

Home Teaching Automator

**VBA Final Project
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Executive Summary

Description of Business

Home Teaching is an assignment given to every male member of the church above the age of 14. Each member is teamed up with one other male member and are assigned one or more ward members to teach. At the end of each month, Home Teachers are to report to the Elder's Quorum Presidency whether or not they home taught that month. Because there are so many companionships reporting it can be extremely time consuming to manually report this kind of data by calling or texting each companionship. In addition, more mistakes can be made in manual processes. Once you have the reported data, it would also be time-consuming and monotonous to get reliable statistics from it. We found that each ward has their own process of how to assign and report home teaching. This can be a problem since Elders Quorum Presidencies change and ward members come and go. We have come up with a solution to automate the process of assigning and reporting home teaching based on the current ward list so each Elders Quorum can have reliable statistics to help them make the best decisions to help their ward.

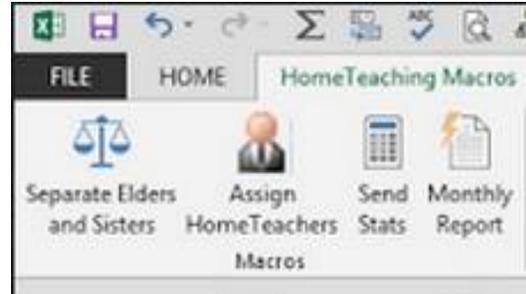
Overview of System

The system is made up of 4 macros. Its starts with a ward list that can be downloaded from lds.org, and creates a list of the men and women in the ward. With that list, the second macro creates companionships and assigns members of the ward to home teach. At the end of each month, the district supervisors will turn in their reports of those who were home taught, those who were not, those who were contacted, and those who did not report. The third macro takes that information and compiles a report listing the names of everyone in the ward and their correct status for the month. It then creates month end statistics for each group. Those who wish to be notified of this information can be added to the list of leaders. The fourth macro sends an email with the statistics to each of the members on the leader list.

Implementation Overview

Introduction

Once the user has opened the “Home Teacher” excel document they can click the HomeTeaching Macros tab to see the 4 buttons. Each of these buttons execute unique functions. The first button separates the elders from the sisters to make companionships and assignments. The second button assigns home teaching companions and members of the ward to home teach. The third button emails statistics to the leadership of the ward and the last button runs the monthly report.



Gathering Data

First we need to gather correct and current data of everyone who is in the ward. We are able to do this by downloading the ward list as a CSV file from lds.org into our excel spreadsheet. This file contains personal information for each member including their address. Only members of the bishopric and clerks can download this file type.

	A	B	C	D	E
1	Family Name	Couple Name	Family Phone	Family Email	Family Address
2	Aleson Ponce	Aleson Ponce, Andres			830 N 100
3	Anderson	Anderson, Troy	7193326172	trirwin1@gmail.com	51 W 880
4	Anderson	Anderson, Jake	208-982-0222	trirwin1@byu.edu	830 N 100
5	Astel	Astel, Matthew		trirwin1@gmail.com	60 W 800
6	Astel	Astel, Nathan	208-206-8718	trirwin1@byu.edu	830 N 100
7	Bang	Bang, Whitney	(956) 478-9023	trirwin1@gmail.com	840 N 100
8	Barnes	Barnes, Brianna	801-360-2339	trirwin1@byu.edu	25 W 880
9	Bassett	Bassett, Kirk	210-273-7827	trirwin1@gmail.com	830 N 100
10	Berrett	Berrett, Logan	702-541-4939	trirwin1@gmail.com	
11	Blatter	Blatter, Martin	801-222-1646	trirwin1@gmail.com	

Assigning Companionships and Assignments

Since the ward list includes everyone, we needed to separate the men and women. We did this based off of addresses. The ‘Separate Elders and Sisters’ button looks at the

address of the member and places them in the correct list. After the lists have been compiled, it sorts them by apartment number.

Once the ward list has been separated into men and women, the user can click the 'Assign Companionships' button on the ribbon. This assigns 2 elders to be a companionship and gives them 2 elders and 2 sisters to home teach. It prints the assignments out by apartment so the presidency can deliver one list to each apartment. Companionships that are made up of elders from different apartments are on the lists for both apartments.

	A	B	C
1	Column1	Column2	
2	1	Bassett, Kirk	
3	1	Glenn, Steven	
4	1	Kaufman, James	
5	1	Lyman, Jacob Hansen	
6	1	Stacy, Jordan Michael	
7	2	Bowman, Taylor	
8	2	Gauthier, Jack	
9	2	Lance, Eric James	
10	2	Young, Derek	
11	2	Young, Devin	

	A	B	C	D	E	F	G	H	I	J	K
1	Apt	Companion	Apt	Companion	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea
2	1	Bassett, K	1	Glenn, Ste	9	Hancock, I	9	Roberts, S	3	Tolson, Sp	
3	1	Kaufman, J	1	Lyman, Ja	9	Vomocil, S	9	Whitaker,	4	Ostler, Bra	
4	1	Stacy, Jori	2	Bowman, T	10	Christense	10	Davis, Erin	4	Rudolphi, C	
5	Apt	Companion	Apt	Companion	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea	Home Tea
6	1	Stacy, Jori	2	Bowman, T	10	Christense	10	Davis, Erin	4	Rudolphi, C	
7	2	Gauthier, J	2	Lance, Eri	10	Goodman,	10	Howard, A	5	Kasen, Ste	
8	2	Young, De	2	Young, De	10	Taylor, Asl	10	Van Tuyl,	5	Parkinson,	

