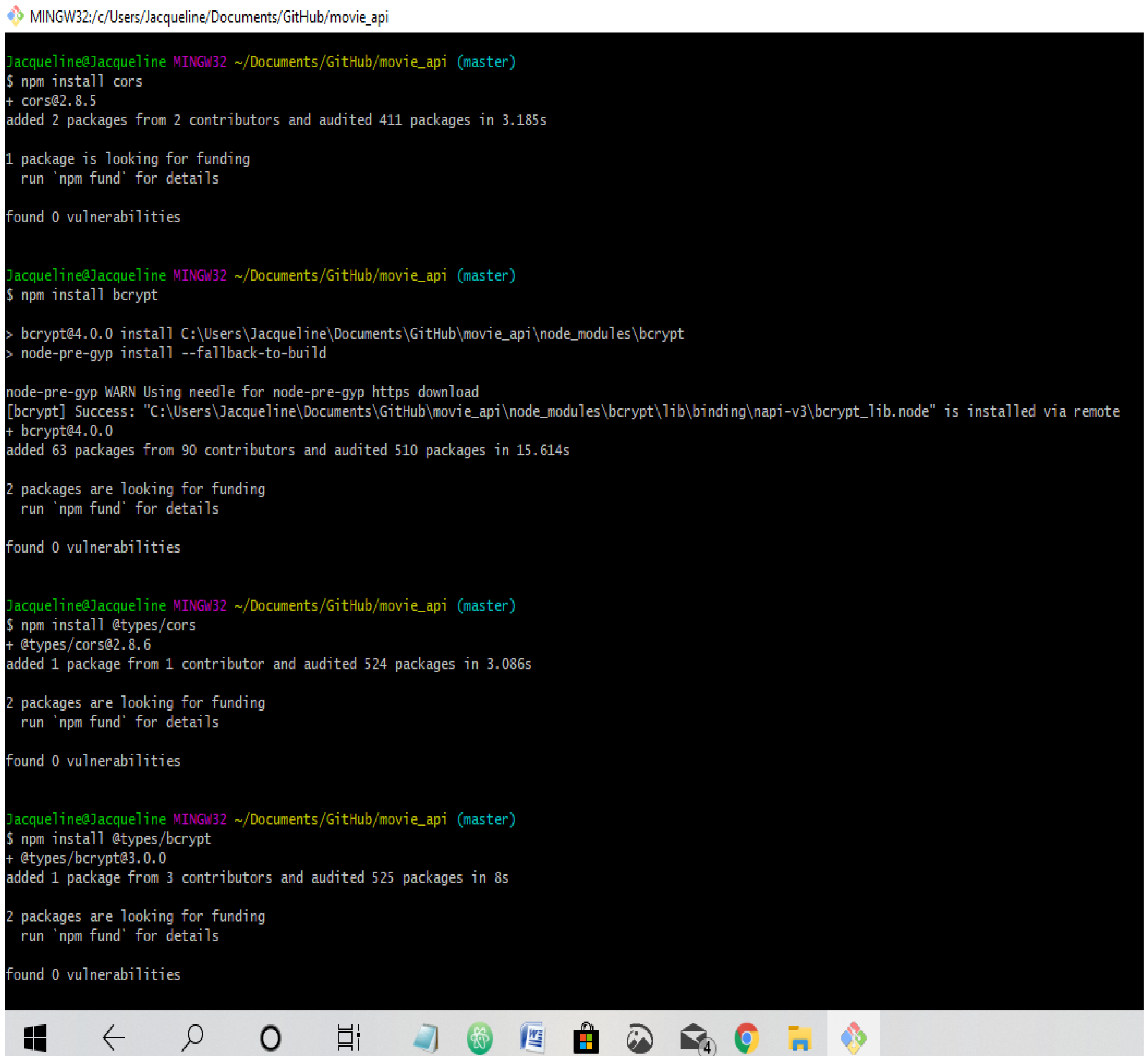
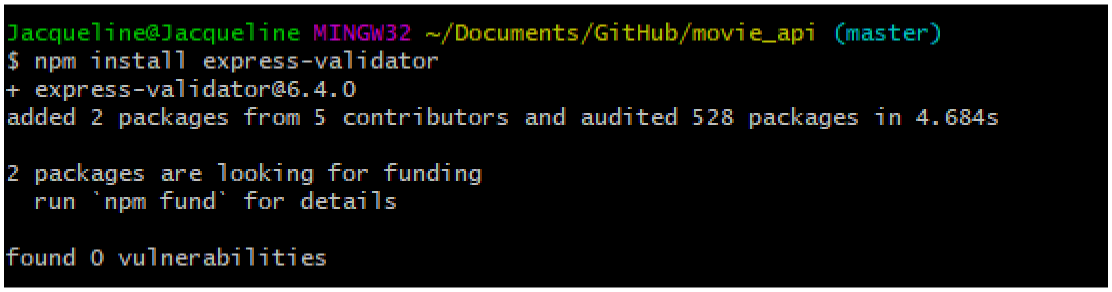
Exercises 2.10a

Installed CORS, bcrypt and express-validator via npm (git bash)



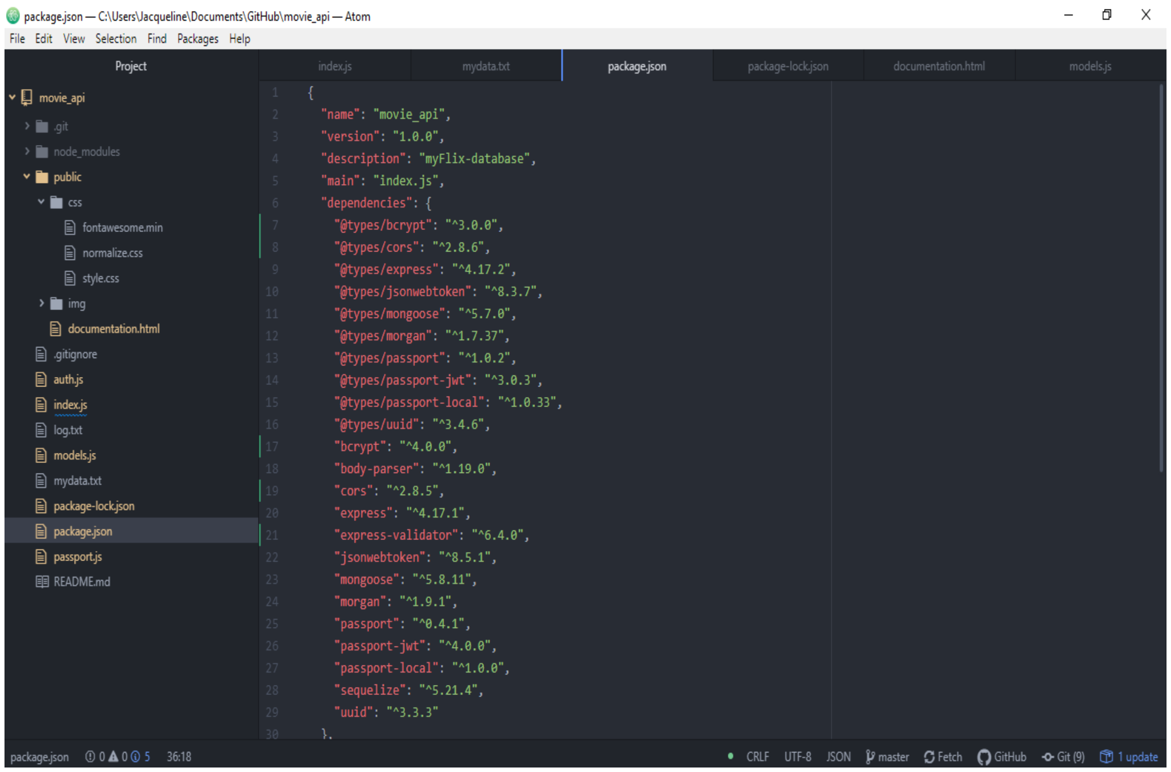
MINGW32:/c/Users/Jacqueline/Documents/GitHub/movie_api

```
Jacqueline@Jacqueline MINGW32 ~/Documents/GitHub/movie_api (master)
$ npm install cors
+ cors@2.8.5
added 2 packages from 2 contributors and audited 411 packages in 3.185s

1 package is looking for funding
  run `npm fund` for details

found 0 vulnerabilities


Jacqueline@Jacqueline MINGW32 ~/Documents/GitHub/movie_api (master)
$ npm install bcrypt

> bcrypt@4.0.0 install C:\Users\Jacqueline\Documents\GitHub\movie_api\node_modules\bcrypt
> node-pre-gyp install --fallback-to-build

node-pre-gyp WARN Using needle for node-pre-gyp https download
[bcrypt] Success: "C:\Users\Jacqueline\Documents\GitHub\movie_api\node_modules\bcrypt\lib\binding\napi-v3\bcrypt_lib.node" is installed via remote
+ bcrypt@4.0.0
added 63 packages from 90 contributors and audited 510 packages in 15.614s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities


Jacqueline@Jacqueline MINGW32 ~/Documents/GitHub/movie_api (master)
$ npm install @types/cors
+ @types/cors@2.8.6
added 1 package from 1 contributor and audited 524 packages in 3.086s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities


Jacqueline@Jacqueline MINGW32 ~/Documents/GitHub/movie_api (master)
$ npm install @types/bcrypt
+ @types/bcrypt@3.0.0
added 1 package from 3 contributors and audited 525 packages in 8s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```



