User Manual

CS686 Final Project-One World Shelter

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How to set up the visualization:

1. Load **style.css**, **d3.v3.min.js**, and **vis.js** inside **<head>** section of index.html; Also put a link to **queue.v1.min.js** file. The URL and an example are as follows:

```
<link href="css/style.css"  rel="stylesheet">
<script src="js/d3.v3.min.js"></script>
<script src="js/vis.js"></script>
<script src="http://d3js.org/queue.v1.min.js"></script>
```

2. Put **<div id=”vis_container”>** and the following **<script>** tags inside **<body>** section. The visualization is shown where you put the **<div>** tag:

```
 <div id="vis_container"></div>

<script>
 queue()
   .defer(d3.json, "data/world.json")
   .defer(d3.csv, "data/sheet1.csv")
   .defer(d3.csv, "data/sheet2.csv")
   .await(createVis);
</script>
```

world.json contains geographic information, and is used to show the world map. You do not need to modify or update it. **sheet1.csv** and **sheet2.csv** are, as their name imply, csv files that represent each data sheet of the original database, **Metrix 2014**. The name basically does not matter to change, but the order does: **sheet1** should come first.

How to set up data (csv):

Basically, it is OK to convert each sheet of **Metrics 2014** into csv files. Yet, you may need to do some data preprocessing before the conversion:

1. Add **COUNTRY** (All uppercase) column next to **PARTNER NAME** column if it does not exist yet. As of now (Dec 11, 2014), **PARTNER NAME** contains both partner names and their countries. What you may need is to decouple those. For instance,

Original data

PARTNER NAME	REGION
Akili Dapa, Kenya	Africa

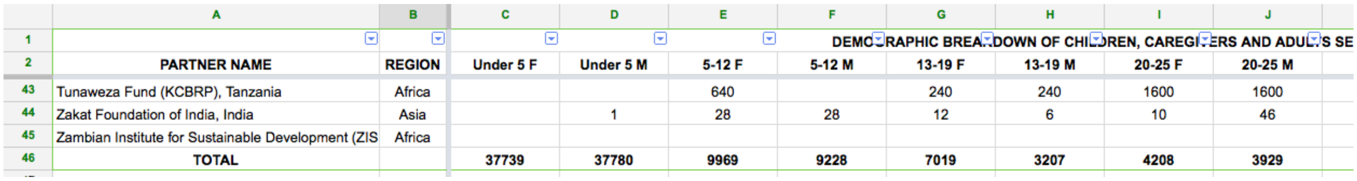
Preprocessed data

PARTNER NAME	COUNTRY	REGION
Akili Dapa	Kenya	Africa

The country name should start with a capital letter such as Kenya or Canada

2. Do not contain or remove unnecessary rows.
As of now, **Metrics 2014** contains unnecessary rows for the visualization. Those may cause some unintended bugs, so these should not be included in csv files:

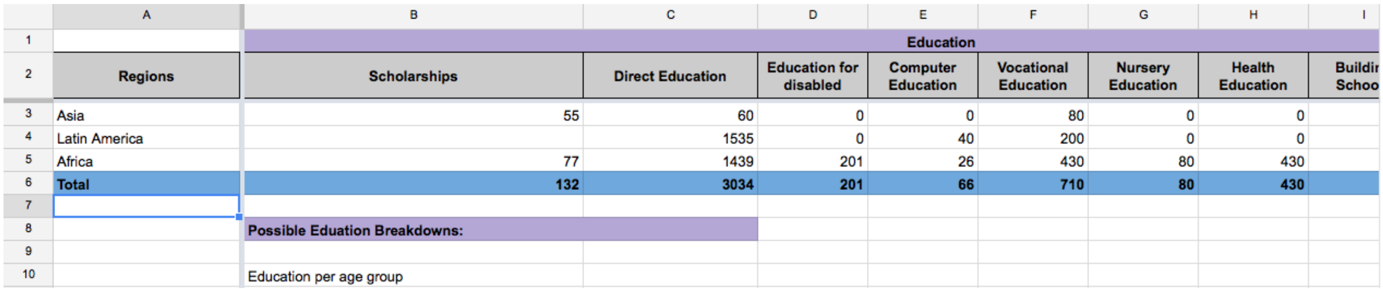
a. sheet1



	A	B	C	D	E	F	G	H	I	J
1	▾	▾	▾	▾	▾	DEMO▾RAPHIC BREA▾DOWN OF CHI▾DREN, CAREGI▾ERS AND ADU▾S SE				
2	PARTNER NAME	REGION	Under 5 F	Under 5 M	5-12 F	5-12 M	13-19 F	13-19 M	20-25 F	20-25 M
43	Tunaweza Fund (KCBRP), Tanzania	Africa			640		240	240	1600	1600
44	Zakat Foundation of India, India	Asia		1	28	28	12	6	10	46
45	Zambian Institute for Sustainable Development (ZIS	Africa								
46	TOTAL		37739	37780	9969	9228	7019	3207	4208	3929

Here is the current state of sheet1. The first row, Row1 (**DEMOGRAPHIC BREAKDOWN**) and the last row, Row 46 (**TOTAL**) are unnecessary. But please keep Row2 since it contains titles of each row.

b. sheet2



	A	B	C	D	E	F	G	H	I
1					Education				
2	Regions	Scholarships	Direct Education	Education for disabled	Computer Education	Vocational Education	Nursery Education	Health Education	Buildir Schoo
3	Asia	55	60	0	0	80	0	0	
4	Latin America		1535	0	40	200	0	0	
5	Africa	77	1439	201	26	430	80	430	
6	Total	132	3034	201	66	710	80	430	
7									
8		Possible Eduation Breakdowns:							
9									
10		Education per age group							

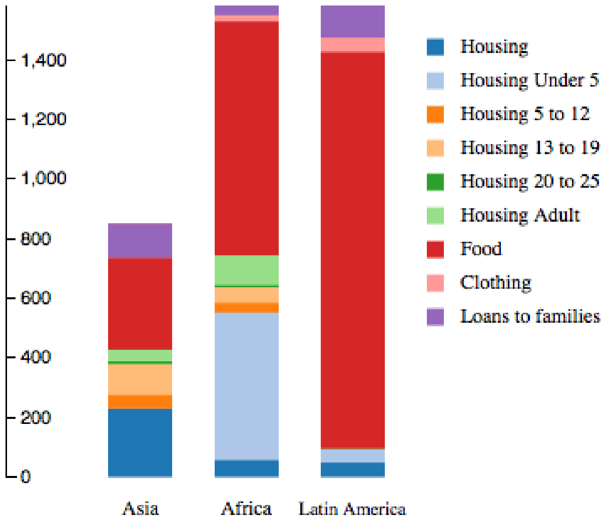
Similarly, here is the current state of sheet2. It is OK to just get rid of the first Row (in this image, the purple one) from the csv file. It does not affect the behavior of the visualization whether you remove Row 7 – 10. It is up to you.

c. Any sheets
Please check if there are any rows that do not contain any data such as all values are zero or empty. These rows also should not be included in csv files.

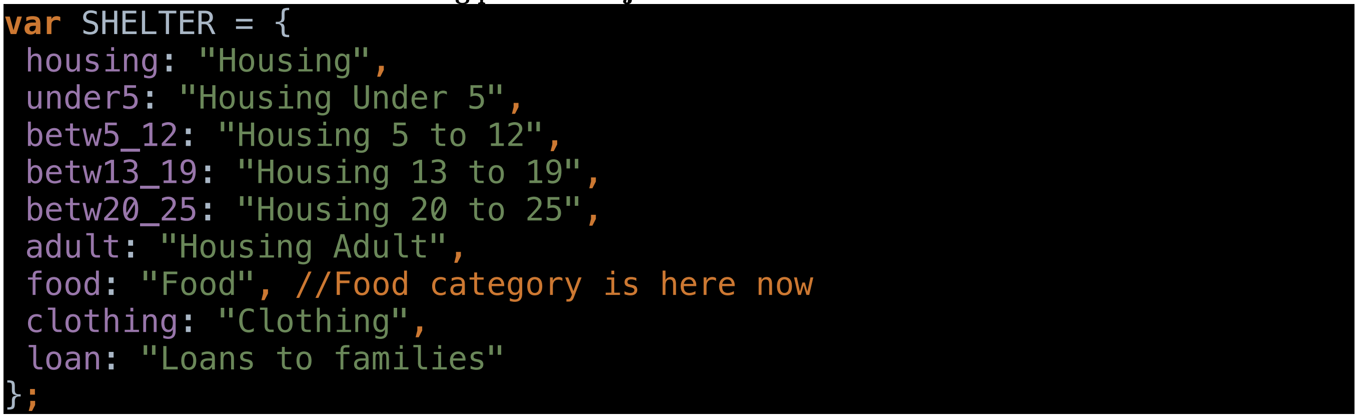
Available actions of the visualization:
The map has zoom-in and zoom-out functionality. If the user clicks a country, the map will zoom in. If clicked one more time, zoom out. If the country is colored, the corresponding data (retrieved from sheet1) is shown in the bar chart. The user also can switch different datasets (Shelter, Education, and Healthcare), just by clicking a button at the upper right corner of the visualization

