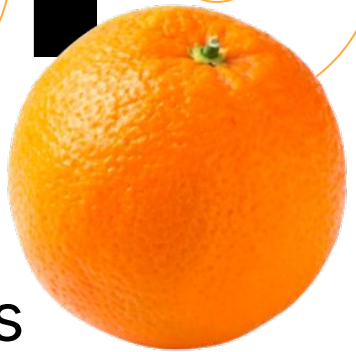
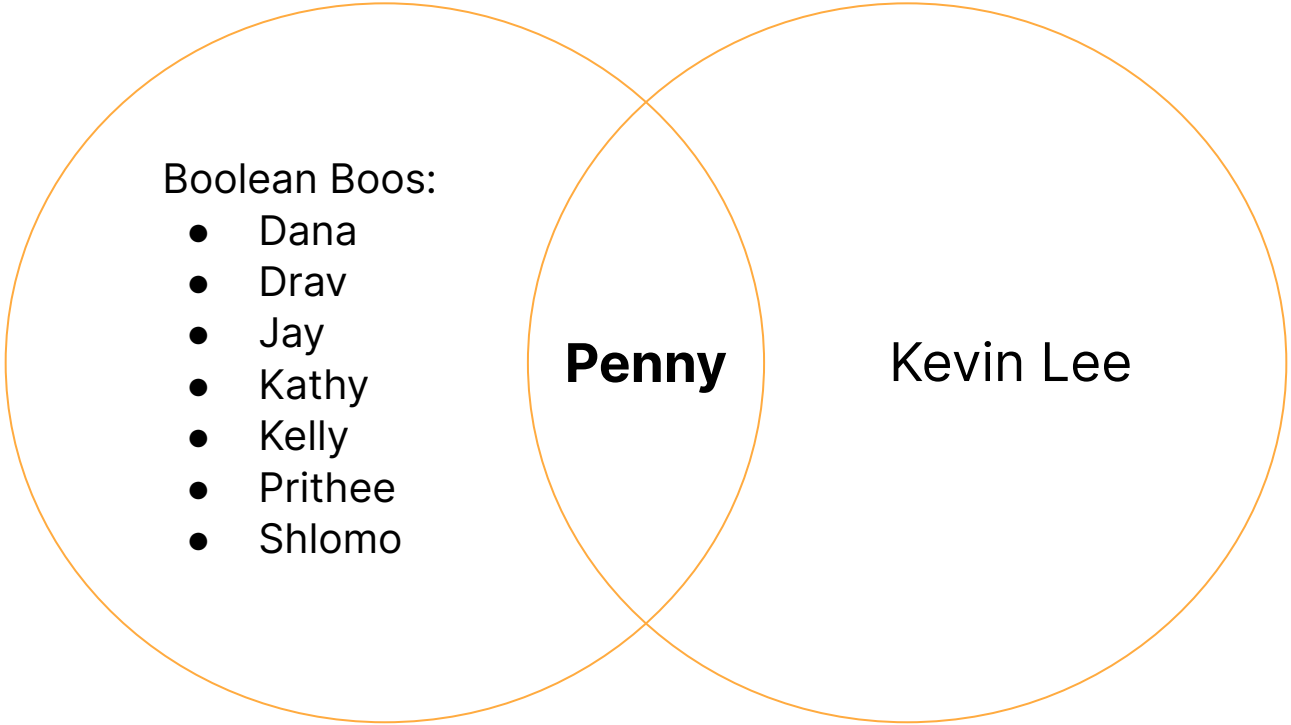
CSC301

PENNY



Team 26: Boolean Boos

INTRODUCTIONS



PROBLEM

- Rising costs of grocery store items – overall rise in costs of living
- Financial stress for many
  - Students
  - Seniors
  - Lower-income individuals/families
- Time consuming to find the cheapest items – resort to convenience

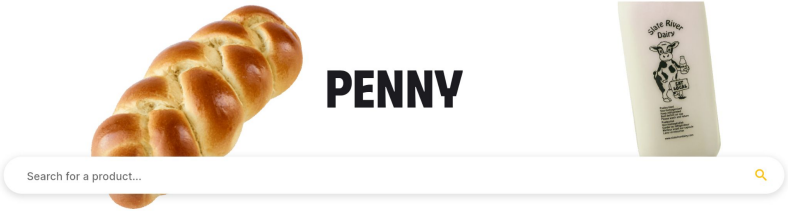
OUR PRODUCT

- Cross-platform application for grocery store price-checking and comparisons
- Search and sort for items by price and distance, create and manage a shopping list
- Implements real-time data from grocery stores and location
- Existing GitHub repo on mostly frontend work & sample database

