

Using Google Spreadsheet as a Data Base EDM 310

Go to Google Documents and Open a New Spreadsheet

Prepare the Spreadsheet by filling in Row 1 with the names of your FIELDS such as First Name, Last Name, Address, City, State, Zip etc.

Remember that when using a data base your FIELDS (the elements of data you are keeping on an individual or other entity) you should break them into the smallest useable parts. It is easy to combine the First Name and the Last Name but very difficult to separate them from the Full Name. If the RECORDS (the set of data kept on an individual or entity) only have the full name, the records can only be arranged by the first letter of the Full Name, but if there are separate fields you can alphabetize by either the first or last name.

Combining Fields

To combine the text strings in two or more fields you use the CONCATENATE FUNCTION (also called a FORMULA).

Click in the CELL where you wish to have the combined data.

Because of the way Google Spreadsheets work, scroll your window so that the cell in which you clicked is on the left side of the window. It does not have to be all the way to the left, just near the left of the window. You will find the following steps much easier to if you follow this suggestion.

Insert a Function (Formula)

Select a Text Type of FUNCTION

Then double click on CONCATENATE which will be in the right column of the function select window.

Close the window.

You will have an entry box that looks like this:
=CONCATENATE(text 1,text 2,...text 30)

You want to remove everything inside the parentheses but you want to keep the parentheses.

NOW you want to add material between the parentheses, specifically the text strings that are being joined together.

What are you joining together? For the purposes of this discussion let us say you want to combine the City, the State and the Zip code into one field *properly formatted*. I call attention to the words properly formatted because when I ask students what comes after the city they often say the state but that is *not correct!* The city is followed by a comma and a space. In addition, the

state is followed by a space and then the zip. You must be clear about what you are joining together.

In these notes I must make some assumptions about where your data are located in the spreadsheet. You will need to make any adjustments necessary if your data are not arranged like my assumptions. Let's assume you are working joining the following which are located in the designated cells:

City Column E
State Column F
Zip Column G

Continue the addition of the arguments in the CONCATENATE formula by clicking on E2 (assuming you are working in Row 2). That click tells the computer to use the contents of E2 as the first element to join with other elements.

Next we add a comma since **we must separate all arguments with a comma.**

What comes next? A comma and a space since we write the final as City, State Zip. A comma and a space is a TEXT STRING and as such MUST be enclosed in double quotation marks. So our next argument is:
", "

Now our formula looks like this:

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=CONCATENATE(E2,"", "
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We must follow the argument ", " with a comma since more arguments will follow. The next element will be the State which is in F2. We click in F2 and add a comma after F2 in our formula which tells the computer more arguments are coming.

What is the next element? A space. Again we must enclose it in double quotation marks. So we add " " and then a comma because another argument will follow.

We now have =CONCATENATE(E2,"",",F2,"",

What is our last argument? The Zip which is in cell G2 so we click on G2. We do not add a comma after G2 since no more arguments follow. Our formula (function) is complete:
=CONCATENATE(E2,"",",F2,"",G2)

IMPORTANT: Most students confuse the commas that separate the arguments and the comma that is inside the double quotation marks. **THEY SERVE DIFFERENT PURPOSES** and it is **VERY** important to understand that. If a comma (or anything else) is inside double quotation marks, it will be part of the final text string. All of the other commas are used **ONLY** to separate the arguments. Look closely at what I have written above and **THINK!** It is **VERY IMPORTANT** that you understand what you are doing and that you are not doing it mechanically without understanding it. If you do not understand what you are doing, **PLEASE** email me or ask in class!

I will have an audio version of this handout on the class blog shortly.