Reporting

Now that the companionships have been made and assignments given, each home teaching district leader reports on a google doc which members were home taught, contacted, or didn't report. Once all the data has been reported the user will select the 'Monthly Report' button on the ribbon. This compiles a report by gathering all the data from each district for the specific month you want to see statistics about. This report creates a list of members who were:

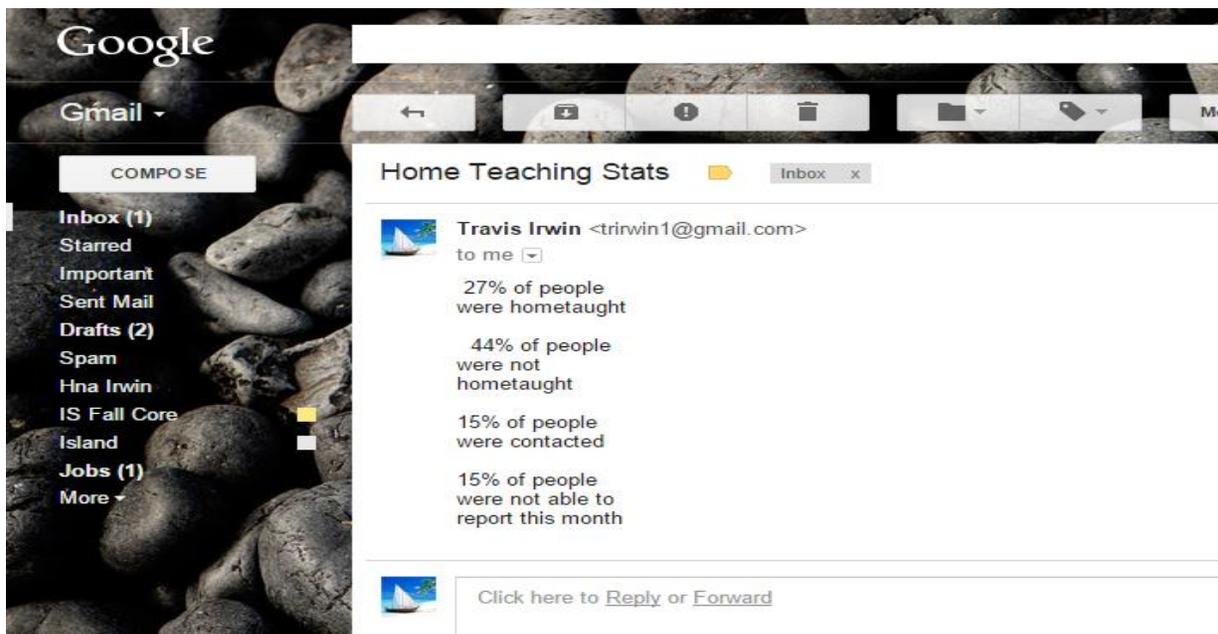
- home taught
- not home taught
- contacted
- did not report

In addition, the report shows the corresponding percentages of each to help for reporting to the bishopric.

	Yes	42 No	69 Contacted	24 No Report	23	
Nana Buah		Kimberly Beard-Rios	Maile Hekekia	Elizabeth Doud		
Sarah Kemp		Alyssa LeDoux	Brenna Wheeler	Hillary Dalsing		
Anna Zaitzeff		Ellen McClusky	Joel Stoker	Emma Tan	Averages	
Angela Marte		Kimberly Farnsworth	Erin Davis	Rachel Moon	27%	Yes
Tyson Boardman		Janey Warren	Elizabeth Rae	Jordann Parks	44%	No
Eric San Diego		Jessica Mckay	Mckinzie Davis	Kaitlin Fitts	15%	Contacted
Micheal Cowley		Adam	Ryan Kurth	Chad Janis	15%	No Report
Trevor Boardman		Chris Cutler	Sophia Roberts	Cory Weidman		
Jesse Woodbury		Casey Muir	Amber Turnbow	Brett Johnson		

Email

Home teaching statistics are important for the leadership of the ward to know. For this reason, after we have calculated the statistics the user can choose to email the statistics to other ward leaders. The Leadership tab contains a list of members who would like to receive the statistics and their email addresses. The 'Send Stats' button sends an email to everyone on that list, no matter the size.



Conceptual Difficulties

One of the difficulties we encountered was not being able to get the data from lds.org. We were able to see the data but could not figure out how to get it into a usable format that would make the process more useable. We eventually discovered that we could download the data we needed as a csv file. However, we did not have the permissions to do so. After a few phone calls and internet research we learned that you must be in the bishopric or be a ward clerk in order to have this functionality. This led us into an element we wanted to get to work but could not. Since we spent sufficient time creating the other 4 macros, we decided it was just better to manually download the file and start from there.

Lessons Learned

While working on this project, we learned plethora of new things. One of the first things we learned was how powerful and versatile VBA is. There are so many different applications for it. Likewise, because it is so versatile everybody has a use for it. No matter the field, there is something in VBA that can help.

Another lesson that we learned is that Google is our best friend. There is an overabundance of online resources to help solve almost any problem. Because there are people out there that really know what they are doing. There are many forums that involve various ways of writing code. We were able to find many examples when we were stuck.

The last lesson we learned was that sometimes coding doesn't work how you would like. Often times we had in our head, the way we wanted something to logically work. After researching that, we realized it was not like that. For example, we thought sending an email would be pretty straight forward; however, Dr. Allen showed us that there are parameters that need to be used in order to get it to work properly.