- Touched on our user stories

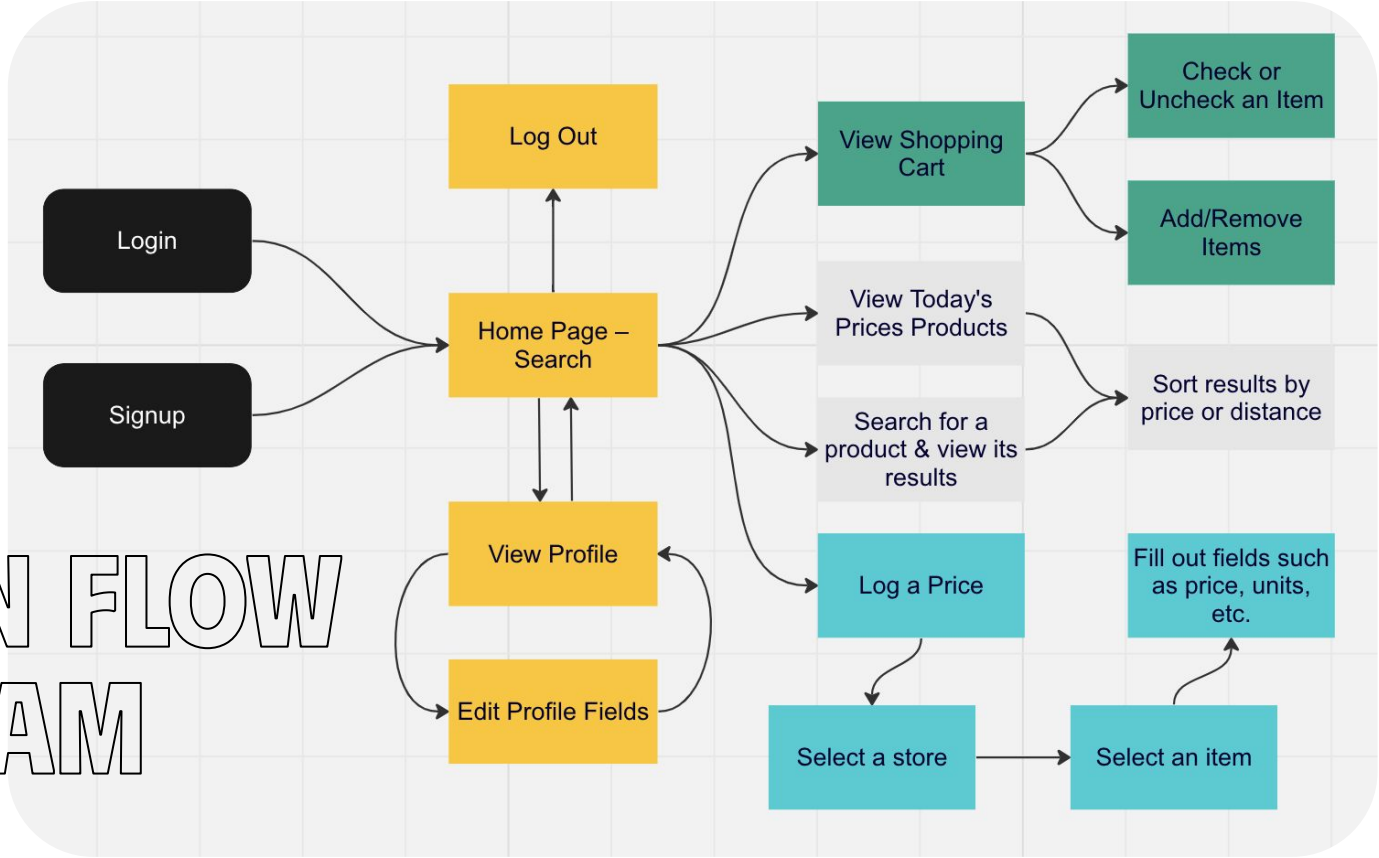
Targeted user groups

- Students
- Seniors
- Anyone financially conscious with grocery shopping



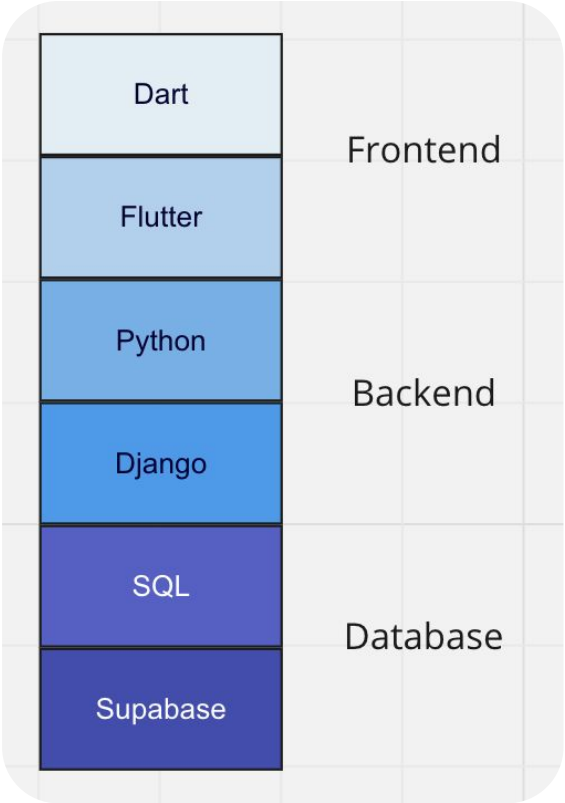
ARCHITECTURE & TECHNICAL DECISIONS

DESIGN FLOW DIAGRAM



TECH STACK

- Flutter (Dart)
  - UI toolkit for natively compiled mobile applications
- Django (Python)
  - High level web framework that uses Object Relational Mapping
- Supabase (SQL)
  - Cloud service that offers PostgreSQL database
