

Project Development Report: SynApp

Introduction

SynApp aims to connect people based on their interests in a number of topics. To begin with users will have the choice to communicate with (make synapses with) with other users based on their interest in Politics, Sports, Health or Tech. Future updates will bring further topics and features but we at SynApp believe in developing the app with our users based on their response.

One of the unique features of SynApp is that users can set an expiration time for the post, after which the post cannot be reacted to. We believe this will encourage more positive interactions between users and minimise the negative aspects seen on other platforms. Users will still be able to browse the synapses either by topic or not.

This report provides a comprehensive overview of the Node.js Express application called "SynApp" for the Piazza platform. It details the architecture, database design, services, and API resources, along with references to external resources used during development.

Application Architecture

Technology Stack

- **Backend:** Node.js with Express framework
- **Database:** MongoDB with Mongoose ODM
- **Authentication:** JSON Web Tokens (JWT)
- **Validation:** Joi
- **Security:** bcryptjs for hashing

Key Components

- **Server Initialization:** `app.js` initializes the Express server and connects to the MongoDB database.
- **Middleware:** Includes body-parser for JSON parsing, custom token verification, and proposed validation middleware.
- **Route Handling:** Defined in `routes` directory, with separate files for **synapses** and **auth**.

Database Design

- **User Model:** Stores username, email, and hashed password.
- **Synapse Model:** Includes fields like title, body, user, comments, react(like/dislike), and topic.
- **Relationships:** References between synapse posts and users via ObjectIDs.

Service Descriptions

1. **User Authentication:**
 - Register: User sign-up with validation.
 - Login: User authentication and token generation.
2. **Synapse Management:**
 - Post Creation/Deletion/Update: CRUD operations on synapse posts.
 - Likes/Dislikes: User interactions with posts.

- Commenting: Adding comments to posts.

API Resources

Endpoints

- **Auth:**
 - POST **/api/users/register**: User registration
 - POST **/api/users/login**: User login
- **Synapses:**
 - POST **/api/synapses**: Create a synapse
 - GET **/api/synapses**: Retrieve all synapses
 - PATCH **/api/synapses/:synapseld**: Update a synapse
 - DELETE **/api/synapses/:synapseld**: Delete a synapse
 - POST **/api/synapses/react/:synapseld**: React to a synapse
 - POST **/api/synapses/comments/:synapseld**: Comment on a synapse

References and External Resources

- **Node.js and Express:**
 - Official Documentation: [Express.js](#)
 - Tutorial: [MDN Web Docs](#)
- **MongoDB and Mongoose:**
 - Official Documentation: [Mongoose](#)
 - Guide: [MongoDB University](#)
- **Authentication and Security:**
 - JWT: [jsonwebtoken NPM](#)
 - Password Hashing: [bcryptjs NPM](#)
 - Security Best Practices: [Node.js Security Checklist](#)
- **Validation:**
 - Joi Validation: [Joi NPM](#)

In addition, a number of other online teaching resources and forums were utilised during the development of this app;

- [Learn JavaScript](#)
- [Learn Intermediate JavaScript](#)
- [Learn Node.js](#)
- And of course: [stackoverflow](#)

Test Cases

To test for the scenarios required in the course work, calls were made using Postman and screenshots are provided below for each testcase.

TC 1. Olga, Nick, Mary, and Nestor register and are ready to access the **Piazza** API.



localhost:3001/api/users/register

POST



localhost:3001/api/users/register

Params

Authorization

Headers (8)

Body ●

Pre-request Script

Tests

Settings



none



form-data



x-www-form-urlencoded



raw



binary



GraphQL



JSON



```
1 {  
2   ... "username": "Olga",  
3   ... "email": "olga@domain.com",  
4   ... "password": "strongpassword"  
5 }
```

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON



```
1 {  
2   "username": "Olga",  
3   "email": "olga@domain.com",  
4   "password": "$2a$05$1n/F5uRALsfDqVXobGLZG.VWsFSWNKMM.0c6Ly/qFJJmZAYPd.XRe",  
5   "_id": "65746fef096610cf7b738829",  
6   "date": "2023-12-09T13:47:27.933Z",  
7   "__v": 0  
8 }
```



localhost:3001/api/users/register

POST



localhost:3001/api/users/register

Params

Authorization

Headers (8)

