

Go to <https://highlifeshop.com/speedbird-cafe>. Imagine there is no "Sort by" feature in this website.

We hire you as a QA engineer in the team. In your first Sprint, the team is asked to implement the

"Sort by" user story.

Id BAU-123

Description

As a user I want to sort my product list so that it's easier for me to find the product I want

Acceptance Criteria

1. Given I am in the product list for the first time the page is sorted by position
2. Given I am in the product list when I click with my mouse the "sort by" dropdown control I can see there are 4 options: Position, product name, price and new arrivals.
3. Given I am in the product list and I click on the arrow up ↑ icon the list is sorted in descending order, otherwise in ascending order.

1. Help the team to refine the acceptance criteria. Rewrite what you need and add any additional criteria you consider. Raise questions if you need further definition from the Product Owner.

1. Given I am in the product list for the first time, the page is sorted by position in ascending order.
2. Given I am in the product list, when I click the "sort by" dropdown control, I can see the following options: Position, product name, price, and new arrivals. The selected sorting option should be highlighted and the combo closed.
3. Given I select a sort option from the "sort by" dropdown control, when I select a new sorting from the dropdown, the list is sorted by the selected option in ascending order by default.
4. Given I am in the product list and I click on the arrow up ↑ icon next to the selected sort option, the list is sorted in descending order keeping the sorting selected in the dropdown. Clicking the arrow again toggles the sort order between ascending and descending keeping the sorting selected in the dropdown
5. Given the product list has multiple pages, the sorting should remain consistent across pages.
6. Given two or more products have the same sorting value, the default sorting order is by product position in ascending order.

7. If the user clicks on a product and come back to the page, the list must appear at the same point in that the user accessed to the product and with the same sorting and paging.

8. Given I am in the product list, the product's position should be updated dynamically based on the sorting order, i.e., the position of the product should reflect its current position in the sorted list. (product 1 by position order, is in the position 1, but product1 by product name sort is in the position 7)

9. If the list is filtered by any option, if the user changes the sorting, the list must keep the filter applied by the user

Some questions that may require further definition from the Product Owner:

- If the user selects viewing 30 products by page, and the total products is less than 30, Is it necessary to show the paging?
- If the user applies a filter, and the results aren't returning products, the sort by must be enabled?
- How should products without stock be handled in the sorting process?
- It's possible having products to pay with ticket and the prices are not numeric? In those cases, how must be handled in the sorting process?
- When the user has a list filtered and sorting and reload the page, must the sorting be restarted like the first time that the user accessed to the page?
- *How should we handle ties when sorting by a certain criteria? For example, if two products have the same price or name, which one should come first in the sorted list?*
- Should we display any message or feedback to the user when the list is sorted? For example, a message saying "List sorted by Price, ascending" when the user selects that option from the dropdown.

2. Write test cases to cover additional scenarios you can imagine.

TC1 Order by Price

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with products ordered by position

WHEN

The user selects in the dropdown Sort by the "Price" option

THEN

The product list should be sorted in ascending order by price

TC2 Order by Product Name

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with products ordered by price

WHEN

The user selects in the dropdown Sort by the "Product Name" option

THEN

The product list should be sorted alphabetically by product name

TC3 Having duplicate products (same product name) with different prices, sorting by price

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with duplicate products by name and with different prices

WHEN

The user selects the "Price" option from the sort by dropdown

THEN

The product list should be sorted by price in ascending order

AND the duplicates with higher prices should appear after duplicates with lower prices.

TC4 Having products with duplicate names, sorting by Product Name

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with duplicate products by name and with different prices

WHEN

The user selects the "Product Name" option from the sort by dropdown

THEN

The product list should be sorted by product name in ascending order

AND the duplicates should appear in the order they were added to the list

TC5 Change type sorting to descending

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with the ordered by default, by position

WHEN

Click on the arrow next to the sorting dropdown

THEN

The sorting change to descending

TC6 Change type sorting to ascending

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with the ordered by default, by position

AND the sorting is descending

WHEN

Click on the arrow next to the sorting dropdown

THEN

The sorting change to ascending

TC7 Keep sorting after refreshing the page

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen is ordered by product name

WHEN

The user refreshes the page

THEN

The page must keep the same type of sorting and the list ordered like the sorting criteria

TC8 Sorting with paging

GIVEN

The web <https://highlifeshop.com/speedbird-cafe>

AND the cookies accepted

AND The product list in screen with products ordered by position with more than 2 pages

WHEN

The user selects sort by price

THEN

Each page must be ordered ascending by price

3. Can you figure out any edge case scenario?

1. Given I am in the product list and the list contains only one product, when I select any sorting option from the "sort by" dropdown, the list should remain the same as there's only one item and no sorting is necessary. The sorting dropdown should be disabled in this case, to avoid confusion to the user.
2. Given I am in the product list and the list is empty, the sorting dropdown should be disabled and a message should be displayed to the user stating "No products found". Any attempt to sort the list should be ignored.
3. Given I am in the product list and the list contains products with identical names, when I select the "Product Name" option from the "sort by" dropdown, the list should be sorted in a way that considers the order in which the items were added to the list. For example, if the list contains two products with the name "Apple", the one that was added first should appear before the one that was added later.
5. Given I am in the product list and the list contains products with very long names, when I select the "Product Name" option from the "sort by" dropdown, the list should be sorted in a way that considers only the first few characters of the name. This should allow the user to see the entire list without scrolling horizontally.

4. Would you suggest some unit or integration test to the developers team?

Unit tests:

1. Test that the sorting dropdown control contains the expected options.
2. Test that the default sorting order is set to "position" when the product list page is loaded for the first time.
3. Test that clicking on the "sort by" dropdown the open with the different options to sort (position, product name, price and new arrivals)
4. Test that clicking on the arrow up ↑ icon changes the sorting order correctly.
5. Test that the list remains the same when the sorting dropdown is disabled (such as when there's only one item in the list).
6. Test that the list remains the same when the sorting dropdown is ignored (such as when the list is empty).
7. Test that the list is sorted correctly based on each sorting option (position, product name, price, and new arrivals).

8. Test that the list is sorted correctly even when it contains special characters or non-English characters in the product names.

Integration tests:

1. Test that the product list page loads correctly and displays the products in the expected order.
2. Test that the "sort by" dropdown updates the product list correctly based on the selected sorting option.
3. Test that clicking on the arrow up ↑ icon updates the product list sorting order correctly.
4. Test that the product list page remains responsive and functional even when the sorting order is changed multiple times.
5. Test that the product list page updates correctly when new products are added or removed from the list.
6. Test that the product list page maintains the user's selected sorting option even when the page is refreshed.
7. Test that the product list page handles edge cases (such as when the list is empty or contains only one product) correctly.