Analytical Method

Analytical Method is the methodology used in laboratories to test the amount and existence of a specific substance in a sample.

Task

You have to create a form to add new Analytical Method or edit existing analytical method. We have attached a detailed interactive prototype showing all the cases to be supported by the final form. You can use react, angular, Vue.js or plain javascript to build the attached form.

Note that you do not have to create any backend. You can save data and retrieve it from the local storage of the browser.

The assignment has three parts and it's advised to it in that sequence.

1. Create a basic form which supports taking Analytical Method ID, Target Residue Type, LOD, LOQ, and Reason parameters. Ignore Swab and Rinse sampling parameters.
2. Add support for configuring Swab and Rinse sampling parameters. At least one of Swab or Rinse parameters should be configured. Both can be configured by opening the collapsible form as shown in the click-through. For this task, you can ignore the additional "Add MOC" option inside Swab and Rinse forms.

Bonus
3. Add support for "Add MOC" inside Swab and Rinse sampling parameters form. Clicking on "Add another" option should allow the user to configure recovery values for one of the preconfigured MOC. Please take a look at clickthrough for more information.

Prototype

https://xd.adobe.com/view/00c38e2d-2e26-4b84-436d-863a22cdc636-76f2/?fullscreen

Data

Analytical Method is used to detect and measure a specific substance. There are be four kinds of substances (also known as residue) which the form needs to support:
1. API
2. Cleaning Agent
3. Bioburden
4. Endotoxin

Each Analytical Method will have a unique id. This id can be any string without space.

For API & Cleaning Agent substance type, we need to take following basic inputs
1. LOD - Limit of detection. This is a positive real number greater than zero
2. LOQ - Limit of Quantitation. This is a positive real number greater than zero.

For Bioburden and Endotoxin, we need to take the following basic inputs:
1. Method Used - String specifying the name of the lab method used to measure.
2. Define TNTC and TFTC limits? - A boolean property which specifies whether we need to configure TNTC and TFTC values.
   a. TNTC and TFTC limits - Two positive real numbers which are only needed if "Define TNTC and TFTC limits?" is turned on.

Apart from basic parameters, we also need to provide the option of configuring Swab and Rinse parameters for a given analytical method. The specific values needed in the Swab and Rinse parameter may also depend on the type of substance. Please refer to the prototype attached for more details.

As a part of Swab and Rinse parameters, the user will also have the option to configure MOC (material of construction).