Body ●

Pre-request Script

Tests

Settings



none



form-data



x-www-form-urlencoded



raw



binary



GraphQL

JSON



```
1 {  
2   "username": "Nick",  
3   "email": "nick@domain.com",  
4   "password": "strongpassword_nick"  
5 }
```

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON



```
1 {  
2   "username": "Nick",  
3   "email": "nick@domain.com",  
4   "password": "$2a$05$TLGGmtkkfpBN7yTJa54JN0Jx6v9T6eJL1RIhb2XuJSJ1N5dkD5kgq",  
5   "_id": "65747051096610cf7b73882c",  
6   "date": "2023-12-09T13:49:05.362Z",  
7   "__v": 0  
8 }
```



localhost:3001/api/users/register

POST



localhost:3001/api/users/register

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON**

```
1 {  
2   "username": "Mary",  
3   "email": "mary@domain.com",  
4   "password": "strongpassword_mary"  
5 }
```

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON



```
1 {  
2   "username": "Mary",  
3   "email": "mary@domain.com",  
4   "password": "$2a$05$Ji0vY0cG6deQ2/CCVp7QveL7nbLtjc4kFufv8XwRV3cqE8/Nkavx0",  
5   "_id": "6574706e096610cf7b73882f",  
6   "date": "2023-12-09T13:49:34.340Z",  
7   "__v": 0  
8 }
```

HTTP localhost:3001/api/users/register

POST localhost:3001/api/users/register

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

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

```
1 {
2   ... "username": "Nestor",
3   ... "email": "nestor@domain.com",
4   ... "password": "strongpassword_nestor"
5 }
```

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "username": "Nestor",
3   "email": "nestor@domain.com",
4   "password": "$2a$05$AQAwsINDaZJQr/jckeZKTOKXwxm0uUb0itSAPH1qwE6AU3oHBWxfK",
5   "_id": "6574708b096610cf7b738832",
6   "date": "2023-12-09T13:50:03.346Z",
7   "__v": 0
8 }
```

TC 2. Olga, Nick, Mary, and Nestor use the oAuth v2 authorisation service to register and get their tokens.

localhost:3001/api/users/login

POSTlocalhost:3001/api/users/login

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettings

noneform-datax-www-form-urlencodedrawbinaryGraphQLJSON

```
1
2  .... "email": "olga@domain.com",
3  .... "password": "strongpassword"
4
```

BodyCookiesHeaders (8)Test Results

PrettyRawPreviewVisualizeJSON

```
1
2  "auth-token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZjA5NjYxMGNmN2I3Mzg4Mjk1LCJpYXQiOiJlM0I3MDIxMjk4Nzd9.
3  jeBcz_FbkX7fUzGMotEc5VDh-gvYovfer2m0xgPBAz8"
4
```

localhost:3001/api/users/login

POSTlocalhost:3001/api/users/login

ParamsAuthorizationHeaders (12)BodyPre-request ScriptTestsSettings

noneform-datax-www-form-urlencodedrawbinaryGraphQLJSON

```
1
2  .... "email": "mary@domain.com",
3  .... "password": "strongpassword_mary"
4
```

BodyCookiesHeaders (8)Test Results

PrettyRawPreviewVisualizeJSON