```
Jacqueline@Jacqueline MINGW32 ~/Documents/GitHub/movie_api (master)
$ npm install express-validator
+ express-validator@6.4.0
added 2 packages from 5 contributors and audited 528 packages in 4.684s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

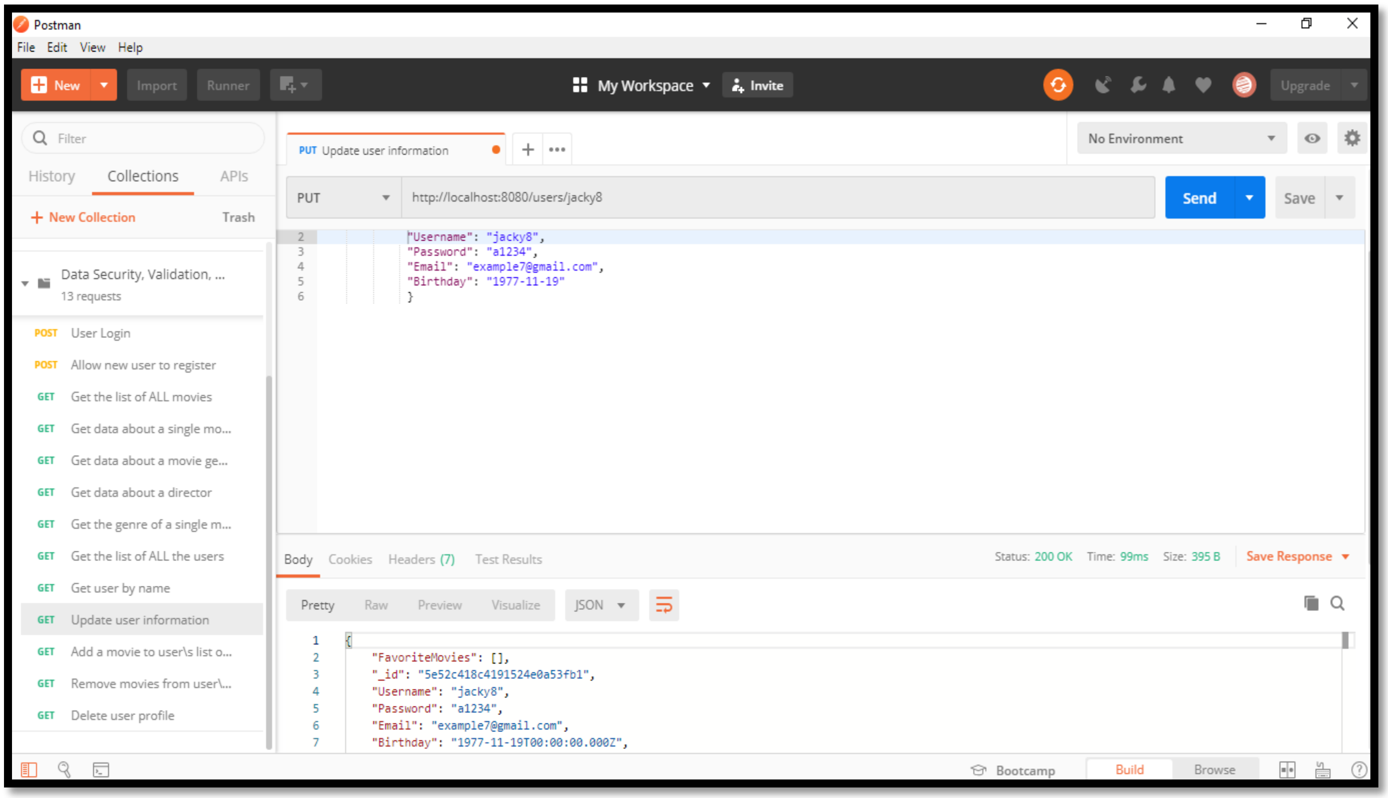
Updated package.json:



```json
{
  "name": "movie_api",
  "version": "1.0.0",
  "description": "myFlix-database",
  "main": "index.js",
  "dependencies": {
    "@types/bcrypt": "^3.0.0",
    "@types/cors": "^2.8.6",
    "@types/express": "^4.17.2",
    "@types/jsonwebtoken": "^8.3.7",
    "@types/mongoose": "^5.7.0",
    "@types/morgan": "^1.7.37",
    "@types/passport": "^1.0.2",
    "@types/passport-jwt": "^3.0.3",
    "@types/passport-local": "^1.0.33",
    "@types/uuid": "^3.4.6",
    "bcrypt": "^4.0.0",
    "body-parser": "^1.19.0",
    "cors": "^2.8.5",
    "express": "^4.17.1",
    "express-validator": "^6.4.0",
    "jsonwebtoken": "^8.5.1",
    "mongoose": "^5.8.11",
    "morgan": "^1.9.1",
    "passport": "^0.4.1",
    "passport-jwt": "^4.0.0",
    "passport-local": "^1.0.0",
    "sequelize": "^5.21.4",
    "uuid": "^3.3.3"
  },
```

Postman screenshots (testing code before deploying via Heroku and MongoDB Atlas)

New User Registration


Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
GET Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
PUT Update user information
No Environment
Send
Save
Body Cookies Headers (7) Test Results
Save Response
Pretty Raw Preview Visualize JSON
Bootcamp Build Browse

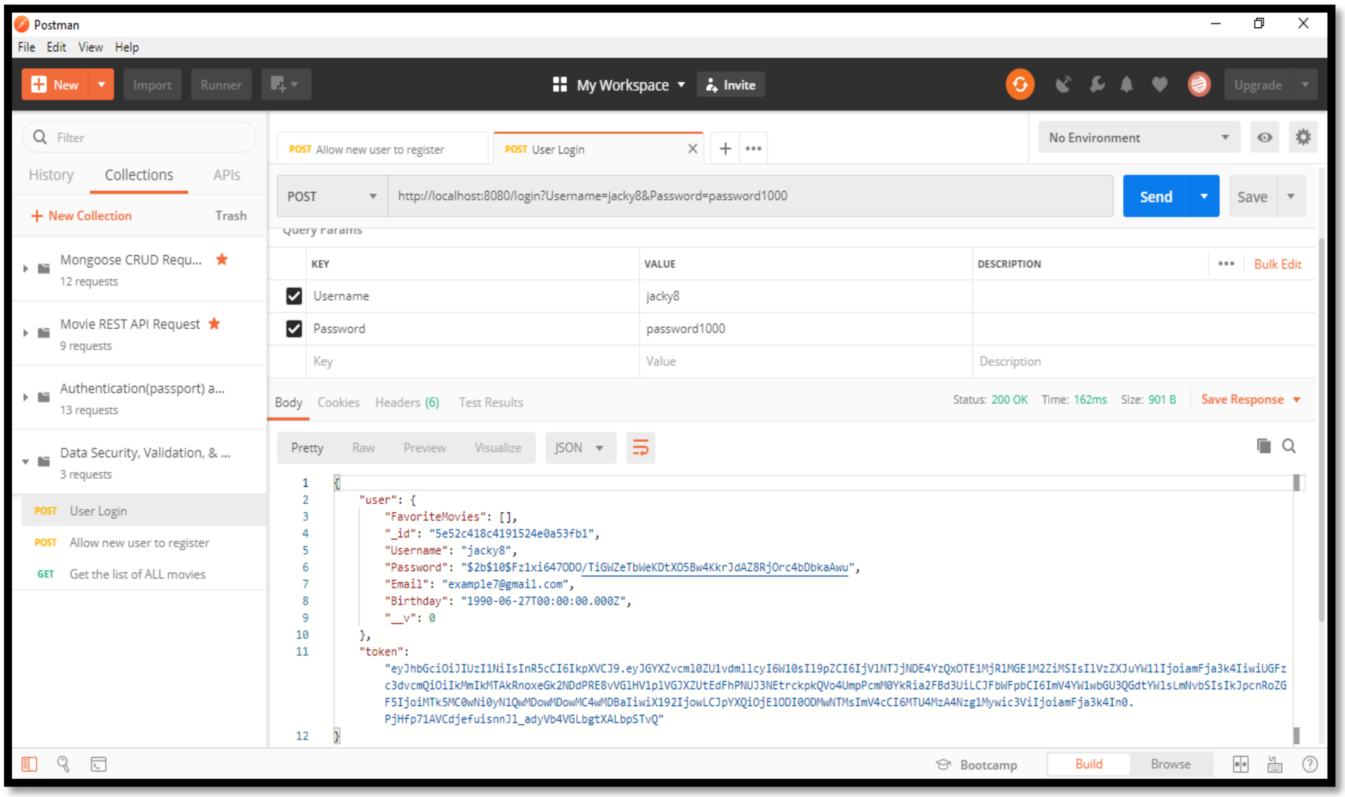
PUT http://localhost:8080/users/jacky8

```
"Username": "jacky8",
"Password": "a1234",
"Email": "example7@gmail.com",
"Birthday": "1977-11-19"
}
```