<u>Advanced setting (Change the order of categories):</u>

If you want to change the order of categories in the stacked bar chart, first you need to look at **vis.js** file. Let's say, you want to show **Food** category of **Shelter** dataset in the first place:

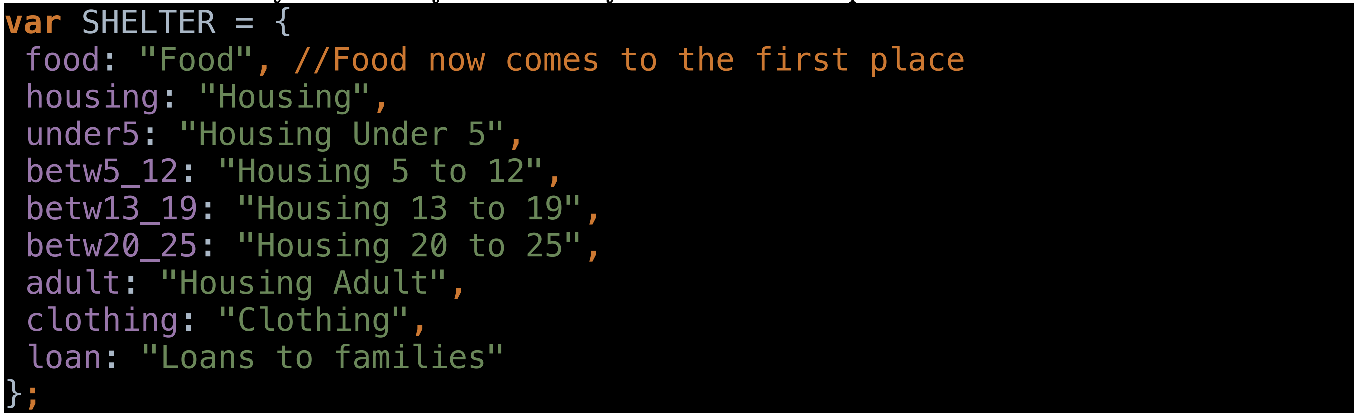


You will be able to find a following part in **vis.js**:



```
var SHELTER = {
 housing: "Housing",
 under5: "Housing Under 5",
 betw5_12: "Housing 5 to 12",
 betw13_19: "Housing 13 to 19",
 betw20_25: "Housing 20 to 25",
 adult: "Housing Adult",
 food: "Food", //Food category is here now
 clothing: "Clothing",
 loan: "Loans to families"
};
```

You may have noticed that the order above is the same as the order of categories in the visualization. What you need is just to modify the order of the part above:

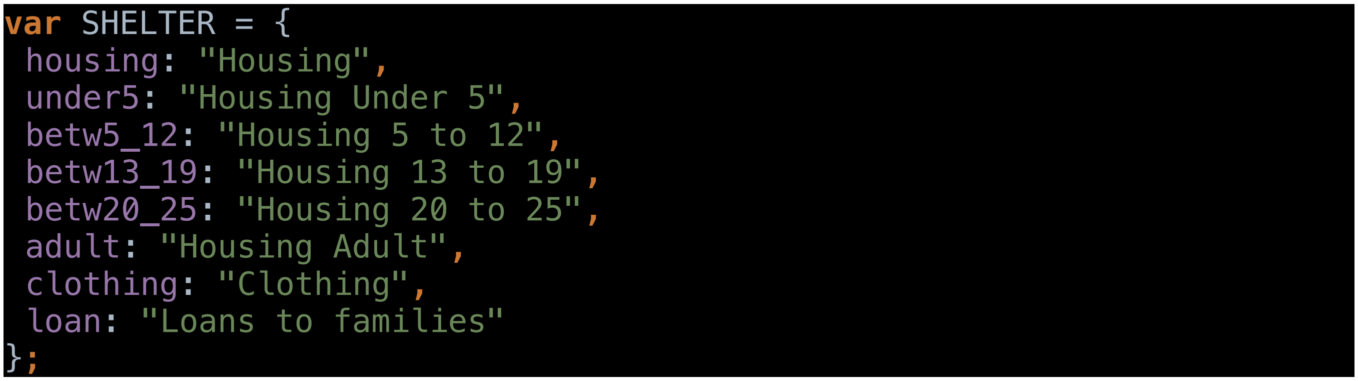


```
var SHELTER = {
 food: "Food", //Food now comes to the first place
 housing: "Housing",
 under5: "Housing Under 5",
 betw5_12: "Housing 5 to 12",
 betw13_19: "Housing 13 to 19",
 betw20_25: "Housing 20 to 25",
 adult: "Housing Adult",
 clothing: "Clothing",
 loan: "Loans to families"
};
```

