

Magento Exercise – Products in Range

Description

We have a client that requires a customer account section to return a list of products based on a range of prices entered. A customer will go to this section in the customer account (a new tab in customer account) and be presented with three input fields: low price, high price, and sort. Upon form submission the page should load via AJAX and display a list of products whose price falls within the submitted range. Form cannot submit on frontend unless frontend JavaScript validation is passed and form cannot submit if backend controller validation of required field data does not pass (to prevent manual manipulation).

Specifics

Form

- Low Range
 - Required
 - Any value, zero or more.
- High Range
 - Required
 - Any value greater than "Low Range" and no more than 5x higher than the entered "Low Range".
 - For example, if Low Range entered is \$100, the maximum high range value is: 500
- Sort By Price
 - Options:
 - Ascending (Default)
 - Descending
- Validation
 - Frontend: prevent form submission on frontend unless JavaScript validation passes
 - Backend: do not process grid without validating in backend controller

Product Table

The product table should show the first 10 products returned by default, sorted by price either ascending or descending based on input. The table should have, at minimum, the following columns: Thumbnail, SKU, Name, QTY, Price, Link to Product (Open in new tab).

Deliverable

We'd like a self-contained module that can be installed on any instance; the package given back should only include the module itself, not the entire instance. You can assume we will install this on a brand-new directly out of the box version Magento 2.3.x Open Source edition Magento instance with sample data installed. There will be no configuration changes or modules added.