  - Real-time updates



CLIENT–SERVER ARCHITECTURE (API–DRIVEN)

- Frontend
  - Presents UI and communicates with backend through HTTP requests
- Backend
  - Provides endpoints through RESTful API
  - Handles business logic
  - Returns data from database to frontend
- Database
  - Holds the scraped data
  - Creates data tables based on Django models

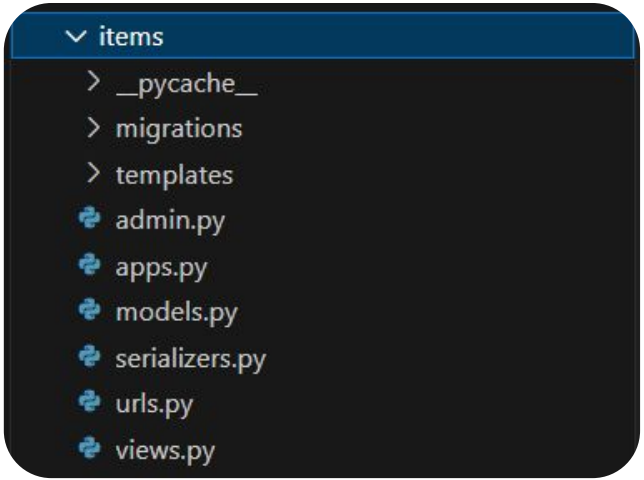
```
var response = await http.get(Uri.parse(
    'https://boolean-boos.onrender.com/items/?ordering=$ordering&name=$searchText'));
```