The remaining work is just to save the file and reload the visualization.

Advanced setting (Reduce the number of categories):

It is also easier to reduce the number of categories. You just go to the same part (in **vis.js**) as above, and delete a category you want to get rid of:

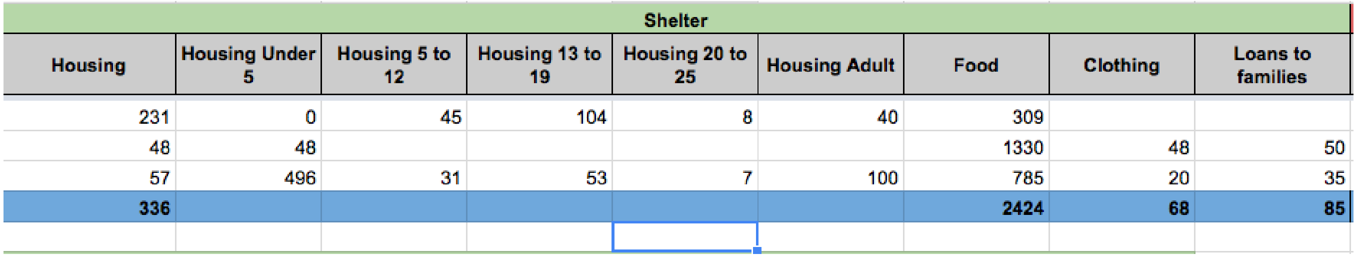


```
var SHELTER = {
 housing: "Housing",
 under5: "Housing Under 5",
 betw5_12: "Housing 5 to 12",
 betw13_19: "Housing 13 to 19",
 betw20_25: "Housing 20 to 25",
 adult: "Housing Adult",
 clothing: "Clothing",
 loan: "Loans to families"
};
```

Here, **Food** category is removed. No typing is required in this case except removing the last category (in the case, you also need to delete the comma of new last category).

Advanced setting (Add a new category):

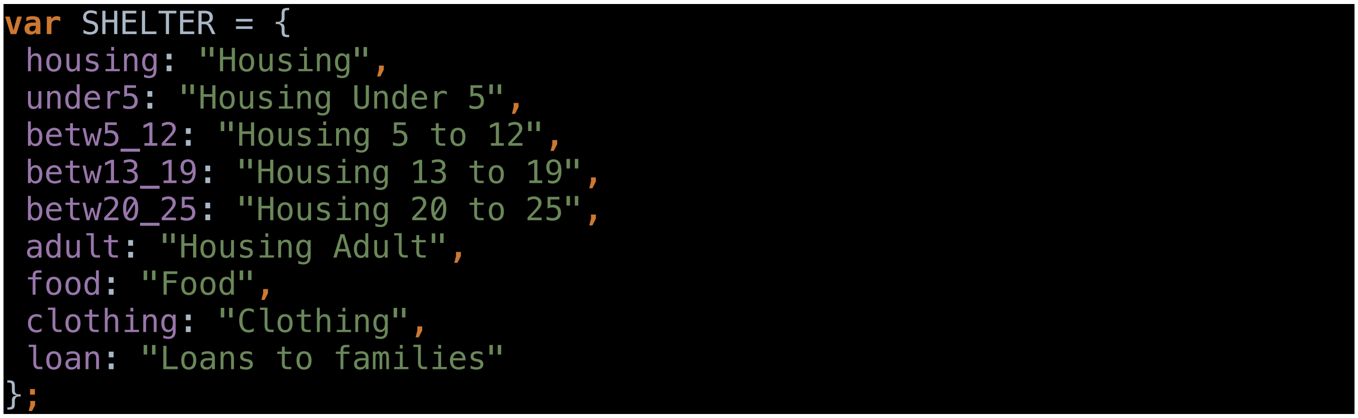
Compared with deletion and order modification, this is little complicated. Still, it is not hard. The first step is to make a new column. Let's say, you want to have **Housing 26 to 35** column in **Shelter** dataset.



