**Sprint 4: Core Features Implementation & Finalization – Nathan Nguyen**

**Week 7-8**

**Goals:**

Implement core features for filtering and searching products.

Finalize the platform with testing and bug fixes.

**Tasks Completed:**

**Filter by Supermarkets:**

Implemented the ability for users to filter products based on supermarkets.

Developed the backend logic and SQL queries for the same.

Integrated frontend UI components for a dropdown list or checkboxes for supermarket selection.

Search by Product Name:

Enhanced the product search functionality to allow users to search for a product by its name.

Implemented backend logic and SQL queries for this feature.

Improved the search bar UI/UX to provide instant results as users type.

Price Range Filter:

Developed a filtering system that allows users to specify a price range and view products within that range.

Integrated frontend UI components such as sliders or input fields for price range selection.

Implemented backend logic and SQL queries to fetch products within the specified price range.

Sort by Price:

Added a feature for users to sort products by price, either in ascending or descending order.

Developed backend logic and SQL queries for sorting.

Integrated frontend UI components, like a dropdown or toggle button, for sorting selection.

Testing & Bug Fixes:

Conducted comprehensive testing of all the newly implemented features.

Addressed the failing test cases and ensured all tests passed.

Made necessary bug fixes and improvements based on test results.

**Challenges:**

The tight deadline meant that extensive testing was essential to ensure all features were working as expected.

Some mock data discrepancies caused initial test failures, which were later resolved.

Three out of the five members dropped out. The other member was unresponsive and unwilling to work.

**Notes:**

There had been no progress on the codebase in the weeks prior as I was unaware that the other members had dropped out, leaving me to work on the SRS document as we had planned originially. The project was successfully completed with all the core features implemented and tested.