**KRYPTO BACKEND TASK**

**DETAILED DOCUMENTATION**

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**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":21000000.0,"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.**

**API ENDPOINTS:**

**Login:**

“/login” = [BASIC AUTH]

Body:

{

username : “”,

password : “”

}

If logged in, A token is sent back

{

    "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpZCI6ImU5OTJmYjc1LWFjZDktNGM5NC1hMDEzLWMyZDY1MDc1M2M3ZiIsImV4cCI6MTY1OTE2NjAwMH0.8TELbxVIpvX98zhY\_czHsWu6GWWQoJhvnU3VZC4wnd0"

}

Token has to be used as header to remaining APIs.

**Header:**

JWT token is created on login.

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

**Users:**

1. **Add user:**

Post method to add new user.

“/user/create” = [POST]

Json Example:

{

    "name" : "admin",

    "password": "admin",

    "admin" : "True"

}

**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$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732efdb89d8705c168ff35e5a4fa2d4a782"

    }

}

1. **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$jbwAWYM0ueQQ5796$f75f0977243e2e4e15272dda6119e732efdb89d8705c168ff35e5a4fa2d4a782"

        }

    ]

}

**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

{

    "desc" : "New alert to check",

    "alert\_name" : "okb",

    "alert\_on" : "current\_price",

    "mail\_to" : "jarunmadhesh@gmail.com",

    "threshold" : 30

}

1. **List all alerts created by the user**

[GET] = “/alerts/mine”

**Query:**

“/alerts/mine?status=initiated”

Status = {initiated, triggered, deleted, all}

Default status = all

{

    "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"

        }

    ]

}

1. **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"}