

Za testiranje sam koristio <https://automationintesting.online/> jer sam na ovoj aplikaciji mogao testirati i Web UI i ima dobro dokumentovan API na: <https://restful-booker.herokuapp.com/apidoc/index.html>

## Zadatak 1. Testni slučajevi:

TEST CASE 5

5 Ispuni i pošalji kontakt formu sa nevalidnim podacima

Eldar Babić

0 comments

Add tag

Save

Follow

Settings

Refresh

More

Updated by Eldar Babić: Saturday

State: Design

Reason: New

Area: VVS projektni zadatak

Iteration: VVS projektni zadatak

Steps

Deployment

Development

Related Work

Status

Parameter values

Steps	Action	Expected result	Attachments
1.	Otvori stranicu	Stranica učitana	
2.	Unesi ime: Test Test	Polje "Name" popunjeno	
3.	Unesi email: test@test.com	Polje "Email" popunjeno	
4.	Unesi broj telefona: abcdefghijklm	Polje "Phone" popunjeno	
5.	Unesi subject: Testni subject	Polje "Subject" popunjeno	
6.	Unesi poruku: Ovo je testna poruka	Polje "Message" popunjeno	
7.	Klikni submit dugme:	Prikazana poruka o neuspješnom slanju	

Click or type here to add a step

TEST CASE 7

7 Ispuni i napravi rezervaciju sa validnim podacima

Eldar Babić

0 comments

Add tag

Save

Follow

Settings

Refresh

More

Updated by Eldar Babić: Just now

State: Design

Reason: New

Area: VVS projektni zadatak

Iteration: VVS projektni zadatak

Steps

Deployment

Development

Related Work

Status

Click or type here to add a step

TEST CASE 8

8 Ispuni i napravi rezervaciju sa nevalidnim podacima

Eldar Babić

0 comments Add tag

Save Follow Settings Refresh More

State: Design Reason: New Area: VVS projektni zadatak Iteration: VVS projektni zadatak

Updated by Eldar Babić Saturday

Steps Summary Associated Automation History Attachments

Steps

Steps	Action	Expected result	Attachments
1.	Otvori stranicu	Stranica učitana	
2.	Unesi ime: Test	Polje "Firstname" popunjeno	
3.	Unesi prezime: Test	Polje "Lastname" popunjeno	
4.	Unesi email: test@test.com	Polje "email" popunjeno	
5.	Unesi broj telefona: aaabbbccddd	Polje "Phone" popunjeno	
6.	Odaberi datum za rezervaciju	Datumi odabrani na kalendaru	
7.	Klikni dugme book	Prikazana poruka o neuspješnoj rezervaciji	

Click or type here to add a step

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

+ Add link

Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

+ Add link

Add an existing work item as a parent

Status

Priority

2

Automation status

Not Automated

Recently updated Back to Work Items

7 of 7 Up Down

TEST CASE 3

3 Ispuni i pošalji kontakt formu sa validnim podacima

Eldar Babić

0 comments Add tag

Save Follow Settings Refresh More

State: Design Reason: New Area: VVS projektni zadatak Iteration: VVS projektni zadatak

Updated by Eldar Babić Saturday

Steps Summary Associated Automation History Attachments

Steps

Steps	Action	Expected result	Attachments
1.	Otvori stranicu	Stranica učitana	
2.	Unesi ime: Test Test	Polje "Name" popunjeno	
3.	Unesi email: test@test.com	Polje "Email" popunjeno	
4.	Unesi broj telefona: 061-123-456	Polje "Phone" popunjeno	
5.	Unesi subject: Testni subject	Polje "Subject" popunjeno	
6.	Unesi poruku: Ovo je testna poruka	Polje "Message" popunjeno	
7.	Klikni submit dugme	Prikazana poruka o uspješnom slanju	

Click or type here to add a step

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

+ Add link

Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

+ Add link

Add an existing work item as a parent

Status

Priority

2

Automation status

Not Automated

Parameter values

6. Pristupi admin panelu

Eldar Babić

0 comments Add tag

Save Follow Refresh Help More

Status: Design Area: VVS projektni zadatak Reason: New Iteration: VVS projektni zadatak

Updated by Eldar Babić: Saturday

Steps Summary Associated Automation History Attachments

Steps

Steps	Action	Expected result	Attachments
1.	Otvori stranicu	Stranica učitana	
2.	Lociraj i pritisni dugme 'Admin panel'	Otvoren login za admina	
3.	Unesi username: admin	Polje "admin" popunjeno	
4.	Unesi password: password	Polje "password" popunjeno	
5.	Pritisni login	Otvoren admin panel	

Click or type here to add a step

Deployment

To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting

Development

+ Add link

Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

+ Add link

Add an existing work item as a parent

Status

Priority

2

Automation status

Not Automated

Evidentirani bugovi

Recently updated

Back to Work Items

BUG 13

13 Sistem za rezervaciju ne provjerava tip podataka u polju "Phone"

Unassigned0 commentsAdd tag

StateNew

ReasonNew

AreaVVS projektni zadatak

IterationVVS projektni zadatak

Repro Steps

Planning

1. Unesite alfabetsku ili alfanumeričku vrijednost dužine 11 do 21 karaktera u polje phone.

2. Kliknite submit

System Info

Click to add System Info

Discussion

EB

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

Resolved Reason

Story Points

Priority1

Severity3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

Completed

Recently updated

Back to Work Items

BUG 9

9 Kontakt forma ne provjerava tip podatka u polju "Phone"

Unassigned0 commentsAdd tag

StateNew

ReasonNew

AreaVVS projektni zadatak

IterationVVS projektni zadatak

Repro Steps

Planning

1. Unesite alfabetsku ili alfanumeričku vrijednost dužine 11 do 21 karaktera u polje phone.

2. Kliknite submit

System Info

Click to add System Info

Discussion

EB

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

Resolved Reason

Story Points

Priority1

Severity3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

Completed

	Order	Work Item Type	Title	State	Story ...	Value Area	Iteration Path	Tags
	1	Bug	Kontakt forma ne provjerava tip podatka u polju "Phone"	New		Business	VVS projektni zadatak	
+	2	Bug	Sistem za rezervaciju ne provjerava tip podataka u polju...	New		Business	VVS projektni zadatak	

Automatizacija pomoću Selenium IDE:

Selenium IDE - VVSProjekat2\*

Project: VVSProjekat2\*

Search tests...

https://automationtesting.online

	Command	Target	Value
✓ TC3*			
✗ TC5*			
✓ TC6*			
1	open	/	
2	set window size	974x1040	
3	click	id=name	
4	type	id=name	Test Test
5	click	id=email	
6	type	id=email	test@test.com
7	click	id=phone	
8	type	id=phone	061-123-456
9	click	id=subject	
10	type	id=subject	Testni subject
11	click	id=description	
12	type	id=description	Ovo je testna poruka
13	click	id=submitContact	
14	click	css=div:nth-child(1) > p:nth-child(3)	
15	verify element present	css=div:nth-child(1) > h2	

