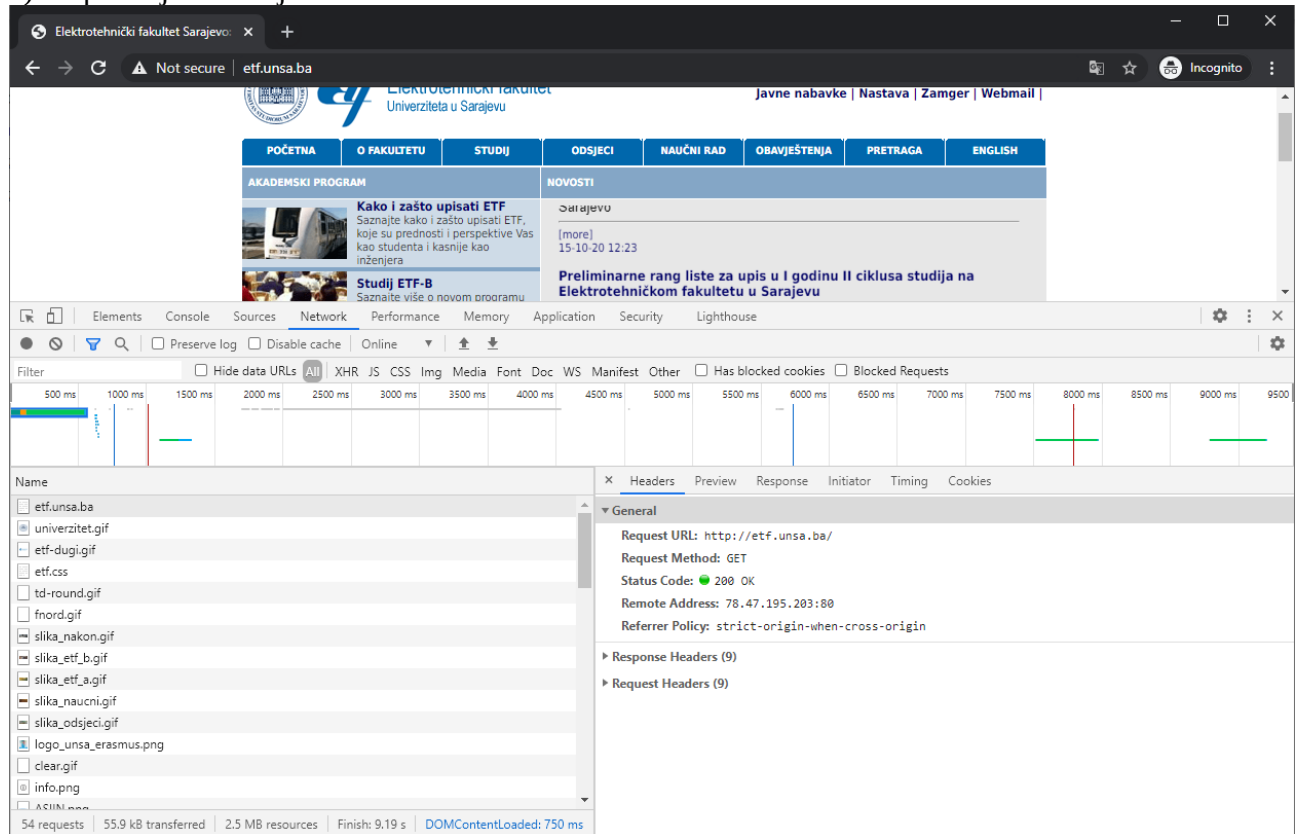


Zadatak 1

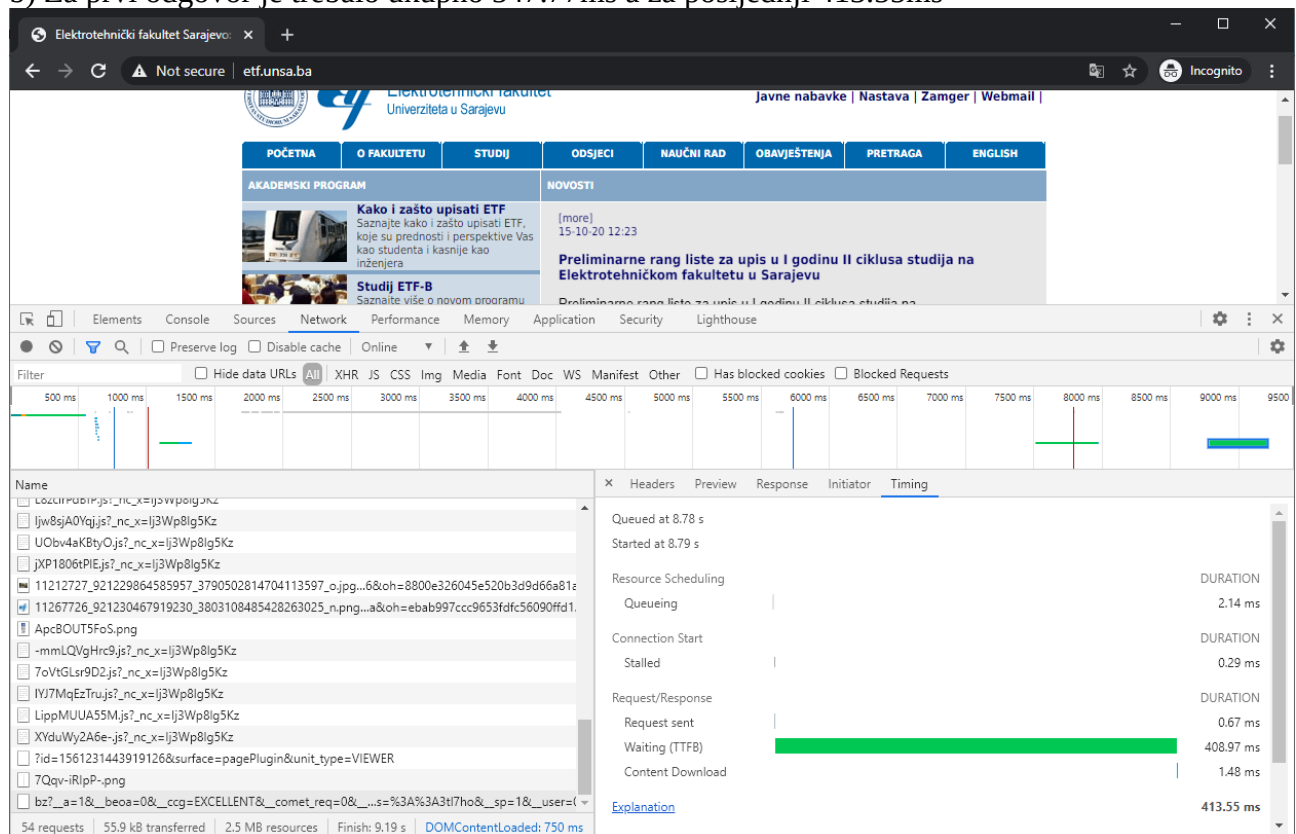
a) Http zahtjev se šalje metodom GET



The screenshot shows the website of the Elektrotehnički fakultet Sarajevo. The Network tab is open, displaying a list of requests. The first request, 'etf.unsa.ba', is selected, and its details are shown in the right pane. The details include the Request URL, Request Method (GET), Status Code (200 OK), Remote Address, and Referrer Policy.