Status: 200 OK Time: 99ms Size: 395 B

```
{
  "FavoriteMovies": [],
  "_id": "5e52c418c4191524e0a53fb1",
  "Username": "jacky8",
  "Password": "a1234",
  "Email": "example7@gmail.com",
  "Birthday": "1977-11-19T00:00:00.000Z",
```

New User login and authorization token



POST http://localhost:8080/login?Username=jacky8&Password=password1000

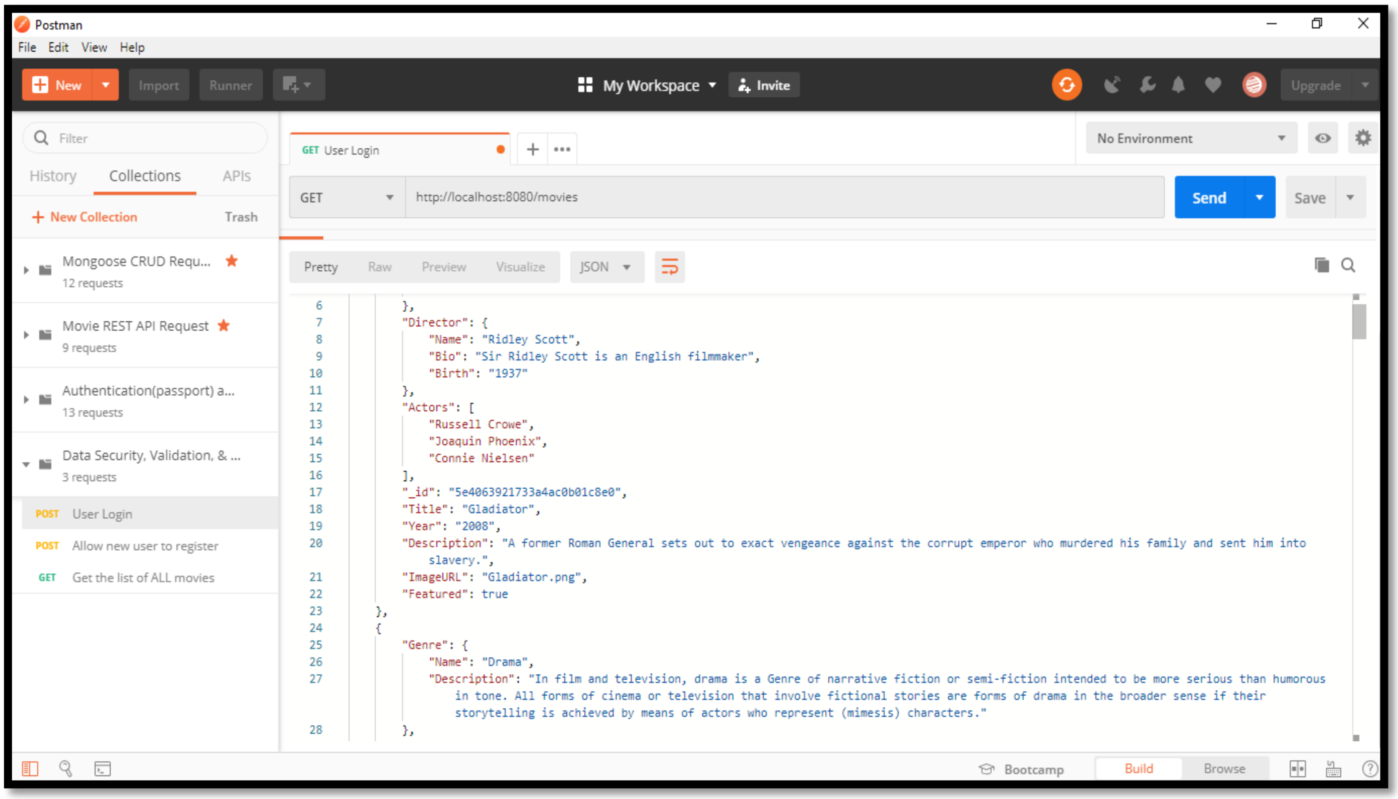
KEY	VALUE	DESCRIPTION
✓ Username	jacky8	
✓ Password	password1000	
Key	Value	Description

Status: 200 OK Time: 162ms Size: 901 B

```
{
    "user": {
        "FavoriteMovies": [],
        "_id": "5e52c418c4191524e0a53fb1",
        "Username": "jacky8",
        "Password": "$2b$10$Fz1xi6470DO/TiGWZeTbWeKDtXO5Bw4KkrJdAZ8RjOrc4bDbkaAwu",
        "Email": "example7@gmail.com",
        "Birthday": "1990-06-27T00:00:00.000Z",
        "__v": 0
    },
    "token":
        "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjV1NTJjNDE4YzQxOTE1MjR1MGE1M2ZiMSIsIlVzZXJuYW1lIjoiamFja3k4IiwiUGFz
        c3dvcmQiOiIkMmIkMTAkRnoxeGk2NDdPRE8vVGlHV1plVGJXZUtEdFhPNUJ3NEtrckpkQVo4UmpPcmM0YkRia2FBd3UiLCJFbWFpbCI6ImV4YW1wbGU3QGdtYWlsLmNvbSIsIkJpcnRoZG
        F5IjoiMTk5MC0wNi0yN1QwMDowMDowMC4wMDBaIiwiX192IjowLCJpYXQiOjE1ODI0ODMwNTMsImV4cCI6MTU4MzA4Nzg1Mywic3ViIjoiamFja3k4In0.
        PjHfp71AVCdjefuisnnJl_adyVb4VGLbgtXALbpSTvQ"
}
```

Postman screenshots with authorization token (11 requests)

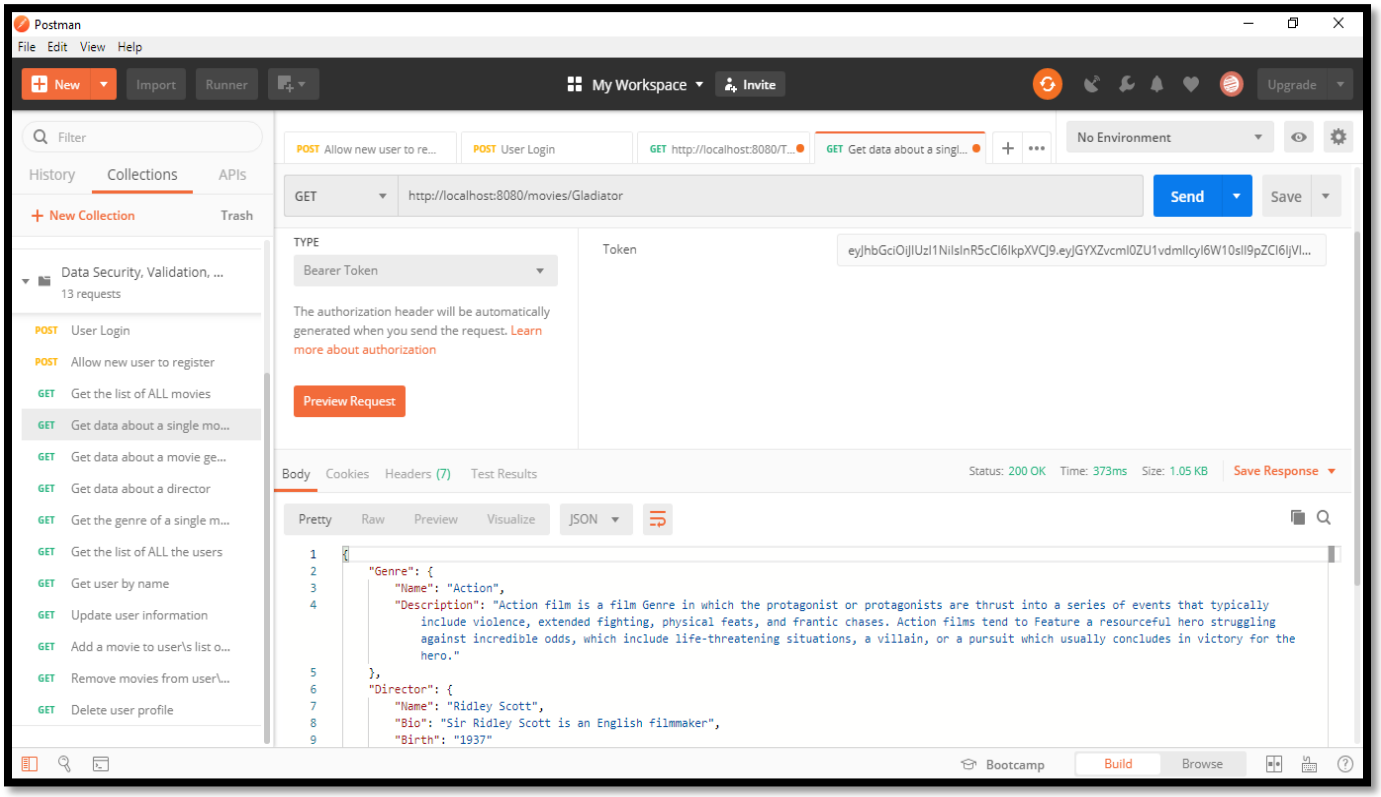
One: Return a list of ALL movies to the user:



GET http://localhost:8080/movies

```
        },
        "Director": {
            "Name": "Ridley Scott",
            "Bio": "Sir Ridley Scott is an English filmmaker",
            "Birth": "1937"
        },
        "Actors": [
            "Russell Crowe",
            "Joaquin Phoenix",
            "Connie Nielsen"
        ],
        "_id": "5e4063921733a4ac0b01c8e0",
        "Title": "Gladiator",
        "Year": "2008",
        "Description": "A former Roman General sets out to exact vengeance against the corrupt emperor who murdered his family and sent him into
            slavery.",
        "ImageURL": "Gladiator.png",
        "Featured": true
    },
    {
        "Genre": {
            "Name": "Drama",
            "Description": "In film and television, drama is a Genre of narrative fiction or semi-fiction intended to be more serious than humorous
                in tone. All forms of cinema or television that involve fictional stories are forms of drama in the broader sense if their
                storytelling is achieved by means of actors who represent (mimesis) characters."
        },
```

Two: Return data (description, genre, director, image URL, whether it’s featured or not) about a single movie by title to the user:


Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
GET Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
POST Allow new user to re...
POST User Login
GET http://localhost:8080/T...
GET Get data about a singl...
No Environment
Send
Save
Preview Request
Body Cookies Headers (7) Test Results
Save Response
Pretty Raw Preview Visualize JSON
Bootcamp Build Browse

GET http://localhost:8080/movies/Gladiator

TYPE: Bearer Token

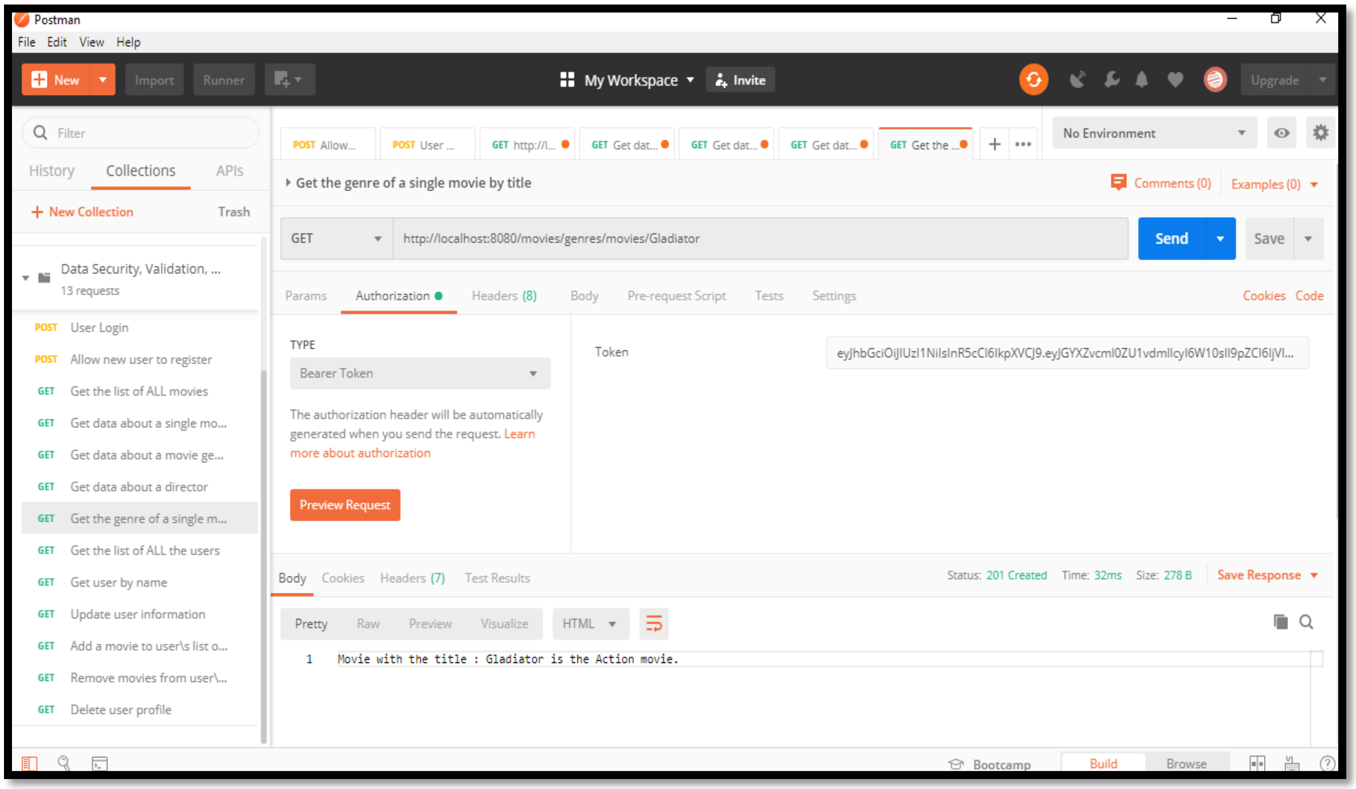
Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcmI0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

The authorization header will be automatically generated when you send the request. Learn more about authorization

Status: 200 OK Time: 373ms Size: 1.05 KB

```
{
    "Genre": {
        "Name": "Action",
        "Description": "Action film is a film Genre in which the protagonist or protagonists are thrust into a series of events that typically
            include violence, extended fighting, physical feats, and frantic chases. Action films tend to Feature a resourceful hero struggling
            against incredible odds, which include life-threatening situations, a villain, or a pursuit which usually concludes in victory for the
            hero."
    },
    "Director": {
        "Name": "Ridley Scott",
        "Bio": "Sir Ridley Scott is an English filmmaker",
        "Birth": "1937"
```

Three: Return data about a genre by the movie title (e.g., “Gladiator”):


Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
GET Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
No Environment
Comments (0)
Examples (0)
Send
Save
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies Code
Preview Request
Body Cookies Headers (7) Test Results
Save Response
Pretty Raw Preview Visualize HTML
Bootcamp Build Browse