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.postgresql_psycopg2',
        'HOST': 'db.ytjttwkyfkltqqxpdaox.supabase.co',
        'NAME': 'postgres',
        'USER': 'postgres',
        'PORT': '5432',
        'PASSWORD': 'BooleanBoos26',
    }
}
```

id uuid	name text	store_name text	price float8
c52e93fa-0688-4d	Vegan Mature Cheddar Cheese Slices	Metro	3.5
24c29bb5-bc80-4	Avocado	Metro	1.99
6987ea2d-9906-47	Romaine Lettuce	Metro	2.99
1c79113b-1f72-4a3d	Spring Salad Mix	Metro	1.92
00b0d4f6-68cc-42	Green Leaf Lettuce	Metro	3.49

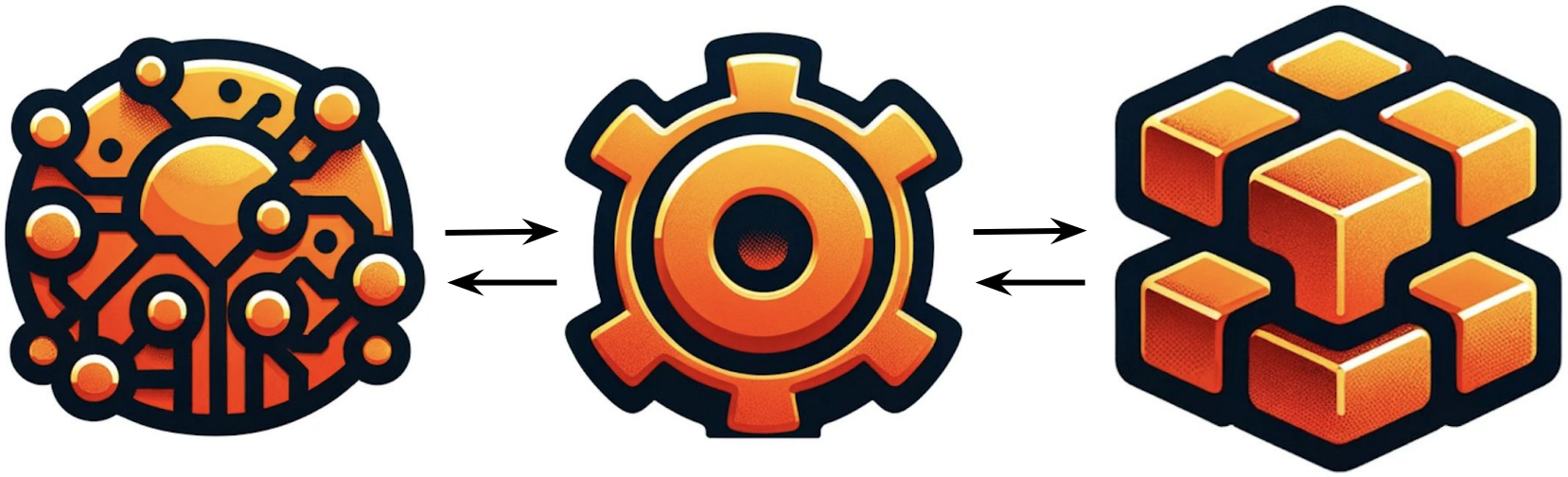
CLEAN PRACTICES

- Django Model-View Structure
  - Follows common API-Driven Architecture
- Follows PEP8 and Effective Dart conventions
- Code follows DRY principle
  - No duplicate code
- README.MD
  - Project inspiration and step by step instructions
- Comments, requirements.txt, and pubspec.yaml



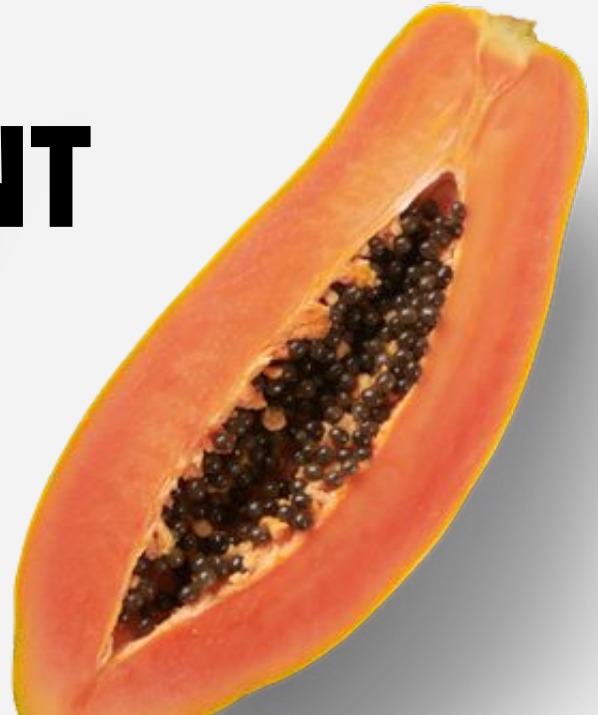
PROCESS & DEVELOPMENT

WORKING TOGETHER



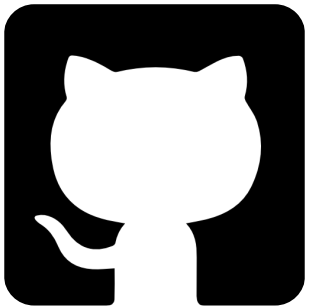
Frontend Backend Database

DEPLOYMENT



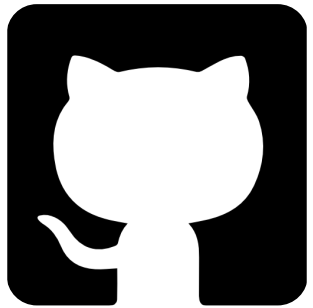
DEPLOYMENT

- Django backend is deployed using render
- Flutter frontend is deployed with GitHub pages

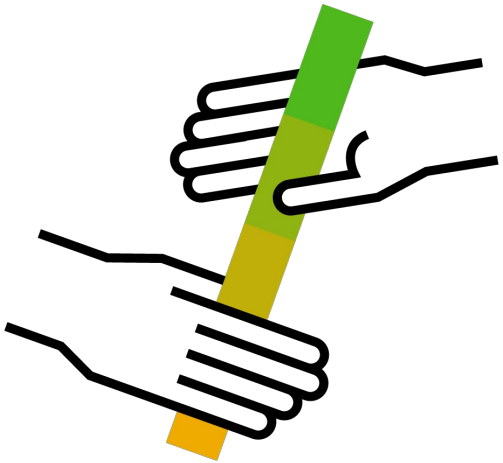


PARTNER HANDOFF

- Project could be accessed through URL
- Access to our GitHub such that he can clone it
- Access to the our database on Supabase so he can look at our table
- Detailed instructions on the README on how to run the project locally



