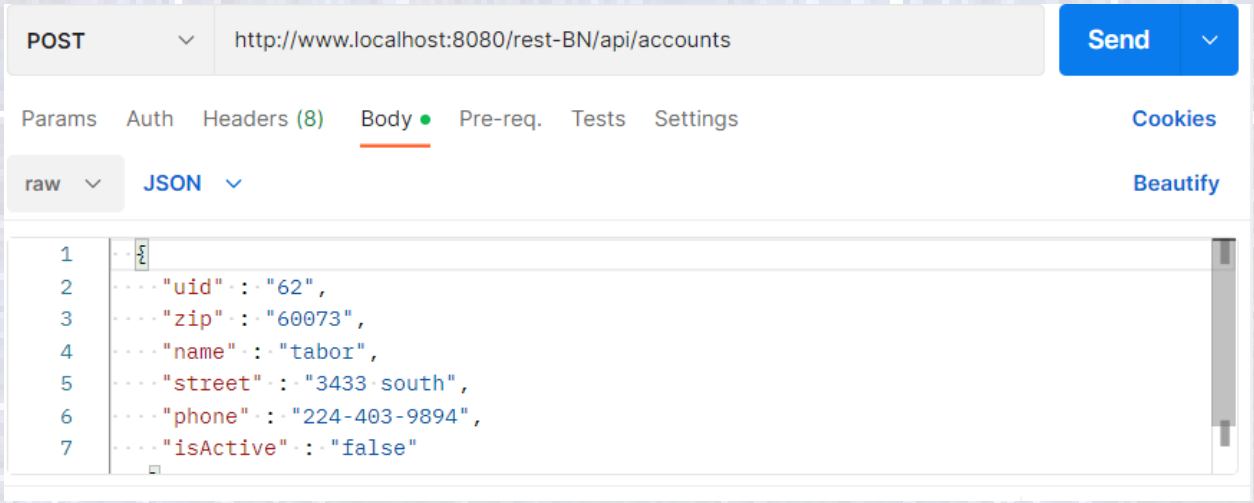
BuyNothing is an application which allows users to transact gifts, send asks and give thanks to other users on the platform. It essentially works like a CashApp or Venmo, the only difference is money doesn't get traded. My task was to build the backend server that will support the application infrastructure. This will consist of creating, updating, and deleting accounts on the app, generating gift transactions that can be seen from both users, allowing users to make ask requests, creating thank you messages, and notes that can be stored for the users convenience. Additionally, there will be an admin point of view of all the data involved. As admin, you can see all the accounts, gifts, thanks, and notes.