Command: open

Target: /

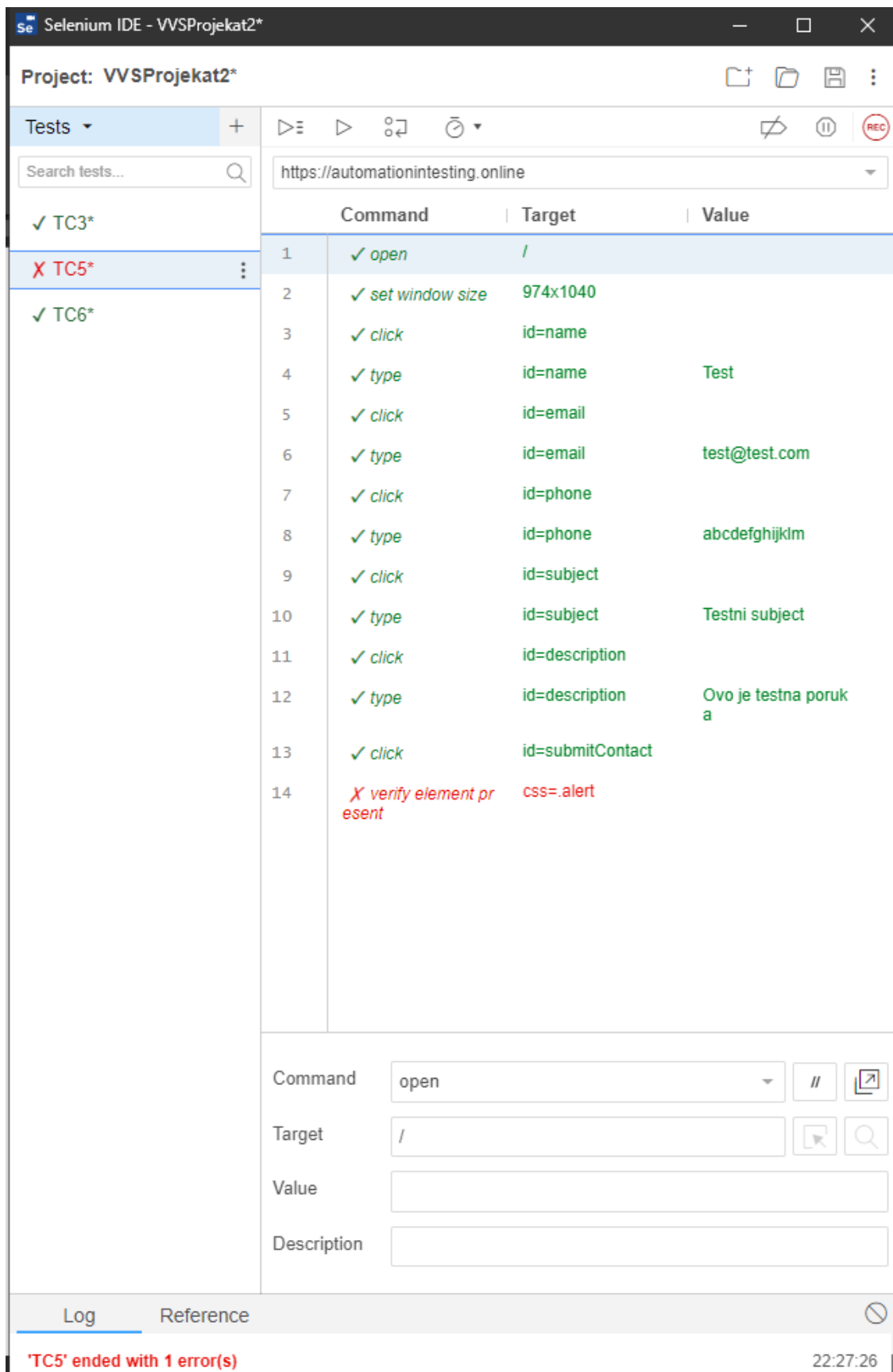
Value:

Description:

Log Reference

'TC5' ended with 1 error(s)

22:27:26



Selenium IDE - VVSProjekat2\*

Project: VVSProjekat2\*

Tests

Search tests...

✓ TC3\*

✗ TC5\*

✓ TC6\*

https://automationintesting.online

	Command	Target	Value
1	open	/	
2	set window size	974x1040	
3	click	linkText=Admin panel	
4	type	id=username	admin
5	type	id=password	password
6	click	id=doLogin	
7	verify element present	id=reportLink	

Command

verify element present

//

Target

id=reportLink

Value

Description

Log

Reference

'TC5' ended with 1 error(s)

22:27:26



```

public void TC8()
{
    driver.Navigate().GoToUrl("https://automationintesting.online/");
    driver.Manage().Window.Size = new System.Drawing.Size(974, 1040);
    driver.FindElement(By.CssSelector(".btn:nth-child(5)")).Click();
    driver.FindElement(By.CssSelector("button:nth-child(3)")).Click();
    {
        var dragged = driver.FindElement(By.XPath("//button[text()='02']"));
        var dropped = driver.FindElement(By.XPath("//button[text()='16']"));
        Actions builder = new Actions(driver);
        builder.DragAndDrop(dragged, dropped).Perform();
    }
    Thread.Sleep(2000);
    driver.FindElement(By.Name("firstname")).Click();
    driver.FindElement(By.Name("firstname")).SendKeys("Test");
    driver.FindElement(By.Name("lastname")).SendKeys("Test");
    driver.FindElement(By.Name("email")).SendKeys("test@test.com");
    driver.FindElement(By.Name("phone")).SendKeys("aaabbbcccd");
    driver.FindElement(By.CssSelector(".btn:nth-child(6)")).Click();
    var successButton = driver.FindElement(By.CssSelector(".btn:nth-child(1)"));
    successButton.Click();
    Thread.Sleep(4000);
    var success = driver.FindElement(By.CssSelector(".alert"));
    Thread.Sleep(4000);
}