supabase






REFLECTION & KEY LEARNINGS

REFLECTIONS

- Do not underestimate the difficulty of any single task
- Deploy first, code later
- Get started early and code consistently throughout
- Meet in person soon and often
- Rely on home written code instead of frameworks
- Pair programming is really helpful when cutting across group concerns
- Work with tools you know and have mastered

LECTURE TAKEAWAYS

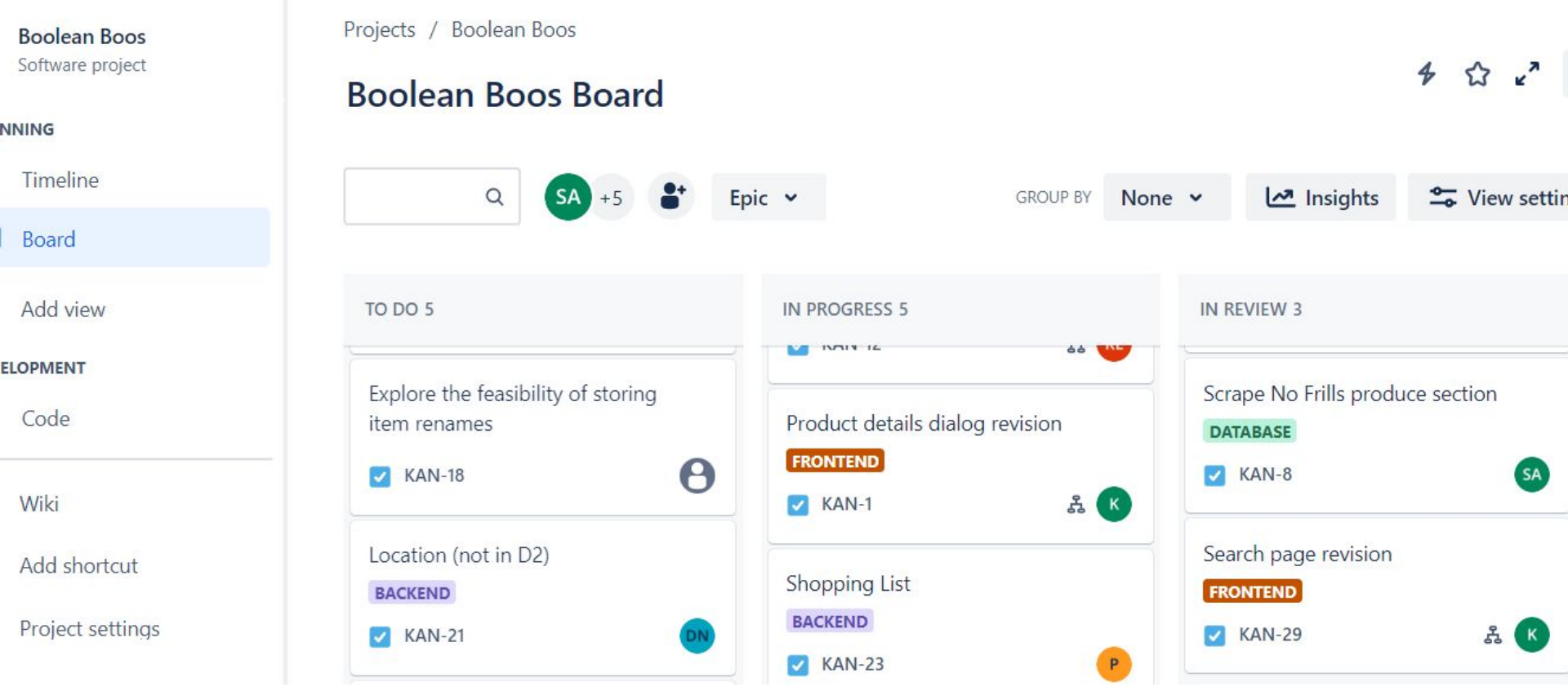
- Jira boards
- Clean code and effective documentation
- Took meeting notes
- Met twice a week to keep ourselves on task
- Met in person and it really helped with group cohesion
- Planned out our software architecture ahead of time
- Branching and PR’s
- Enjoy ourselves and the process of development

MEETING NOTES

Meeting Notes

Meeting	Date	Type	Location	Next Meeting
Partner Meeti OPEN	November 28, 2023	Partner	https://utoronto.zoom.us/j/83608300694	
Team Meeting #	November 28, 2023	Team	Discord	
TA Meeting #	November 23, 2023	TA	https://utoronto.zoom.us/j/82618465762	
Partner Meeting #	November 21, 2023	Partner	https://utoronto.zoom.us/j/83608300694	
Team Meeting #	November 21, 2023	Team	Discord	
Team Meeting #10	November 20, 2023 11:59 PM	Team	Discord	
Team Meeting #9	November 20, 2023 11:00 AM	Team	Discord	Team Meetin
TA Meeting #7	November 16, 2023 8:10 PM	TA	https://utoronto.zoom.us/j/82618465762	
Partner Meeting #6	November 14, 2023	Partner	https://utoronto.zoom.us/j/83608300694	
