VBA Final Project

MBA 614

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Automatic Email Generator for HR Recruiters at General Mills

Executive Summary

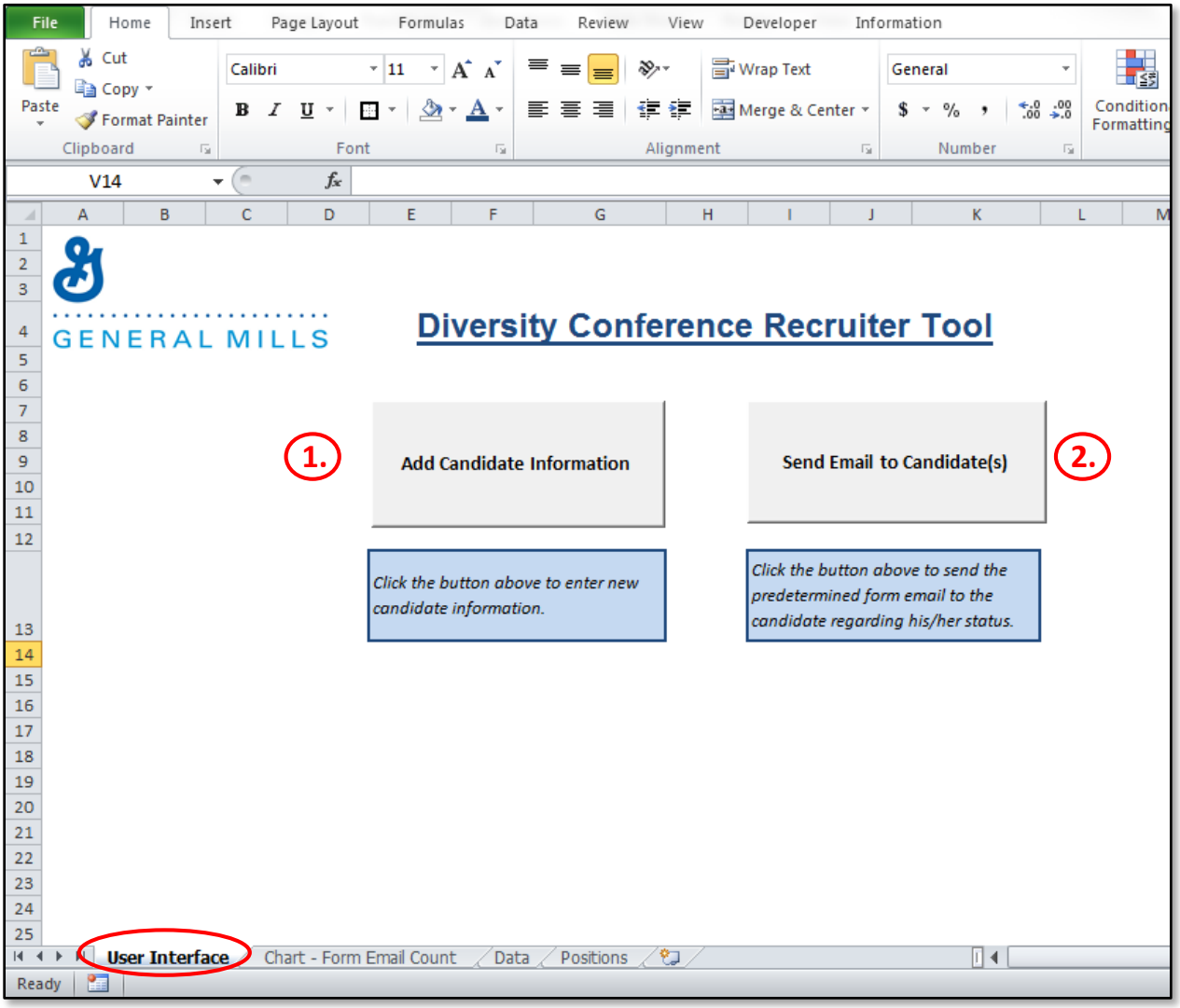
When students attend job conferences or fairs (like the National Black MBA Conference [NBMBA] or the National Society of Hispanic MBA Conference [NSHMBA]), organizations collect a lot of student business cards and/or contact information for perspective job candidates. The program I've created is for a recruiter (in this case, a recruiter for General Mills) to gather names of potential job and internship candidates for various marketing positions within the organization. Then, with a click of a button, the recruiter can send an automatically generated customized email to each candidate letting them know the status of their application or interest with the company, based on the inputs the recruiter provides.

