Entity Relationship Diagram
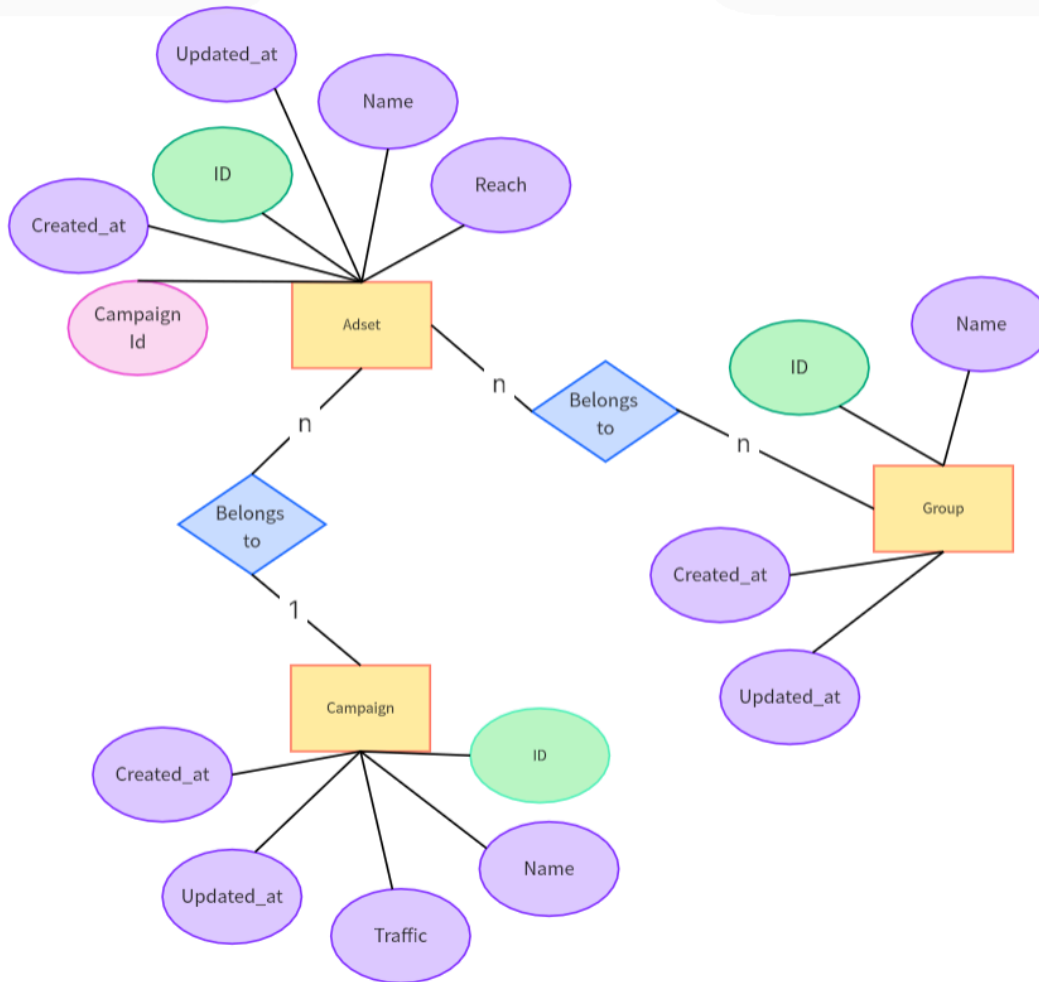
Table Data Screenshots

Table: Groups

	group_id [PK] integer	group_name character varying (255)	created_at timestamp with time zone	updated_at timestamp with time zone
1	1	High-Priority Ads	2025-08-14 03:15:08.034108+05:30	[null]
2	2	Seasonal Ads	2025-08-14 03:15:08.034108+05:30	[null]

Table: Adsets

	adset_id [PK] integer	adset_name character varying (255)	reach character varying (255)	created_at timestamp with time zone	updated_at timestamp with time zone	campaign_id integer
1	1	Adset A	Impressions	2025-08-14 03:15:08.00882+05:30	[null]	1
2	2	Adset B	Reach	2025-08-14 03:15:08.00882+05:30	[null]	1
3	3	Adset C	Clicks	2025-08-14 03:15:08.00882+05:30	[null]	2

