KRYPTO BACKEND TASK

DETAILED DOCUMENTATION

Jarun Madhesh S 19BPS1076

MODELS:

Users Model:

Id String (50) Primary key

Name String (50) unique

Password String (150)

Admin Boolean

Date_added Timestamp

Alert Model:

Alert_id String (50) Primary key

User_id String (50)

Desc String (50)

Alert_name String (50)

Alert_on String (50)

Threshold Integer

Mail_to String (100)

Status String (10) = {"initiated", "Triggered", "deleted"}

Date_added Timestamp

Crypto market API:

{"id":"bitcoin","symbol":"btc","name":"Bitcoin","image":"https://assets.coingecko.com/coins/images/1/large/bitcoin.png?1547033579","current_price":23809,"market_cap":454811511852,"market_cap_rank":1,"fully_diluted_valuation":499859753547,"total_volume":41313050302,"high_24h":24147,"low_24h":23466,"price_change_24h":-220.96612328966148,"price_change_percentage_24h":-0.91953,"market_cap_change_24h":-4534427709.8880005,"market_cap_change_percentage_24h":-0.98715,"circulating_supply":19107443.0,"total_supply":21000000.0,"max_supply":2100

0000.0,"ath":69045,"ath_change_percentage":-65.53917,"ath_date":"2021-11-10T14:24:11.849Z","atl":67.81,"atl_change_percentage":34988.85054,"atl_date":"2013-07-06T00:00:00.000Z","roi":null,"last_updated":"2022-07-30T07:03:53.758Z"}

- "Alert_name" on Alert table matches to "id" of Crypto market API.
- "Alert_on" on Alert table matches to any attribute of Crypto market API.

Crypto market API is fetched every 10 seconds, checked and alerts are sent.

0000.0,"ath":69045,"ath_change_percentage":-65.53917,"ath_date":"2021-11-10T14:24:11.849Z","atl":67.81,"atl_change_percentage":34988.85054,"atl_date":"2013-07-06T00:00:00.000Z","roi":null,"last_updated":"2022-07-30T07:03:53.758Z"}

API ENDPOINTS:

Login:

"/login" = [BASIC AUTH]

      Body:

            {

                        username : "",

                        password : ""

            }

If logged in, A token is sent back

```
{
    "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6ImU5OTJmYjc1LWFjZDktNGM5
NC1hMDEzLWMyZDY1MDc1M2M3ZiIsImV4cCI6MTY1OTE2NjAwMH0.8TELbxVIpvX98zhY_czHsWu6GWWQoJh
vnU3VZC4wnd0"
}
```

Token has to be used as header to remaining APIs.

Header:

JWT token is created on login.

{x-access-token : <user-token>}

GET   http://127.0.0.1:5000/login   Save   Send

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

Type   Basic Auth

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

Username   jarun

Password   password

☑ Show Password

Body   Cookies   Headers (5)   Test Results   Status: 200 OK   Time: 173 ms   Size: 348 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2      "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6IjVjZDUzMmVmLTgzNzktNGUyMS1iNjA2LTUzOTU0NjdlOTM5YiIsImV4cCI6MTY1OTE2OTQwOH0.
          PonKd1j7rRAuPPTifVcAeoprCcXI7_gP_5qTzTnXZNA"
3  }
```

Users:

1. Add user:
Post method to add new user.
"/user/create" = [POST]

Json Example:

```
{
    "name" : "admin",
    "password": "admin",
    "admin" : "True"
}
```

```
POST       ∨     http://127.0.0.1:5000/user/create
```

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

● none   ● form-data   ● x-www-form-urlencoded   ● raw   ● binary   ● GraphQL   **JSON** ∨

```
1  {
2      "name" : "jarun",
3      "password": "password",
4      "admin" : "True"
5  }
```

Body   Cookies   Headers (5)   Test Results

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  {
2      "message": "New user created!"
3  }
```

Need admin privileges:

1. **Get user information by id:**
   [GET] = "/user/<user_id>"

   Response:

   - Invalid user-id:
     ```
     {
         "message": "User by the id does not exist"
     }
     ```
   - Valid user-id:

```
{
    "users": {
        "admin": true,
        "id": "e992fb75-acd9-4c94-a013-c2d650753c7f",
        "name": "admin",
        "password": "sha256$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732efdb89
d8705c168ff35e5a4fa2d4a782"
    }
}
```

	GET		http://127.0.0.1:5000/user/e992fb75-acd9-4c94-a013-c2d650753c7f

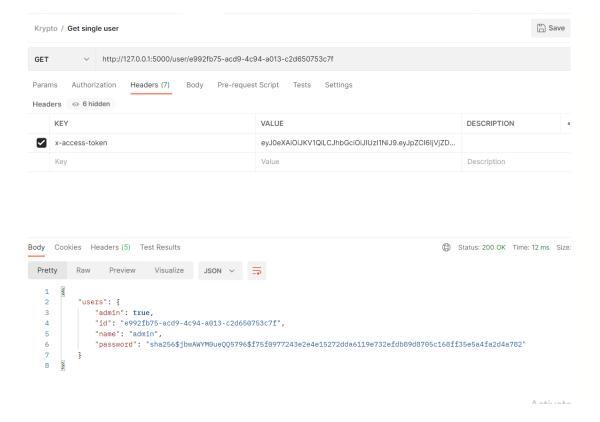Params   Authorization   Headers (7)   Body   Pre-request Script   Tests   Settings

