Food Remedy API – My Leadership Journey

From Solo Database

Member



To The Backbone of Project Data

#### **F₩OD REMEDY**



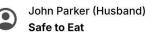
#### Old El Paso, General Mills

|||||| 9300695008826











#### Ingredients



Corn and Wheat Tortillas (42%) [Wheat flour (43%), water, ground corn (13%), humectant (glycerin), vegetable oil, wheat gluten, dextrose, raising agents (sodium acid pyrophosphate, sodium bicarbonate), food acids (fumaric acid, citric acid, glucono delta-lactone), emulsifier mono and di-glycerides of fatty acids), salt, preservatives (calcium propionate, potassium sorbate), turmeric.] Cooking Sauce (58%) [Water, tomato paste (14%), capsicum, onion, sugar, modified maize starch (1422), salt, cumin, garlic, cloves, food acid (citric acid), black pepper extract.]

Traces

None



#### Nutrients



Nutrient	Per 100g	Per serving
Energy (kcal)	141	91.54

## Stepping Up as Leader

## **Starting Point**

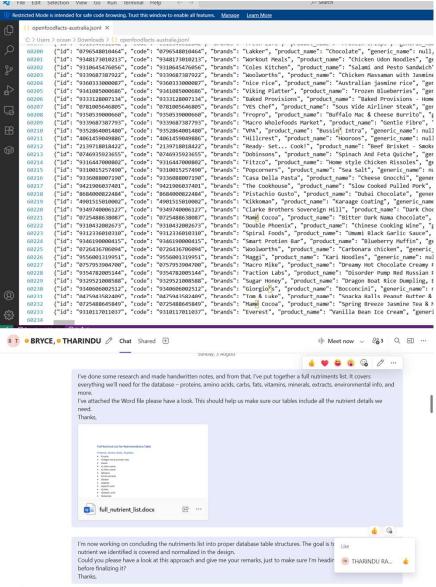
Began as the sole database member with strong encouragement from our Project Lead to take ownership of this critical component

## Vision Development

Took complete ownership of the database vision powering barcode scanning for nutrition data, allergens, and ingredients

## **Setting Standards**

Established the standards and direction for all future database development across the entire project lifecycle



## Building the Data Foundation

## Data Mastery

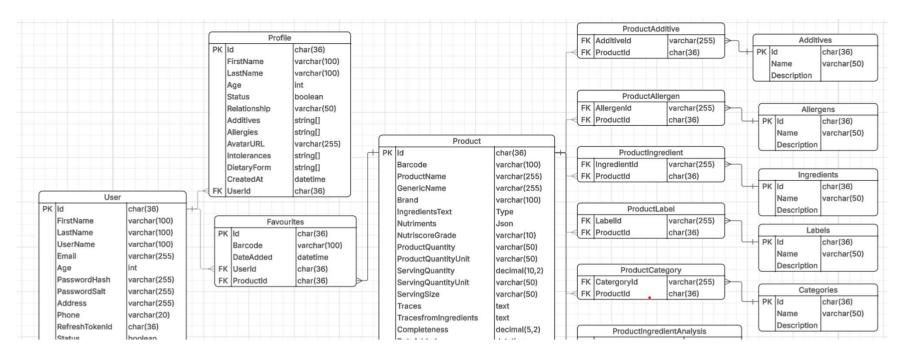
Sourced and cleaned
60,233 products using
custom Python scripts,
transforming raw data into
structured, usable
information
Tackled complex nutriment

data challenges by
manually processing reports,
then automating the entire
workflow into efficient
JSONL format

# Initiative & Independence

Demonstrated strong initiative by creating first deliverables without waiting for dependencies from other teams

Built robust data processing pipelines that became the foundation for all future database operations



## Architect & Designer

01

#### **ERD Creation**

Designed comprehensive Entity
Relationship Diagram mapping
all database entities and their
complex relationships

## Schema Design

02

Developed robust schemas and models with seamless backend alignment for optimal performance

03

### **Technical Solutions**

Resolved critical Docker and migration errors using advanced CLI tools and troubleshooting expertise