Table: Campaigns

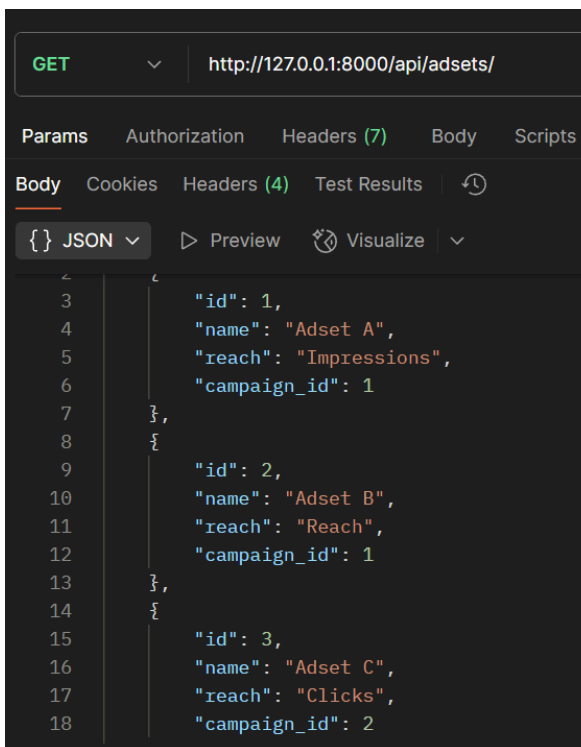|	campaign_id [PK] integer	campaign_name character varying (255)	traffic character varying (255)	created_at timestamp with time zone	updated_at timestamp with time zone
1	1	Spring Campaign	Awareness	2025-08-14 03:15:07.966649+05:30	[null]
2	2	Summer Sale	Traffic	2025-08-14 03:15:07.966649+05:30	[null]

Table: Adset_groups

	adset_id [PK] integer	group_id [PK] integer
1	2	1
2	3	1

Documentation for API Endpoints

1. Retrieve all Adsets

This endpoint retrieves a list of all adsets in the database.

- **Endpoint:** GET /adsets/
- **Description:** Fetches a list of all adsets, returning their details such as ID, name, status, and associated campaign and group IDs.
- **Request:**
  - **Method:** GET
  - **Parameters:** None
- **Response:**
  - **Success (200 OK):** A JSON array containing all adsets. Each adset object conforms to the AdsetSchema.
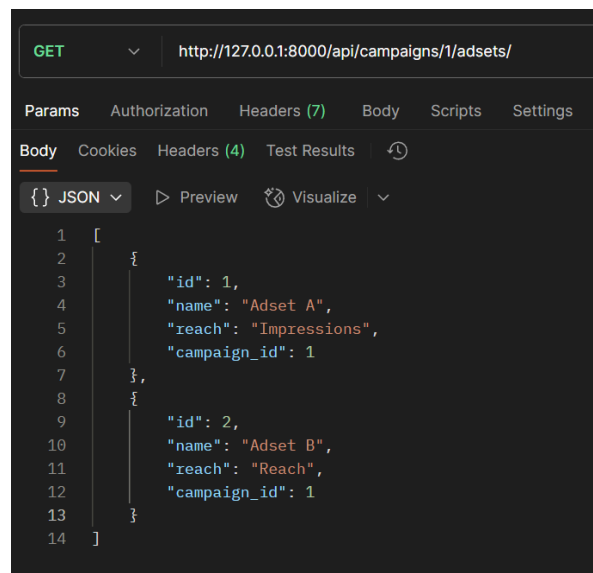

```
GET            ∨      http://127.0.0.1:8000/api/adsets/

Params    Authorization    Headers (7)    Body    Scripts
Body    Cookies    Headers (4)    Test Results    ⏱

{} JSON ∨      ▷ Preview      ⚙ Visualize    ∨
 2                {
 3                    "id": 1,
 4                    "name": "Adset A",
 5                    "reach": "Impressions",
 6                    "campaign_id": 1
 7                },
 8                {
 9                    "id": 2,
10                    "name": "Adset B",
11                    "reach": "Reach",
12                    "campaign_id": 1
13                },
14                {
15                    "id": 3,
16                    "name": "Adset C",
17                    "reach": "Clicks",
18                    "campaign_id": 2
```

