

Working Docker Compose build

```
(venv) existedmaster@Gaming:~/IS601/mod9$ docker compose up --build
pgadmin | /venv/lib/python3.12/site-packages/passlib/pwd.py:16: UserWarning: pkg_resources is deprecated as an API. See https://setuptools.pypa.io/en/latest/pkg_resources.html. The pkg_resources package is slated for removal as early as 2025-11-30. Refrain from using this package or pin to Setuptools<81.
pgadmin | import pkg_resources
pgadmin | [2025-10-29 15:22:19 +0000] [1] [INFO] Starting gunicorn 23.0.0
pgadmin | [2025-10-29 15:22:19 +0000] [1] [INFO] Listening at: http://[::]:80 (1)
pgadmin | [2025-10-29 15:22:19 +0000] [1] [INFO] Using worker: gthread
pgadmin | [2025-10-29 15:22:19 +0000] [123] [INFO] Booting worker with pid: 123
fastapi_calculator | INFO: 172.21.0.1:52266 - "GET / HTTP/1.1" 200 OK
fastapi_calculator | INFO: 172.21.0.1:52266 - "GET /favicon.ico HTTP/1.1" 404 Not Found
pgadmin | ::ffff:172.21.0.1 - - [29/Oct/2025:15:23:11 +0000] "GET / HTTP/1.1" 302 213 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:144.0) Gecko/20100101 Firefox/144.0"
```

Table Built

Query

Query History

1

CREATE TABLE users (
2 id SERIAL PRIMARY KEY,
3 username VARCHAR(50) NOT NULL UNIQUE,
4 email VARCHAR(100) NOT NULL UNIQUE,
5 created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
6);
7
8 CREATE TABLE calculations (
9 id SERIAL PRIMARY KEY,
10 operation VARCHAR(20) NOT NULL,
11 operand_a FLOAT NOT NULL,
12 operand_b FLOAT NOT NULL,
13 result FLOAT NOT NULL,
14 timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
15 user_id INTEGER NOT NULL,
16 FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE
17);

Data Output

Messages

Notifications

CREATE TABLE

Query returned successfully in 68 msec.

Insert works

Query Query History

```
1  INSERT INTO users (username, email)
2  VALUES
3  ('alice', 'alice@example.com'),
4  ('bob', 'bob@example.com'),
5  ('edgar', 'edgar@example.com');
6
7  INSERT INTO calculations (operation, operand_a, operand_b, result, user_id)
8  VALUES
9  ('add', 2, 3, 5, 1),
10 ('divide', 10, 2, 5, 1),
11 ('multiply', 4, 5, 20, 2);
```

Data Output Messages Notifications

INSERT 0 3

Query returned successfully in 54 msec.

Successful Retrieval

Query










Query History

```
1  -- Retrieve all users
2  SELECT * FROM users;
3
4  -- Retrieve all calculations
5  SELECT * FROM calculations;
6
7  -- Join users and calculations
8  SELECT u.username, c.operation, c.operand_a, c.operand_b, c.result
9  FROM calculations c
10 JOIN users u ON c.user_id = u.id;
```






Data Output

Messages

Notifications



SQL

	username character varying (50) 	operation character varying (20) 	operand_a double precision 	operand_b double precision 	result double precision 
1	alice	add	2	3	5
2	alice	divide	10	2	5
3	bob	multiply	4	5	20

Successful Update

```
Query  Query History
1
2
3  UPDATE calculations
4  SET result = 5
5  WHERE id = 3; -- or whichever row you want to update
6
7

Data Output  Messages  Notifications
UPDATE 1

Query returned successfully in 67 msec.
```

Record Deleted

```
Query  Query History
1
2
3  DELETE FROM calculations
4  WHERE id = 2;  -- example record to remove
5
6

Data Output  Messages  Notifications
DELETE 1

Query returned successfully in 45 msec.
```

Proof of Deletion

Query

Query History

1

-- Retrieve all users

2

SELECT * FROM users;

3

4

-- Retrieve all calculations

5

SELECT * FROM calculations;

6

7

-- Join users and calculations

8

SELECT u.username, c.operation, c.operand_a, c.operand_b, c.result

9

FROM calculations c

10

JOIN users u ON c.user_id = u.id;

Data Output

Messages

Notifications

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SQL

	username character varying (50)	operation character varying (20)	operand_a double precision	operand_b double precision	result double precision
1	alice	add	2	3	5
2	bob	multiply	4	5	5