```

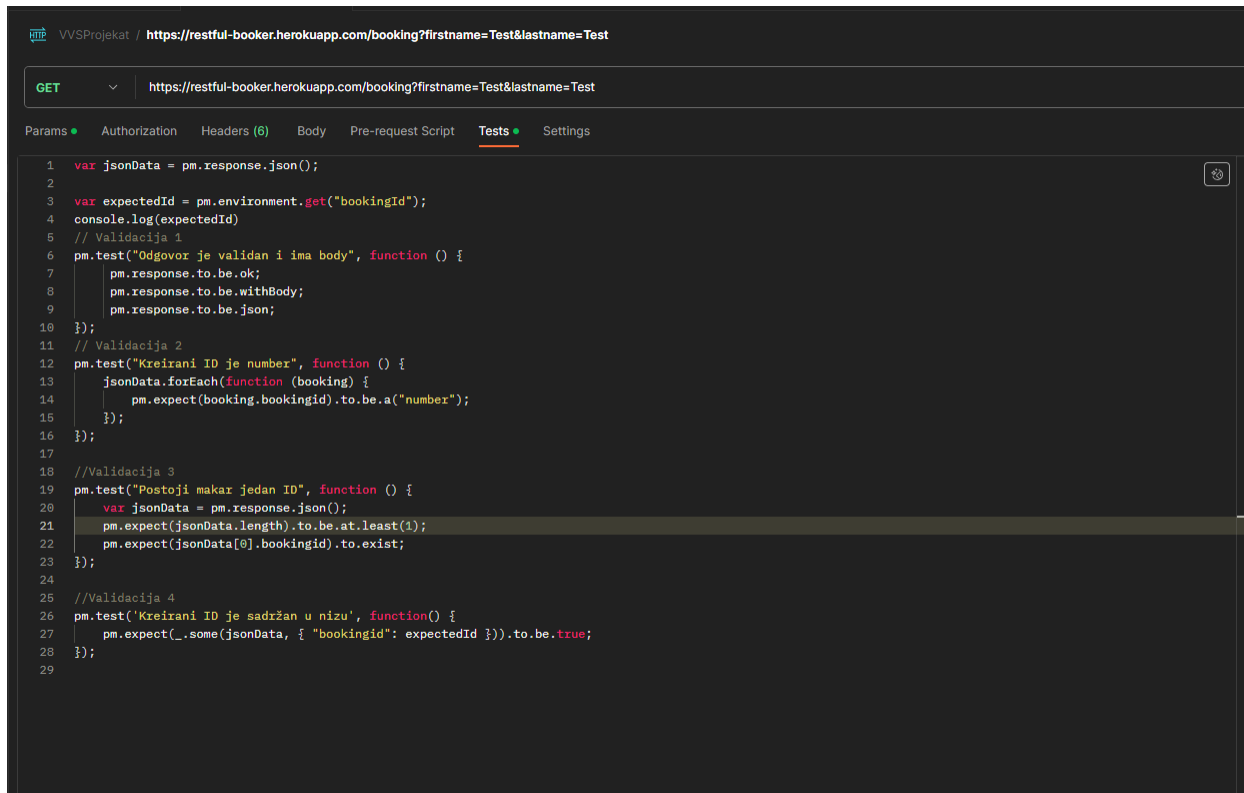
```

[Test]
| 0 references | Please sign-in to New Relic CodeStream to see Code Level Metrics
public void TC7()
{
    driver.Navigate().GoToUrl("https://automationintesting.online/");
    driver.Manage().Window.Size = new System.Drawing.Size(974, 1040);
    driver.FindElement(By.CssSelector(".btn:nth-child(5)")).Click();
    driver.FindElement(By.CssSelector("button:nth-child(3)")).Click();
    {
        var dragged = driver.FindElement(By.XPath("//button[text()='11']"));
        var dropped = driver.FindElement(By.XPath("//button[text()='25']"));
        Actions builder = new Actions(driver);
        builder.DragAndDrop(dragged, dropped).Perform();
    }
    Thread.Sleep(2000);
    driver.FindElement(By.Name("firstname")).Click();
    driver.FindElement(By.Name("firstname")).SendKeys("Test");
    driver.FindElement(By.Name("lastname")).SendKeys("Test");
    driver.FindElement(By.Name("email")).SendKeys("test@test.com");
    driver.FindElement(By.Name("phone")).SendKeys("061-123-456");
    driver.FindElement(By.CssSelector(".btn:nth-child(6)")).Click();
    var successButton = driver.FindElement(By.CssSelector(".btn:nth-child(1)"));
    successButton.Click();
    Thread.Sleep(4000);
    var success = driver.FindElement(By.XPath("//*[contains(text(), 'Booking Successful!')]"));
    Thread.Sleep(4000);
}

```

Test	Duration	Traits	Error Message
✖ VVSProjekat2 (2)	24.4 sec		
✖ <Empty Namespace> (2)	24.4 sec		
✖ ReservationTest (2)	24.4 sec		
✔ TC7	14.1 sec		
✖ TC8	10.4 sec		OpenQA.Selenium.NoSuchElementException : no such element: Unable to locate element: {"method":"css selector","selector..."}

Test 8 i treba da pada jer aplikacija nema validaciju za broj telefona. Trebao bi se pojaviti element sa selektorom .alert.



The screenshot shows a REST client interface with a GET request to `https://restful-booker.herokuapp.com/booking?firstname=Test&lastname=Test`. The 'Tests' tab is active, displaying a JavaScript test suite for the response. The tests are as follows:

```
1 var jsonData = pm.response.json();
2
3 var expectedId = pm.environment.get("bookingId");
4 console.log(expectedId)
5 // Validacija 1
6 pm.test("Odgovor je validan i ima body", function () {
7     pm.response.to.be.ok;
8     pm.response.to.be.withBody;
9     pm.response.to.be.json;
10 });
11 // Validacija 2
12 pm.test("Kreirani ID je number", function () {
13     jsonData.forEach(function (booking) {
14         pm.expect(booking.bookingid).to.be.a("number");
15     });
16 });
17
18 //Validacija 3
19 pm.test("Postoji makar jedan ID", function () {
20     var jsonData = pm.response.json();
21     pm.expect(jsonData.length).to.be.at.least(1);
22     pm.expect(jsonData[0].bookingid).to.exist;
23 });
24
25 //Validacija 4
26 pm.test('Kreirani ID je sadržan u nizu', function() {
27     pm.expect(_.some(jsonData, { "bookingid": expectedId })).to.be.true;
28 });
29
```

VVSProjekat / booking by id

GET https://restful-booker.herokuapp.com/booking/{{bookingId}}

Params Authorization Headers (6) Body Pre-request Script Tests Settings

```
1 var jsonData = pm.response.json();
2
3 // Očekivane vrijednosti
4 var očekivanoIme = "Test";
5 var očekivanoPrezime = "Test";
6 var očekivanaUkupnaCijena = 111;
7 var očekivanPlacenDepozit = true;
8 var očekivaniDatumDolaska = "2018-01-01";
9 var očekivaniDatumOdlaska = "2019-01-01";
10
11 // Validacija 1: Ime je tačno
12 pm.test('Ime je tačno', function() {
13     pm.expect(jsonData.firstname).to.eql(očekivanoIme);
14 });
15
16 // Validacija 2: Prezime je tačno
17 pm.test('Prezime je tačno', function() {
18     pm.expect(jsonData.lastname).to.eql(očekivanoPrezime);
19 });
20
21 // Validacija 3: Ukupna Cijena je tačna
22 pm.test('Ukupna Cijena je tačna', function() {
23     pm.expect(jsonData.totalprice).to.eql(očekivanaUkupnaCijena);
24 });
25
26 // Validacija 4: Status plaćenog depozita je tačan
27 pm.test('Status plaćenog depozita je tačan', function() {
28     pm.expect(jsonData.depositpaid).to.be.true;
29 });
30
31 // Validacija 5: Datum Dolaska je tačan
32 pm.test('Datum Dolaska je tačan', function() {
33     pm.expect(jsonData.bookingdates.checkin).to.eql(očekivaniDatumDolaska);
34 });
35
36 // Validacija 6: Datum Odlaska je tačan
37 pm.test('Datum Odlaska je tačan', function() {
38     pm.expect(jsonData.bookingdates.checkout).to.eql(očekivaniDatumOdlaska);
39 });
40
```