2. Retrieve Adsets by Campaign

This endpoint retrieves all adsets belonging to a specific campaign.
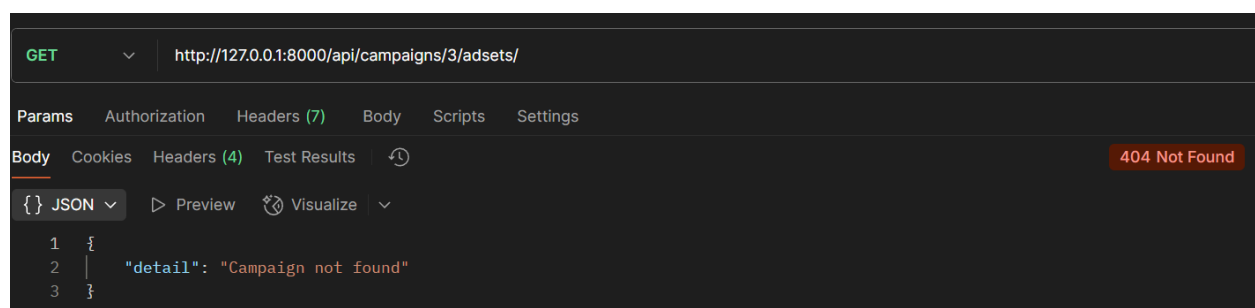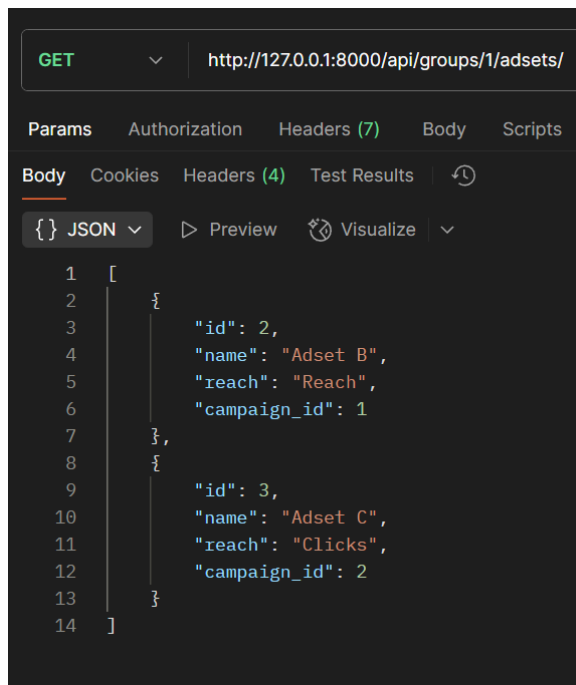
- **Endpoint:** GET /campaigns/{campaign_id}/adsets/
- **Description:** Retrieves a list of adsets associated with a given campaign_id.
- **Request:**
  - **Method:** GET
  - **Parameters:**
    - Campaign_id
- **Response:**
  - **Success (200 OK):** A JSON array of adsets that belong to the specified campaign. Each adset object conforms to the AdsetSchema.
  - **Error (404 Not Found):** If the campaign_id doesn't exist or has no adsets associated with it. The response will include a detail message: "Campaign not found".

3. Retrieve Adsets by Group

This endpoint retrieves all adsets belonging to a specific group.

- **Endpoint:** GET /groups/{group_id}/adsets/
- **Description:** Retrieves a list of adsets associated with a given group_id.
- **Request:**
  - **Method:** GET
  - **Parameters:**
    - group_id
- **Response:**
  - **Success (200 OK):** A JSON array of adsets belonging to the specified group. Each adset object conforms to the AdsetSchema.
  - **Error (404 Not Found):** If the group_id doesn't exist or has no adsets associated with it. The response will include a detail message: "Group not found".
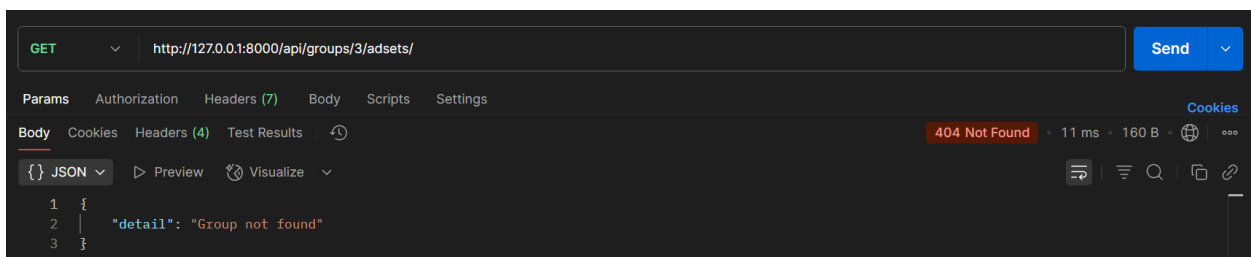
Edge Cases

1. **Empty Adset or campaign/group:**
   There can be cases where the requested group or campaign has no ad sets that belong to them. In that case, an empty list is returned.

