* Check errors related to loading indicators data
  + I am finding an error that I did not pick up before.
  + The model uses three parameters: alpha, alpha\_prime, and beta
  + These parameters can be provided by the user or can be calibrated by the model
  + If the user wants to calibrate them, they need to upload a data file where the columns **alpha**, **alpha\_prime**, and **beta** are empty. Then the app will make sure that the column **success\_rate** is provided, as this one is necessary for the calibration.
  + The error happens when I upload a file with the three parameter columns empty and **success\_rate** filled. I get three errors saying that **success\_rate** has not been provided, and this should not be happening. I am afraid that the data parser is reading the wrong columns, and this may have implications in the calibration.
  + Please check that the data parser is extracting the correct information from the relevant columns. If the parameters are not provided, the app should not allow the user to skip the calibration step.
  + On the other hand, if the user provides the three parameters, the app should allow the user to skip the calibration step and use those values.
* Indicator labels
  + Currently, the template for the indicators has an optional column called **indicator\_label**. When this column is empty, the app generates numeric labels according to their position in the file. At the moment of designing the app, I thought making it optional would provide flexibility, but now I realized it only makes things confusing.
  + I would like to make this column compulsory, so that the app always requires labels for the indicators that follow the constraint of using at most 12 characters.
  + The app should also make sure that the indicator labels are unique, so it should throw an error if there are duplicate labels.
  + Since this column would be the main reference to the indicators, I would like to have it moved to the first position in the template (both in the template and example tabs; also, the metadata tab needs updating). I am attaching the updated template in case it helps.
  + Since the **indicator\_label** column provides the indices for the indicators, it would be necessary to ensure that they are consistent across the other data files.
  + For the budget template, in the **template\_relation\_table** tab, the column indicator\_ID should be relabeled to say **indicator\_label**.
    - In the same column, the user should put the indicator labels (as opposed to the numeric indices that it currently has).
    - The app should verify that all the labels in this column are contained within the column **indicator\_label** from the indicators file. If there are unknown indicator labels, the app should throw an error.
    - If the order of the labels in the column **indicator\_label** is different, the app should re-arrange them internally to make everything consistent.
    - I am attaching an updated template file for the budget data with the columns relabelled and the metadata tab updated.
  + For the network file, the app should ensure that every column and row uses the labels reported in the column **indicator\_label** of the indicators file. If the order is different, the app should arrange it internally to make everything consistent.
    - In the network file, we must ensure that all the labels are reported as column and row names, as the matrix needs to have dimensions NxN.
* Budget file
  + When reading the tab **template\_expenditure**, the app should check that every entry in the column **expenditure** should have a numeric value. Thus, if an entry is empty, the app should throw an error.
  + In the same tab, the app should ensure that the values in the column **program\_ID** are a numerical sequence from 1 to n, where n is the number of expenditure programs. All these programs should appear in the **template\_relation\_table** tab (I think that the app already verifies this but let's double check).
  + In the **template\_relation\_table** tab, in the columns **program1\_ID, program2\_ID,** ... the values along a single row should be unique. That is, the user should not repeat the ID of an expenditure program in the same column, otherwise the app should throw an error.
* Calibration output file
  + Once the calibration finishes, I can download a file with the parameters and goodness of fit of each indicator.
  + I would like to modify that output file so that the first column is named **indicator\_label**, and contains the labels of the indicators provided by the used in the indicators file.
* Initial and final values
  + The indicator parser should throw an error if the columns **initial\_value** and **final\_value** have the same value in any of the rows.
* I noticed that the new version of the app has the download template button under the description text. This is not the case of the indicators step as there is the image in the middle. To make all pages consistent, let’s change the structure so, instead of having 3 columns, there are only two: one with the instructions and another with the functionality. We can remove the image from the “Indicators” page to achieve this.
* Could we modify the top banner so that the Turing logo is always aligned (to the left) with the instructions section?
* Likewise, could we modify the banned fo that the “About PPI” and “Contact info” are also aligned (to the right) with the content of the page?
* The field to drag and drop files lacks a “browse file” button. When ran on android, such button appears. In iOS, it does not (although one can click where it should be). Let’s make the “browse file” button always visible, regardless the OS on which the page runs.
* In the calibration step, could we add a waning message such as the one in the simulation step?
* Once the app is in a 2-column format, could we make the instruction column a little wider to balance it against the functionality one?
* In the figures, instead of generating an integrated PDF, could we export each individual figure as a PDF?
* When hovering the mouse over the time series in figure 1, could we highlight or thicken the selected time series?
* Could we set the “Download Template” buttons to a fixed width instead of spanning over the entire width of the functionality column?