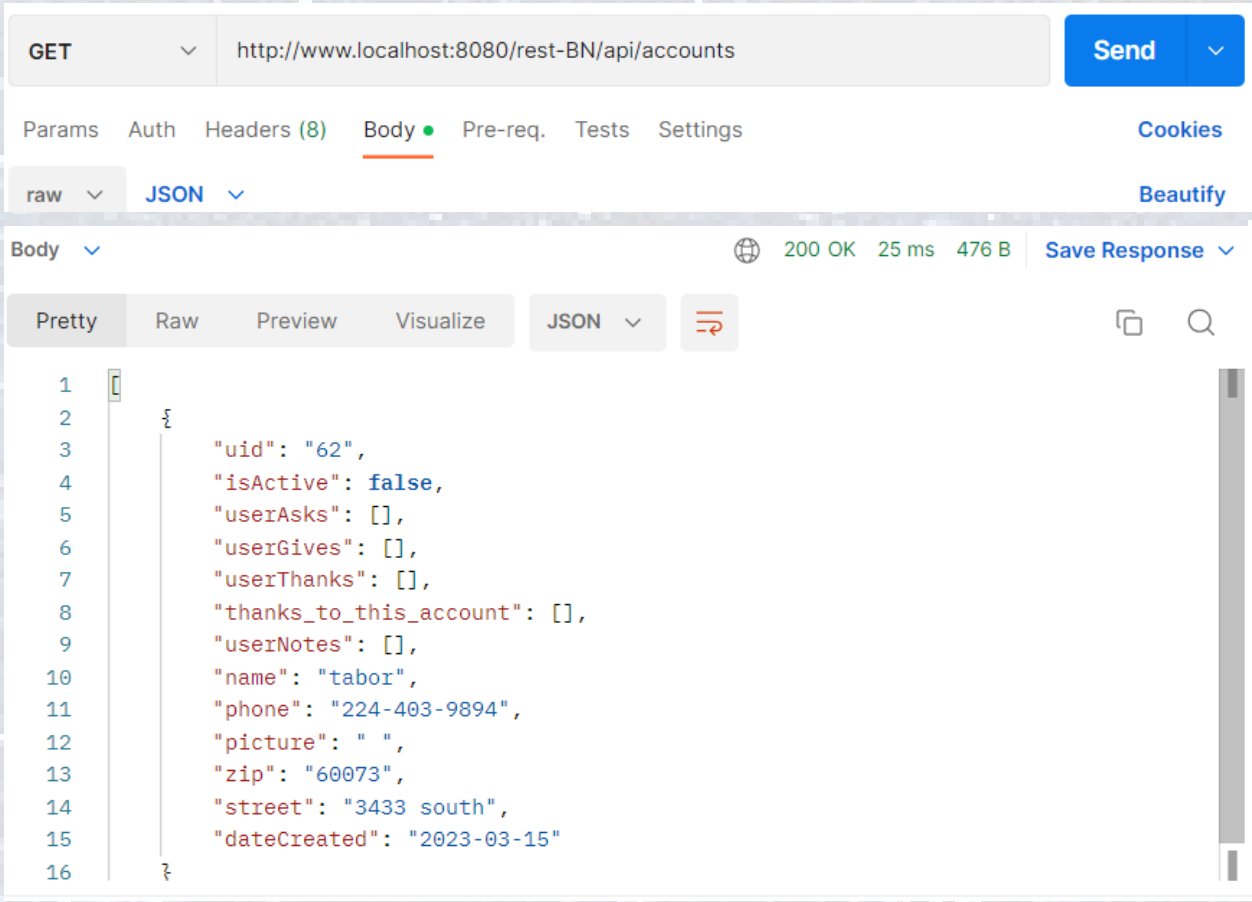
The framework of the application is built on RESTful APIs. When the server is up, users can complete actions through http requests with additional information such as path and body parameters. The API was built using the Java programming language on the Eclipse IDE. Here are some things one can do with this backend server:

ACCOUNTS:

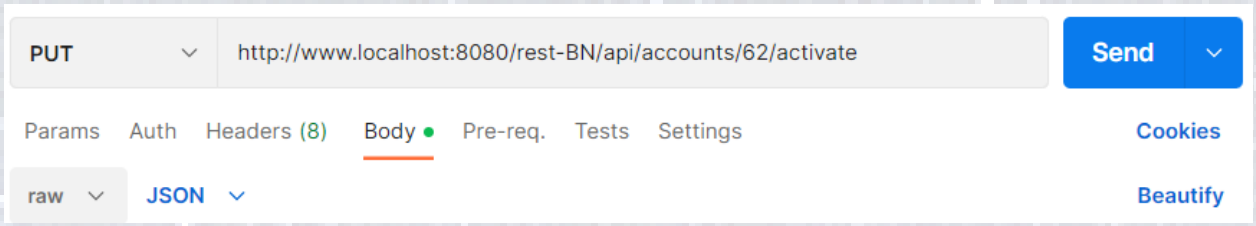
Creating Accounts:



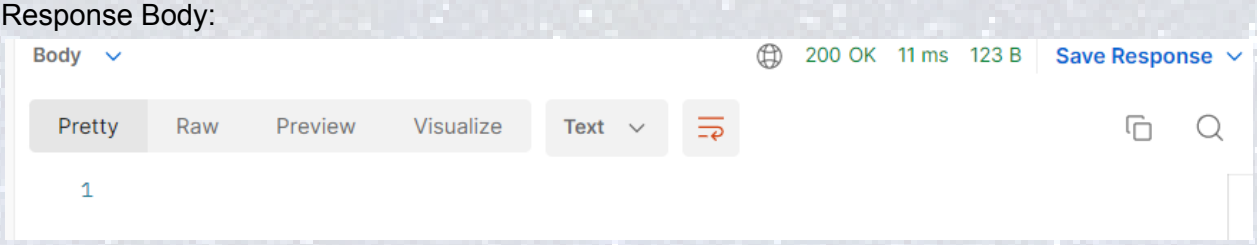
Getting Accounts:

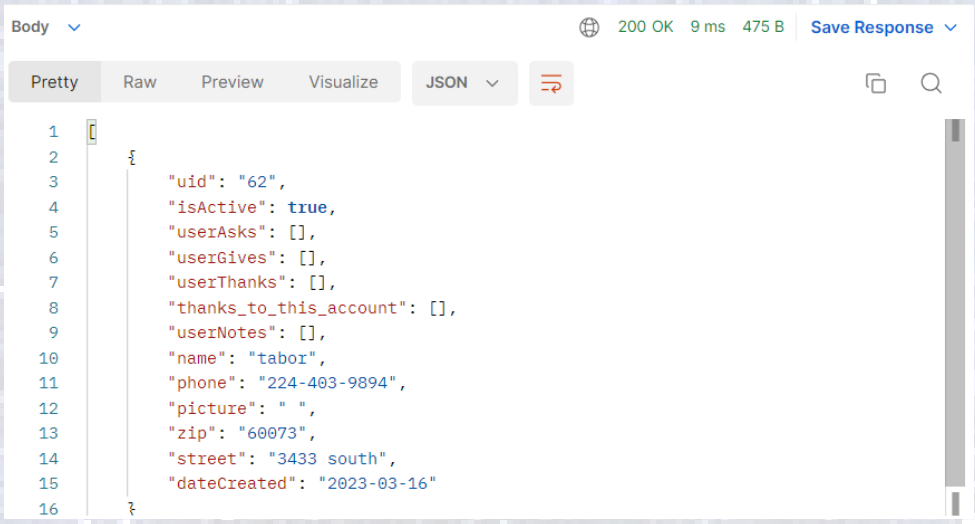


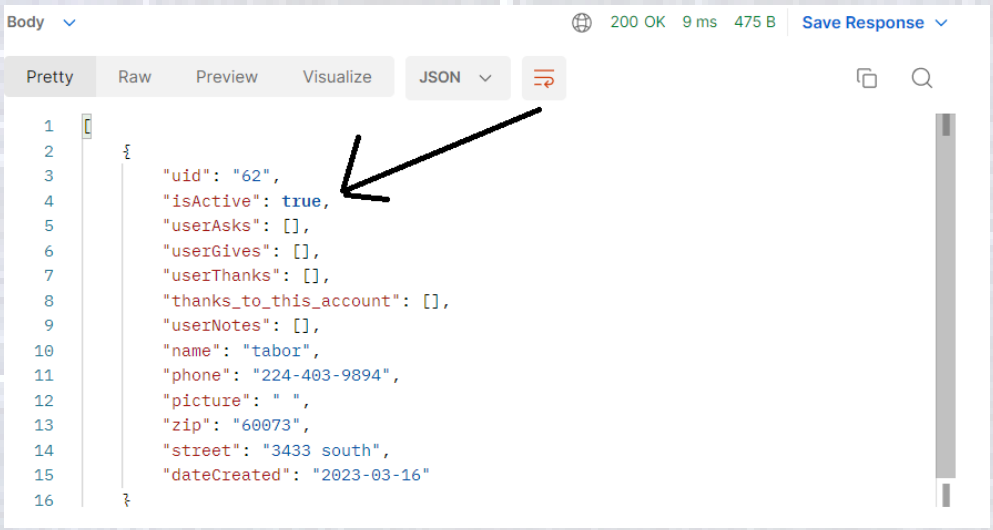
Activate Account:



Response Body:

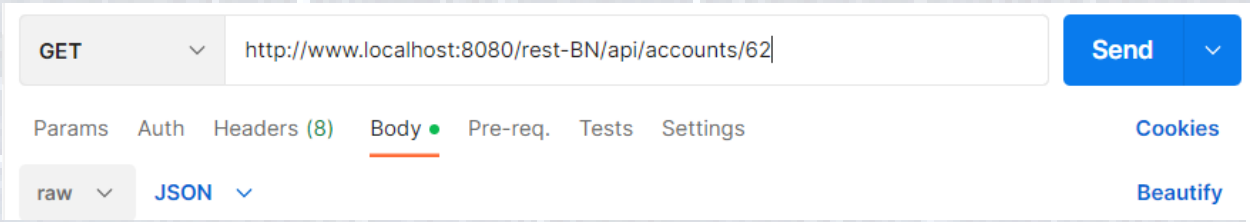




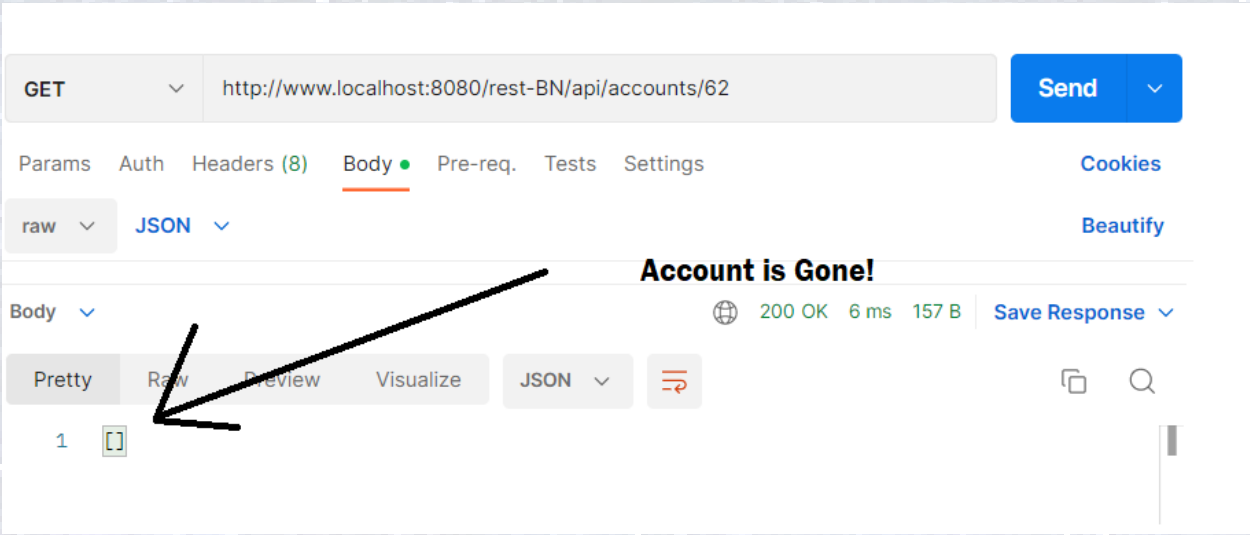


- Admin can deactivate accounts by using “deactivate” in the path params instead of “activate”

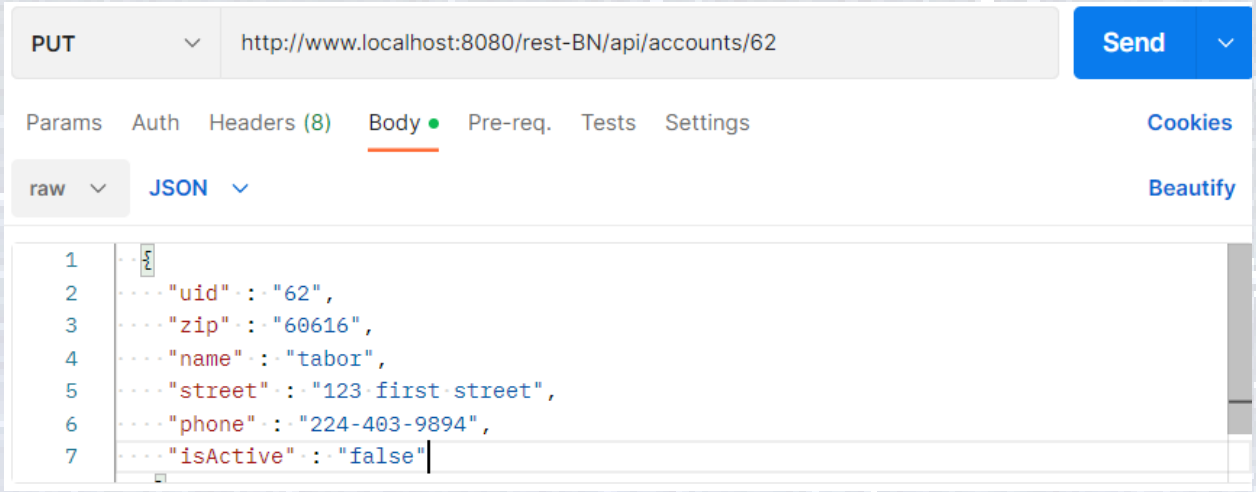
Delete Account:



All accounts in current environment:

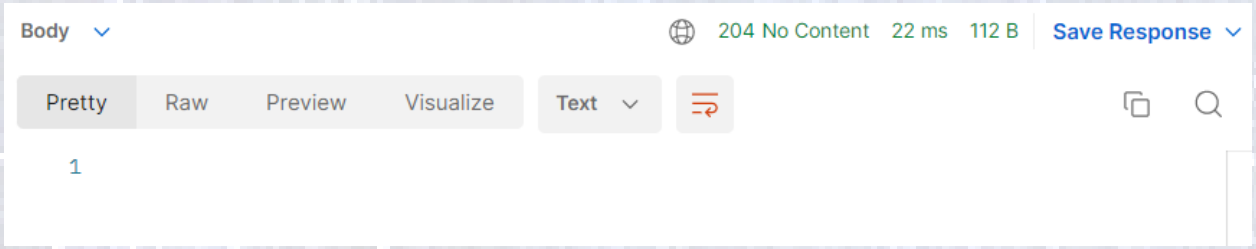


Updating Account:

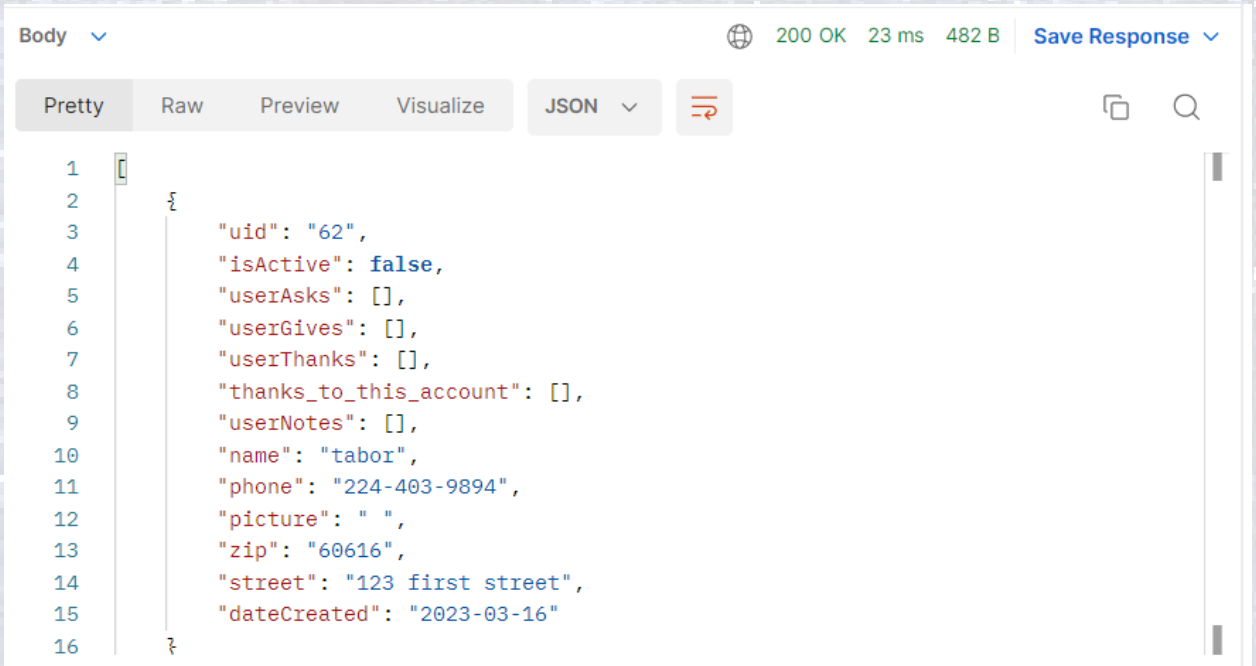


- Changing zip and street

API response:



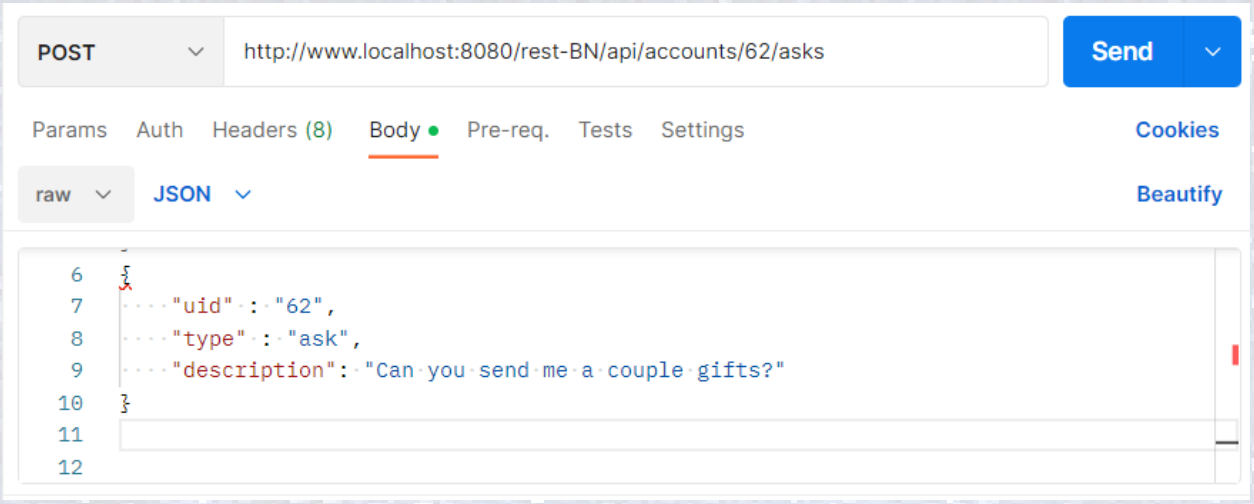
Update:



ASKS:

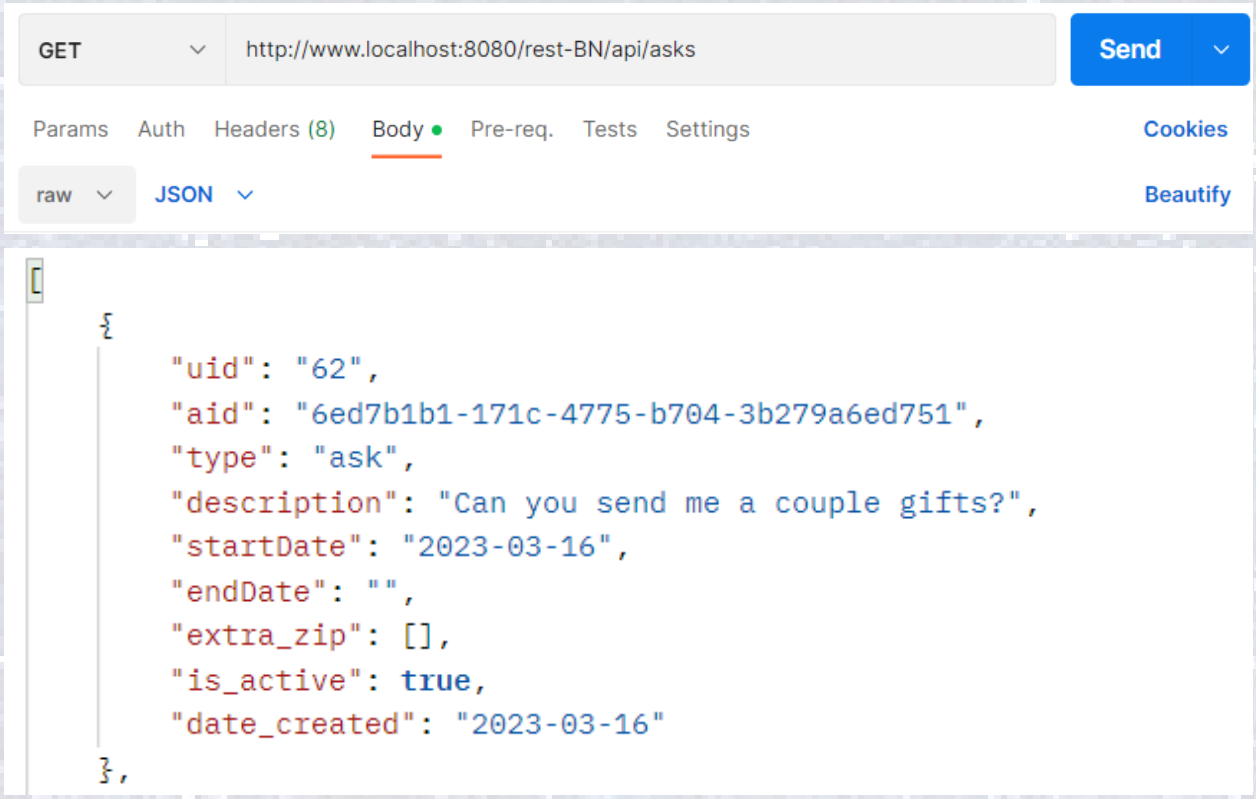
- This allows a user to send an ask request for a favor/gift
- Consists of a uid (user id) of the user sending the ask, type (type of the message), and the description of the ask

