## Bulk Editing of Data Table Column Properties



When a data table has a large number of columns, it can be tedious to edit the properties of each column individually, opening an **Edit Properties** page for each, one at a time. Instead, you have the option to download a spreadsheet (.xlsx) file containing all of the columns' properties, which file you can edit in a spreadsheet application of your choosing and then upload to ezEML to apply the properties to the table all at once.

To use this functionality, click **Edit** for a data table in the **Data Tables** page, then click **Edit Column Properties** in the **Data Table** page for the table. This brings up a page with all of the table's columns, at the bottom of which you will find this:



Click **Download Column Properties Spreadsheet** to download the spreadsheet file to your browser's downloads folder. You can then open and edit the spreadsheet in a program like Microsoft Excel, Google Sheets, or Libre Office. The spreadsheet is pre-populated with the current properties of each column in the table, with spaces for you to enter needed values, and visual indications of which entries are required or recommended versus purely optional, according to a color key contained in the spreadsheet.

The spreadsheet is organized in sections. There is a section that contains the properties that pertain to all types of columns (numerical, text, etc.), then one section each for the numerical columns, the datetime columns, and the categorical columns. If the table has no datetime columns, for example, the datetime section will be omitted.

Fill in the spreadsheet with the entries that are missing or incorrect. Note that column names and their variable types cannot be changed via the spreadsheet but need to be changed in ezEML itself. As you fill in the missing entries, stick to the format of the spreadsheet as it was generated. I.e., ezEML expects the values to be in the cells provided for them, and that is where it will look for them when the spreadsheet is uploaded.

After you have filled in the missing entries, save the spreadsheet. Then, in ezEML, click **Upload Column Properties Spreadsheet**, find the edited spreadsheet file, and upload it. ezEML will interpret the file and apply the properties to the data table, all at once.

Note that you can iterate this process, if needed. I.e., whenever you download a spreadsheet, it will contain the current values of the properties at the time of download. You won't have to start over.