Get the genre of a single movie by title

GET http://localhost:8080/movies/genres/movies/Gladiator

TYPE: Bearer Token

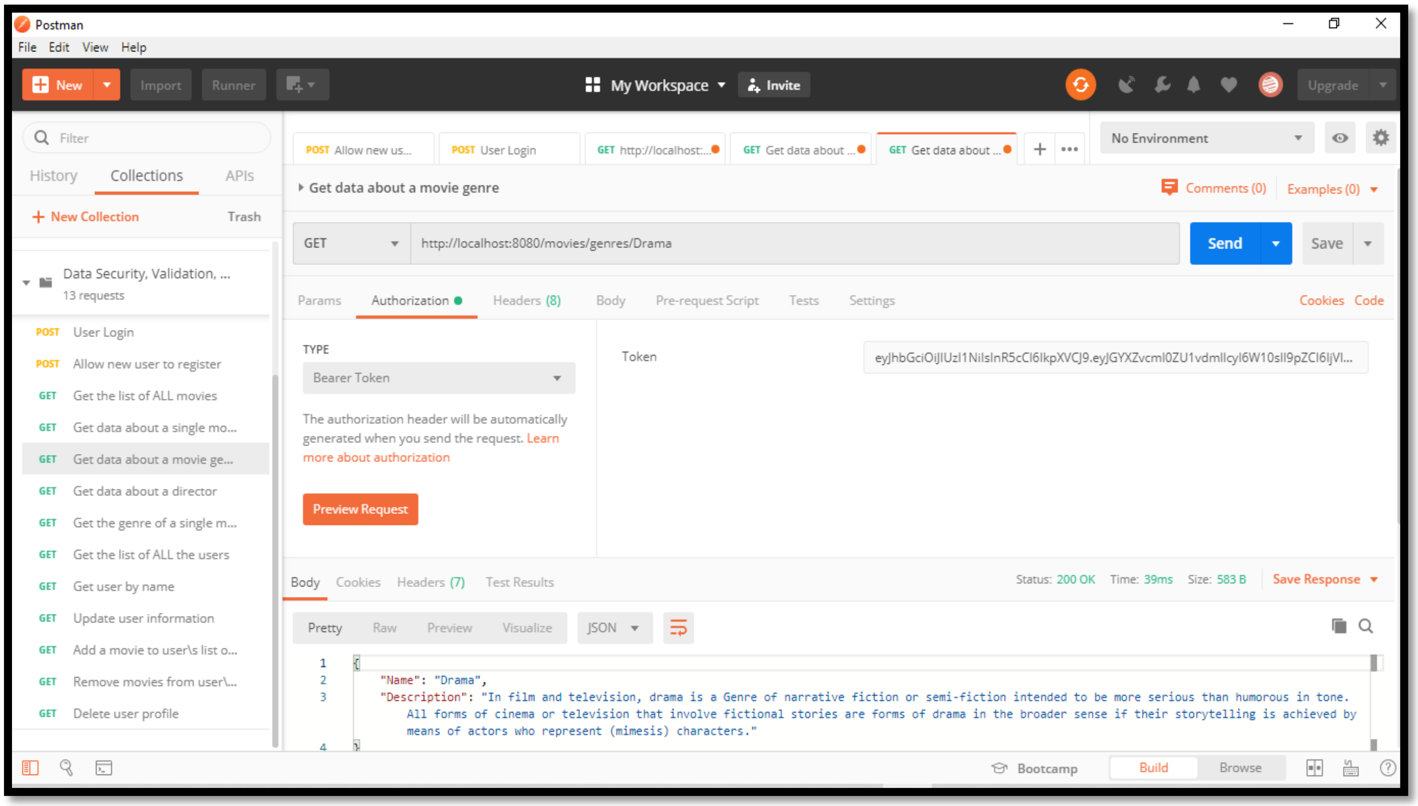
Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcmI0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

The authorization header will be automatically generated when you send the request. Learn more about authorization

Status: 201 Created Time: 32ms Size: 278 B

```
Movie with the title : Gladiator is the Action movie.
```

Four: Return data about a genre (description) by the genre Name (e.g., “Drama”):



Get data about a movie genre

GET http://localhost:8080/movies/genres/Drama

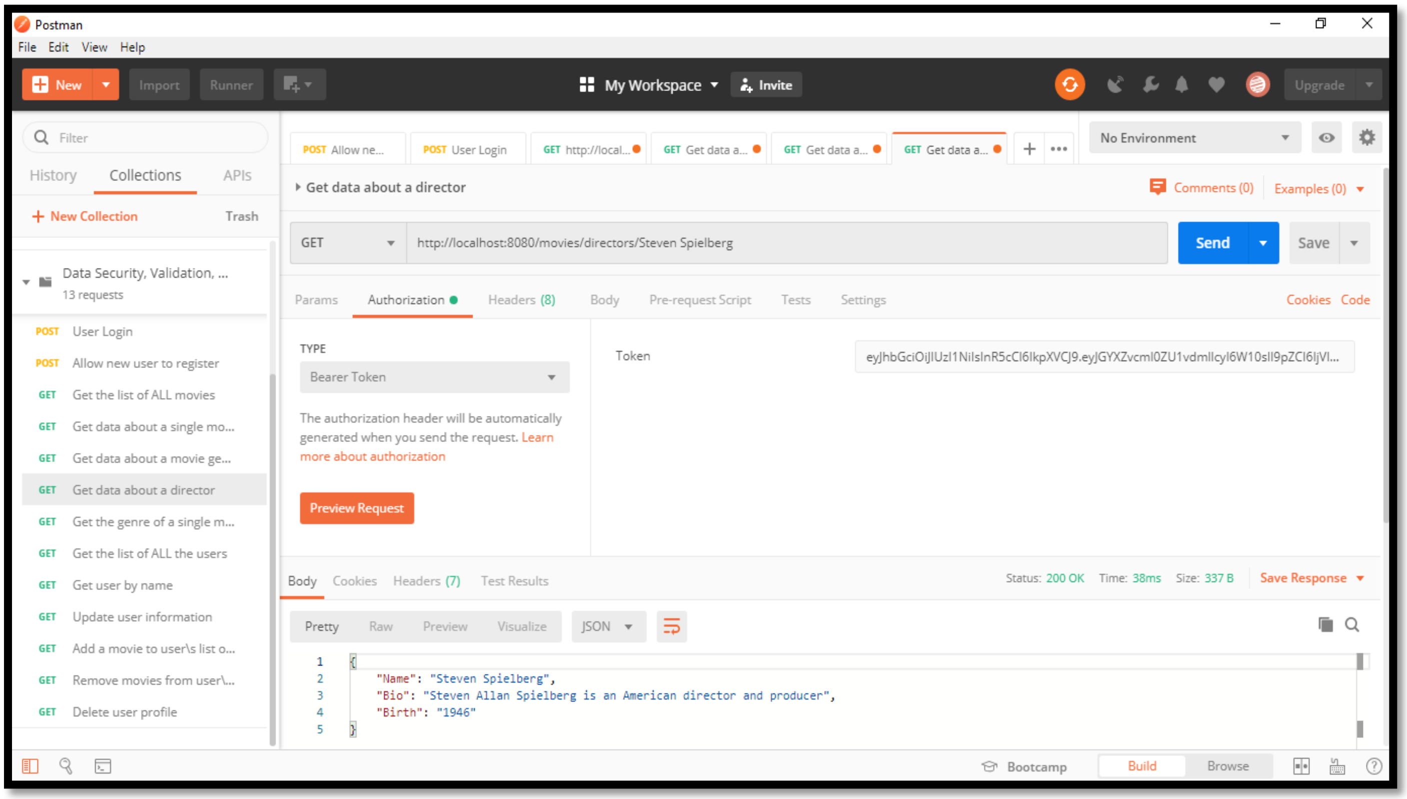
Authorization — TYPE: Bearer Token

Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

Status: 200 OK Time: 39ms Size: 583 B

```
{
    "Name": "Drama",
    "Description": "In film and television, drama is a Genre of narrative fiction or semi-fiction intended to be more serious than humorous in tone.
        All forms of cinema or television that involve fictional stories are forms of drama in the broader sense if their storytelling is achieved by
        means of actors who represent (mimesis) characters."
}
```

Five: Return data about a director (bio, birth year, death year) by name:



Get data about a director

GET http://localhost:8080/movies/directors/Steven Spielberg

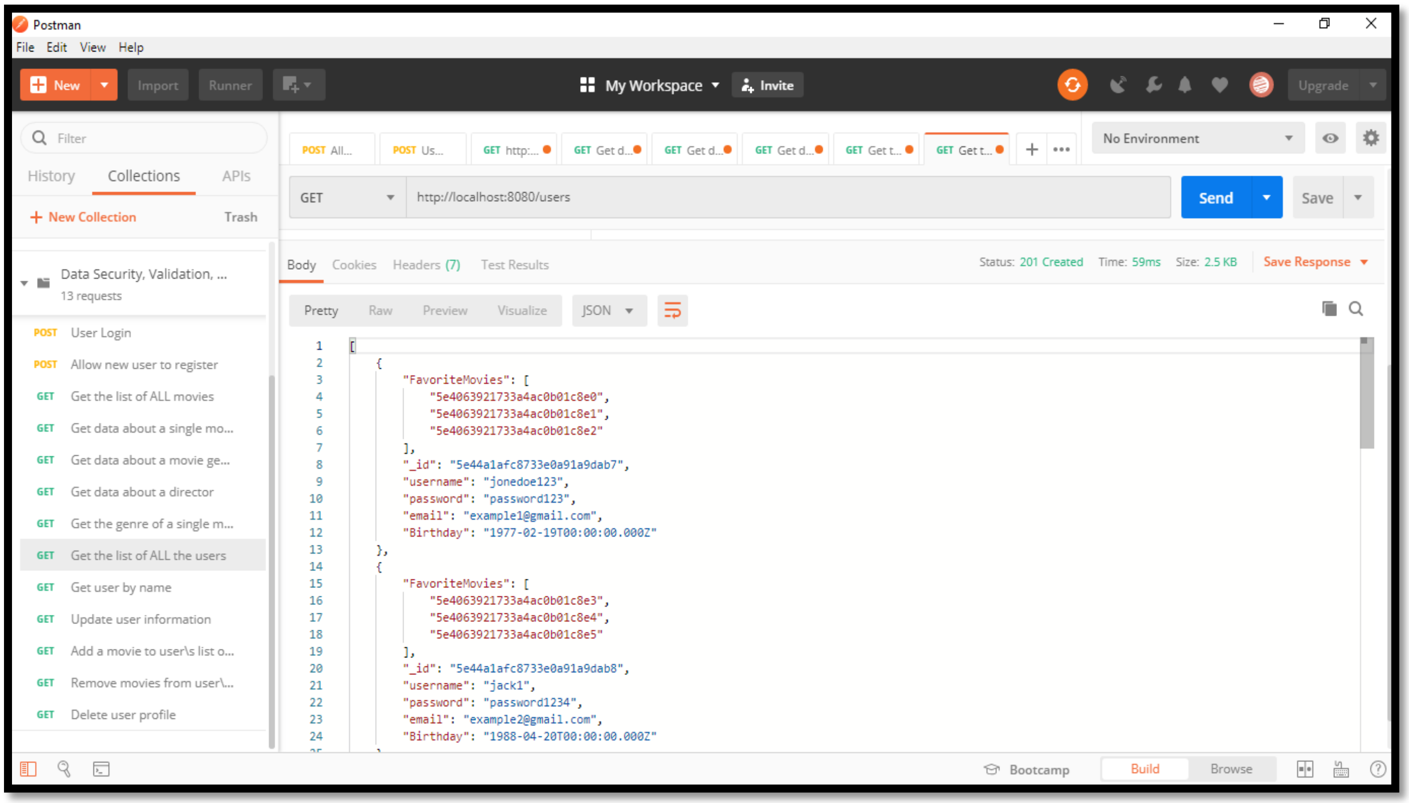
Authorization — TYPE: Bearer Token

Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

Status: 200 OK Time: 38ms Size: 337 B

```
{
    "Name": "Steven Spielberg",
    "Bio": "Steven Allan Spielberg is an American director and producer",
    "Birth": "1946"
}
```

Six: Return a list of ALL users:



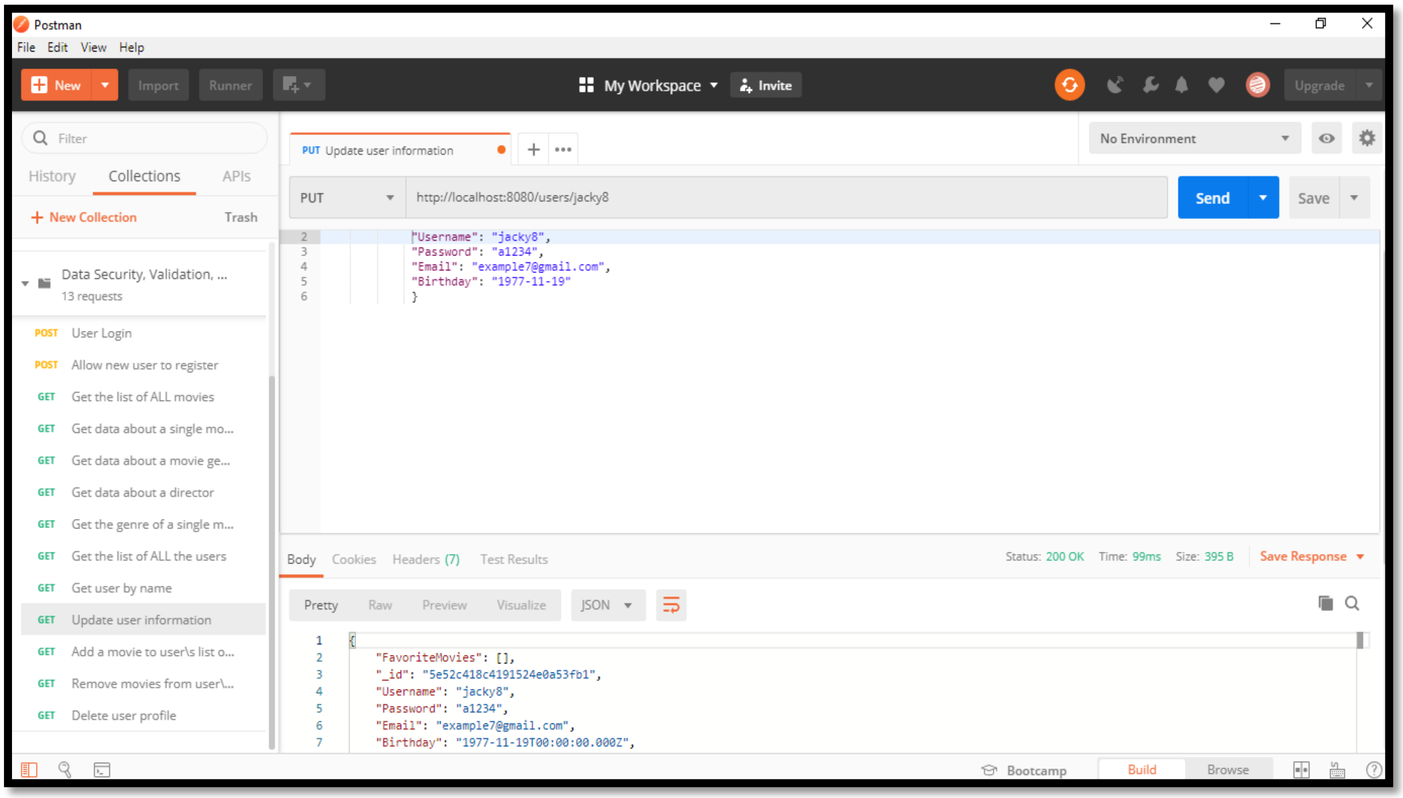
Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
No Environment
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
GET Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
Send
Save
Body
Cookies
Headers (7)
Test Results
Save Response
Pretty
Raw
Preview
Visualize
JSON
Bootcamp
Build
Browse

GET http://localhost:8080/users

Status: 201 Created Time: 59ms Size: 2.5 KB

```
[
    {
        "FavoriteMovies": [
            "5e4063921733a4ac0b01c8e0",
            "5e4063921733a4ac0b01c8e1",
            "5e4063921733a4ac0b01c8e2"
        ],
        "_id": "5e44a1afc8733e0a91a9dab7",
        "username": "jonedoe123",
        "password": "password123",
        "email": "example1@gmail.com",
        "Birthday": "1977-02-19T00:00:00.000Z"
    },
    {
        "FavoriteMovies": [
            "5e4063921733a4ac0b01c8e3",
            "5e4063921733a4ac0b01c8e4",
            "5e4063921733a4ac0b01c8e5"
        ],
        "_id": "5e44a1afc8733e0a91a9dab8",
        "username": "jack1",
        "password": "password1234",
        "email": "example2@gmail.com",
        "Birthday": "1988-04-20T00:00:00.000Z"
```

Seven: Allow users to update their user info (username, password, email, date of birth):



Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
No Environment
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
GET Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
PUT Update user information
Send
Save
Body
Cookies
Headers (7)
Test Results
Save Response
Pretty
Raw
Preview
Visualize
JSON
Bootcamp
Build
Browse

