Labster Typescript Front-End Task

Our customer needs to manage transformation dictionaries.

In this specific case dictionaries are used to normalise values in dataset columns.

Consider the following example of a small dataset of products:

### Original Dataset:

|  |  |  |
| --- | --- | --- |
| Simulation Title | Keyword | Duration |
| Acids & Bases | pH | 30 min |
| Atomic Structure | Atoms | 20 min |
| Basic Electricity | Circuit Building | 10 min |

### Transformed Dataset:

|  |  |  |
| --- | --- | --- |
| Simulation Title | Keyword | Duration |
| Acids & Bases | Biology | 30 min |
| Atomic Structure | Chemistry | 20 min |
| Bacterial Isolation | Physics | 10 min |

In order to transform the dataset into the desired format we need to create a dictionary like this one below:

|  |  |
| --- | --- |
| From | To |
| ph | Biology |
| Atoms | Chemistry |
| Circuit Building | Physics |

# 

# Validations

The created dictionary should not contain any:

* Clones: N identical rows in the dictionary.
* Forks: N rows in the dictionary with the same ‘From’ but with different ‘To’’ .

# Functional Requirements

* Creating and deleting dictionaries
* Showing available dictionaries in an overview
* (Optional) Editing dictionaries (adding, updating and removing rows)
* Validating the entire dictionary regarding consistency (see above)

# Technical Requirements

* Single page web application using a Javascript Framework: Vue (prefered) or React
* VueX, Redux or Mobx as a state management library.
* Typescript is a plus
* (Optional) Unit tests

If any of the above items are not clear please state your interpretation and proceed with completing the exercise using that interpretation