```
1
2  "auth-token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZjA5NjYxMGNmN2I3Mzg4MmY1LCJpYXQiOiJlM0I3MDIxMzAwNzJ9.
3  qI5omVMh4TcsDo2tU9ih-xBTGVeLgRKGEaQ2uSdFHvo"
4
```

HTTPlocalhost:3001/api/users/login

POSTlocalhost:3001/api/users/login

ParamsAuthorizationHeaders (9)BodyPre-request ScriptTestsSettings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1

2

3

4

body

....."email": "nick@domain.com",
....."password": "strongpassword_nick"

BodyCookiesHeaders (8)Test Results

Status: 200 OKTime: 104 msSize: 565 B

PrettyRawPreviewVisualizeJSON

1

2

3

body

"auth-token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NjYxMGNmN2I3Mzg4MmMiLCJpYXQiOiJlE3MDIxMjk5MjZ9.Xzkq9BvKdvVtnbkoyxTh1kpLeqCOM27LHq0W6P5qWdc"

HTTPlocalhost:3001/api/users/login

POSTlocalhost:3001/api/users/login

ParamsAuthorizationHeaders (12)BodyPre-request ScriptTestsSettings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1

2

3

4

body

....."email": "nestor@domain.com",
....."password": "strongpassword_nestor"

BodyCookiesHeaders (8)Test Results

Status: 200 OKTime: 104 msSize: 565 B

PrettyRawPreviewVisualizeJSON

1

2

3

body

"auth-token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4YjA5NjYxMGNmN2I3Mzg4MzIiLCJpYXQiOiJlE3MDIxMzAxMT19.sWLaiF5qISi2I3rHC3Iu1w2EwXYd53KHU1opD0mzFkI"

TC 3. Olga makes a call to the API without using her token. This call should be unsuccessful as the user is unauthorised.

localhost:3001/api/synapses

POST localhost:3001/api/synapses

Params Authorization Headers (12) Body Pre-request Script Tests Settings

	Key		Value	Description
<input type="checkbox"/>	auth-token	Call made without using the token, Access Denied	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Olga
<input type="checkbox"/>	auth-token		eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nick
<input type="checkbox"/>	auth-token		eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Mary
<input type="checkbox"/>	auth-token		eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nestor

Body Cookies Headers (7) Test Results

Status: 401 Unauthorized

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "Access Denied"
3 }
```

TC 4. Olga posts a message in the Tech topic with an expiration time (e.g. 5 minutes) using her token. After the end of the expiration time, the message will not accept any further user interactions (likes, dislikes, or comments).

HTTP localhost:3001/api/synapses

POST localhost:3001/api/synapses

Params Authorization Headers (12) Body ● Pre-request Script Tests Settings

Headers 8 hidden

	Key	Value	Description
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Olga
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nestor
	Key	Value	Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "title": "Will they get it right this time?",
3   "topic": [],
4   "body": "Google just announced Gemini 1.0, hope its smarter than Bard! ",
5   "user": "Olga",
6   "hashtag": "byebyeX",
7   "location": "Golgafrincham",
8   "likes": [],
9   "dislikes": [],
10  "_id": "65747464096610cf7b73883a",
11  "comments": [],
12  "date": "2023-12-09T14:06:28.358Z",
13  "__v": 0
14 }
```

TC5. Nick posts a message in the Tech topic with an expiration time using his token.

localhost:3001/api/synapses

POST localhost:3001/api/synapses

Params Authorization Headers (12) Body ● Pre-request Script Tests Settings

Headers 8 hidden

	Key	Value	Descriptio
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Olga
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nestor
	Key	Value	Descriptio

Body Cookies Headers (7) Test Results Status: 200 OK

Pretty Raw Preview Visualize JSON

```

1  {
2    "title": "Steep",
3    "topic": [],
4    "body": "Thats a steep curve @Google, you sure?",
5    "user": "Nick",
6    "hashtag": "byebyeX",
7    "location": "Saquo-Pilia Hensha",
8    "likes": [],
9    "dislikes": [],
10   "_id": "6574778b096610cf7b73883e",
11   "comments": [],
12   "date": "2023-12-09T14:19:55.333Z",
13   "__v": 0
14 }

```

TC6. Mary posts a message in the Tech topic with an expiration time using her token.

localhost:3001/api/synapses

POST

localhost:3001/api/synapses

Params

Authorization

Headers (12)

Body

Pre-request Script

Tests

Settings

Headers

8 hidden

	Key	Value	Descripti
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Olga
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nick
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nestor
	Key	Value	Descripti

Body

Cookies

Headers (7)

Test Results

Status: 200 OK

Pretty

Raw

Preview

Visualize

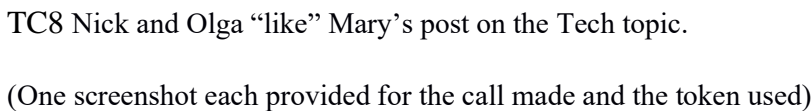
JSON