VVSProjekat / https://restful-booker.herokuapp.com/booking

POST https://restful-booker.herokuapp.com/booking

Params Authorization Headers (8) Body Pre-request Script Tests Settings

```
1 var jsonData = pm.response.json();
2 console.log(jsonData);
3 pm.environment.set("bookingId", jsonData.bookingid);
4
5 // Validacija 1
6 pm.test("Ime je ispravno", function () {
7     pm.expect(pm.response.json().booking.firstname).to.eql("Test");
8 });
9
10 //Validacija 2
11 pm.test("Ukupna Cijena je ispravna", function () {
12     pm.expect(pm.response.json().booking.totalprice).to.eql(111);
13 });
14
15 //Validacija 3
16 pm.test("Status plaćenog depozita je tačan", function () {
17     pm.expect(pm.response.json().booking.depositpaid).to.be.true;
18 });
19
20 //Validacija 4
21 pm.test("Datum objave je ispravan", function () {
22     pm.expect(pm.response.json().booking.bookingdates.checkout).to.eql("2019-01-01");
23 });
24
```

## VVSProjekat

→ <https://restful-booker.herokuapp.com/booking>

POST <https://restful-booker.herokuapp.com/booking> [200 OK, 943B, 587ms]

```
[
  {
    bookingid: 1687,
    booking: {
      firstname: 'Test',
      lastname: 'Test',
      totalprice: 111,
      depositpaid: true,
      bookingdates: { checkin: '2018-01-01', checkout: '2019-01-01'
    },
    additionalneeds: 'Breakfast'
  }
]
```

- ✓ Ime je ispravno
- ✓ Ukupna Cijena je ispravna
- ✓ Status plaćenog depozita je tačan
- ✓ Datum objave je ispravan

→ booking by id

GET <https://restful-booker.herokuapp.com/booking/1687> [200 OK, 922B, 133ms]

- ✓ Ime je tačno
- ✓ Prezime je tačno
- ✓ Ukupna Cijena je tačna
- ✓ Status plaćenog depozita je tačan
- ✓ Datum Dolaska je tačan
- ✓ Datum Odlaska je tačan

→ <https://restful-booker.herokuapp.com/booking?firstname=Test&lastname=Test>

GET <https://restful-booker.herokuapp.com/booking?firstname=Test&lastname=Test> [200 OK, 773B, 133ms]

```
[ 1687
```

- ✓ Odgovor je validan i ima body
- ✓ Kreirani ID je number
- ✓ Postoji makar jedan ID
- ✓ Kreirani ID je sadržan u nizu

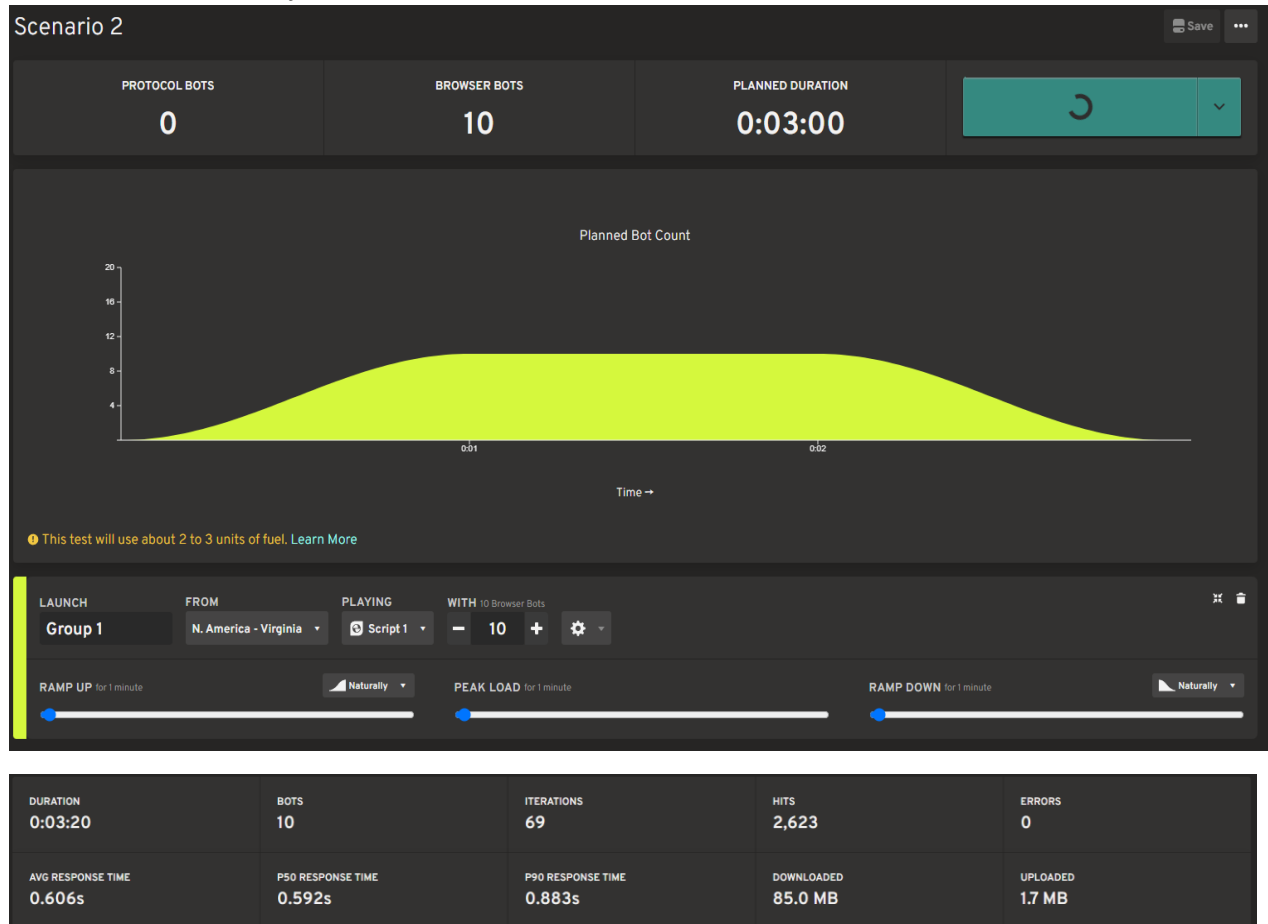
	executed	failed
iterations	1	0
requests	3	0
test-scripts	3	0
prerequest-scripts	0	0
assertions	14	0
total run duration: 1142ms		
total data received: 385B (approx)		
average response time: 284ms [min: 133ms, max: 587ms, s.d.: 214ms]		