## Leading Through Challenges

1

### **Database Population Challenge**

Identified database population as the project's most complex technical hurdle requiring innovative solutions

#### **Automation Excellence**

Built sophisticated automated scripts featuring UUIDv5 generation and optimized batch insertions

3

### Integration Leadership

Served as primary point of contact for backend integration, conducting thorough Swagger API testing

### Adaptive Resilience

Demonstrated exceptional resilience adapting to constant updates and evolving project requirements

```
FoodRemedyAPI-Main / database / samples / generate sample products.py
         Blame 243 lines (212 loc) · 9.77 KB
Code
   21
   22
           INPUT FILE = r"\FoodRemedyAPI-Main\data\demo data\cleanSample.jsonl"
   23
          OUTPUT_FILE = r"\db_sample_products.sql"
   25
          import json, uuid, math, sys, os
   26
          from typing import Any, Dict, List, Tuple
   27
          # Namespaces for deterministic UUIDv5s (idempotent across runs)
                         = uuid.uuid5(uuid.NAMESPACE DNS, "foodremedy:product")
                         = uuid.uuid5(uuid.NAMESPACE_DNS, "foodremedy:category")
                         = uuid.uuid5(uuid.NAMESPACE_DNS, "foodremedy:additive")
                         = uuid.uuid5(uuid.NAMESPACE_DNS, "foodremedy:allergen")
   33
           INGREDIENT_NS = uuid.uuid5(uuid.NAMESPACE_DNS, "foodremedy:ingredient")
          LABEL NS
                         = uuid.uuid5(uuid.NAMESPACE DNS, "foodremedy:label")
   34
   35
           def u5(ns: uuid.UUID, name: str) -> str:
   37
              return str(uuid.uuid5(ns, name))
   38
   39
          def sql_escape(s: str) -> str:
   40
              return s.replace("'", "''")
   41
   42 V def sql_str(val: Any) -> str:
              if val is None:
                   return "NULL"
              if isinstance(val, bool):
```

## Breakthrough & Recognition

#### **Critical Pivot**

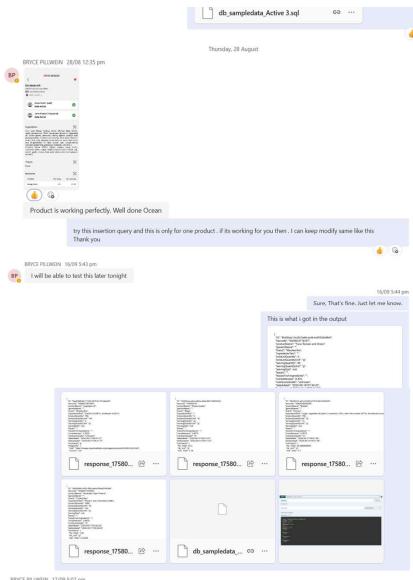
Faced a sudden demo dataset change which required me to rebuild the entire insertion script from scratch. Worked closely with the Project Lead to test queries, validate outputs, and adapt to new requirements.

## Rapid Delivery

Delivered a fully working solution in just 1-2 days, iterating quickly on feedback (sampledata branch, JSON outputs) and ensuring smooth integration with the backend.

## Leadership Validation

Project Lead validated my solution as correct and productionready, acknowledging the speed and reliability of my work under pressure.



BRICE PILLWEIN 17/09 3:07 p

Looks good. Push the sampledata as a new branch and I will test it and merge if if all is working.



#### Weekly Database Progress & Learning Session

I've noticed that some members are interested in working on database-related tickets but may r or ongoing work in the database. I also understand that some would like to learn more about it. To address this, I'll be starting a weekly database progress update and organising a database around 6 PM).

I've created a poll in the group to choose a day that works best for everyone, please share your I'll also be creating additional database tickets before the end of this week to ensure there's eno Looking forward to everyone's input and participation!

With Regards

Ocean



#### Weekly Database Progress & Learning Session – Schedule

#### Hi Team,

Only a few people voted, but the majority preferred Sunday or Tuesday, so we'll hold our weekly In this session, I'll share the latest database progress, talk through current challenges, and offe more or contributing to database-related work. Everyone is welcome to join.