Create Ask:

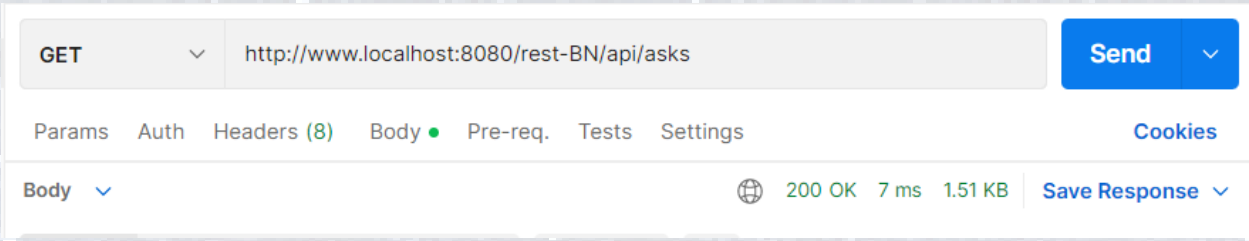


Getting User Asks:

- aid is a unique ask id for every ask
- Start date is when the ask request is active (default is current date) and date created is when the ask was constructed



Getting All Asks in Application:




```
[
    {
        "uid": "62",
        "aid": "f1a1b55d-100e-4ac6-b231-8593edc6b62d",
        "type": "ask",
        "description": "Can you send me a couple gifts?",
        "startDate": "2023-03-16",
        "endDate": "",
        "extra_zip": [],
        "is_active": true,
        "date_created": "2023-03-16"
    },
    {
        "uid": "80",
        "aid": "3a0d4da6-c4ad-4cee-a494-60009cc59c25",
        "type": "ask",
        "description": "Can you send me a couple gifts?",
        "startDate": "2023-03-16",
        "endDate": "",
        "extra_zip": [],
        "is_active": true,
        "date_created": "2023-03-16"
    }
```


- Asks are now stored in the user accounts information (“userAsks”)!


```
{
    "uid": "80",
    "isActive": false,
    "userAsks": [
        {
            "uid": "80",
            "aid": "3a0d4da6-c4ad-4cee-a494-60009cc59c25",
            "type": "ask",
            "description": "Can you send me a couple gifts?",
            "startDate": "2023-03-16",
            "endDate": "",
            "extra_zip": [],
            "is_active": true,
            "date_created": "2023-03-16"
        }
    ],
```


For more functions and information check out the complete API:
http://www.cs.iit.edu/~virgil/cs445/mail.spring2022/project/project-api.html