```

1  {
2    "title": "M3 or M2 Pro?",
3    "topic": [],
4    "body": "Should I get an M3 or M2 Pro, help me decide!",
5    "user": "Mary",
6    "hashtag": "byebyeX",
7    "location": "Lamueella",
8    "likes": [],
9    "dislikes": [],
10   "_id": "65747827096610cf7b738840",
11   "comments": [],
12   "date": "2023-12-09T14:22:31.386Z",
13   "__v": 0
14 }

```

TC7 Nick and Olga browse all the available posts in the Tech topic; three posts should be available with zero likes, zero dislikes and no comments.



localhost:3001/api/synapses/react/65747827096610cf7b738840

POST

localhost:3001/api/synapses/react/65747827096610cf7b738840

Params

Authorization

Headers (12)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1

2

3

4

{

... "reaction": "like"

}

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1

2

3

{

"message": "Reaction updated to 'like'"

}

localhost:3001/api/synapses/react/65747827096610cf7b738840

POST

localhost:3001/api/synapses/react/65747827096610cf7b738840

Params

Authorization

Headers (12)

Body

Pre-request Script

Tests

Settings

<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Olga
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...	Nestor

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1

2

3

{

"message": "Reaction updated to 'like'"

}

Status: 200 OK

TC9 Nestor “likes” Nick’s post and “dislikes” Mary’s on the Tech topic.

(one of each provided for to save space)

localhost:3001/api/synapses/react/6574778b096610cf7b73883e

POST

localhost:3001/api/synapses/react/6574778b096610cf7b73883e

ParamsAuthorizationHeaders (12)BodyPre-request ScriptTestsSettings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1

{

2

... "reaction": "like"

3

}

BodyCookiesHeaders (7)Test Results

Pretty

Raw

Preview

Visualize

JSON

1

{

2