Before the inter-trimester break finishes, I'll create as many new database tickets as possible involved. While I may not get them all done immediately, I'll aim to have the maximum number Join the meeting here: https://teams.microsoft.com/l/meetup-

join/19%3ameeting\_ZTgxODQ2ZWMtZjBhMS00Y2IwLWE5ODItNDQxMWE2MTVmMDRh%40thr context=%7b%22Tid%22%3a%22d02378ec-1688-46d5-8540-1c28b5f470f6%22%2c%22Oid%22 see more



OO OCEAN OCEAN 7/09 6:20 pm

#### Weekly Database Progress & Learning Session – Update

#### Hi Team.

Just a quick follow-up — for the past two weeks, no one has joined the scheduled **Sunday DB s** 

If you need database updates, want to contribute to DB tasks, or plan to work on a specific t Teams anytime — I'll be happy to support or sync up 1:1.

Thanks for understanding!

## Leadership Beyond Code



### **Knowledge Sharing**

Initiated weekly database learning sessions for the entire team, fostering collective technical growth



## **Individual Mentoring**

Provided dedicated 1:1 mentoring for team members working on database-related tickets and challenges



### **Documentation Excellence**

Created comprehensive documentation for migrations and queries, ensuring long-term project sustainability



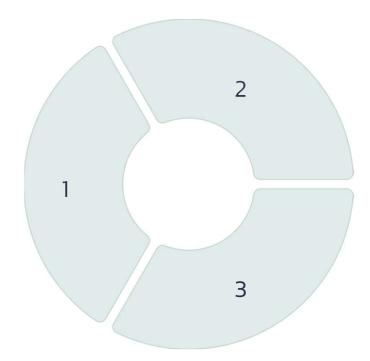
### **Project Continuity**

Authored majority of database tickets, maintaining consistent project momentum and clear deliverables

## Impact & Reflection

## **Technical Impact**

Built the database backbone enabling barcode scanning, nutrition retrieval, allergen detection, and future scalability



## Leadership Growth

Evolved from database beginner to trusted technical guide for the entire development team

## Core Message

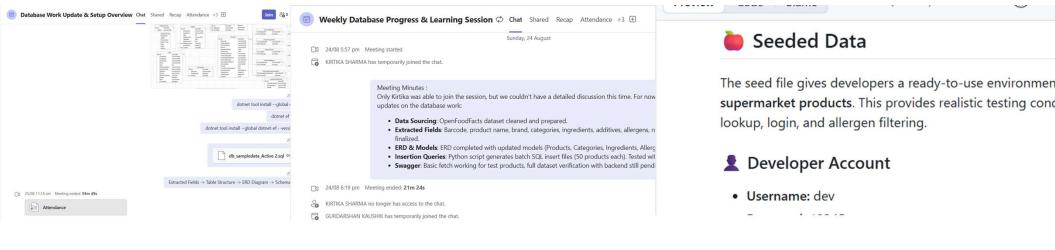
While databases may seem invisible, they are truly the heart of the application powering every user interaction

# Leadership Testimonial

#### BRYCE PILLWEIN 9:28 am

I meant to send this earlier so you could include it in your presentation, but I've been a bit busy. If you still have time, feel free to add it in. It's a short testimonial from me as Project Lead, an endorsement of your work that you can present to the panel:

"At the start of the trimester, Ocean was hesitant about stepping into a leadership role, unsure if she could commit to the responsibility. With support and encouragement, she not only accepted the challenge but quickly grew into a confident and independent leader. She consistently delivered work promptly, asked thoughtful questions, and proposed effective solutions. Her leadership was evident in the way she developed and reviewed database tickets, ensuring quality and progress for the team. Of all the juniors, Ocean demonstrated the strongest dedication and potential, which is why I have personally endorsed her to take on the Project Lead role next trimester."



## Key Leadership Insights





#### Measurable Results

60,233 Products processed, ERD designed, breakthrough delivered under pressure



### **Future-Ready Foundation**

Interactive, scalable database architecture with comprehensive documentation for sustained growth

The database foundation I built doesn't just store data - it powers the entire Food Remedy experience, making nutrition accessible to users worldwide.