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https://github.com/rmorassi/CS3219-OTOT-C

General details

I created a web app to showcase authentication and authorisation. There are 5 endpoints to:

1. Register a user
2. Login (with username and password)
3. Display welcome message if authenticated
4. Whitelist a user
5. Display secret message if authenticated AND authorised

To do this, I use JWT.

Proof of Authentication

The following screenshot shows the welcome page if I am not authenticated.
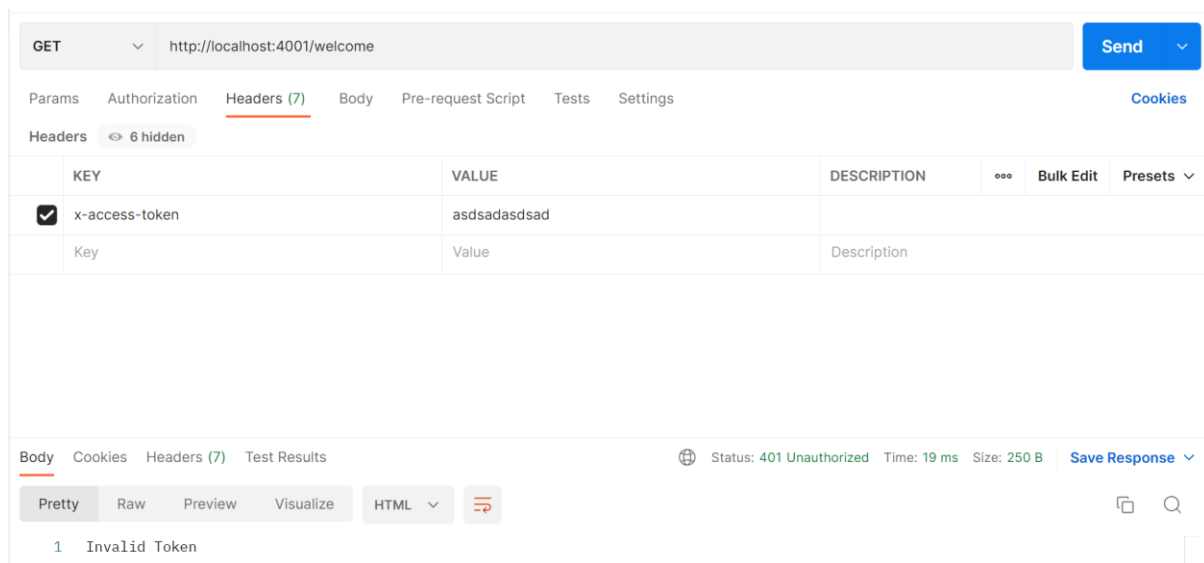
In the following screenshots I show how I create a user, login and display a welcome message once authenticated.

POST ▾   http://localhost:4001/register   **Send** ▾

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   ○ GraphQL   **JSON** ▾   Beautify

```
1  {
2  ····"first_name":·"Bob",
3  ····"last_name":·"Smith",
4  ····"email":·"email@example.com",
5  ····"password": "123456"
6  }
```

Body   Cookies   Headers (7)   Test Results   Status: 201 Created   Time: 180 ms   Size: 651 B   Save Response ▾

Pretty   Raw   Preview   Visualize   JSON ▾

```
1  {
2      "first_name": "Bob",
3      "last_name": "Smith",
4      "email": "email@example.com",
5      "password": "$2a$10$CFZhmYlDFrZSK4VBAxeY..taj81hTQbjbnxEWyj1PzUkfBGFdGIQK",
6      "_id": "636fb1840b4c7714ca20a7a9",
7      "__v": 0,
8      "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
           eyJ1c2VyX2lkIjoiNjM2ZmIxODQwYjRjNzcxNGNhMjBhN2E5IiwiZW1haWwiOiJlbWFpbEBleGFtcGxlLmNvbSIsImlhdCI6MTY2ODI2NDMyNCwiZXhwIjox
           NjY4MjY3OTI0fQ.YT-u7SP_a4dmmiLkWmBP2_vu5qYmmncj48TBc278TiE"
9  }
```

POST ▾   http://localhost:4001/login   **Send** ▾

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

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   ○ GraphQL   **JSON** ▾   Beautify

```
1  {
2  ····"email":·"email@example.com",
3  ····"password":·"123456"
4  }
```

Body   Cookies   Headers (7)   Test Results   Status: 200 OK   Time: 108 ms   Size: 646 B   Save Response ▾

