

# Visual Highlighting for Situated Brushing and Linking

## Supplemental Material

### 1 Task Questions

As mentioned in our paper, our study included three main task types: single-selection, multi-selection, and statement response. The following tables show the specific task questions that we designed. Table 1 shows the questions for the single-selection task and Table 2 for the multi-selection task. The questions for the statement response task can be seen in Table 3.

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<b>Find one specific object of value x and value y</b>
<i>QS1: Select the product that has highest fat and no sugar</i>
<i>QS2: Select the product that has highest carbohydrate and is vegetarian</i>
<i>QS3: Select the product that has highest protein and less than 10 g fat</i>
<i>QS4: Select the product that has highest protein and costs less than 2 EUR</i>
<i>QS5: Select the product that has highest calories and no protein</i>
<i>QS6: Select the product that has no sugar and highest alcohol</i>
<i>QS7: Select the product that is most expensive and has less than 80 kcal calories</i>
<i>QS8: Select the product that has highest calories and is vegetarian</i>

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Table 1: Single-Selection Question-based Task.

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<b>Select multiple objects of value x and value y</b>
<i>QM1: Select all products that cost less than 10 EUR and have more than 24 g protein</i>
<i>QM2: Select all products that have more than 50 g sugar and are vegan</i>
<i>QM3: Select all products that have more than 70 g carbohydrate and have gluten</i>
<i>QM4: Select all products that have more than 22.5 g protein and less than 9.5 g fat</i>
<i>QM5: Select all products that have less than 2 g sugar and more than 530 kcal calories</i>
<i>QM6: Select all products that have less than 3 g protein and have lactose</i>
<i>QM7: Select all products that cost more than 9 EUR and have less than 50 kcal calories</i>
<i>QM8: Select all products that have more than 13 g sugar and less than 35 g carbohydrate</i>

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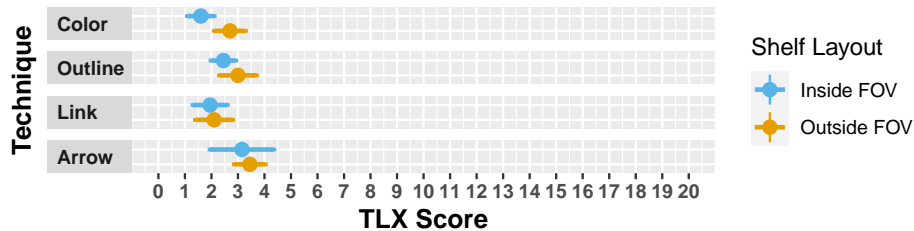
Table 2: Multi-Selection Question-based Task.

Products that have value x and value y are in the lower shelves
<i>QH1: The top-most shelf does not contain any product that has less than 25 g carbohydrate and costs more than 2 EUR</i>
<i>QH2: Products that have less than 15 g fat and less than 240 kcal calories are distributed only in the left-most and center-left shelves</i>
<i>QH3: The bottom-most shelf does not contain any product that has less than 10 g protein and more than 36 g sugar</i>
<i>QH4: Vegan products that contain more than 51 g carbohydrate are distributed only in the center-left and center-right shelves</i>
<i>QH5: Vegan products that have more than 10 g fat are distributed only in the top-most and center-top shelves</i>
<i>QH6: Products that have less than 40 g carbohydrate and have gluten are distributed only in the bottom-most shelf</i>
<i>QH7: Products that have less than 20 g fat and have lactose are distributed only in the bottom-most and center-bottom shelves</i>
<i>QH8: Products that have more than 29 g fat and less than 7 g protein are distributed only in the left-most and right-most shelves</i>

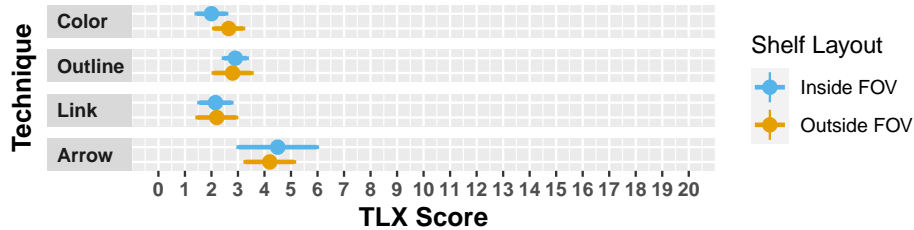
Table 3: Statement Response Task.

## 2 Further NASA-TLX Results

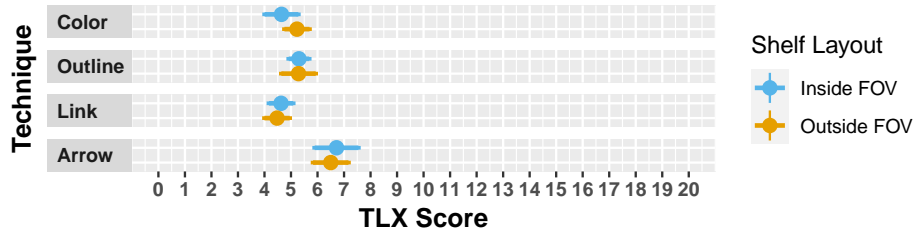
This section shows the remaining NASA-TLX subscales (see Figure 1) that we did not analyze in the results section of our paper. Therefore, one can see the results for physical demand in Figure 1a and the results for temporal demand in Figure 1b. In addition, we calculated the overall taskload by calculating the mean and 95% CIs for all participants. For the latter, the results can be seen in Figure 1c.



(a) Physical Demand.



(b) Temporal Demand.



(c) Overall Taskload.

Figure 1: Mean and 95% CIs of the remaining NASA-TLX subscales.