies (2) Headers (20) Test Results (4/4) 200 OK

Testing your API endpoints one by one? Run your entire collection and test end-to-end workflows effortlessly. Learn more

Filter Results

PASSED Statusni kod je 200

PASSED Zaglavlje Content-Type je ispravno

PASSED Odgovor je HTML ili validan JSON

PASSED Proizvodi imaju potrebna svojstva (ako je JSON)

Postbot Ctrl Alt P

Postbot

API testiranje / **Treci api test**

GET https://www.buzzsneakers.ba/proizvodi/last_buy

Params Authorization Headers (7) Body Scripts Settings

Pre-request

Post-response

```
        // Provera validnosti JSON-a
        const jsonData = pm.response.json();
        pm.expect(jsonData).to.be.an("object", "JSON odgovor treba da bude validan objekat.");
    } else {
        pm.fail("Odgovor nije ni HTML ni validan JSON.");
    }
});

// 4. Validacija strukture proizvoda (ako je JSON)
pm.test("Proizvodi imaju potrebna svojstva (ako je JSON)", function () {
    const contentType = pm.response.headers.get("Content-Type");
    if (contentType.includes("json")) {
        const response = pm.response.json();
        if (response.products && Array.isArray(response.products)) {
            response.products.forEach(product => {
                pm.expect(product).to.have.property("id").that.is.a("number", "Svojstvo 'id' treba da bude broj.");
                pm.expect(product).to.have.property("name").that.is.a("string", "Svojstvo 'name' treba da bude string.");
                pm.expect(product).to.have.property("price").that.is.a("number", "Svojstvo 'price' treba da bude broj.");
                pm.expect(product).to.have.property("image").that.is.a("string", "Svojstvo 'image' treba da bude string.");
            });
        } else {
            pm.fail("Niz proizvoda je nepostojeći ili neispravan.");
        }
    }
});
```

Body Cookies (2) Headers (20) Test Results (4/4) 200 OK 1.81 s

Testing your API endpoints one by one? Run your entire collection and test end-to-end workflows effortlessly. Learn more

Filter Results

PASSED Statusni kod je 200

PASSED Zaglavlje Content-Type je ispravno

PASSED Odgovor je HTML ili validan JSON

PASSED Proizvodi imaju potrebna svojstva (ako je JSON)