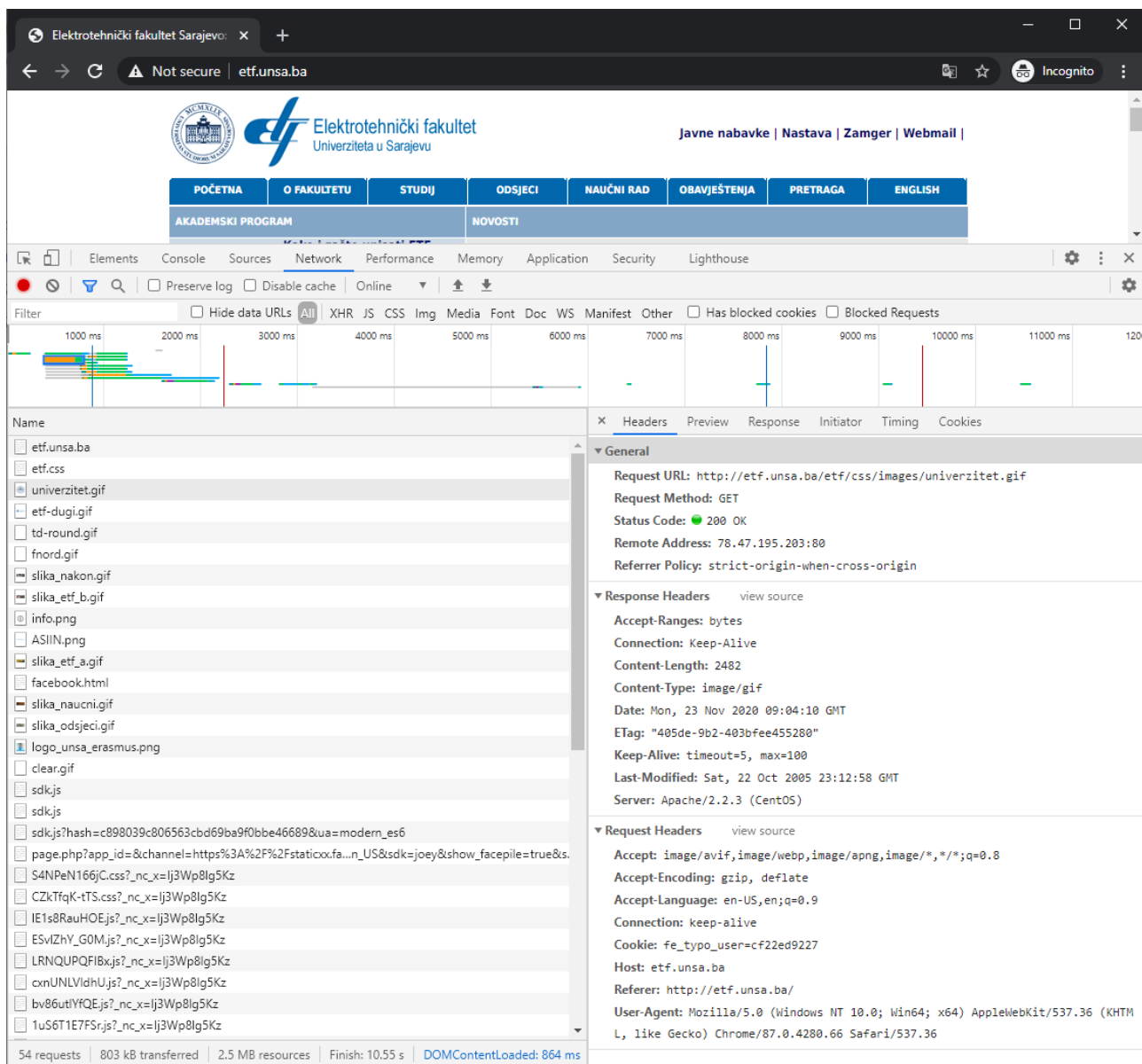
Name	Request URL	Request Method	Status Code	Remote Address	Referrer Policy
etf.unsa.ba	http://etf.unsa.ba/	GET	200 OK	78.47.195.203:80	strict-origin-when-cross-origin

b) Za prvi odgovor je trebalo ukupno 547.77ms a za posljednji 413.55ms



The screenshot shows the same website, but the 'Timing' sub-tab is selected for the first request. This tab provides a detailed breakdown of the request's duration, showing the time taken for each step from queuing to content download.

Step	Duration
Queued at 8.78 s	
Started at 8.79 s	
Resource Scheduling	
Queueing	2.14 ms
Connection Start	
Stalled	0.29 ms
Request/Response	
Request sent	0.67 ms
Waiting (TTFB)	408.97 ms
Content Download	1.48 ms
Total	413.55 ms



c) Veličina tijela odgovora je 2482 bajta (Content-length).