Shelter								
Housing	Housing Under 5	Housing 5 to 12	Housing 13 to 19	Housing 20 to 25	Housing Adult	Food	Clothing	Loans to families
231	0	45	104	8	40	309		
48	48					1330	48	50
57	496	31	53	7	100	785	20	35
336						2424	68	85

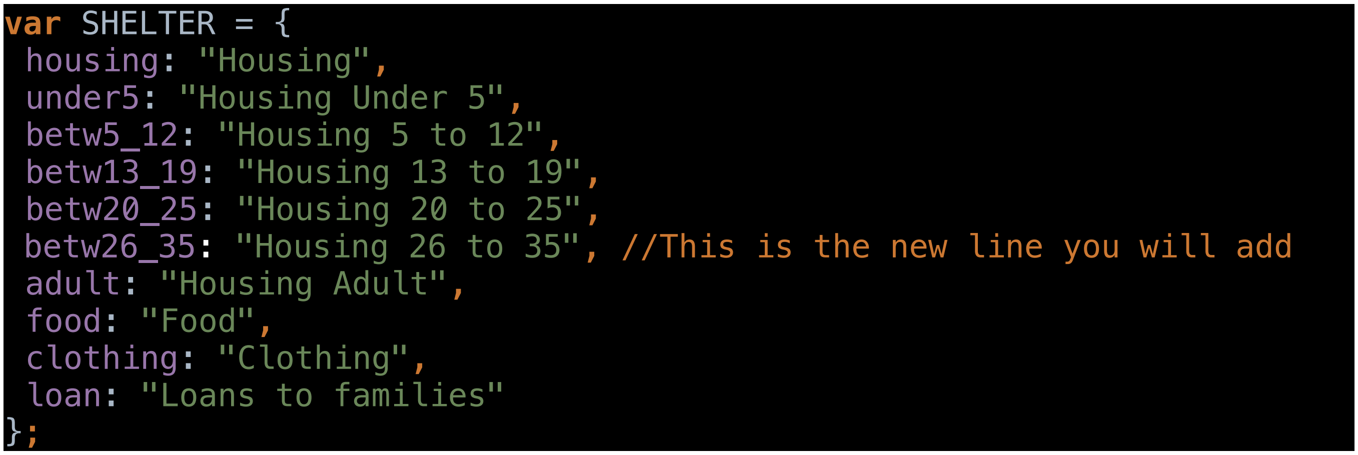
In the dataset, you probably will make a column between **Housing 20 to 25** and **Housing Adult**. Having created the column, just fill out values at each row.

The next step is to look inside **vis.js**, and find the following part:



```
var SHELTER = {
 housing: "Housing",
 under5: "Housing Under 5",
 betw5_12: "Housing 5 to 12",
 betw13_19: "Housing 13 to 19",
 betw20_25: "Housing 20 to 25",
 adult: "Housing Adult",
 food: "Food",
 clothing: "Clothing",
 loan: "Loans to families"
};
```

Now, what you need to do is add a new line, something like this:



```
var SHELTER = {
 housing: "Housing",
 under5: "Housing Under 5",
 betw5_12: "Housing 5 to 12",
 betw13_19: "Housing 13 to 19",
 betw20_25: "Housing 20 to 25",
 betw26_35: "Housing 26 to 35", //This is the new line you will add
 adult: "Housing Adult",
 food: "Food",
 clothing: "Clothing",
 loan: "Loans to families"
};
```

Here, you must follow one rule: **inside the double quotations, the text must be the same as the category name you added.** You can use whatever name for the left part (i.e., **betw26_35**), yet you cannot for the right part.

The remaining work is just to save **vis.js**, and reload the visualization. You will find a new one there!