

# Spaghetti Carbonara, the PostgreSQL way

Federico Campoli

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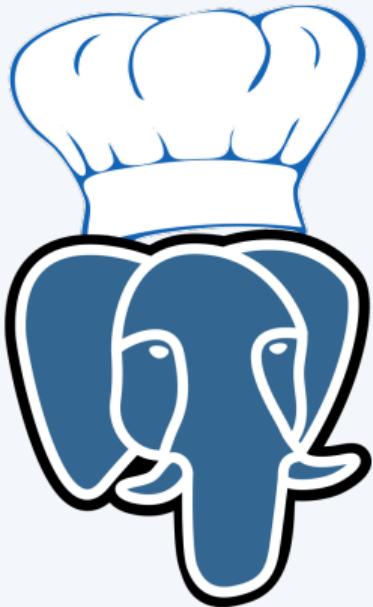
PostgreSQL is an amazing RDBMS.

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Which can help us to cook a delicious dish of Spaghetti Carbonara



Let's find out how!



# Setup the schema

```
CREATE TABLE boiling_pot
(
    content character varying(255) NOT NULL,
    temperature integer NOT NULL DEFAULT 35,
    quantity character varying(255) NOT NULL DEFAULT '',
    CONSTRAINT pk_pot PRIMARY KEY (content)
)
;
```

# Setup the schema

```
CREATE TABLE mixing_bowl
(
    content      character varying(255) NOT NULL,
    quantity     character varying(255) NOT NULL DEFAULT '',
    CONSTRAINT pk_bowl PRIMARY KEY (content)
)
;
```

# Setup the schema

```
CREATE TABLE frying_pan
(
    content character varying(255) NOT NULL,
    quantity      character varying(255) NOT NULL DEFAULT '',
    CONSTRAINT pk_frying PRIMARY KEY (content)
)
;
```

# Setup the schema

Then let's create a table for our ingredients.

```
CREATE TABLE ingredients
(
    ing_name      character varying(255) NOT NULL,
    quantity      character varying(255) NOT NULL,
    alternative   character varying(255) NULL,
    notes         text NULL,
    status        character varying(50) NOT NULL DEFAULT 'ready',
    ordering      serial,
    CONSTRAINT pk_ingredients PRIMARY KEY (ing_name)
)
;
```

# Setup the schema

A check constraint will help to avoid **BLASPHEMOUS** ingredients in our carbonara

```
ALTER TABLE ingredients
    ADD CONSTRAINT chk blasphemous_ingredients
        CHECK (
            ing_name NOT IN
            (
                'ham',
                'cream',
                'belly slices',
                'parmesan',
                'wild rocket',
                'mushrooms',
                'tomato',
                'pineapple',
                'onions',
                'garlic',
                'spam',
                'marmite'
            )
        );
    
```

# Add ingredients !

```
INSERT INTO ingredients
(
    ing_name,
    quantity,
    alternative,
    notes
)
VALUES
(
    'spaghetti',
    '350 gr',
    'spaghetti',
    'to get the pasta al dente, subtract 1 minute from the cooking time stated on the box'
),
(
    'pork cheek (guanciale)',
    '150 gr',
    'bacon (pancetta)',
    'bacon is a decent alternative (Sorry, Roman fellows!!!).'
),
(
    'grated pecorino romano cheese',
    '100 gr',
    '',
    ''
),
```

# Add ingredients II

```
(  
    'medium size eggs',  
    '3',  
    '',  
    '',  
) ,  
(  
    'coarse salt',  
    '4 gr',  
    '',  
    '',  
) ,  
(  
    'fine salt',  
    '2 pinches',  
    '',  
    '',  
) ,  
(  
    'ground black pepper',  
    '2 gr',  
    '',  
    '')  
)  
ON CONFLICT DO NOTHING;
```

# Add ingredients !

```
CREATE OR REPLACE FUNCTION make_carbonara_please()
RETURNS text AS
$BODY$
DECLARE
    v_temperature integer;

BEGIN

    RAISE NOTICE 'Let''s add eggs,pepper and salt to the mixing bowl';
    INSERT INTO mixing_bowl (content,quantity)
    SELECT
        ing_name,
        quantity
    FROM
        ingredients
    WHERE
        ing_name IN (
            'medium size eggs',
            'ground black pepper',
            'fine salt'
        )
    ON CONFLICT DO NOTHING;
    RAISE NOTICE 'Now we mix everything with a fork. hang on.';
    PERFORM pg_sleep(10);
    RAISE NOTICE 'PERFETTO!';
    PERFORM pg_sleep(1);
```

