

# Matching

The *Matching* settings determine to what extent a question influences the result list in the recommendation phase of your Product Guide in comparison to other questions in your guide. This page gives you an overview of the available settings, explains the main concepts of matching and filtering in the Workbench, and provides several examples to explain possible outcomes when using these settings.

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## Question vs. Answer Option Setting

This page shows you the difference between the **Question (left)** and the **Answer Option (right)** settings.

## Question Detail View

The image below shows you the **Detail View for a Question** within the *Concept Board*:

## Answer Option Detail View

The image below shows you the **Detail View for an Answer Option** within the *Concept Board*:

General Properties

Data Binding & Connections

Matching & Reasoning

Match Weight ⓘ

How important is the right answer for the recommendation?

Low

High

Filter Settings ⓘ

Hard Filtering ☒

Create Alternatives ☒

Matching Logic ⓘ

OR

Reasoning

The Question should generate the following reasons in the product recommendation:

Positive Reason ☒

Positive Text 

Use a template ⓘ

Supported: \$uservalue

Negative & Unknown Reasons ☒

Negative Text 

Use a template ⓘ

Not supported: \$uservalue

Unknown Text 

Use a template ⓘ

Unknown: \$uservalue

Answer Option Type

Visibility

Explanation Content

General Properties

Data Binding & Connections

Matching & Reasoning

Matching

Alternative Answer Options ⓘ

Select an Answer

Reasoning

This Answer should generate the following reasons in the product recommendation.

**Note:** These texts overwrite the Question reason texts for this Answer.

Option specific positive reason ☒

Option specific negative reason ☒

Visibility

Explanation Content

## Match Weight

The match weight determines how important the given question is for calculating the product order within the result list.

Therefore, the Workbench allows you to set the match weight as low-medium-high, with the use of a slider as shown in the image below. (see [Matching Use Case](#) below).

## Alternative Answer Options

Given a particular answer option *A* you can define other alternative answer options *X... to Z*, that if fulfilled as a requirement also qualify a product as being a valid recommendation for *A*. (see [Matching Use Case](#) below)

## Conclusions

- There are no negative reason texts if the **Alternative Answer Option** was selected.
- The fit score is lower than the score from the actual Answer Option. Thus, products which **fulfill the features of the chosen Answer Options are ranked higher than products which only fulfill the alternative Answer Options**.
- The fit score for the result list is higher than the score from Answer Options which are not part of the alternative Answer Options or the actual Answer Option itself.

## Filter Settings

Furthermore, you can decide how the results of the Question should be represented in the product recommendation. That means that you can enable or disable a hard filtering. With an active hard filter all products which do not fulfill the user-selected Answer Options are not shown in the recommended result list. (see [Matching Use Case](#) below)

| Filtering Opportunities | Settings and Description                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Filter               | <p><b>Filter Settings</b> ⓘ</p> <p>Hard Filtering <input type="checkbox"/></p> <p>Create Alternatives <input type="checkbox"/></p> <p>No filter is set: A deactivated hard filter does not remove any products. The difference is that these products do not get any fitting points and as a consequence are ranked lower than products which fulfill these criteria.</p>                                  |
| Hard Filter             | <p><b>Filter Settings</b> ⓘ</p> <p>Hard Filtering <input checked="" type="checkbox"/></p> <p>Create Alternatives <input type="checkbox"/></p> <p>A "hard filter" displays only the perfect matches in the recommendation page.</p> <p>Note: Negative and unknown reasons (see <a href="#">Reasoning</a>) are automatically disabled for an active hard filter because they won't be displayed anyways.</p> |
| Alternatives            | <p><b>Filter Settings</b> ⓘ</p> <p>Hard Filtering <input type="checkbox"/></p> <p>Create Alternatives <input checked="" type="checkbox"/></p> <p>"Create Alternatives" shown in result list (no perfect match)</p> <div> <p>ⓘ <b>Create Alternatives</b></p> <p><b>Create Alternatives</b> can only be set by excentos, please contact us for this purpose.</p> </div>                                     |

## Matching Logic

**Only relevant for questions that allow the selection of *multiple options* by the user.**

Given multiple selection options for the question, the matching logic specifies the logical relation between the selected options - *OR* / *AND*

- **OR:**  
At least one of the selected answer options has to be fulfilled by a product in order to fulfill the user requirement.
- **AND:**  
All the selected answer options have to be fulfilled by a product to fulfill the user requirement.

(see [Matching Use Case](#) below).

## Question Use case

These use cases for the settings for the Question help you to understand the presented settings.

### Match Weight

Color has a lower weight score than the brake type, and hence results in a higher score for products with the requested brake type, resulting in a higher spot in the product recommendation list.

The attribute color is set to **match a middle weight**. This would show default products in the result list, as categorized in the product data.

| Question     | Which color? | Which type of brake? |
|--------------|--------------|----------------------|
| User Answers | blue         | carbon               |
| Match Weight | 1            | 2                    |

not-perfect matches (in this case, not the chosen color)

## Answer Option Use case

These use cases for the settings for the Answer Option help you to understand the presented settings.

### Alternative Answer Options

The color could be "blue" or "marine". All variants are shades of blue but have different names. If you select the alternative answer option "marine" for the color "blue" then there is no negative reason if the user selects "blue" and the product has the color "marine".

## Filter Settings

**No Filter:** The attribute color is set to '**no filter**' — that means that no filter is set, and all products are shown in the result list. In this case blue is selected and also products which are not blue are in the result list. There are no fitting points to influence the result list.

**Hard Filter:** The attribute color is set to '**Hard filtering**' — only products that have the chosen "color" are displayed in the results list. In this case blue is selected and only blue products are in the result list.

**Create Alternatives:** The attribute color is set to '**Create Alternatives**' — **There are products which do not perfectly match, but shown in the result list.** In this case blue is selected and also products which are not blue are in the result list.



#### Create Alternatives

**Create Alternatives** can only be set by excentos, please contact us for this purpose.

Filter Mode: **Hard filter = OFF** for both Questions

| Product Result List | Color | Brake Type | Fit |
|---------------------|-------|------------|-----|
|---------------------|-------|------------|-----|

|    |       |        |             |
|----|-------|--------|-------------|
| P1 | blue  | carbon | $3 = 1 + 2$ |
| P2 | green | carbon | $2 = 0 + 2$ |
| P3 | blue  | steel  | $1 = 1 + 0$ |
| P4 | green | steel  | $0 = 0 + 0$ |

Filter Mode: **Hard filter = ON** for the Question "Which color?"

| Product Result List | Color | Brake Type | Fit         |
|---------------------|-------|------------|-------------|
| P1                  | blue  | carbon     | $3 = 1 + 2$ |
| P3                  | blue  | steel      | $1 = 1 + 0$ |

## Matching Logic

1. **GOOD:** Question about colors of a jacket with two selected Answer Options "blue" and "grey". The corresponding product attribute color has multiple values (e.g. "blue, grey", "green, black", etc.). Then a product can be found that fulfills both color wishes.
2. **BAD:** Question about car brands with two selected Answer Options "Mercedes" and "Audi". All cars only have exactly one brand. That is why an "AND" logic would result in getting negative reasons for the not fulfilled brand. As a consequence, there would not be any top recommendation.

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Read on with the [Reasoning](#) section