Headers   👁 6 hidden

	KEY	VALUE	DESCRIPTION	∘
☑	x-access-token	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6IjVjZD...		
	Key	Value	Description	

Body   Cookies   Headers (5)   Test Results   ⊕ Status: 200 OK   Time: 12 ms   Size:

Pretty   Raw   Preview   Visualize   JSON ∨   ⇥

```json
1   {
2       "users": {
3           "admin": true,
4           "id": "e992fb75-acd9-4c94-a013-c2d650753c7f",
5           "name": "admin",
6           "password": "sha256$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732efdb89d8705c168ff35e5a4fa2d4a782"
7       }
8   }
```

Activate

2. **List all users:**
   Get method to list all users.
   [GET] = "/user"

   Response:

```
{
    "users": [
        {
            "admin": true,
            "id": "e992fb75-acd9-4c94-a013-c2d650753c7f",
            "name": "admin",
            "password": "sha256$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732ef
db89d8705c168ff35e5a4fa2d4a782"
        }
    ]
}
```

GET   http://127.0.0.1:5000/user

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

Headers   👁 6 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk E
☑	x-access-token	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6IjVjZD...			
	Key	Value	Description		

Body   Cookies   Headers (5)   Test Results   Status: 200 OK   Time: 20 ms   Size: 629 B   S

Pretty   Raw   Preview   Visualize   JSON ∨

```
 1  {
 2      "users": [
 3          {
 4              "admin": true,
 5              "id": "e992fb75-acd9-4c94-a013-c2d650753c7f",
 6              "name": "admin",
 7              "password": "sha256$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732efdb89d8705c168ff35e5a4fa2d4a782"
 8          },
 9          {
10              "admin": true,
11              "id": "5cd532ef-8379-4e21-b606-5395467e939b",
12              "name": "jarun",
13              "password": "sha256$1SVpV0k6bqpTuF2P$c7caa3499fe160bfb63ccf051a09aaffa794b2c84d319dd517a4a0e1d1cead12"
14          }
15      ]
16  }
```
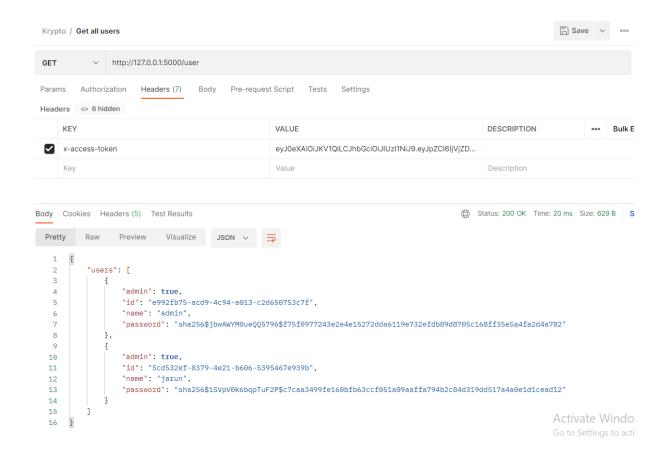
Activate Windo
Go to Settings to acti

Alert:

All APIs on Alert need user token in header.

Need Admin privileges:

1. **List all Alerts**
   [GET] = "/alerts"

   Paginated.

   "/alerts?page=1"

   Page = Int value, Default – 1
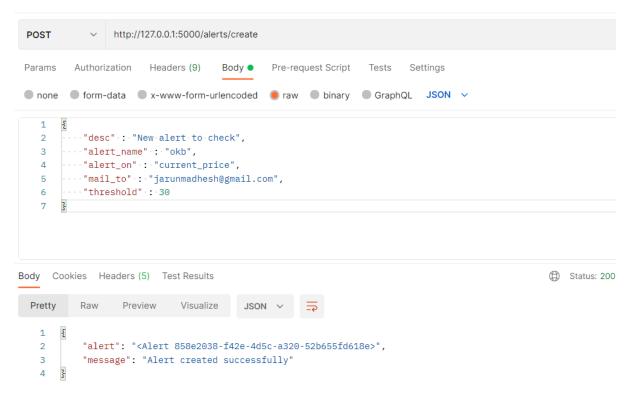
   Rows_per_page = 5

Does not need Admin Privileges:

1. **Create Alert:**
   [POST] = "/alerts/create"
   To create alerts

```json
{
    "desc" : "New alert to check",
    "alert_name" : "okb",
    "alert_on" : "current_price",
    "mail_to" : "jarunmadhesh@gmail.com",
    "threshold" : 30
}
```