## Testovi su dokumentovani ovdje:





















The screenshot displays the Azure DevOps web interface. On the left, the 'Repos' sidebar is active, showing a file tree for the 'VVS-projekat.git' repository. The file 'VVSProjekat.postman\_collection.json' is selected under the 'Testovi' folder. The main pane shows the content of this file, which is a Postman collection JSON. A notification at the top of the main pane states 'You updated VVS-projekat.git 2m ago' with a 'Create a pull request' button. The JSON file contains metadata and a single test script for a REST API endpoint.

```
1 {
2   "info": {
3     "name": "VVSProjekat",
4     "schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json",
5     "exporter_id": "2766082"
6   },
7   "item": [
8     {
9       "name": "https://restful-booker.herokuapp.com/booking",
10      "event": [
11        {
12          "listen": "test",
13          "script": [
14            "var jsonData = pm.response.json();\n",
15            "console.log(jsonData);\n",
16            "pm.environment.set('bookingId', jsonData.bookingId);\n",
17            "\n",
18            "// Validacija 1\n",
19            "pm.test('Ime je ispravno', function () {\n",
20              "  pm.expect(jsonData.booking.firstname).to.eql('Test');\n",
21            "});\n",
22            "\n",
23            "// Validacija 2\n",
24            "pm.test('Ukupna cijena je ispravna', function () {\n",
25              "  pm.expect(jsonData.booking.totalprice).to.eql(111);\n",
26            "});\n",
27            "\n",
28            "// Validacija 3\n",
29            "pm.test('Status plaćenog depozita je tačan', function () {\n",
30              "  pm.expect(jsonData.booking.depositpaid).toBe(true);\n",
31            "});\n",
32            "\n",
33            "// Validacija 4\n",
34            "pm.test('Datum odjave je ispravan', function () {\n",
35              "  pm.expect(jsonData.booking.bookingdates.checkout).to.eql('2019-01-01');\n",
36            "});\n",
37          ]
38        }
39      ]
40    }
41  ]
42 }
```

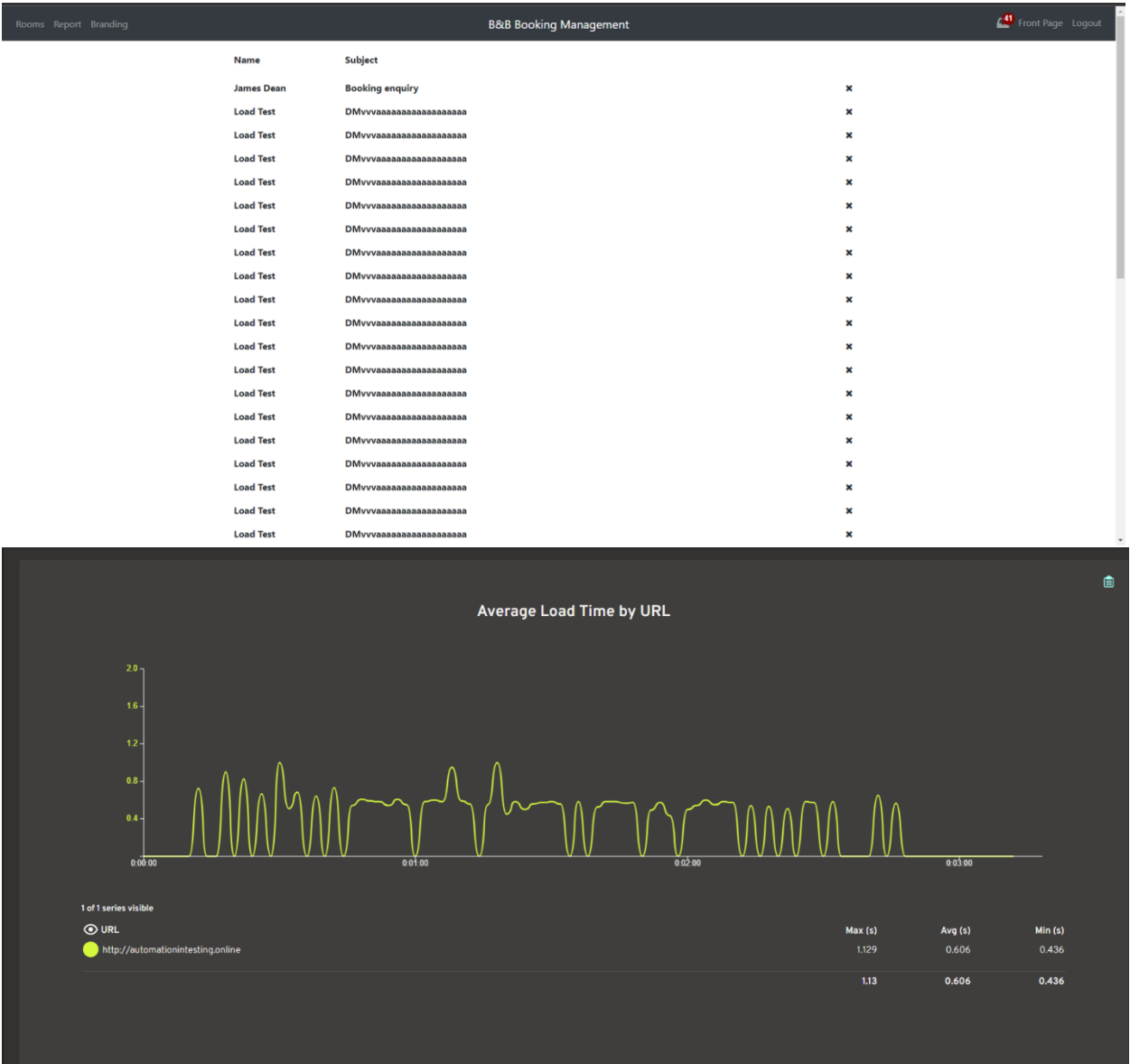
### Zadatak 3: load testiranje



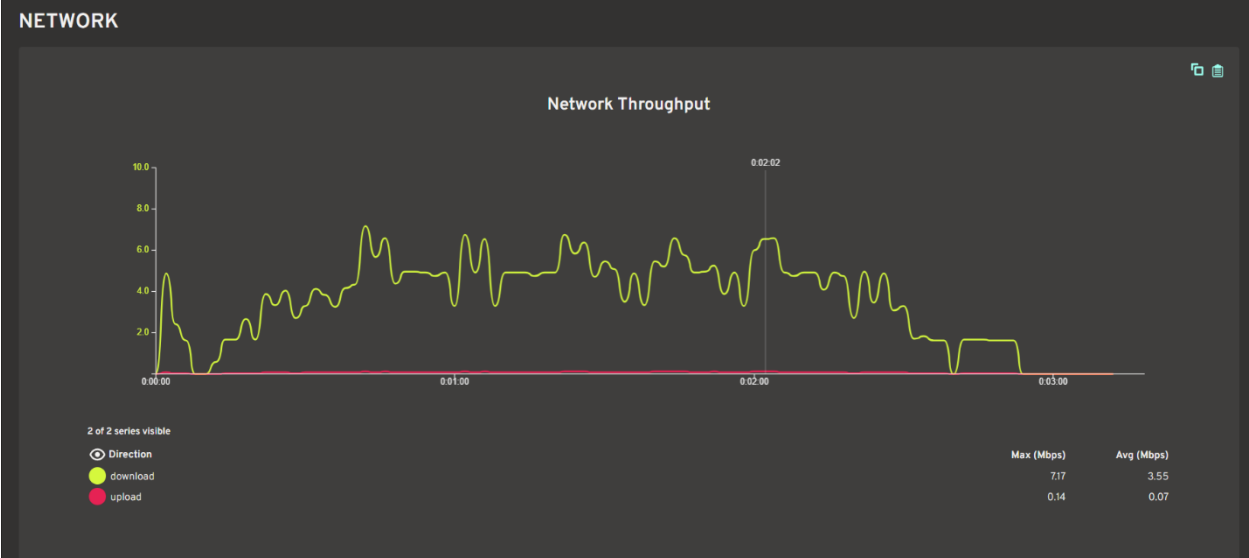
Korištena je ova skripta koja je snimljena upotrebom Loadster recorder plugina.

