

### Issue 3: Integrity Error

My Like model has foreign key relationship with both Post and Recommendation entities. I can only add a like if I select both Post and Recommendation, but I wanted them to be independent. So, I added blank=True and null=True in field class types.

IntegrityError at /admin/likes/like/add/  
NOT NULL constraint failed: likes\_like.recommendation\_id

Request Method: POST  
Request URL: http://localhost:8000/admin/likes/like/add/  
Django Version: 4.1.6  
Exception Type: IntegrityError  
Exception Value: NOT NULL constraint failed: likes\_like.recommendation\_id  
Exception Location: /workspace/.pip-modules/lib/python3.8/site-packages/django/db/backends/sqlite3/base.py, line 357, in execute  
Raised during: django.contrib.admin.options.add\_view  
Python Executable: /home/gitpod/.pyenv/versions/3.8.11/bin/python3  
Python Version: 3.8.11  
Python Path: [...]  
Server time: Tue, 14 Feb 2023 00:28:27 +0000

**Traceback** [Switch to copy-and-paste view](#)

/workspace/.pip-modules/lib/python3.8/site-packages/django/db/backends/utils.py, line 89, in \_execute

```
89.         return self.cursor.execute(sql, params)
```

► Local vars

/workspace/.pip-modules/lib/python3.8/site-packages/django/db/backends/sqlite3/base.py, line 357, in execute

```
357.         return Database.Cursor.execute(self, query, params)
```

► Local vars

The above exception (NOT NULL constraint failed: likes\_like.recommendation\_id) was the direct cause of the following exception:

/workspace/.pip-modules/lib/python3.8/site-packages/django/core/handlers/exception.py, line 55, in inner

If posting like for a selected post is attempted (skipping recommendation)

The screenshot shows the Django REST framework API explorer interface. The browser address bar displays the URL `8000-roshnavakke-beinspiredd-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface title is "Django REST framework" with a user dropdown set to "admin". The selected endpoint is `GET /likes/`. The response is an HTTP 200 OK with headers: `Allow: GET, POST, HEAD, OPTIONS`, `Content-Type: application/json`, and `Vary: Accept`. The JSON response body contains two like objects:

```
[
  {
    "id": 3,
    "owner": "admin",
    "created_on": "2023-02-13T10:59:18.894702Z",
    "post": 2,
    "recommendation": 1
  },
  {
    "id": 1,
    "owner": "learner",
    "created_on": "2023-02-13T00:01:35.499712Z",
    "post": 1,
    "recommendation": 1
  }
]
```

Below the response, there are tabs for "Raw data" and "HTML form". The "HTML form" tab is active, showing a form with two fields: "Post" (a dropdown menu currently showing "3 Iceland") and "Recommendation" (a text input field). A tooltip message says "Make a POST request on the Like List resource". A "POST" button is located at the bottom right of the form.

Result:

The screenshot shows the Django REST framework API explorer interface. The browser address bar displays the URL `8000-roshnavakke-beinspiredd-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface title is "Django REST framework" with a user dropdown set to "admin". The selected endpoint is `POST /likes/`. The response is an HTTP 400 Bad Request with headers: `Allow: GET, POST, HEAD, OPTIONS`, `Content-Type: application/json`, and `Vary: Accept`. The JSON response body contains an error message:

```
{
  "detail": "possible duplication"
}
```

Below the response, there are tabs for "Raw data" and "HTML form". The "HTML form" tab is active, showing a form with two fields: "Post" (a dropdown menu) and "Recommendation" (a dropdown menu). A "POST" button is located at the bottom right of the form.

If both Post and Recommendation are selected

The screenshot shows the Django REST framework interface for the 'Like List' API view. The URL bar indicates the endpoint is `8000-roshnavakke-beinspired-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface displays the results of a GET request to `/likes/`, showing a single JSON object in the response body:

```
HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

[
  {
    "id": 1,
    "owner": "learner",
    "created_on": "2023-02-13T00:01:35.499712Z",
    "post": 1,
    "recommendation": 1
  }
]
```

Below the response, there are two tabs: 'Raw data' and 'HTML form'. The 'HTML form' tab is active, showing a form with two dropdown menus: 'Post' (selected: 2 Mahatma Gandhi) and 'Recommendation' (selected: 1 Atomic Habits). A 'POST' button is visible at the bottom right of the form. A tooltip message says 'Make a POST request on the Like List resource'.

Result: Then it gets saved to the list

The screenshot shows the Django REST framework interface for the 'Like List' API view. The URL bar indicates the endpoint is `8000-roshnavakke-beinspired-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface displays the results of a POST request to `/likes/`, showing a single JSON object in the response body:

```
HTTP 201 Created
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

{
  "id": 4,
  "owner": "admin",
  "created_on": "2023-02-13T11:05:50.529002Z",
  "post": 2,
  "recommendation": 1
}
```

Below the response, there are two tabs: 'Raw data' and 'HTML form'. The 'HTML form' tab is active, showing a form with two dropdown menus: 'Post' (selected: 2 Mahatma Gandhi) and 'Recommendation' (selected: 1 Atomic Habits). A 'POST' button is visible at the bottom right of the form.