... "message": "Reaction updated to 'like'"

3

}

localhost:3001/api/synapses/react/65747827096610cf7b738840

POST

localhost:3001/api/synapses/react/65747827096610cf7b738840

ParamsAuthorizationHeaders (12)BodyPre-request ScriptTestsSettings

☐

auth-token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...

Nick

☐

auth-token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...

Mary

☒

auth-token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc...

Nestor

Key

Value

Descrip

BodyCookiesHeaders (7)Test Results

Pretty

Raw

Preview

Visualize

JSON

1

{

2

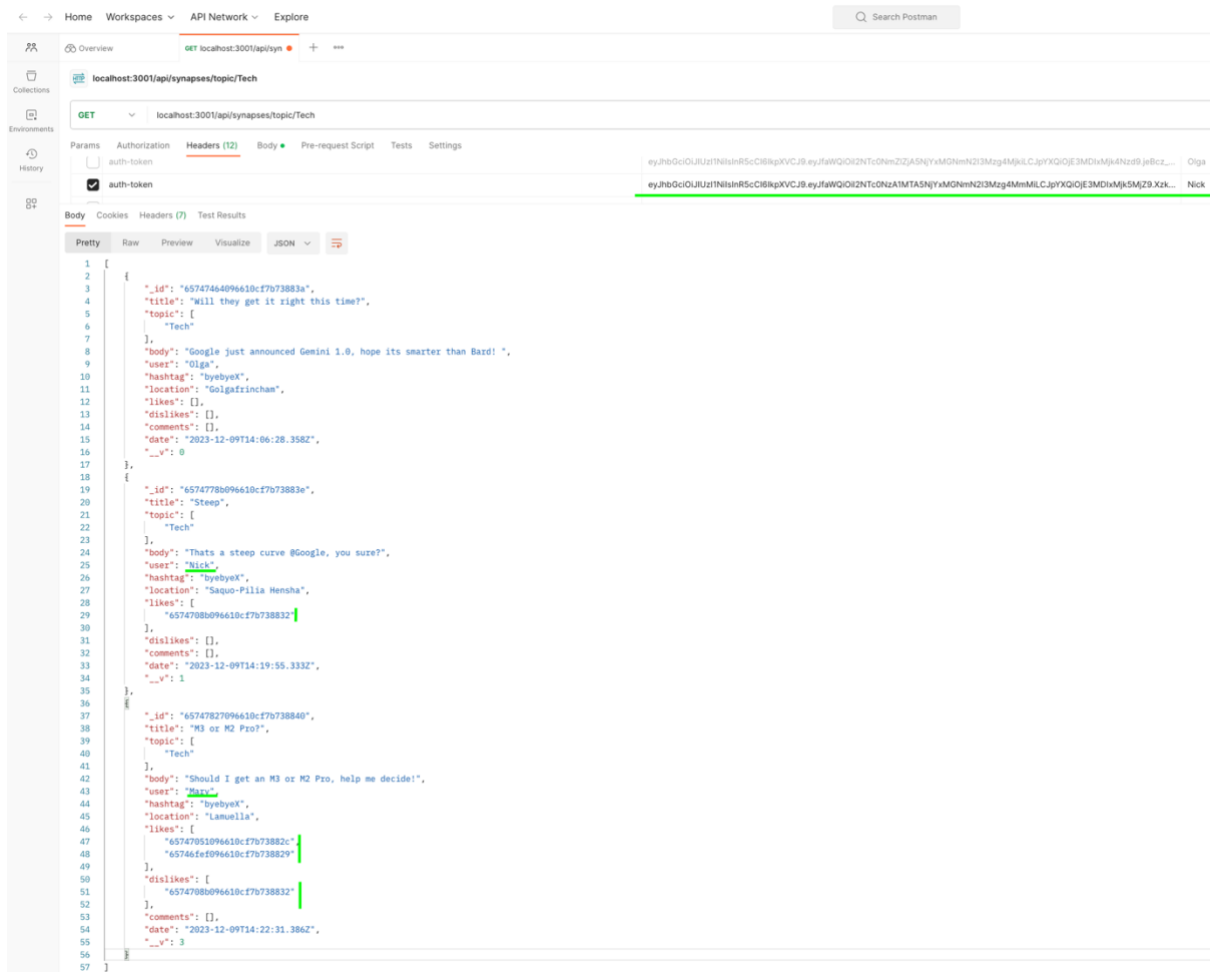
... "message": "Reaction updated to 'dislike'"

3

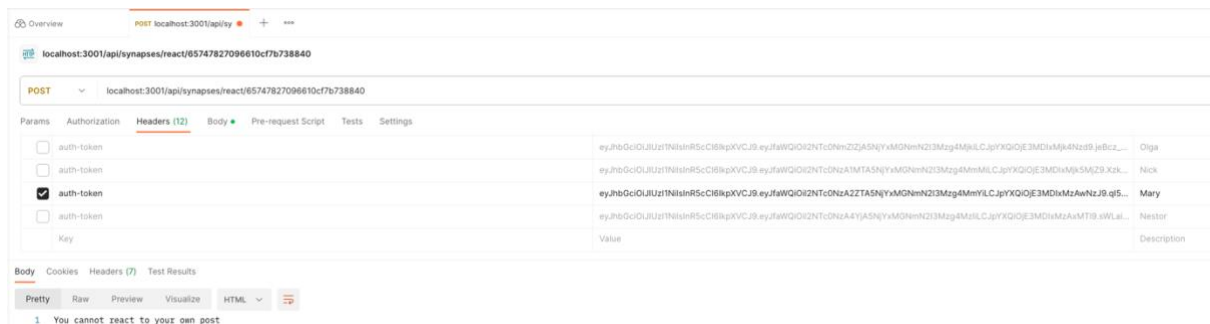
}

Status: 200 OI

TC10 Nick browses all the available posts on the Tech topic; at this stage, he can see the number of likes and dislikes for each post (Mary has two likes and one dislike, and Nick has one like). There are no comments made yet.



TC11 Mary likes her post on the Tech topic. This call should be unsuccessful; in **Piazza**, a post owner cannot like their messages.



TC12 Nick and Olga comment on Mary's post on the Tech topic in a round-robin fashion (one after the other, adding at least two comments each).

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

POST localhost:3001/api/synapses/comments/65747464096610cf7b73883a

Params Authorization Headers (12) Body Pre-request Script Tests Settings

Headers 8 hidden

	Key	Value	Description
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZj...	Olga
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1M...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2Z...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4Yj...	Nestor
	Key	Value	Description

Body Cookies Headers (7) Test Results

Status: 200

Pretty Raw Preview Visualize JSON