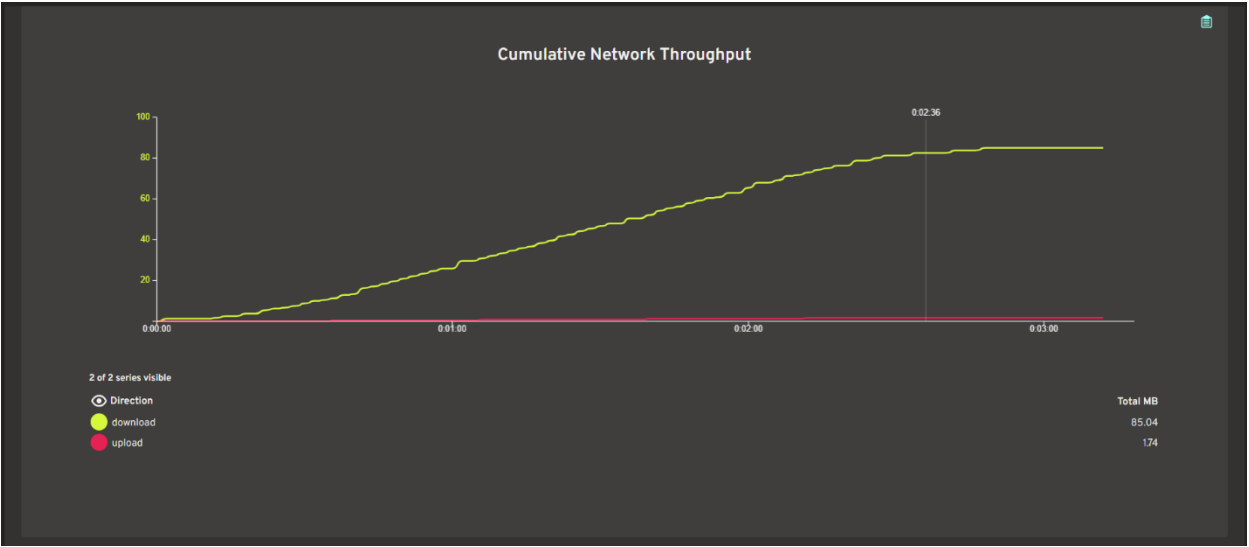
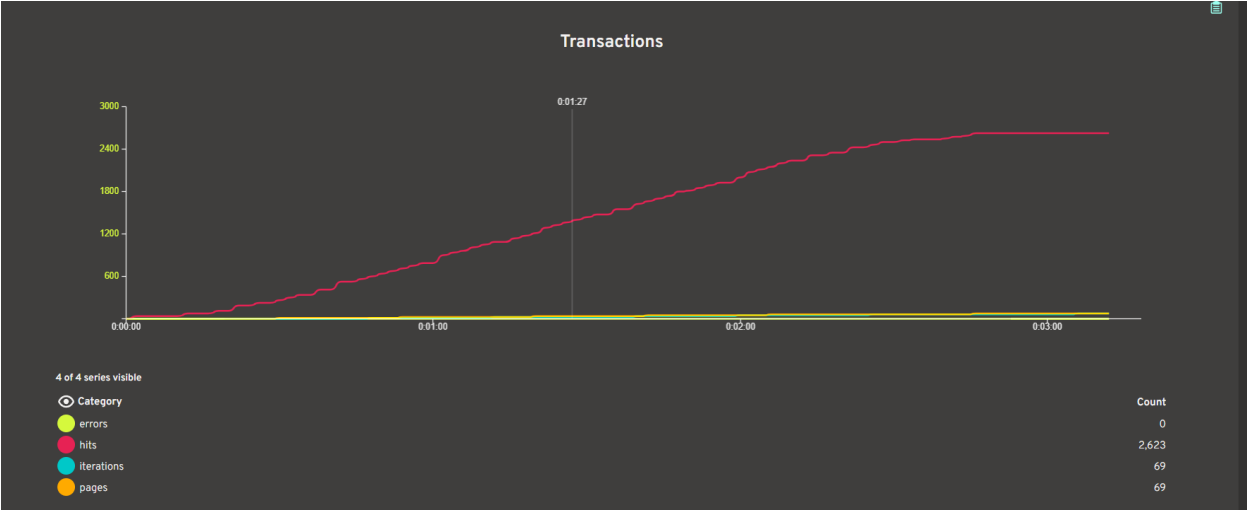
1		NAVIGATE TO	http://automationintestingonline	  
2		CLICK ON	#name	<input checked="" type="checkbox"/> Double Click
3		WAIT	5.07 seconds	
4		ENTER TEXT	Stress Test	INTO #name
5		CLICK ON	#email	<input checked="" type="checkbox"/> Double Click
6		WAIT	0.92 seconds	
7		ENTER TEXT	test@test.com	INTO #email
8		WAIT	0.83 seconds	
9		CLICK ON	#phone	<input checked="" type="checkbox"/> Double Click
10		WAIT	4.68 seconds	
11		ENTER TEXT	123-456-789	INTO #phone
12		CLICK ON	#subject	<input checked="" type="checkbox"/> Double Click
13		WAIT	8.31 seconds	
14		ENTER TEXT	Stress test	INTO #subject
15		CLICK ON	#description	<input checked="" type="checkbox"/> Double Click
16		WAIT	8.76 seconds	
17		ENTER TEXT	This is a stress test for my uni project	INTO #description

