Vertabelo Instructions

MIS 2502

Follow these steps below to help create your database schema using Vertabelo!

**Step 1**: From your main dashboard, CLICK “Create New Document” in the upper-left corner

**Step 2:** Select the *Physical Data Model* option and CLICK *Create.*

**Step 3:** Give your project a name and select any of the Database engine options e.g. ***MySQL 5.x***

Leave the **Content** radio button value as *empty*. CLICK *start modeling* to access your workspace.



**Step 3:** SELECT the “Add New Table” Tab and click on your workspace (the white area in the middle of your screen) to create a new entity table.



**Step 4:** Use the *TABLE PROPERTIES* tool bar on the right to give your table a name. CLICK the “+Add column” button to add attributes to your table.



*“Columns”* Fields Explained:

* **Name**: Give the attribute an appropriate name.
* **Type**: Give the attribute an appropriate data type.
	+ **Int**: Any whole number i.e 1, -1, 12345, 10, -15
	+ **Varchar(%)**\*: Contains text i.e. “Sean is awesome”, “I love data analytics”, “Bob”
	+ \*The % symbol indicates the maximum character length. That means if you want all of your first names to have a maximum of 20 letters, replace % with 20.
	+ **Boolean**: Binary outcomes i.e true/false, yes/no
	+ **Date**: Date or time i.e. “9/4/2019”, “11:11 PM”
* **N (Nullable)**: If the box is checked, the attribute may have a value of null (nothing). Ignore this field for now.
* **PK (Primary Key)**: Check this box on the same row as your primary key attribute.

**Step 5:** Create a relationship between two entities by clicking the *relationship tab*and dragging your mouse across both entities. A line connecting both entities will appear. Depending on the type of relationship, a foreign key (FK) may appear inside of a table.



**Step 6: (Reference the picture below)** Click on the relationship line to modify the relationship. You may need to change it from one-to-many to one-to-one etc. If you have the right type of relationship, but in the wrong order, CLICK the “Swap Reference” button. Use the “Cardinality” tab under the “General” tool bar on the right to edit the type of cardinality.

**Symbols**:

1..\* means *one-to-many*

1..1 means *one-to-one*

The others reference minimum cardinality, which is not required for this exercise.

\*REMEMBER\* *many-to-many* relationships require the addition of a new entity table.

i.e. If the entities Unit and Household had a *many-to-many* relationship, you need to make a new entity table called “UnitHousehold” with a *one-to-many* relationship between Unit & UnitHousehold AND Household & UnitHousehold!! UnitHousehold should contain the primary keys of both Unit AND Household as foreign keys.



In order to practice proper etiquette, you should have the foreign key (FK) of Resident connected to the primary key (PK) of Household with the relationship line. Vertabelo might not do this for you, but you can easily move the tables to make this happen.

**Step 7:** Save the tearsbyMAKING SURE TO SAVE YOUR WORK! CLICK the SAVE ICON to do so.

Follow these steps and you’ll be good to go! If you have any issues with Vertabelo or questions about creating database schemas, send me an email at sean.boyer@temple.edu !

Your Beloved ITA,

Sean