Team Meeting #8	November 14, 2023	Team	Discord	Team Meetin

JIRA BOARD


Boolean Boos
Software project
NNING
Timeline
Board
Add view
ELOPMENT
Code
Wiki
Add shortcut
Project settings
Projects / Boolean Boos
Boolean Boos Board
SA +5
Epic
GROUP BY None
Insights
View settin
TO DO 5
Explore the feasibility of storing item renames
KAN-18
Location (not in D2)
BACKEND
KAN-21
DN
IN PROGRESS 5
Product details dialog revision
FRONTEND
KAN-1
K
Shopping List
BACKEND
KAN-23
P
IN REVIEW 3
Scrape No Frills produce section
DATABASE
KAN-8
SA
Search page revision
FRONTEND
KAN-29
K

INDIVIDUAL CONTRIBUTIONS

DANA

- Designed frontend components
- Implemented login features
- Connected backend to frontend components

DRAVIN

- Project Manager & Software Developer
- Backend infrastructure for Account User and for the Shopping Cart
- Linked backend to database

JAY

- Implemented search and sort functionality for items
- Created API endpoints

KATHY

- Designed & developed user interfaces
- Refined frontend components to maintain visual consistency
- Connected backend functions with frontend

KELLY

- Database management
- Connected database to web scraper
- Wrote iteration reviews and readme

PRITHEE

- Implemented location searching API (Google API)
- Created new database on Supabase
- Enabled Database communication with Backend
- Deployed Frontend
- Deployed Backend

SHLOMO

- Scraped item info from both No Frills & Metro
- Added said items to the database