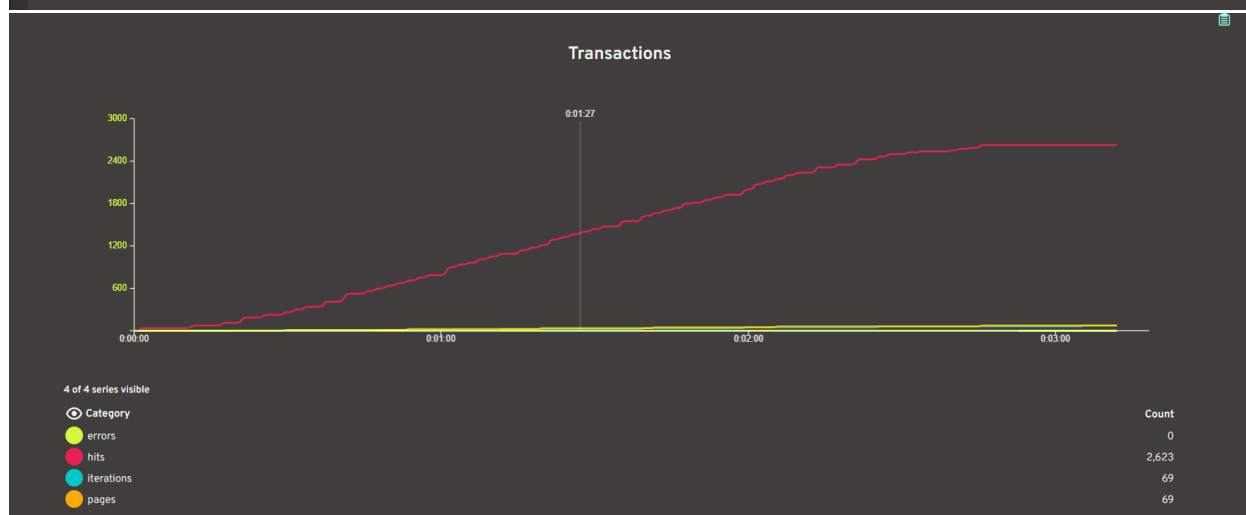
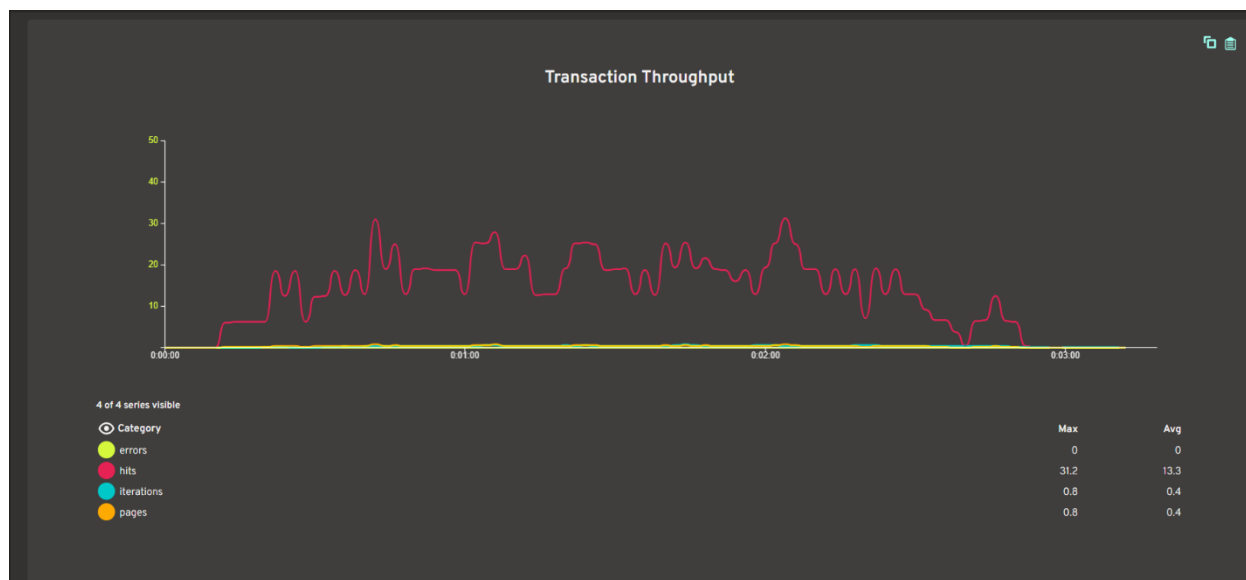
Na admin panelu aplikacije vidimo da su se kreirali zahtjevi:







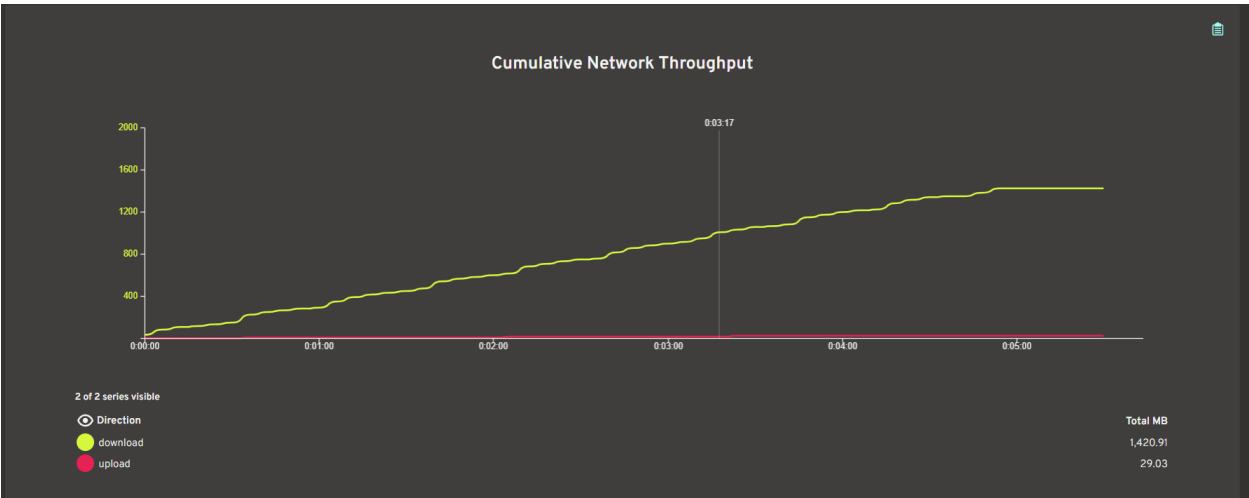
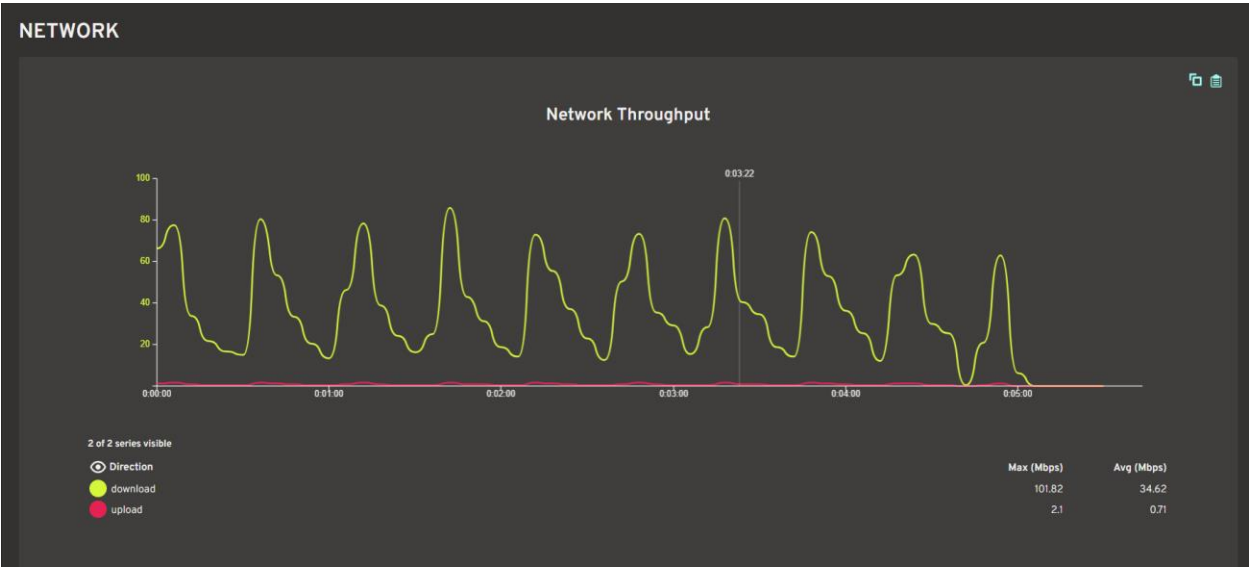
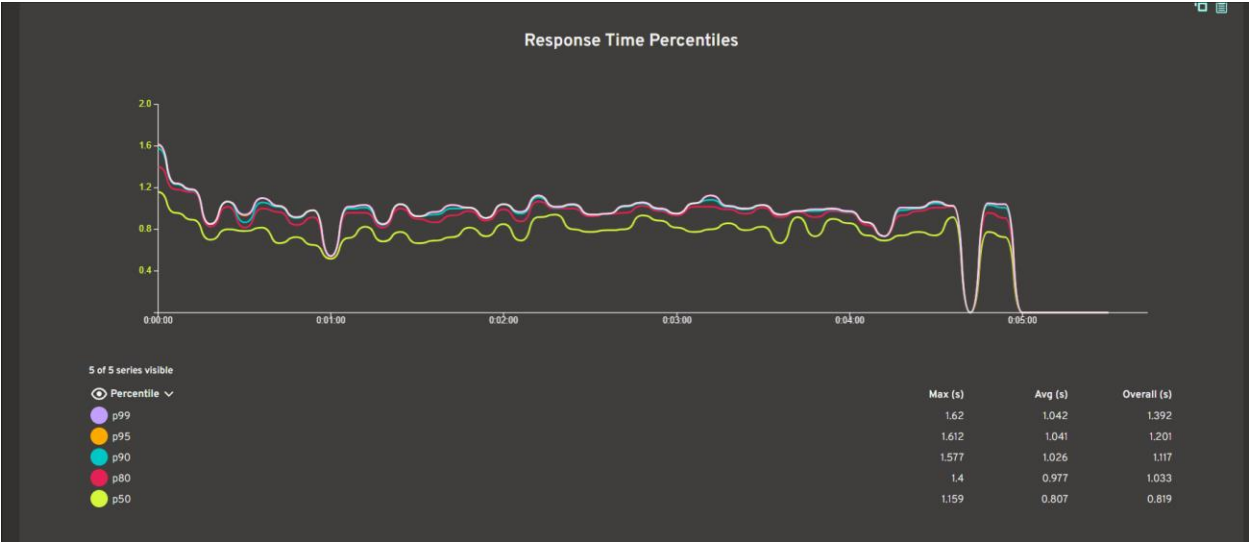