Krypto / Alerts / **Create alert**

POST ∨	http://127.0.0.1:5000/alerts/create

Params   Authorization   Headers (9)   **Body** ●   Pre-request Script   Tests   Settings

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

```json
1  {
2      "desc" : "New alert to check",
3      "alert_name" : "okb",
4      "alert_on" : "current_price",
5      "mail_to" : "jarunmadhesh@gmail.com",
6      "threshold" : 30
7  }
```

Body   Cookies   Headers (5)   Test Results   ⊕ Status: 200

Pretty   Raw   Preview   Visualize   JSON ∨   ⇥

```json
1  {
2      "alert": "<Alert 858e2038-f42e-4d5c-a320-52b655fd618e>",
3      "message": "Alert created successfully"
4  }
```

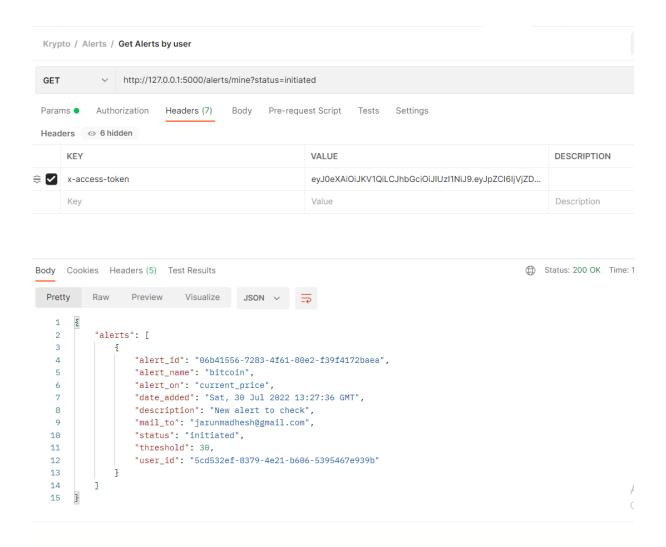2. **List all alerts created by the user**
   [GET] = "/alerts/mine"

   Query:
   "/alerts/mine?status=initiated"

Status = {initiated, triggered, deleted, all}
Default status = all

```json
{
    "alerts": [
        {
            "alert_id": "d4a33ae1-3d2d-440c-a999-621add6a2ab2",
            "alert_name": "okb",
            "alert_on": "current_price",
            "date_added": "Sat, 30 Jul 2022 02:17:00 GMT",
            "description": "New alert to check",
            "mail_to": "jonesakajr@gmail.com",
            "status": "triggered",
            "threshold": 20,
            "user_id": "e992fb75-acd9-4c94-a013-c2d650753c7f"
        },
        {
            "alert_id": "d26a5666-1a80-4841-8329-d264c849d55d",
            "alert_name": "okb",
            "alert_on": "current_price",
            "date_added": "Sat, 30 Jul 2022 12:23:42 GMT",
            "description": "New alert to check",
            "mail_to": "jarunmadhesh@gmail.com",
            "status": "triggered",
            "threshold": 30,
            "user_id": "e992fb75-acd9-4c94-a013-c2d650753c7f"
        }
    ]
}
```

| GET | ∨ | http://127.0.0.1:5000/alerts/mine?status=initiated |

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

Headers   👁 6 hidden

KEY	VALUE	DESCRIPTION
☷ ☑ x-access-token	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6IjVjZD...	
Key	Value	Description

Body   Cookies   Headers (5)   Test Results   ⊕ Status: 200 OK   Time: 1

Pretty   Raw   Preview   Visualize   JSON ∨   ⇄

```
 1   {
 2       "alerts": [
 3           {
 4               "alert_id": "06b41556-7283-4f61-80e2-f39f4172baea",
 5               "alert_name": "bitcoin",
 6               "alert_on": "current_price",
 7               "date_added": "Sat, 30 Jul 2022 13:27:36 GMT",
 8               "description": "New alert to check",
 9               "mail_to": "jarunmadhesh@gmail.com",
10               "status": "initiated",
11               "threshold": 30,
12               "user_id": "5cd532ef-8379-4e21-b606-5395467e939b"
13           }
14       ]
15   }
```

3. Delete an alert:
[DELETE] = "alerts/delete/<alert_id>"

Response:
If Alert id found:

```
{"message" : "Alert deleted successfully", "alert_id": alert.alert_id}
```

If not:

```
{"message":"Alert not found"}
```

DELETE ⌄ | http://127.0.0.1:5000/alerts/delete/06b41556-7283-4f61-80e2-f39f4172baea

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

Headers | 👁 6 hidden

	KEY	VALUE	DESCRIPTION
☑	x-access-token	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6IjVjZD...	
	Key	Value	Description

Body | Cookies | Headers (5) | Test Results · Status: **200 OK** Time: **23 ms**

Pretty | Raw | Preview | Visualize | JSON ⌄ | ⇥

```
1   {
2       "alert_id": "06b41556-7283-4f61-80e2-f39f4172baea",
3       "message": "Alert deleted successfully"
4   }
```