   GET | http://127.0.0.1:8000/api/groups/2/adsets/ | Send

   Params   Authorization   Headers (7)   Body   Scripts   Settings   Cookies

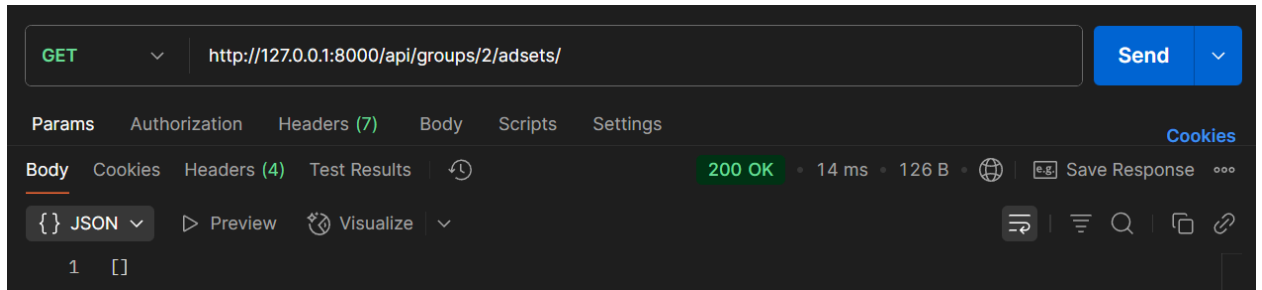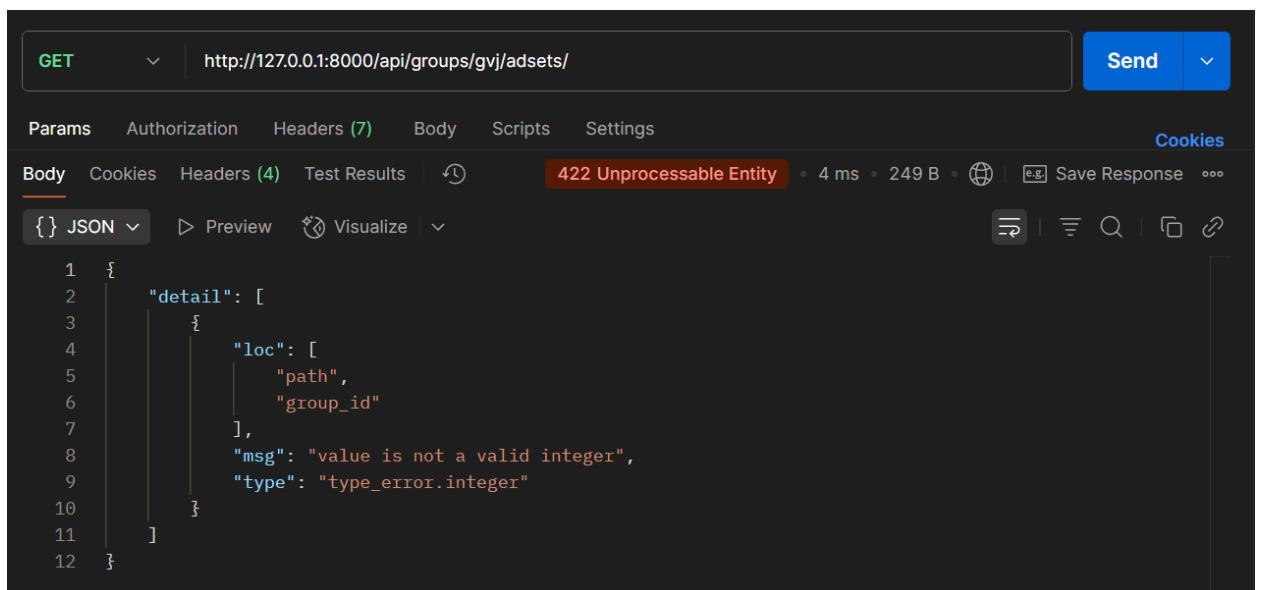   Body   Cookies   Headers (4)   Test Results   200 OK • 14 ms • 126 B • Save Response

   { } JSON ∨   ▷ Preview   Visualize ∨

   ```
   1    []
   ```

2. **Non integer parameters:**
   If the parameter in the api called is a non integer then the server puts out a 422 Error (Unprocessable Entry), meaning the given parameter has a semantic error and its a request error.

   GET | http://127.0.0.1:8000/api/groups/gvj/adsets/ | Send

   Params   Authorization   Headers (7)   Body   Scripts   Settings   Cookies

   Body   Cookies   Headers (4)   Test Results   422 Unprocessable Entity • 4 ms • 249 B • Save Response

   { } JSON ∨   ▷ Preview   Visualize ∨

   ```
   1   {
   2       "detail": [
   3           {
   4               "loc": [
   5                   "path",
   6                   "group_id"
   7               ],
   8               "msg": "value is not a valid integer",
   9               "type": "type_error.integer"
   10          }
   11      ]
   12  }
   ```

3. **Missing parameters:**
   If the parameters are missing, it gives a 404 error as the request made does not exist without the parameters.