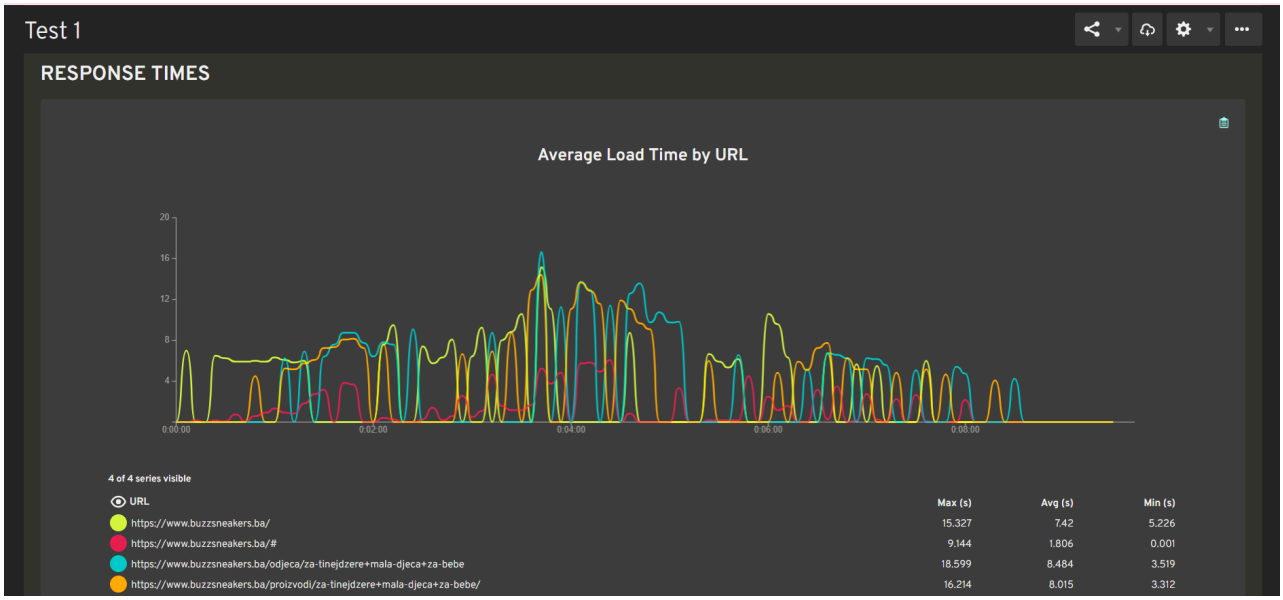
Postbot Ctrl Alt P

Postbot Runner

Grupni zadatak:

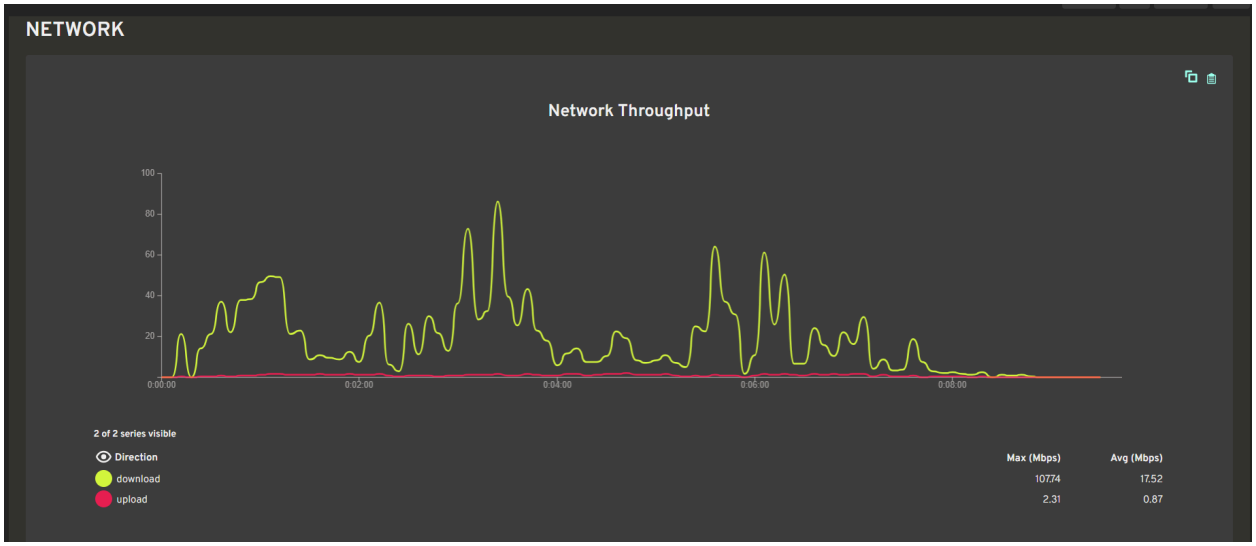
Zadatak 4:
Loadster

Analiza grafova
Graf 1:



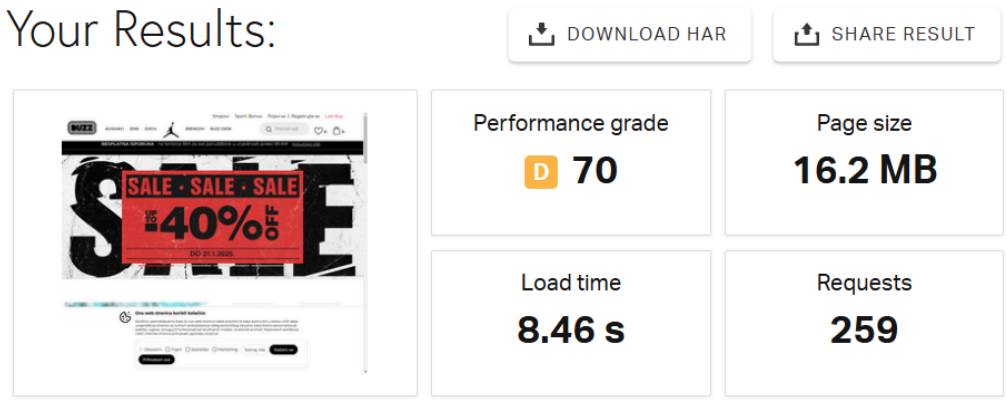
Na osnovu ovih podataka vidimo da je prosječno vrijeme učitavanja početne stranice oko 7 i po sekundi, što je jako sporo. Ostali URL-ovi koji su korišteni u testnom scenariju se također vrlo sporo učitavaju. Ovi podaci nam govore da skalabilnost stranice nije na zadovoljavajućem nivou i u slučaju da veliki broj korisnika istovremeno koristi stranicu, performanse se značajno pogoršavaju. Glavna pretpostavka je da na stranici postoji previše bespotrebnih skripti, slika i različitih sadržaja koji se u datom trenutku i ne koriste, a negativno utiču na brzinu izvršenja pojedinih akcija na stranici. Iz tog razloga bi se trebala posvetiti posebna pažnja optimizaciji korištenih skripti, stilova i uraditi optimizaciju sadržaja poput kompresije slika i slično.