```
1  {
2    "message": "Comment added successfully",
3    "comment": {
4      "text": "I think the M3 has better performance overall. Have you considered battery life?",
5      "postedBy": "65747051096610cf7b73882c"
6    }
7  }
```

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

POST localhost:3001/api/synapses/comments/65747464096610cf7b73883a

Params Authorization Headers (12) Body Pre-request Script Tests Settings

Headers 8 hidden

	Key	Value	Description
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZj...	Olga
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1M...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2Z...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4Y...	Nestor

Body Cookies Headers (7) Test Results

Status: 200

Pretty Raw Preview Visualize JSON

```
1  {
2    "message": "Comment added successfully",
3    "comment": {
4      "text": "M2 Pro seems more cost-effective. Are you looking for higher graphics capability?",
5      "postedBy": "65746fef096610cf7b738829"
6    }
7  }
```

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

POST

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

Params

Authorization

Headers (12)

Body

Pre-request Script

Tests

Settings

Headers

8 hidden

	Key	Value	Description
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZj...	Olga
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1M...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2Z...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4Y...	Nestor

Body

Cookies

Headers (7)

Test Results

Status: 200 OK

Pretty

Raw

Preview

Visualize

JSON

```
1 {
2   "message": "Comment added successfully",
3   "comment": {
4     "text": "Also, the M3's cooling system is a big plus. Might be worth the extra cost.",
5     "postedBy": "65747051096610cf7b73882c"
6   }
7 }
```

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

POST

localhost:3001/api/synapses/comments/65747464096610cf7b73883a

Params

Authorization

Headers (12)

Body

Pre-request Script

Tests

Settings

Headers

8 hidden

	Key	Value	Description
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NmZlZj...	Olga
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1M...	Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2Z...	Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4Y...	Nestor

Body

Cookies

Headers (7)

Test Results

Status: 200 OK

Pretty

Raw

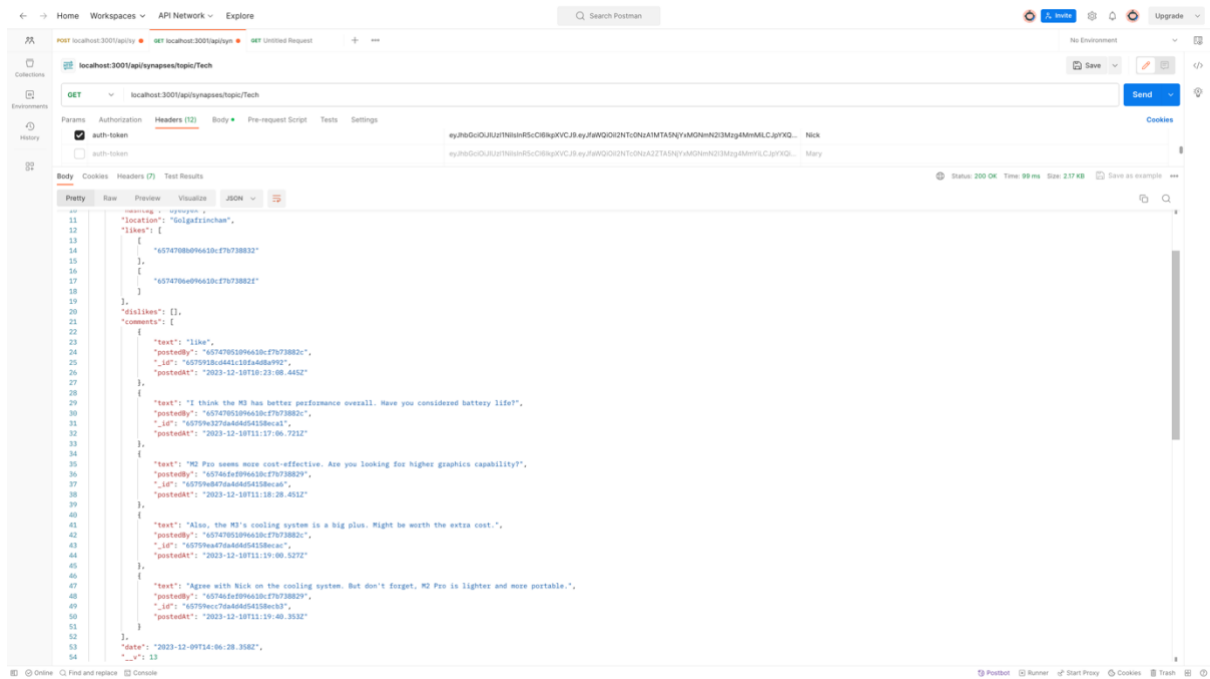
Preview

Visualize

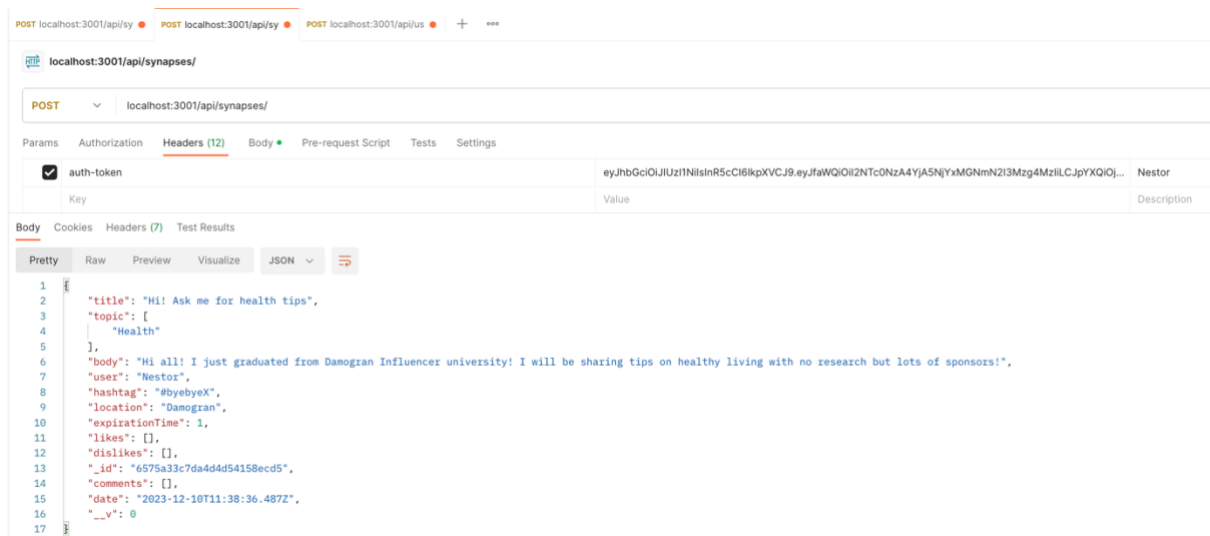
JSON