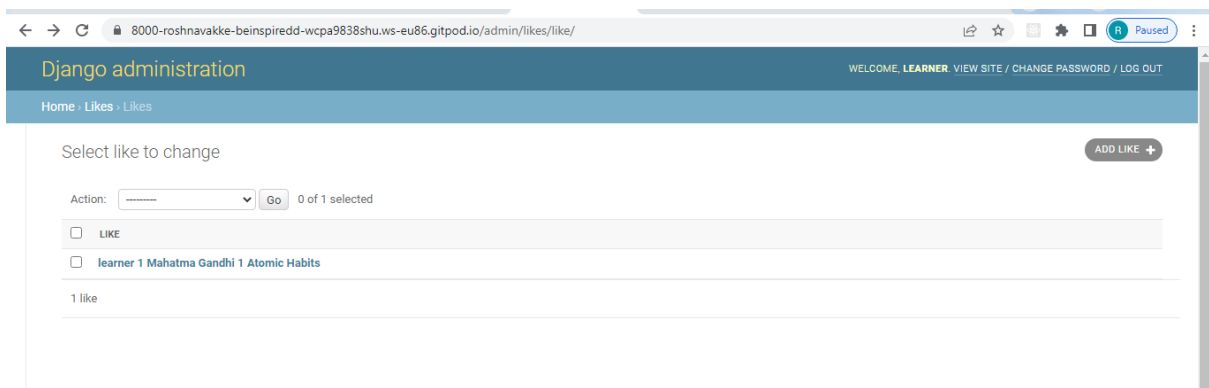
## If Recommendation is selected skipping Post

The screenshot shows the Django REST framework interface in a web browser. The URL is `8000-roshnavakke-beinspiredd-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface displays the results of a POST request to the `/likes/` endpoint. The response is a JSON object: `{ "id": 1, "owner": "learner", "created_on": "2023-02-13T00:01:35.499712Z", "post": 1, "recommendation": 1 }`. Below the response, there is a form with two dropdown menus: "Post" and "Recommendation". The "Recommendation" dropdown is currently selected and shows the value "1 Atomic Habits". A tooltip message says "Make a POST request on the Like List resource". A "POST" button is visible next to the form.

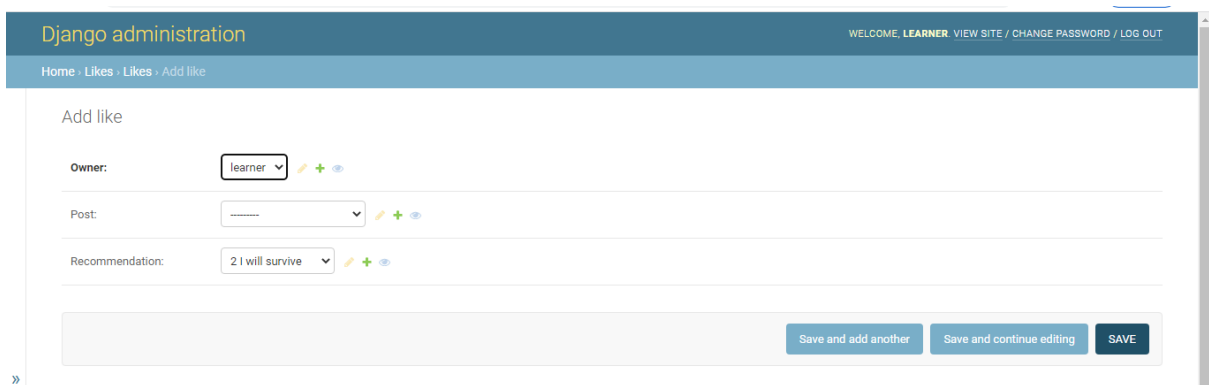
## Result: Error

The screenshot shows the Django REST framework interface in a web browser. The URL is `8000-roshnavakke-beinspiredd-wcpa9838shu.ws-eu86.gitpod.io/likes/`. The interface displays the results of a POST request to the `/likes/` endpoint. The response is a JSON object: `{ "detail": "possible duplication" }`. Below the response, there is a form with two dropdown menus: "Post" and "Recommendation". Both dropdowns are currently empty. A "POST" button is visible next to the form.