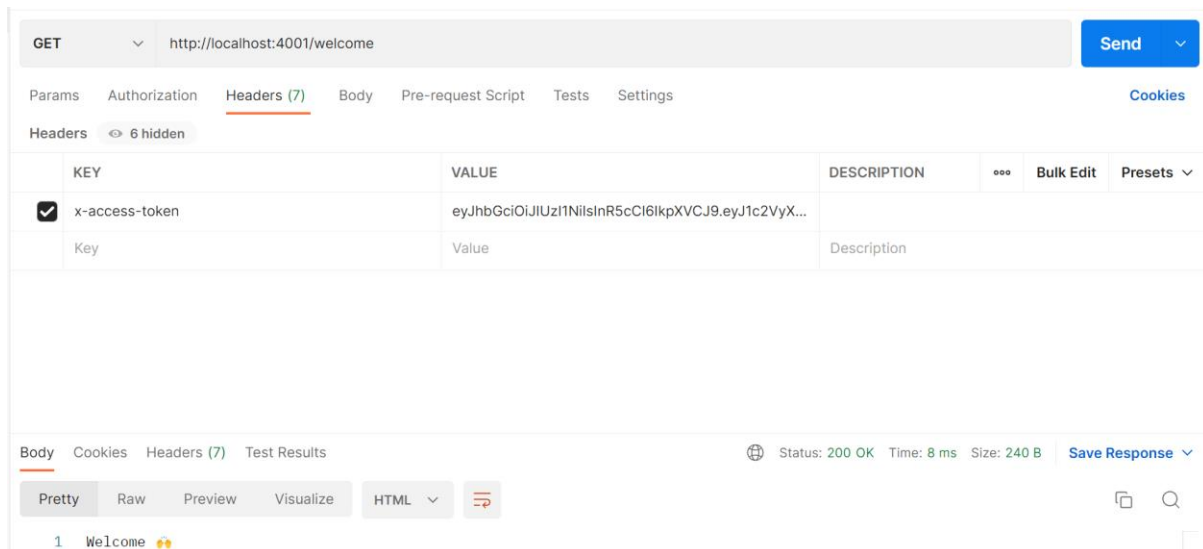Pretty   Raw   Preview   Visualize   JSON ▾

```
1  {
2      "_id": "636fb1840b4c7714ca20a7a9",
3      "first_name": "Bob",
4      "last_name": "Smith",
5      "email": "email@example.com",
6      "password": "$2a$10$CFZhmYlDFrZSK4VBAxeY..taj81hTQbjbnxEWyj1PzUkfBGFdGIQK",
7      "__v": 0,
8      "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
           eyJ1c2VyX2lkIjoiNjM2ZmIxODQwYjRjNzcxNGNhMjBhN2E5IiwiZW1haWwiOiJlbWFpbEBleGFtcGxlLmNvbSIsImlhdCI6MTY2ODI2NDM1MiwiZXhwIjox
           NjY4MjY3OTUyfQ.vGtutQ4a0Rlcd7ZKTuq0gfrhfYwdzRuddxZ5uV9Mv4E"
9  }
```

Proof of Authorisation

The following screenshot shows the welcome page if I am authenticated BUT not authorised.
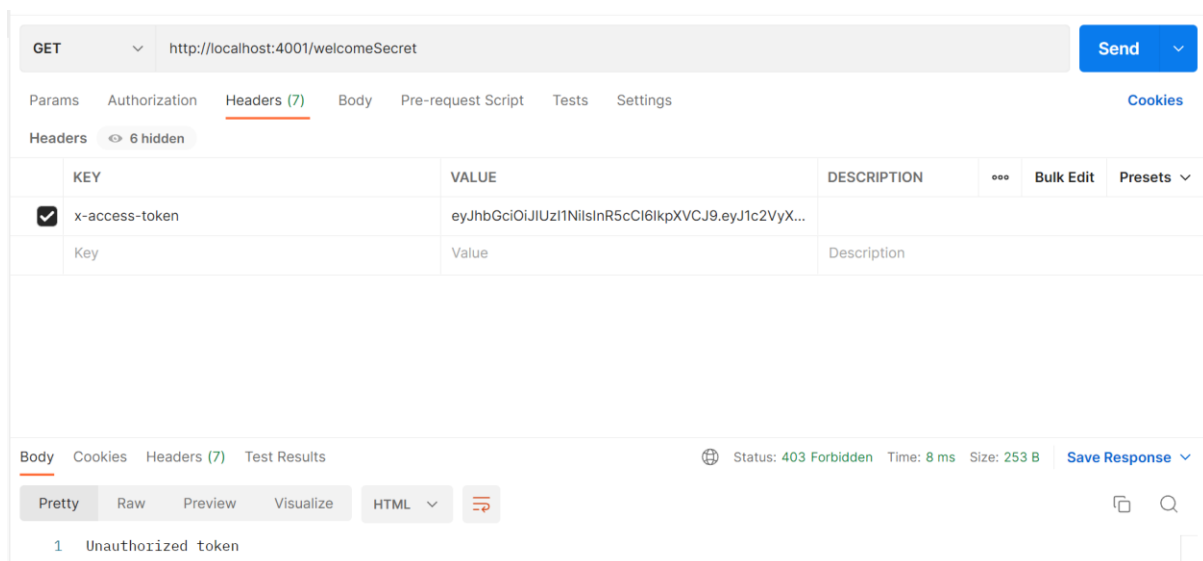
In the following screenshots I authorise the user by visiting the relevant endpoint and then display a welcome message only shown to authorised users.

GET ∨ http://localhost:4001/whitelistMe [Send ∨]

Params   Authorization   Headers (7)   Body   Pre-request Script   Tests   Settings   Cookies

Headers   👁 6 hidden

	KEY	VALUE	DESCRIPTION	⦾⦾⦾	Bulk Edit	Presets ∨
☑	x-access-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX...				
	Key	Value	Description			

Body   Cookies   Headers (7)   Test Results   🌐 Status: 200 OK   Time: 30 ms   Size: 238 B   Save Response ∨

Pretty   Raw   Preview   Visualize | HTML ∨ | ⇥

1   Whitelisted

GET ∨ http://localhost:4001/welcomeSecret [Send ∨]

Params   Authorization   Headers (7)   Body   Pre-request Script   Tests   Settings   Cookies

Headers   👁 6 hidden

	KEY	VALUE	DESCRIPTION	⦾⦾⦾	Bulk Edit	Presets ∨
☑	x-access-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX...				
	Key	Value	Description			

Body   Cookies   Headers (7)   Test Results   🌐 Status: 200 OK   Time: 18 ms   Size: 262 B   Save Response ∨

Pretty   Raw   Preview   Visualize | HTML ∨ | ⇥

1   Welcome to the secret website 🙌