```
1 {
2   "message": "Comment added successfully",
3   "comment": {
4     "text": "Agree with Nick on the cooling system. But don't forget, M2 Pro is lighter and more portable.",
5     "postedBy": "65746fef096610cf7b738829"
6   }
7 }
```

TC13 Nick browses all the available posts in the Tech topic; at this stage, he can see the number of likes and dislikes of each post and the comments made.



TC14 Nestor posts a message in the Health topic with an expiration time using her token.



TC15 Mary browses all the available posts on the Health topic; at this stage, she can see only Nestor's post.

POST localhost:3001/api/syn POST localhost:3001/api/sy POST localhost:3001/api/us + ...

localhost:3001/api/synapses/

POST localhost:3001/api/synapses/

Params Authorization Headers (12) Body Pre-request Script Tests Settings

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4YjA5NiYxMGNmN2I3Mzg4MzIiLCJpYXQiOiJ... Nestor

Key Value Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```

1 {
2   "title": "Hi! Ask me for health tips",
3   "topic": {
4     "Health"
5   },
6   "body": "Hi all! I just graduated from Damogran Influencer university! I will be sharing tips on healthy living with no research but lots of sponsors!",
7   "user": "Nestor",
8   "hashtag": "#byebyeX",
9   "location": "Damogran",
10  "expirationTime": 3,
11  "likes": [],
12  "dislikes": [],
13  "_id": "6575a4bc7da4d4d54158ecd9",
14  "comments": [],
15  "date": "2023-12-10T11:45:00.349Z",
16  "__v": 0
17 }

```

TC16 Mary posts a comment in Nestor's message on the Health topic.

localhost:3001/api/synapses/comments/6575a4bc7da4d4d54158ecd9

POST localhost:3001/api/synapses/comments/6575a4bc7da4d4d54158ecd9

Params Authorization Headers (12) Body Pre-request Script Tests Settings

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQiOiJ... Nick

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2ZTA5NiYxMGNmN2I3Mzg4MmYiLCJpYXQiOiJ... Mary