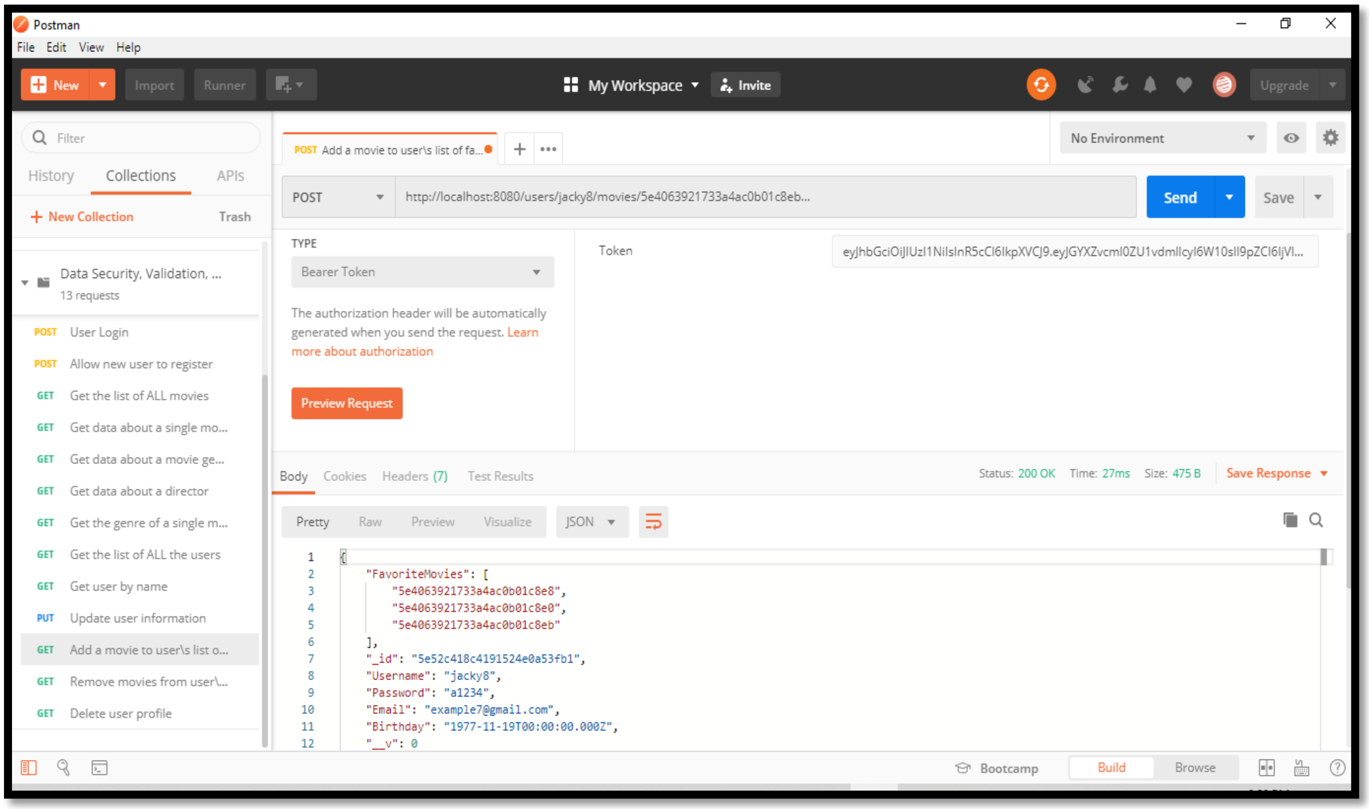
PUT http://localhost:8080/users/jacky8

```
    "Username": "jacky8",
    "Password": "a1234",
    "Email": "example7@gmail.com",
    "Birthday": "1977-11-19"
    }
```

Status: 200 OK Time: 99ms Size: 395 B

```
{
    "FavoriteMovies": [],
    "_id": "5e52c418c4191524e0a53fb1",
    "Username": "jacky8",
    "Password": "a1234",
    "Email": "example7@gmail.com",
    "Birthday": "1977-11-19T00:00:00.000Z",
```

Eight: Allow users to add a movie to their list of favorites:

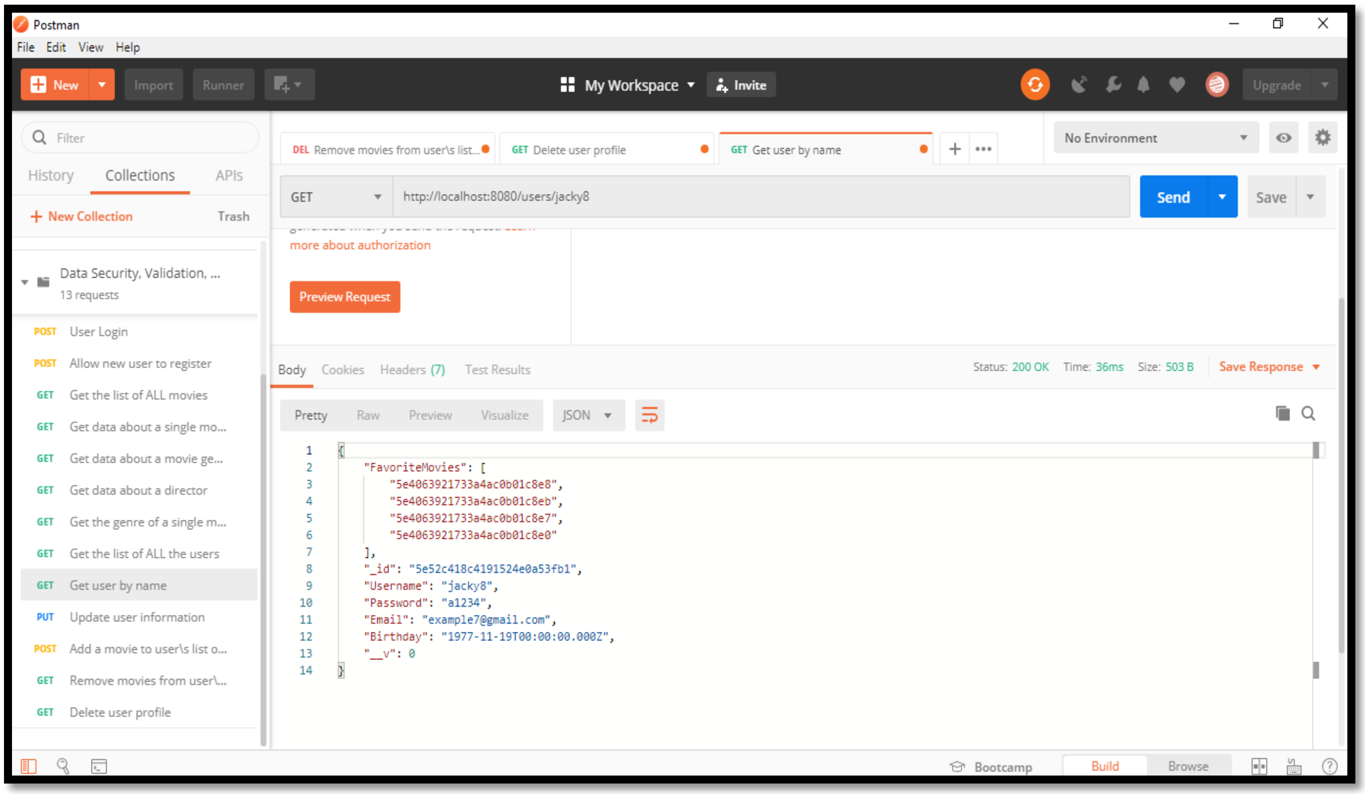

Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
PUT Update user information
GET Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
POST Add a movie to user\s list of fa...
No Environment
Send
Save
TYPE
Bearer Token
The authorization header will be automatically generated when you send the request. Learn more about authorization
Preview Request
Token
Body Cookies Headers (7) Test Results
Status: 200 OK Time: 27ms Size: 475 B
Save Response
Pretty Raw Preview Visualize JSON
Bootcamp
Build
Browse

POST http://localhost:8080/users/jacky8/movies/5e4063921733a4ac0b01c8eb...

Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

```
{
    "FavoriteMovies": [
        "5e4063921733a4ac0b01c8e8",
        "5e4063921733a4ac0b01c8e0",
        "5e4063921733a4ac0b01c8eb"
    ],
    "_id": "5e52c418c4191524e0a53fb1",
    "Username": "jacky8",
    "Password": "a1234",
    "Email": "example7@gmail.com",
    "Birthday": "1977-11-19T00:00:00.000Z",
    "__v": 0
```