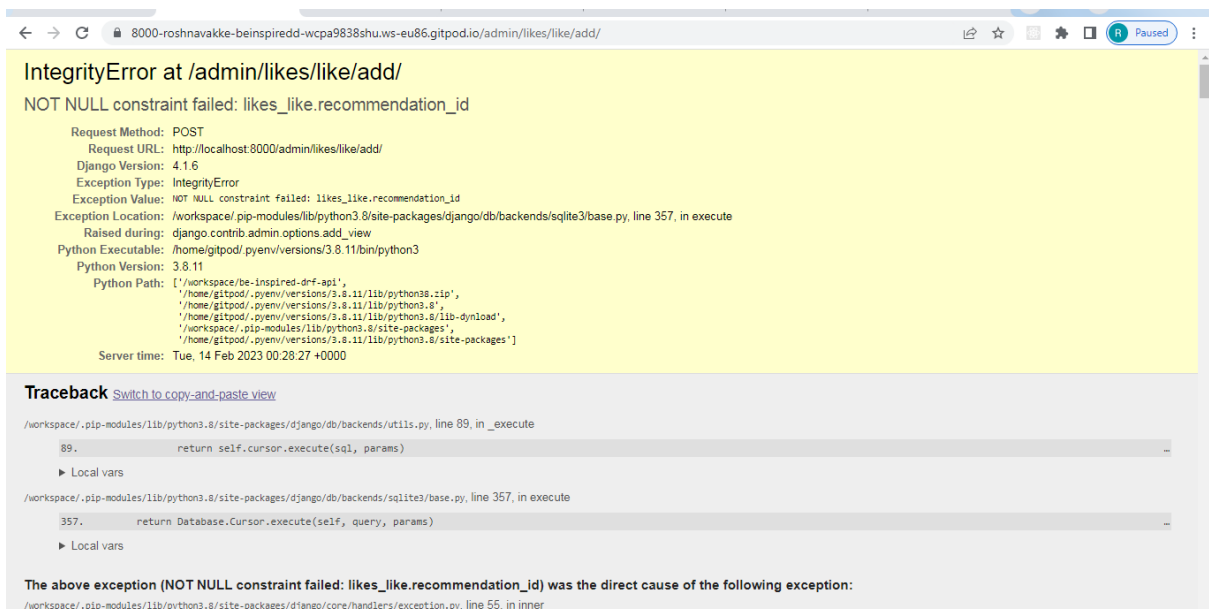
At admin page,



Upon In add like page,



I get this error:



When both are selected,

The screenshot shows the 'Add like' form in the Django administration interface. The form has three dropdown menus: 'Owner' with 'learner' selected, 'Post' with '2 Mahatma Gandhi' selected, and 'Recommendation' with '2 I will survive' selected. At the bottom right, there are three buttons: 'Save and add another', 'Save and continue editing', and 'SAVE'.

Result: It gets saved

The screenshot shows the 'Select like to change' view in the Django administration interface. A green success message at the top states: 'The like "learner 2 Mahatma Gandhi 2 I will survive" was added successfully.' Below this, there is a table with two columns: 'Action:' and a list of likes. The table contains two rows of likes: 'learner 2 Mahatma Gandhi 2 I will survive' and 'learner 1 Mahatma Gandhi 1 Atomic Habits'. At the bottom, it says '2 likes'.

My Like Model:

```
from posts.models import Post
from recommendations.models import Recommendation

class Like(models.Model):
    """
    Like model
    Related to User, Post and Recommendation
    """
    owner = models.ForeignKey(User, on_delete=models.CASCADE)
    created_on = models.DateTimeField(auto_now_add=True)
    post = models.ForeignKey(
        Post,
        on_delete=models.CASCADE,
        related_name='likes',
        default=None,
        null=True,
        blank=True
    )
    recommendation = models.ForeignKey(
        Recommendation,
        on_delete=models.CASCADE,
        related_name='likes',
        default=None,
        null=True,
        blank=True
    )
```

When blank=True is removed and database migration is done:

Django administration

Home · Likes · Likes · Add like

WELCOME, **ADMIN**. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Add like

Please correct the error below.

Owner: learner

Post: 1 Mahatma Gandhi

This field is required.

Recommendation: -----

Save and add another Save and continue editing SAVE

```
class Like(models.Model):
    """
    Like model
    Related to User, Post and Recommendation
    """
    owner = models.ForeignKey(User, on_delete=models.CASCADE)
    created_on = models.DateTimeField(auto_now_add=True)
    post = models.ForeignKey(
        Post,
        on_delete=models.CASCADE,
        related_name='likes',
        default=None,
        null=True,
    )
    recommendation = models.ForeignKey(
        Recommendation,
        on_delete=models.CASCADE,
        related_name='likes',
        default=None,
        null=True,
    )

    class Meta:
        """
        Orders like objects in the order latest to old
        'unique_together' for single selection of post/recommendation
        """
        ordering = ['-created_on']
        unique_together = ['owner', 'post'], ['owner', 'recommendation']
```

Still the issue persists. Single selection of post/recommendation cannot be made.