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```

1 {
2   "message": "Comment added successfully",
3   "comment": {
4     "text": "I'm a health influencer too, lets collaborate! We can share garbage together and make more pretend money!",
5     "postedBy": "6574706e096618cf7b73882f"
6   }
7 }

```

TC17 Mary dislikes Nestor's message on the Health topic after the end of post-expiration time. This should fail.

localhost:3001/api/synapses/react/6575a4bc7da4d4d54158ecd9

POST localhost:3001/api/synapses/react/6575a4bc7da4d4d54158ecd9

Params Authorization Headers (12) Body Pre-request Script Tests Settings

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQiOiJ... Nick

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA2ZTA5NiYxMGNmN2I3Mzg4MmYiLCJpYXQiOiJ... Mary

auth-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA4YjA5NiYxMGNmN2I3Mzg4MzIiLCJpYXQiOiJ... Nestor

Key Value Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize HTML

```

1 This post has expired and cannot be reacted to

```

TC18 Nestor browses all the messages on the Health topic. There should be only one post (his own) with one comment (Mary's).

POST localhost:3001/api/sy GET localhost:3001/api/syn POST localhost:3001/api/us + ...

localhost:3001/api/synapses/topic/Health

GET localhost:3001/api/synapses/topic/Health

Params Authorization Headers (12) Body Pre-request Script Tests Settings

<input type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Nick
<input type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Mary
<input checked="" type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Nestor
Key	Value	Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   {
3     "_id": "6575a4bc7da4d4d54158ecd9",
4     "title": "Hi! Ask me for health tips",
5     "topic": {
6       "Health"
7     },
8     "body": "Hi all! I just graduated from Damogran Influencer university! I will be sharing tips on healthy living with no research but lots of sponsors!",
9     "user": "Nestor",
10    "hashtag": "#byebyeX",
11    "location": "Damogran",
12    "expirationTime": 3,
13    "likes": [],
14    "dislikes": [],
15    "comments": [
16      {
17        "text": "I'm a health influencer too, lets collaborate! We can share garbage together and make more pretend money!",
18        "postedBy": "6574786e096618cf7b73882f",
19        "_id": "6575a5457da4d4d54158ecdd",
20        "postedAt": "2023-12-10T11:47:17.095Z"
21      }
22    ],
23    "date": "2023-12-10T11:45:00.349Z",
24    "__v": 1
25  }
26 }
```

TC19 Nick browses all the expired messages on the Sports topic. These should be empty.

POST localhost:3001/api/sy GET localhost:3001/api/syn POST localhost:3001/api/us + ...

localhost:3001/api/synapses/expiredSynapses

GET localhost:3001/api/synapses/expiredSynapses

Params Authorization Headers (12) Body Pre-request Script Tests Settings

<input checked="" type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Nick
<input type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Mary
<input type="checkbox"/> auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NTc0NzA1MTA5NiYxMGNmN2I3Mzg4MmMILCJpYXQ...	Nestor
Key	Value	Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize HTML

```
1 No expired synapses found
```

TC20 Nestor queries for an active post with the highest interest (maximum number of likes and dislikes) in the Tech topic. This should be Mary's post.

<http://localhost:3001/api/synapses/mostActiveSynapse/Tech>

GET localhost:3001/api/synapses/mostActiveSynapse/Tech

Params	Authorization	Headers (12)	Body	Prerequest Script	Tests	Settings
<input checked="" type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfYWQlOiI2NTc0ZnAzMTA5NiYxMGNmNzI3Mzg4MmMkIjApcXQ...				Nick
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfYWQlOiI2NTc0ZnAzZTA5NiYxMGNmNzI3Mzg4MmMkIjApcXQ...				Mary
<input type="checkbox"/>	auth-token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfYWQlOiI2NTc0ZnAzA4YjA5NiYxMGNmNzI3Mzg4MmMkIjApcXQl...				Nestor
	Key	Value				Description

Pretty Raw Preview Visualize JSON

```

1  "id": "65747827096610cf7b738840",
2
3  "title": "M3 or M2 Pro?",
4
5  "topic": [
6    "Tech"
7  ],
8
9  "body": "Should I get an M3 or M2 Pro, help me decide!",
10
11 "user": "Mary",
12
13 "hashtag": "byebyeX",
14
15 "location": "Lamuella",
16
17 "likes": [
18   [
19     "65747851096610cf7b73882c"
20   ],
21   [
22     "65746fef096610cf7b738829"
23   ],
24   [
25     "6574706e096610cf7b73882f"
26   ]
27 ],
28
29 "dislikes": [
30   [
31     "6574708b096610cf7b738832"
32   ]
33 ],
34
35 "comments": [],
36
37 "_v": 29,
38
39 "totalActivity": 4

```