

Sheet Merger

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Executive Summary

This VBA macro was written in response to a request from the TA of the professor of the Family Finance class on BYU campus. The macro was requested when merging a sheet full of data from students' questionnaires with a sheet that is called the "Student Database" that has all the rest of the student information became monotonous.

The idea of this macro is to find open the student questionnaire sheet, get the data out, check for duplicates, and fill in the missing data for each student in the Student Database. This allows the professor to sort through the data as appropriate and email certain students based off of certain criteria (i.e., students who took the class in fall 2012).

Implementation

There are only two steps to be taken in order to run the associated macros and finish the task.

Setup

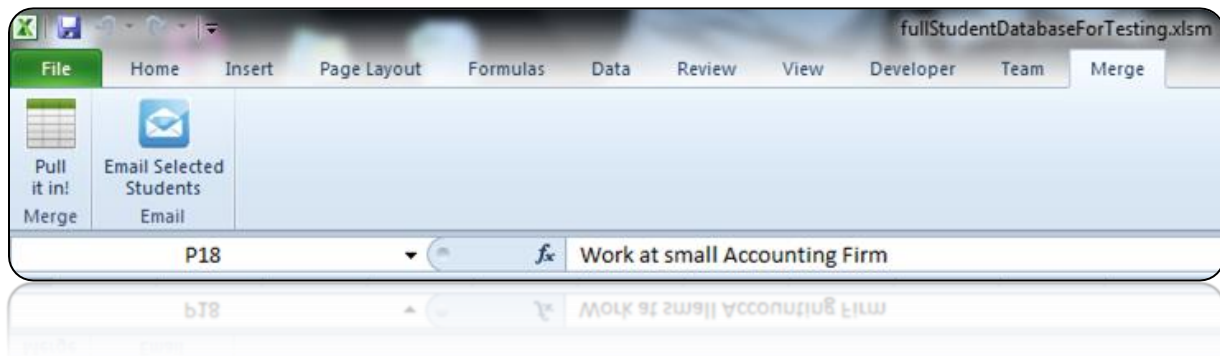
In order to use these macros, some preliminary steps must be taken.

1. Download the student questionnaire spreadsheet that holds all the students' information that the students filled in
2. Name the questionnaire spreadsheet "studentQuestionnaire.xlsx"
3. Save studentQuestionnaire.xlsx to the same location as the spreadsheet that has these macros

Use

Once the steps in setup have been followed exactly, there are only four steps to be taken.

Fig. 1



1. Click on the "Pull it in!" button in the Merge tab.
2. When duplicates are found, a GUI pops up allowing the user to select which of the duplicates to keep. Choose the one to be kept and click "Use Selected" (Fig. 2)

Fig. 2

Choose desired row to keep

☐ Andersen | Morgan | | | | Sophomore | business finance | morgandersen@hotmail.com | amorganc | | Morgan | (916) 934-9661 | unemployed | Financial Planner/Investor | False | | Orangevale, CA | M | 21 | Guatemala City South | July 2007 - July 2009 | Spanish | | | False | False | False | False | False | False | True | False | False | False | True | | | Pool cleaner, Inventory counter, Manual Labor | False | False | False | True | True | False | | False | False | False | True | 10 | 9 | 9 | 9 | 10 | 10 | 10 | 6 | This topic interests me a lot. I would love to have a firm understanding of how to organize and use my money efficiently.

☐ Andersen | Morgan | | | | Sophomore | business finance | morgandersen@hotmail.com | amorganc | | Morgan | 916-934-9661 | MTC Teacher | Financial Planner or Accountant | False | | Orangevale, CA | M | 21 | Guatemala City South | July 2007 - July 2009 | Spanish | | | False | False | False | False | False | False | False | False | False | False | True | | | Pool Cleaner | False | False | False | True | True | False | | False | False | False | True | 8 | 8 | 7 | 10 | 10 | 10 | 9 | 6 |

Use Selected

3. Once "Pull it in!" has completed, then select the rows of students to whom an email will be sent
4. Click on the "Email Selected Students" button (Fig. 1) and fill in the information for the email to be sent (Fig. 3).

Email selected students

GMail account @gmail.com

GMail password

Enter your subject in the subject box and the body of your email in the big box below. NOTE: The "Dear <FNAME> <LNAME>," will be replaced with the first and last name of the student selected in the actual email. IF YOU WRITE "Dear so-and-so" IN THE BIG BOX BELOW, THEN IT WILL BE WRITTEN TWICE.

Subject

Dear <FNAME> <LNAME>,

Send Emails Cancel

Fig. 3

Functionality/Run through

When the “Pull it in!” button is clicked, there are a few things that happen very quickly. I will walk through the steps without too much detail on exactly what going on but I will give the summary.

1. The studentQuestionnaire.xlsx workbook is opened
2. Since there is only one page in the studentQuestionnaire.xlsx, that page is copied in its entirety and then the workbook is closed while the data from the sheet is kept on the clipboard.
3. A new sheet is made in order to accept the data
4. The data is pasted onto that new sheet
5. The sheet then has to be cleaned as there may be some empty rows from students who started the survey, didn't finish it, but still turned it in.
6. As the cleaning goes on, duplicates are searched for. If duplicates are found, then all the duplicates are shown in the GUI shown in Fig. 2 and the user may choose which to keep. The others rows are deleted.
7. Each row in the pasted sheet is iterated through. On each row, the netid is gotten and then found on the student database sheet where partial student info is already kept.
8. If the netid is found on the database sheet, then the information from the row with the current netid on the pasted sheet is brought over to that row on the database sheet and filled in in the proper columns.
9. If a netid is not found on the database sheet, then a new row is inserted with all that student's information at the bottom of the sheet

Difficulties

The difficulties that I encountered were minimal. I had to learn how to open a workbook, copy the data from the active sheet, and then close the work book while not losing the data on the clipboard. This was something that I had never tried to do before, so it took me a little bit to figure out how to do that.

Another difficulty was getting the email functionality. It works now such that contiguous rows, separated rows, or one cell per row may be selected that each row will still be interrogated and the email will be gotten.

There are no extra features that I wanted to add but couldn't.

Assistance

I received minimal help on this project outside of searches on Google. I had to get help from Dr. Allen on an error that was fixed by specifying the sheet that need to be manipulated.

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References

Anderson, Charles & Johnson (2003). *The impressive psychology paper*. Chicago: Lucerne Publishing.

Smith, M. (2001). Writing a successful paper. *The Trey Research Monthly*, 53, 149-150.

Entries are organized alphabetically by surnames of first authors and are formatted with a hanging indent. Most reference entries have three components:

1. Authors: Authors are listed in the same order as specified in the source, using surnames and initials. Commas separate all authors. When there are seven or more authors, list the first six and then use “et al.” for remaining authors. If no author is identified, the title of the document begins the reference.
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Appendix

Each Appendix appears on its own page.

Footnotes

¹Complete APA style formatting information may be found in the Publication Manual.

Table 1

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[Insert table here]

Figure Captions

Figure 1. Caption of figure

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