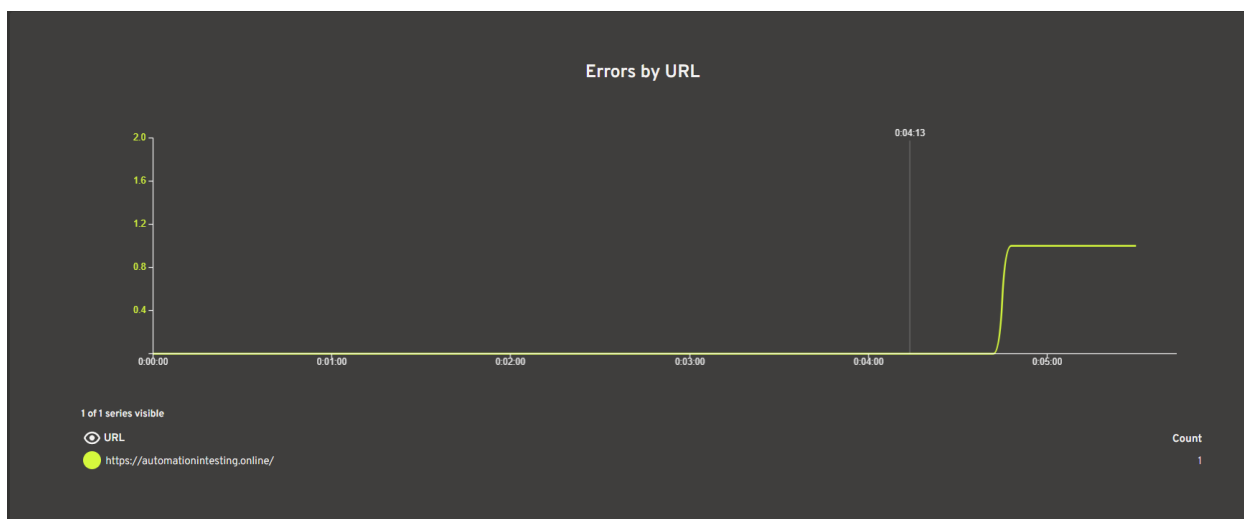


Možemo vidjeti da web stranica nije padala u slučaju load testa.

S obzirom da sa besplatnim planom imamo ograničene resurse, ovo je najveći stres test koji sam mogao pokrenuti.







Pri kraju se desila jedna. To, uz pad response timea u vrijeme greške nam govori da je web stranica imala poteškoće sa stres testom:

#### NEXT STEPS

##### FUNCTIONAL ERRORS

failed to execute action Click on element #name

[Edit script "Script 1"](#)

[Edit scenario](#) [Re-run this test](#) [See traces](#)

## Trace



General

Logs

Screenshot

Resources

Details

### Time

0:04:51

### Source

Group 1 - Bot 38 - Iteration 9 (ERROR)

### Step

2

### Location

<https://automationintesting.online/>

### Message

failed to execute action Click on element #name

Azure pipelines Postman integration:

Jobs in run #20240415.2

VVS-projektat.git

Jobs

Job8s

Initialize job<1s

Checkout VVS-projektat.git@azure...1s

Install Postman CLI1s

Run automated API tests using Po...4s

Post-job: Checkout VVS-projeka...<1s

Finalize Job<1s

Report build status<1s

Run automated API tests using Postman CLI

GET https://restful-booker.herokuapp.com/booking/1364 [200 OK, 9148, 90ms]

✓ Time je tačno

✓ Prezime je tačno

✓ Ukupna cijena je tačna

✓ Status plaćenog depozita je tačan

✓ Datum dolaska je tačan

✓ Datum odlaska je tačan

• https://restful-booker.herokuapp.com/booking?firstname=Test&lastname=Test

GET https://restful-booker.herokuapp.com/booking?firstname=Test&lastname=Test [200 OK, 7698, 89ms]

r

| 1364

t

✓ Odgovor je validan i ima body

✓ Kreirani ID je number

✓ Postoji makar jedan ID

✓ Kreirani ID je sadržan u nizu

	executed	failed
iterations	1	0
requests	3	0
test-scripts	3	0
prerequest-scripts	0	0
assertions	14	0
total run duration: 644ms		
total data received: 3858 (approx)		
average response time: 187ms [min: 89ms, max: 382ms, s.d.: 137ms]		