

Notes:

- Do not change any of the column headers under any table.
- After each round of editing, check the tool and make sure everything is working fine. If that's the case, then open the File menu and under Version history, pick Name current version and create a version for your changes. The current format is `v{Version_Number}`, e.g. `v1.2`. You can increment the last named version. If you notice something has gone wrong in the tool due to your changes and you cannot figure out how to solve it, then restore to the last working version.
- In all formulas in this guide:
 - a. if you see `{CELL_NUMBER}`, it must be replaced with the cell number of the cell you are entering the formula in. For example, if the instruction says enter `=ROW({CELL_NUMBER})` in the current active cell, and you are working on cell A39, then the formula becomes `=ROW(A39)`.
 - b. If you see `{ROW_NUMBER}`, it must be replaced with the row number you are working on. For example, if you are in cell B42, then this `=TEXTJOIN(" ", 1, {CELL_NUMBER}:{ROW_NUMBER})` becomes `=TEXTJOIN(" ", 1, B42:42)`. The first rule applies to `{CELL_NUMBER}` and the second rule applies to `{ROW_NUMBER}`.
 - c. If you see `{COLUMN number}`, then it must be replaced with the column name of the cell you are working on. For example, if you are working on cell D73, then `=LOOKUP({COLUMN_NUMBER})` becomes `=LOOKUP(D)`.
- With all formulas, you can select them from adjacent row or column and drag them to allow Google Sheet autofill and adjust the cell, row, and column numbers in the new cell, exactly the same way that it can be done in Excel.
- When dealing with Ids in any table (Items, Locations, Relations), it is all right to have gaps between them. For example, having an id sequence of 1, 2, 5, 7 for items is fine. The only criteria is each entry must have a unique id.
- You should be able to sort all sheets, except for "Categories" table, without any issue by following these steps:
 - a. Select all the columns in a sheet
 - b. Select "Sort range" from "Data" menu
 - c. Check "Data has header row" box
 - d. Select the column you want to sort by and click "Sort"
 - e. Wait for the formulas to update (you should see a progress bar in the top right section of the sheet)
- To sort "Categories" table, only select column A, and then follow the steps b through e mentioned above.

Categories:

Go to **Categories** table.

- Add a new category:
 - a. Enter the new category in a new cell in column A
 - b. Put this formula in column B:
=TEXTJOIN(" ", 1, {CELL_NUMBER}:{ROW_NUMBER})
 - c. Put this formula in column C:
**=TRANSPOSE(UNIQUE(IFNA(FILTER(Relations!\$C:\$C, Relations!\$L:\$L
= Categories!\$A{CELL_NUMBER}), "")))**
- Update a category:
 - a. Change the category name in column A
 - b. Go to the **Items** table. You'll notice all the items that are pointing to the old category name have an error on their column D. You need to change all those to the new category name. See the screenshot below for an example of an invalid category:

	A	B	C	D
1	Id	Item	Description	Category
2	1	3-ring binders		Office supplies
3	2	Adult clothes / accessories		Adult clothes / accessories
4	3	Adult diapers		Medical equipment / supplies
5	4	Air pillows		Household goods
6	5	Alarm clocks		Home electronics, Office equipment

- Delete a category:
 - a. Remove the category row from **Categories** table.
 - b. Go to the **Items** table. Like when updating a category, you'll notice all the items that were pointing to the deleted category now has an error over their column D. You need to update those categories to something else. For example, if you delete "Office supplies" as a category, you need to update the category of "3-ring binders" to something else.

Items:

Go to **Items** table.

- Add a new item:
 - a. Like an id, an item name (column B), must be unique.
 - b. Pick the empty row after the last item. Enter a unique id number (you can increment the last id, as long as it's unique). Enter the item name and description in columns B and C respectively. You can keep the name short and put the extra notes under Description, i.e. column C. In the tool, an item description, if it exists,

will show up underneath its title. Lastly, pick a category from the dropdown in column D.

- Update an item:
 - a. You must never update an item id.
 - b. As long as you are not changing an item name (column B), you can edit its other attributes, i.e. Description, and Category, without any issue.
 - c. If you update an item name (column B), then go to the **Relations** table and find all the rows that were referring to that item in column J of that table. Then update the name in column J to the new name of the item.
- Delete an item:
 - a. Remove the item row.
 - b. Go to the **Relations** table. Find all the rows that were referring to the deleted item. Those rows should have an error sign in their column B cell. Delete all those rows from the **Relations** table.

Locations (Businesses):

Go to the **Locations** table.

- Add a new location:
 - a. Like an id, a location name (column B), must be unique.
 - b. Pick the empty row after the last location. Enter a unique id number (you can increment the last id, as long as it's unique). Enter the location attributes in columns B to H. Column B is required. If you want the location to show up on the map, you must enter a valid and precise address for it in column C. You can keep the location name short and put the extra notes under Notes, i.e. column H. In the tool, a location notes, if it exists, will show up underneath its name.
 - c. To get the latitude and longitude of a location, enter this formula in column I (LatLng) of a location:
=IFERROR(GEocode_GOOGLE(INDIRECT(CONCAT("C", ROW())))).
- Update a location:
 - a. You must never update a location id.
 - b. As long as you are not changing a location name (column B), you can edit its other attributes, i.e. columns C to H.
 - c. If you update a location name (column B), then go to the **Relations** table and find all the rows that were referring to that location in column H of that table. Then update the location in column H to the new name of the item.
- Delete an item:
 - a. Remove the location row.
 - b. Go to the **Relations** table. Find all the rows that were referring to the deleted location. Those rows should have an error sign in their column C cell. Delete all those rows from the **Relations** table.

Relations

Go to the **Relations** table.

- Add a new relation:
 - a. Pick the empty row after the last relation. Enter a unique id number (you can increment the last id, as long as it's unique).
 - b. Pick an item from the dropdown in column J.
 - c. Pick a location from the dropdown in column H.
 - d. In columns D to G, put a **y** underneath each waste prevention action that applies to that relation. For example, if you are creating a relation for “*Comforters*” at “*CARDV (Admin office)*”, and they accept such items for both reuse and repair, then you put a **y** in both columns D and F. Notice that you do not need to create two separate relations for this case, one for reuse and one for repair. You can mark all the relevant columns in the same row.
 - e. Enter **=VLOOKUP(B{ROW_NUMBER},{Items!A:A, Items!D:D}, 2, False)** under column L for the new relation.
 - f. Enter **=VLOOKUP(J1{ROW_NUMBER},{Items!B:B, Items!A:A}, 2, False)** under column B for the new relation.
 - g. Enter **=VLOOKUP(K{ROW_NUMBER},{Locations!B:B, Locations!A:A}, 2, False)** under column C for the new relation.
- Update a relation:
 - a. You can pick a new item or location from their respective dropdowns under columns J and H. You can also modify columns D to G without any issue. Leave the formulas under columns, and the rest should get updated automatically and without any issue.
- Delete a relation:
 - a. You can remove a relation row without any issue.

Unique ReUse Opportunities

Go to the **Resources** table.

- Add a new opportunity:
 - a. Pick the empty row after the last opportunity.
 - b. Enter the Title, Description, and Notes for the new entry. Try to keep the description in one paragraph. Each new line under column C (Notes), will show up on a new line in the tool.
- Update an opportunity:
 - a. You can edit all the existing entries there without any issue.
- Delete an opportunity:
 - a. You can delete the rows that are not needed without any issue.