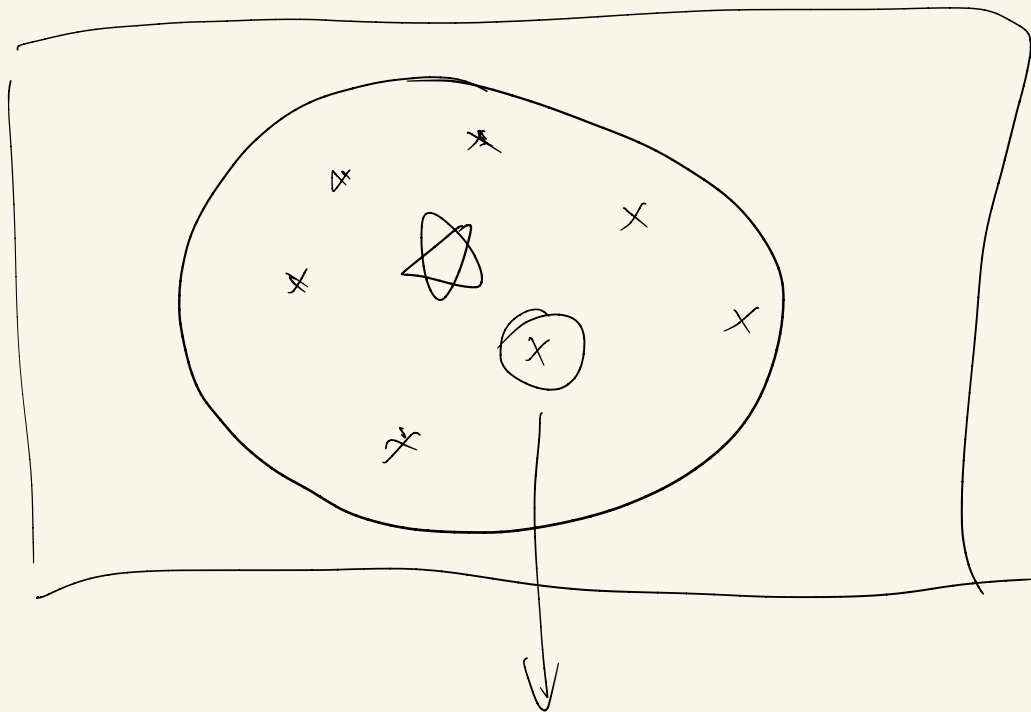


# MAP



choose the restaurant.

After choosing a restaurant, the customer can choose 5 nutrients among 10 nutrients. And they can see the top 50 food (Item-Name) of the restaurant according to their preference.

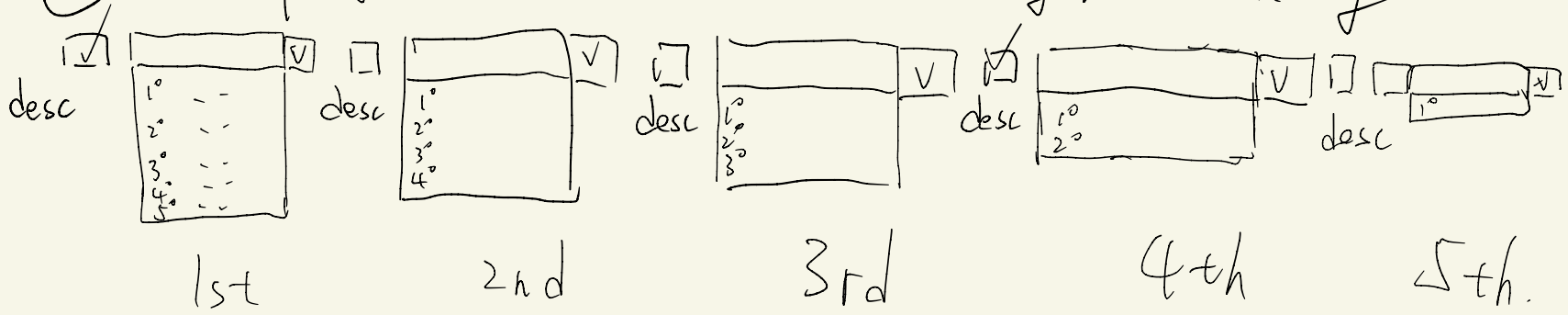
① customer choose 5 nutrients.

☒ fat ☒ calories ☐ saturated\_Fat ☒ .. ☐ ..

☐ .. ☒ .. ☐ .. ☐ .. ☒ .. Dietary-Fiber.

choose 5

② the preferred order and ascending / descending



↓

③ <sup>e.g.</sup> calories → Sodium (desc) → Protein (desc) → Trans-Fat  
→ Sugar



④ arrange ( data, calories, desc (Sodium), desc (Protein),  
Trans-Fat, Sugar ).



show in

⑤ head ( data, 50 ). ⇒ drop-down menu / table.

problem:

Filtering and processing the data on application maybe too slow. (We can process the data first and let customers choose 3 (not 5) nutrients. Then the app can call processed data directly.)

Assumption:

Each branch of a restaurant chain has all the food type (Item-Name) listed in [DOHMH-MenuStat].

## Choose the top 50 ITEM\_NAME of a restaurant according to customer's preference

## example

```
# customer choose c("A", "D", "B", "C", "E")
# ordered_nutrients <- c("A", "D", "B", "C", "E")
# desc <- c(TRUE, FALSE, TRUE, FALSE, TRUE)
# the dataset of the restaurant is -> data
# item_ordered <- data[order(unlist(data[,ordered_nutrients[1]]),
#                             unlist(data[,ordered_nutrients[2]]),
#                             unlist(data[,ordered_nutrients[3]]),
#                             unlist(data[,ordered_nutrients[4]]),
#                             unlist(data[,ordered_nutrients[5]]),
#                             decreasing = desc, method = "radix"),]
# top_50 <- head(item_ordered, 50)
```