Headeri u zahtjevu su:

Accept - daje informaciju serveru koje tipove podataka očekuje

Accept-Encoding – koji algoritam za enkodiranje može biti upotrebljen

Accept-Language – koji jezik očekuje

Connection – da li će konekcija ostati otvorena nakon što se transakcija izvrši

Cookie – šalje cookie koji je prethodno poslao server Set-Cookie headerom

Host – kome se zahtjev šalje

Referer – adresa stranice kojoj se šalje zahtjev

User-agent – informacije o pošiljaocu (uključuje i informaciju koji web preglednik koristi – zadatak 1 pod d)

Headeri u odgovoru:

Accept-Ranges – podrška parcijalnim transakcijama

Connection – isto kao u zahtjevu

Content-Length – veličina odgovora u bajtima

Content-Type – tip vraćenog sadržaja

Date – datum odgovora

Etag – indikator verzije resursa

Keep-Alive – dodatne informacije vezane za header Connection

The screenshot shows the website of Elektrotehnički fakultet Sarajevo (etf.unsa.ba) in an Incognito browser window. The page has a blue header with the faculty logo and navigation links: 'Javne nabavke', 'Nastava', 'Zamger', and 'Webmail'. Below the header is a menu with links: 'POČETNA', 'O FAKULTETU', 'STUDIJ', 'ODSJECI', 'NAUČNI RAD', 'OBAVJEŠTENJA', 'PRETRAGA', and 'ENGLISH'. The 'AKADEMSKI PROGRAM' and 'NOVOSTI' sections are also visible.

The Chrome DevTools Network tab is open, showing a list of requests. The request 'univerzitet.gif' is selected. The right pane shows the 'General' and 'Request Headers' for this request.

General:

- Request URL: http://etf.unsa.ba/etf/css/images/univerzitet.gif
- Request Method: GET
- Status Code: 200 OK
- Remote Address: 78.47.195.203:80
- Referrer Policy: strict-origin-when-cross-origin

Response Headers:

- Accept-Ranges: bytes
- Connection: Keep-Alive
- Content-Length: 2482
- Content-Type: image/gif
- Date: Mon, 23 Nov 2020 09:04:10 GMT
- ETag: "405de-9b2-403bfee455280"
- Keep-Alive: timeout=5, max=100
- Last-Modified: Sat, 22 Oct 2005 23:12:58 GMT
- Server: Apache/2.2.3 (CentOS)

Request Headers:

- Accept: image/avif,image/webp,image/apng,image/*,*/*;q=0.8
- Accept-Encoding: gzip, deflate
- Accept-Language: en-US,en;q=0.9
- Connection: keep-alive
- Cookie: fe_typo_user=cf22ed9227
- Host: etf.unsa.ba
- Referer: http://etf.unsa.ba/
- User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML like Gecko) Chrome/87.0.4280.66 Safari/537.36

At the bottom of the Network tab, it shows: 54 requests | 803 kB transferred | 2.5 MB resources | Finish: 10.55 s | DOMContentLoaded: 864 ms

Last-Modified – kada je resurs posljednji put promijenjen

Server – softver servera koji je obradio zahtjev

d) Header User-agent

e) Ukupno upućeno 54 zahtjeva (ugao dole lijevo na slici)

Zadatak 2

a)

Postman interface showing a GET request to `https://api.themoviedb.org/3/search/movie?api_key=ac0f4c6eb8504d19d9f139adedafb2e3&query=god`. The request is successful with a status of 200 OK, time of 519 ms, and size of 13.85 KB. The response headers are visible, including Content-Type: application/json; charset=utf-8 and various CORS headers.

KEY	VALUE	DESCRIPTION
Content-Type	application/json; charset=utf-8	
Transfer-Encoding	chunked	
Connection	keep-alive	
Date	Fri, 27 Nov 2020 18:10:13 GMT	
Server	openresty	
Access-Control-Allow-Origin	*	
Access-Control-Allow-Methods	GET, HEAD, POST, PUT, DELETE, OPTIONS	
Access-Control-Expose-Headers	ETag, X-RateLimit-Limit, X-RateLimit-Remaining, X-RateLimit-Reset, Retry-Aft...	
Cache-Control	public, max-age=600	
Content-Encoding	br	
Vary	Accept-Encoding	
X-Cache	Miss from cloudfront	

Statusni kod je 200. Vrijeme je 519ms. Tip sadržaja odgovora je JSON objekat. Odgovor ima ukupno 15 headera. Oni koji se ne vide na screenshotu su header Via i još 2 custom headera.

b)

Postman interface showing a POST request to `http://httpbin.org/post?ime=Eman&prezime=Duvnjak`. The request is successful with a status of 200 OK, time of 589 ms, and size of 765 B. The response headers are visible, including Date, Content-Type, Content-Length, and various CORS headers.