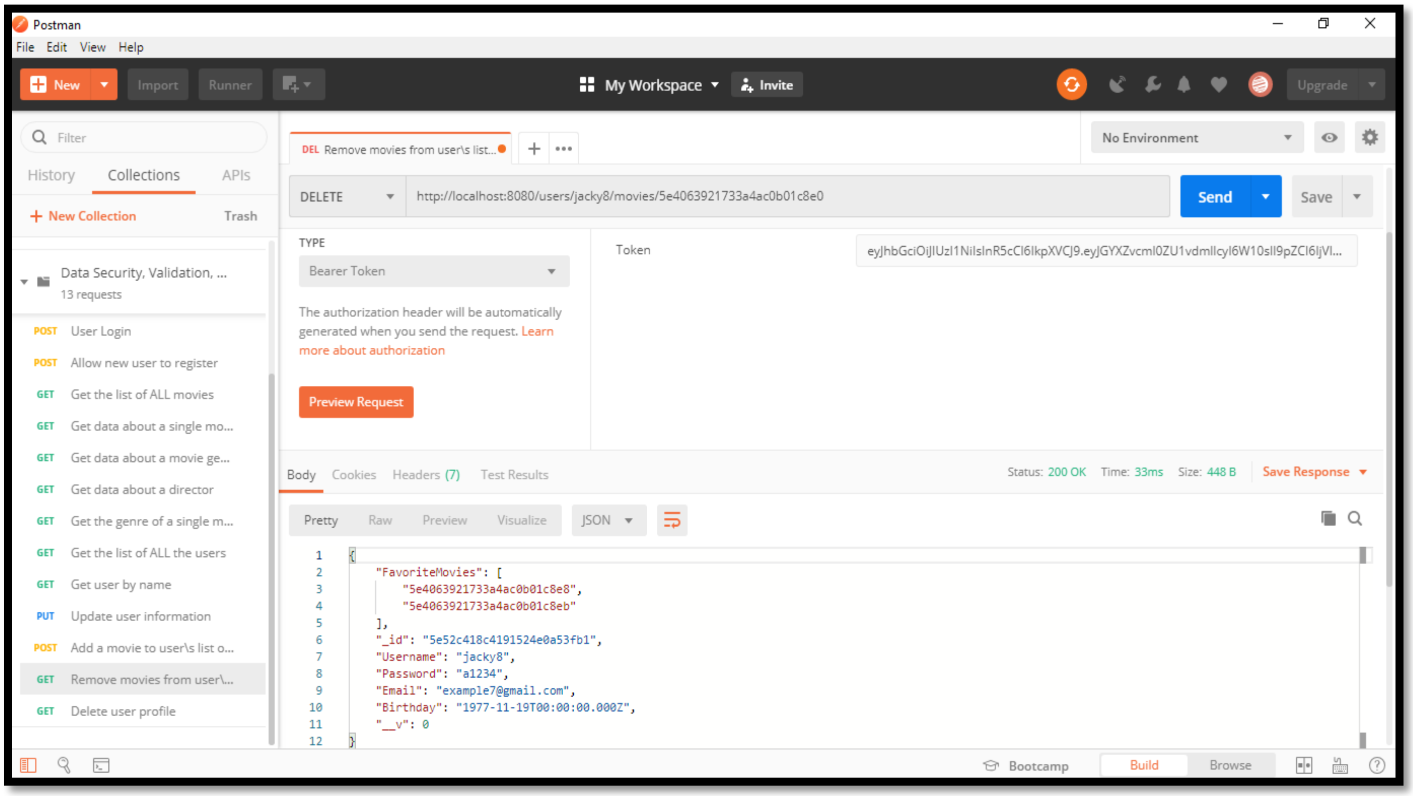
Nine: Get user by Name:


Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
PUT Update user information
POST Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
DEL Remove movies from user\s list...
GET Delete user profile
GET Get user by name
No Environment
Send
Save
more about authorization
Preview Request
Body Cookies Headers (7) Test Results
Status: 200 OK Time: 36ms Size: 503 B
Save Response
Pretty Raw Preview Visualize JSON
Bootcamp
Build
Browse

GET http://localhost:8080/users/jacky8

```
{
    "FavoriteMovies": [
        "5e4063921733a4ac0b01c8e8",
        "5e4063921733a4ac0b01c8eb",
        "5e4063921733a4ac0b01c8e7",
        "5e4063921733a4ac0b01c8e0"
    ],
    "_id": "5e52c418c4191524e0a53fb1",
    "Username": "jacky8",
    "Password": "a1234",
    "Email": "example7@gmail.com",
    "Birthday": "1977-11-19T00:00:00.000Z",
    "__v": 0
}
```

Ten: Allow users to remove a movie from their list of favorites:


Postman
File Edit View Help
New
Import
Runner
My Workspace
Invite
Upgrade
Filter
History
Collections
APIs
New Collection
Trash
Data Security, Validation, ...
13 requests
POST User Login
POST Allow new user to register
GET Get the list of ALL movies
GET Get data about a single mo...
GET Get data about a movie ge...
GET Get data about a director
GET Get the genre of a single m...
GET Get the list of ALL the users
GET Get user by name
PUT Update user information
POST Add a movie to user\s list o...
GET Remove movies from user\...
GET Delete user profile
DEL Remove movies from user\s list...
No Environment
Send
Save
Preview Request
Body
Cookies
Headers (7)
Test Results
Save Response
Pretty
Raw
Preview
Visualize
JSON
Bootcamp
Build
Browse

DELETE http://localhost:8080/users/jacky8/movies/5e4063921733a4ac0b01c8e0

TYPE: Bearer Token

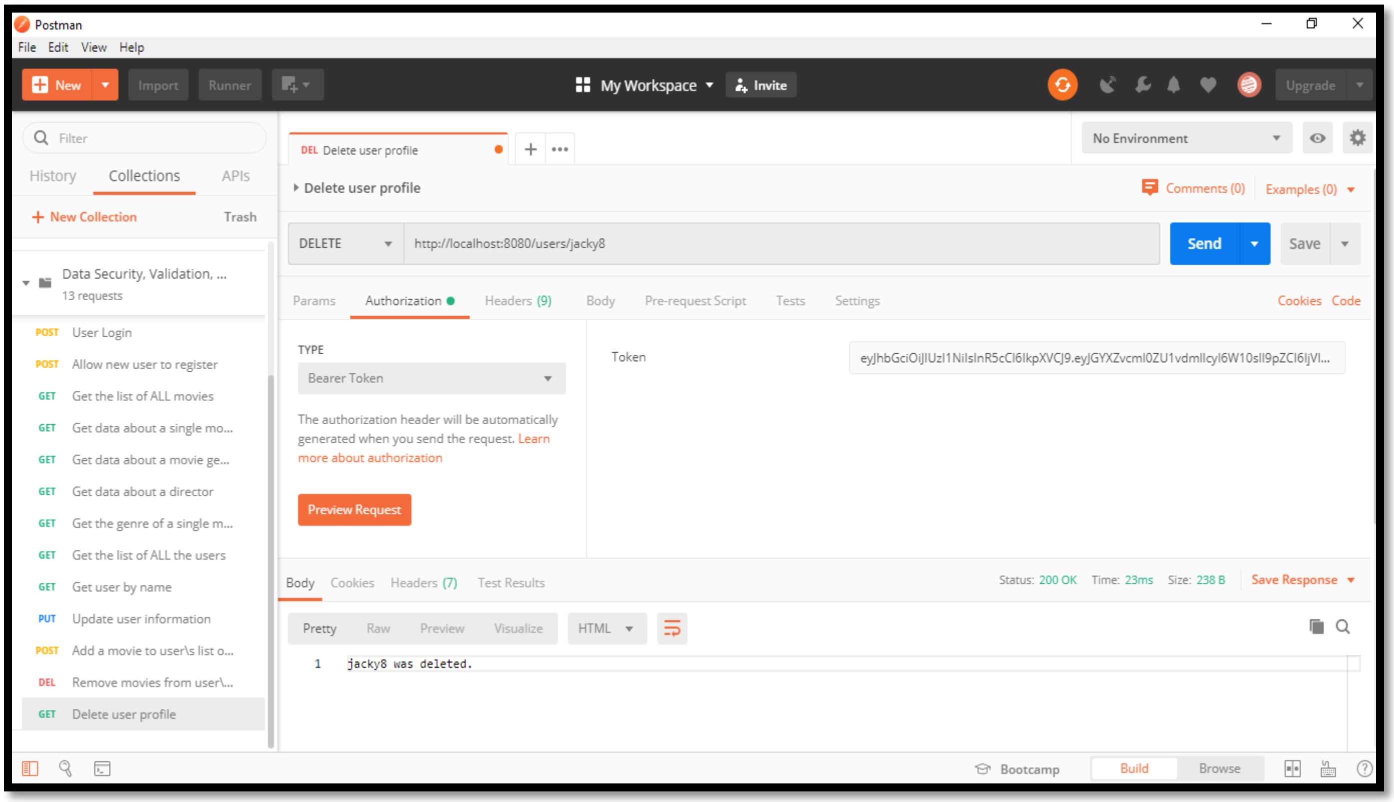
Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

The authorization header will be automatically generated when you send the request. Learn more about authorization

Status: 200 OK Time: 33ms Size: 448 B

```
{
    "FavoriteMovies": [
        "5e4063921733a4ac0b01c8e8",
        "5e4063921733a4ac0b01c8eb"
    ],
    "_id": "5e52c418c4191524e0a53fb1",
    "Username": "jacky8",
    "Password": "a1234",
    "Email": "example7@gmail.com",
    "Birthday": "1977-11-19T00:00:00.000Z",
    "__v": 0
}
```

Eleven: Allow existing users to deregister with authorization token:



Delete user profile

DELETE http://localhost:8080/users/jacky8

TYPE: Bearer Token

Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJGYXZvcml0ZU1vdmllcyI6W10sIl9pZCI6IjVl...

The authorization header will be automatically generated when you send the request. Learn more about authorization

Status: 200 OK Time: 23ms Size: 238 B

```
jacky8 was deleted.
```