# Add ingredients II

```
RAISE NOTICE 'Let''s add the guanciale to the frying pan and turn on the fire.';
INSERT INTO frying_pan (content,quantity)
SELECT
    ing_name,
    quantity
FROM
    ingredients
WHERE
    ing_name IN (
        'pork cheek (guanciale')
    )
ON CONFLICT DO NOTHING;

RAISE NOTICE 'Wait until the guanciale release its grease and start sizzling. Dont make it crispy
though.';
PERFORM pg_sleep(10);
RAISE NOTICE 'MOLTO BENE!';
PERFORM pg_sleep(1);
RAISE NOTICE 'Now we are adding water to the boiling pot and wait until it boils.';
INSERT INTO boiling_pot (content,temperature) VALUES ('water',25)
ON CONFLICT DO NOTHING;

FOR v_temperature in select generate_series(10,100,20)
LOOP
    RAISE NOTICE 'be patient, water is warming up';
    UPDATE boiling_pot
```

# Add ingredients III

```
        SET temperature=v_temperature
    WHERE
        content='water'
    ;
    PERFORM pg_sleep(1);
END LOOP;
UPDATE boiling_pot
        SET temperature=100
    WHERE
        content='water'
    ;
RAISE NOTICE 'Water is boiling, time to add salt and PASTA!';
INSERT INTO boiling_pot (content,temperature,quantity)
SELECT
        ing_name,
        100,
        quantity
    FROM
        ingredients
    WHERE
        ing_name IN (
            'spaghetti',
            'coarse salt',
        )
    ON CONFLICT DO NOTHING
    ;
    PERFORM pg_sleep(10);
```

# Add ingredients IV

```
RAISE NOTICE 'Drain the pasta then put it back into the boiling pot (without the water, of course).';
DELETE FROM boiling_pot
WHERE
    content IN ('water','coarse salt');
RAISE NOTICE 'We first add the cooked guanciale.';
INSERT INTO boiling_pot
(
    content,
    quantity
)
SELECT
    content,
    quantity
FROM
    frying_pan
ON CONFLICT DO NOTHING
;

PERFORM pg_sleep(5);

RAISE NOTICE 'Then it''s the eggs turn. Don''t forget to give them another mix before adding it.';
INSERT INTO boiling_pot
(
    content,
    quantity
)
```

# Add ingredients V

```
SELECT
    content,
    quantity
FROM
    mixing_bowl
ON CONFLICT DO NOTHING
;
PERFORM pg_sleep(5);
RAISE NOTICE 'Add the grated cheese and the pepper, then mix all together.';
INSERT INTO boiling_pot
(
    content,
    quantity
)
SELECT
    ing_name,
    quantity
FROM
    ingredients
WHERE
    ing_name IN ('grated pecorino romano cheese', 'ground black pepper')
ON CONFLICT DO NOTHING;
PERFORM pg_sleep(5);
RAISE NOTICE 'BUON APPETITO!';
PERFORM pg_sleep(5);
RETURN 'SPAGHETTI CARBONARA'::text;
END;
```

# Add ingredients VI

```
$BODY$  
language plpgsql;
```

# Function carbonara output

```
carbonara=# SELECT make_carbonara_please();
NOTICE: Let's add eggs, pepper and salt to the mixing bowl
NOTICE: Now we mix everything with a fork. hang on.
NOTICE: PERFETTO!
NOTICE: Let's add the guanciale to the frying pan and turn on the fire.
NOTICE: Wait until the guanciale release its grease and start sizzling. Dont make it crispy though.
NOTICE: MOLTO BENE!
NOTICE: Now we are adding water to the boiling pot and wait until it boils.
NOTICE: be patient, water is warming up
NOTICE: Water is boiling, time to add salt and PASTA!
NOTICE: Drain the pasta then put it back into the boiling pot (without the water, of course).
NOTICE: We first add the cooked guanciale.
NOTICE: Then it's the eggs turn. Don't forget to give them another mix before adding it.
NOTICE: Add the grated cheese and the pepper, then mix all together.
NOTICE: BUON APPETITO!
make_carbonara_please
-----
SPAGHETTI CARBONARA
(1 row)
```

- Spaghetti carbonara, copyright Popo le Chien
- Pinkie Pie that's all folks, Copyright by dan232323, used with permission
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That's all folks!

Thank you for listening!



Full working code available here <https://pastebin.com/NnrvWbnJ>

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