KEY	VALUE	DESCRIPTION
Date	Sun, 29 Nov 2020 14:26:47 GMT	
Content-Type	application/json	
Content-Length	535	
Connection	keep-alive	
Server	gunicorn/19.9.0	
Access-Control-Allow-Origin	*	
Access-Control-Allow-Credentials	true	

POST sa imenom i prezimenom kodiranim kao **x-www-form-urlencoded**

Postman

File Edit View Help

+ New Import Runner My Workspace Invite

Filter

History Collections APIs

+ New Collection Trash

You don't have any collections

Collections let you group related requests, making them easier to access and run.

+ Create a collection

Untitled Request

POST http://httpbin.org/post

Send Save

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

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   ime: "Eman"
3   prezime: "Duvnjak"
4 }
```

Body Cookies Headers (7) Test Results

KEY	VALUE
Date	Sun, 29 Nov 2020 14:33:09 GMT
Content-Type	application/json
Content-Length	559
Connection	keep-alive
Server	gunicorn/19.9.0
Access-Control-Allow-Origin	*
Access-Control-Allow-Credentials	true

Status: 200 OK Time: 662 ms Size: 789 B Save Response

Find and Replace Console

Bootcamp

POST sa imenom i prezimenom kodiranim kao JSON objekat

Postman

File Edit View Help

+ New Import Runner My Workspace Invite

Filter

History Collections APIs

+ New Collection Trash

You don't have any collections

Collections let you group related requests, making them easier to access and run.

+ Create a collection

Untitled Request

DELETE http://httpbin.org/delete?korisnik=neko

Send Save

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

Query Params

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> korisnik	neko	
Key	Value	Description

Body Cookies Headers (7) Test Results

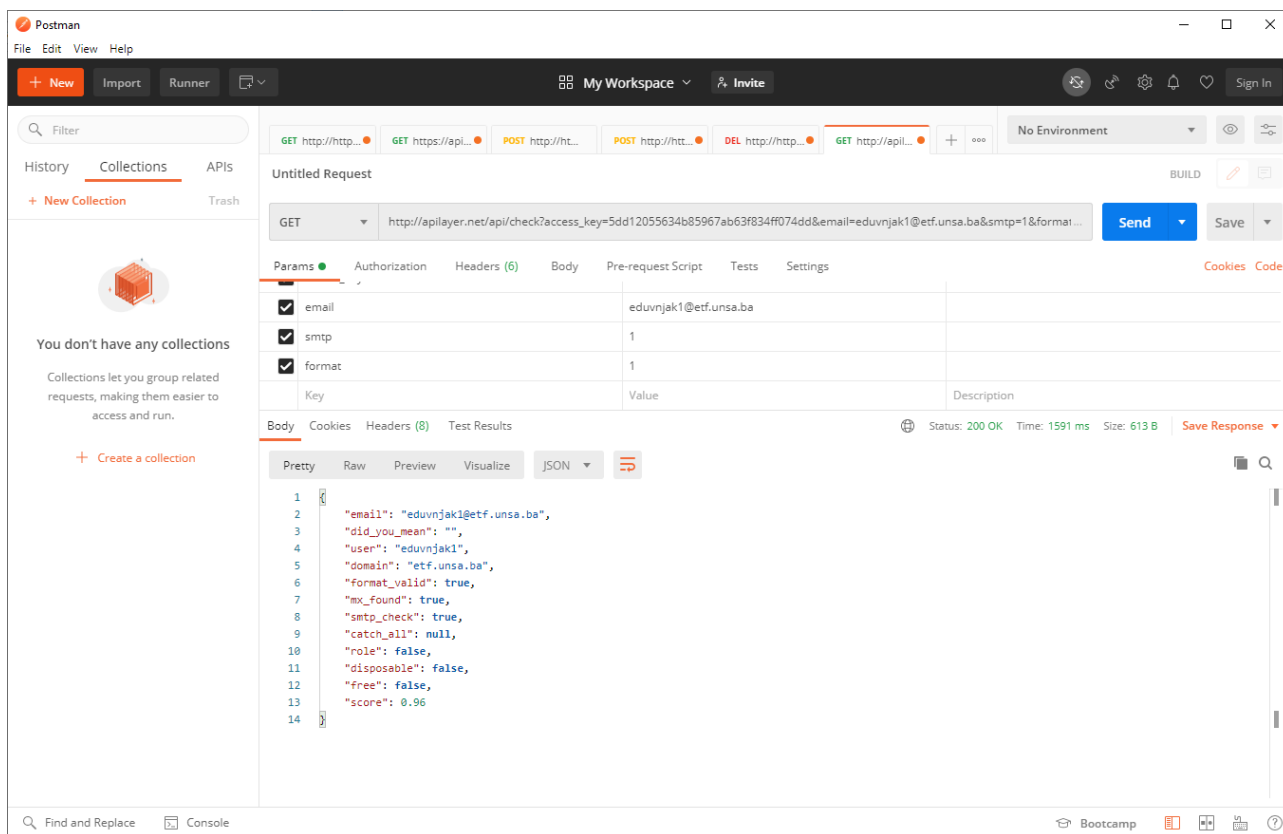
KEY	VALUE
Date	Sun, 29 Nov 2020 14:35:26 GMT
Content-Type	application/json
Content-Length	476
Connection	keep-alive
Server	gunicorn/19.9.0
Access-Control-Allow-Origin	*
Access-Control-Allow-Credentials	true

Status: 200 OK Time: 857 ms Size: 706 B Save Response

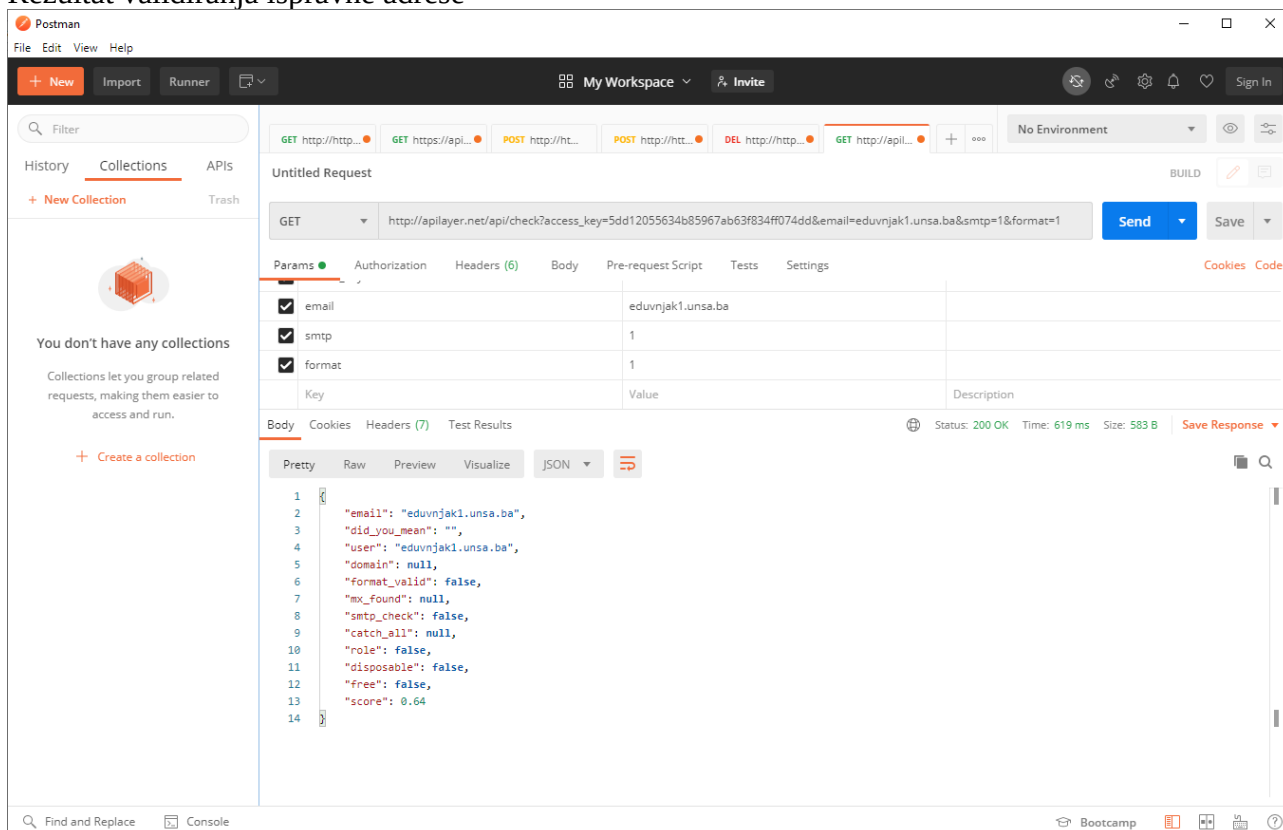
Find and Replace Console

Bootcamp

DELETE korisnik neko



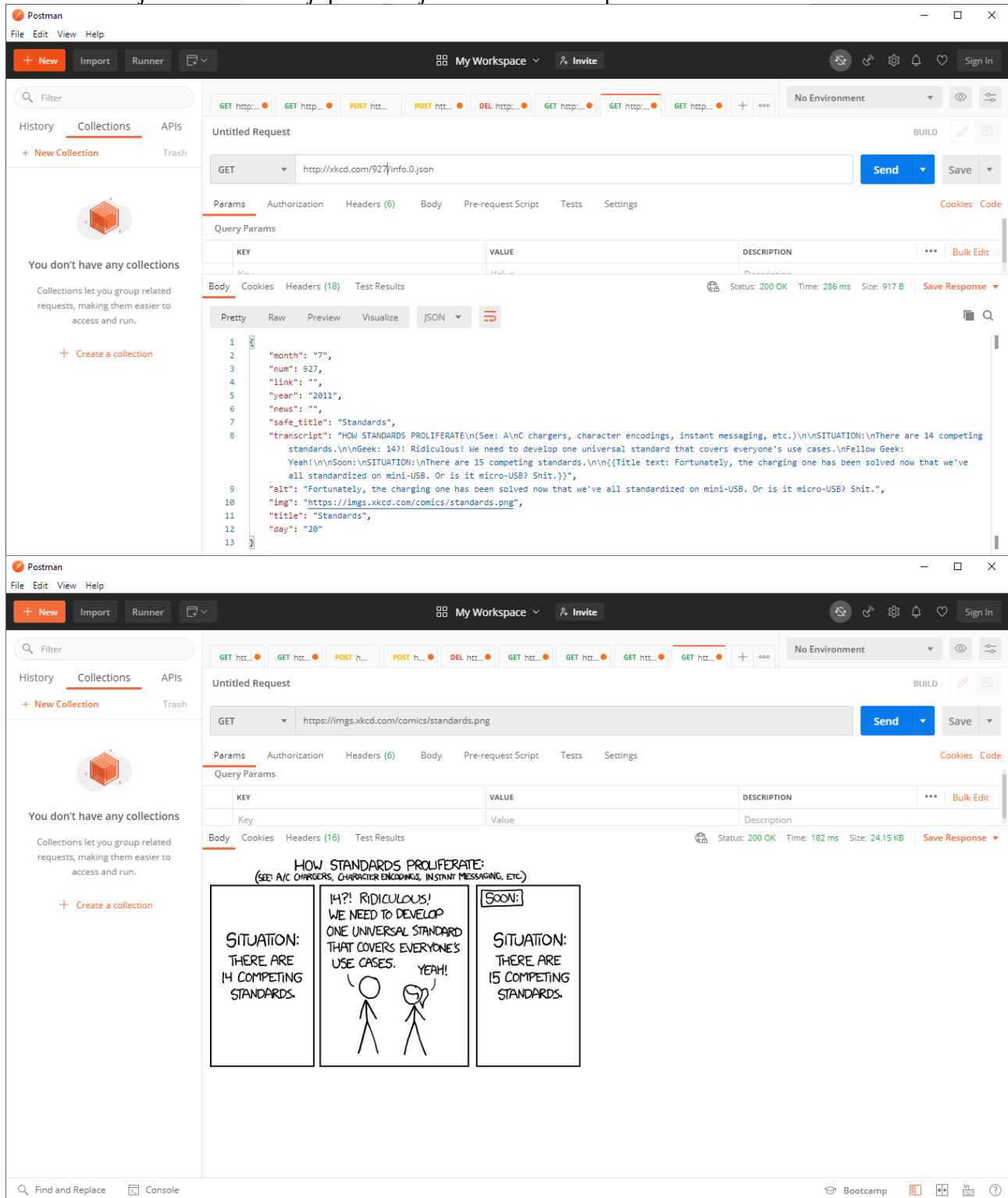
Rezultat validiranja ispravne adrese



Rezultat validiranja neispravne adrese. Objekti JSON odgovora su sljedeći:

- “email” – ona adresa koja se navedena u zahtjevu
- “did_you_mean” – ispravka u slučaju tipfelera
- “user” – lokalni dio e-mail adrese u zahtjevu
- “domain” – domenski dio e-mail adrese u zahtjevu
- “format_valid” – true u slučaju ispravne e-mail adrese (1. slučaj) false u suprotnom (2. slučaj)

“mx_found” – da li je e-mail adresa u zahtjevu konfigurisana da prima e-mail
“smtp_check” – da li e-mail adresa u zahtjevu zapravo postoji
“catch_all” - da li je e-mail server konfigurisan da prihvati sve zahtjeve
“role” – da li e-mail adresa obnaša neku funkciju u nekoj kompaniji (npr support)
“disposable” – da li je e-mail adresa jednokratna (adresa koja se upotrebljava određeno vrijeme ili određeni broj puta)
“free” – besplatna ili ne
“score” – broj između 0 i 1 koji predstavlja kvalitetu i dostupnost adrese



The first screenshot shows a GET request to `http://xkcd.com/927/info.0.json`. The response is a JSON object with the following structure:

```

{
  "month": "7",
  "num": 927,
  "link": "",
  "year": "2011",
  "news": "",
  "safe_title": "Standards",
  "transcript": "HOW STANDARDS PROLIFERATE(See: A\\n\\c chargers, character encodings, instant messaging, etc.)\\n\\nSITUATION:\\nThere are 14 competing standards.\\n\\nGeek: 14?! Ridiculous! We need to develop one universal standard that covers everyone's use cases.\\n\\nFellow Geek: Yeah!\\n\\nSoon:\\nSITUATION:\\nThere are 15 competing standards.\\n\\n{{Title text: Fortunately, the charging one has been solved now that we've all standardized on mini-USB. Or is it micro-USB? Shit.}}",
  "alt": "Fortunately, the charging one has been solved now that we've all standardized on mini-USB. Or is it micro-USB? Shit.",
  "img": "https://imgs.xkcd.com/comics/standards.png",
  "title": "Standards",
  "day": "20"
}

```

The second screenshot shows a GET request to `https://imgs.xkcd.com/comics/standards.png`. The response is a comic strip titled "HOW STANDARDS PROLIFERATE: (SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)". The comic consists of three panels:

- Panel 1: SITUATION: THERE ARE 14 COMPETING STANDARDS.
- Panel 2: 14?! RIDICULOUS! WE NEED TO DEVELOP ONE UNIVERSAL STANDARD THAT COVERS EVERYONE'S USE CASES. YEAH!
- Panel 3: SITUATION: THERE ARE 15 COMPETING STANDARDS.

Dohvaća podatke o xkcd stripu rednog broja 927. Odgovor je JSON formata i uključuje datum (“month”, “day”, “year”) redni broj (“num”), naslov (“title”), alternativni tekst (“alt”), transkript (“transcript”), link na strip (“img”) itd.

MusicBrainzAPI

The image displays two screenshots of the Postman application, illustrating API requests to the MusicBrainz API.

Top Screenshot: Shows a GET request to the endpoint `https://musicbrainz.org/ws/2/artist?query=beatles&limit=10&offset=0`. The response is an XML document (Status: 200 OK, Time: 259 ms, Size: 13.35 KB) containing details about the artist "The Beatles". The XML structure includes metadata, artist information, and geographical data (area and city).

Bottom Screenshot: Shows a GET request to the endpoint `https://musicbrainz.org/ws/2/release-group?artist=b10bbbfc-cf9e-42e0-be17-e2c3e1d2600d`. The response is an XML document (Status: 200 OK, Time: 546 ms, Size: 8 KB) containing a list of release groups for the specified artist. The XML structure includes release group information, titles, release dates, and primary types.

Prvi zahtjev je pretraga izvođača sa nazivom beatles. Drugi zahtjev je prikaz svih albuma koji dobijamo preko id-a koji smo dobili prvim zahtjevom. Odgovor je formata XML