Graf 2:



Iz ovog grafika očitavamo propusnost mreže pri povećanju zahtjeva. Vidimo da u trenucima kada broj korisnika dostiže svoj maksimum dolazi do naglog pada u propusnosti mreže. Ovo nam govori da performanse mreže nisu tako dobre, jer je poželjno da se propusnost mreže povećava sa brojem korisnika.

Pingdom
Rezultati testiranja:



Improve page performance

GRADE		SUGGESTION
F	0	Make fewer HTTP requests
F	0	Use cookie-free domains
F	0	Add Expires headers
E	55	Reduce DNS lookups
E	56	Compress components with gzip
A	100	Avoid empty src or href
A	100	Put JavaScript at bottom

Preporučene akcije za poboljšanje performansi stranice:

Smanjiti broj HTTP zahtjeva

Smanjenje broja komponenti na stranici smanjuje broj HTTP zahtjeva potrebnih za prikazivanje stranice, što rezultira bržim učitavanjem stranice. Neki načini za smanjenje broja komponenti su kombirniranje više odvojenih skripti u jednu skriptu, kombirniranje odvojenih CSS fajlova u jedan fajl i korištenje lazy loading za slike.

Koristiti domene bez kolačića

Kada pretraživač zatraži statičnu sliku i pošalje kolačiće sa zahtjevom, server ignorira kolačiće. Ovi kolačići stvaraju nepotreban mrežni promet. Rješenje je da se statičke komponente traže sa zahtjevima bez kolačića, tako što se kreira poddomena i tamo se smještaju.

Dodati Expires zaglavlje

Korištenjem Expires zaglavlja komponente stranice postaju keširane, pa se smanjuje broj nepotrebnih HTTP zahtjeva pri narednim pregledima stranica.

Smanjiti DNS pretraživanja

Pretraživač ne može preuzeti ništa sa hosta dok se traženje IP adrese putem DNS-a ne završi, što usporava izvršenje. Zbog toga je potrebno smanjiti broj DNS pretraživanja.

Omogućiti gzip kompresiju

Kompresija smanjuje vrijeme odgovora smanjenjem veličine HTTP odgovora. Gzip je trenutno najpopularnija i najefikasnija metoda kompresije koja generalno smanjuje veličinu odgovora za oko 70%. Potrebno je konfigurisati server da kompresuje odgovore koristeći gzip.

Response codes

RESPONSE CODE	RESPONSES
200 OK	259

Content size by content type

CONTENT TYPE	PERCENT	SIZE
Image	85.10%	13.8 MB
Script	9.61%	1.6 MB
CSS	2.02%	326.7 KB
Font	1.93%	312.0 KB
HTML	0.94%	152.7 KB
Error	0.21%	34.1 KB
XHR	0.18%	29.7 KB
Total	100.00%	16.2 MB

Requests by content type

CONTENT TYPE	PERCENT	REQUESTS
Image	49.01%	124
CSS	21.74%	55
Script	20.55%	52
Font	3.95%	10
XHR	1.98%	5
HTML	1.58%	4
Error	1.19%	3
Total	100.00%	253

Najveći dio sadržaja zauzimaju slike, pa bi se trebala razmotriti optimizacija slika korištenjem drugog formata ili smanjenjem rezolucije. Pored toga i skripte zauzimaju značajan dio prostora, pa je potrebna i njihova optimizacija.