Additionally, I created a tab that contains a chart that is seamlessly updated with the count of the types of emails that have been entered into the spreadsheet via the User Form. This helps the recruiter to track candidates so that the marketing department does not accept or reject too many candidates.

I wanted to make this spreadsheet extremely user friendly as many HR professionals are not known for the Excel skills and I wanted it to be as intuitive as possible. I know that by automating the email process, a recruiter can save a lot of time by not having to manually change a form email for every candidate.

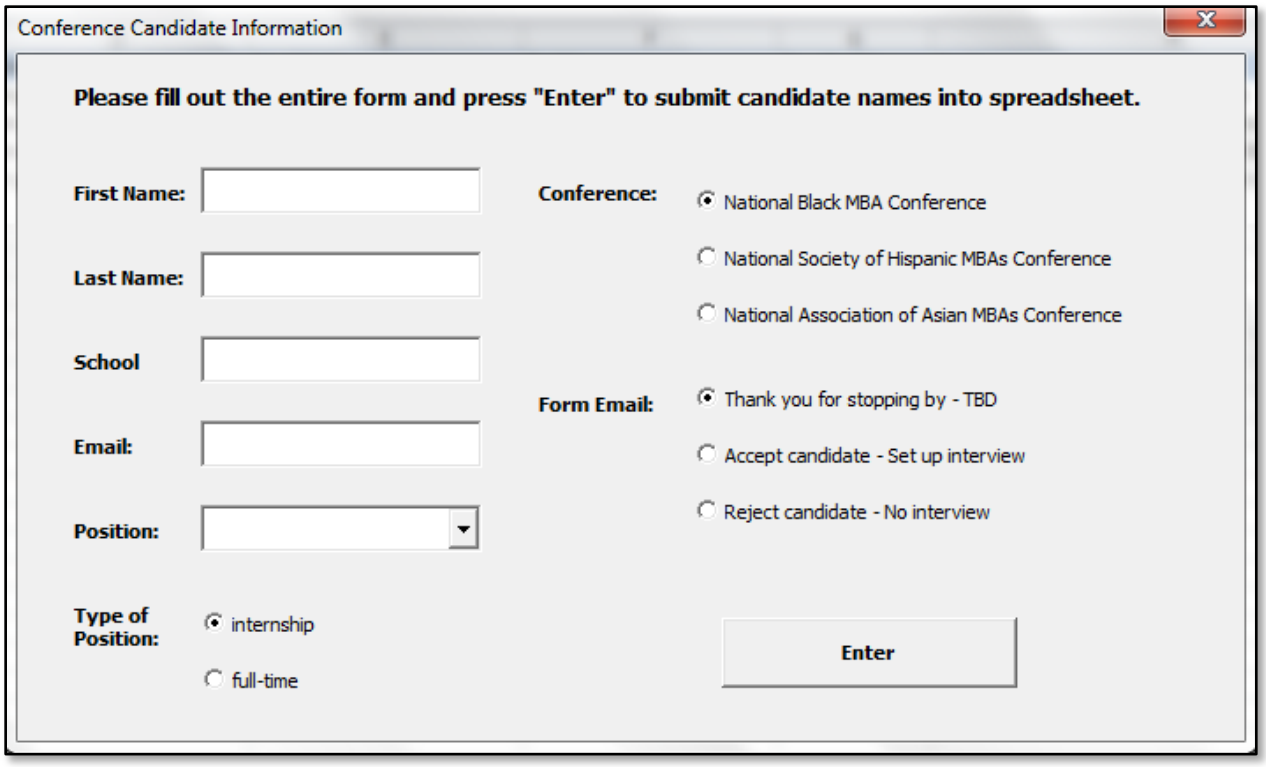
Implementation

To begin, the recruiter will start on the “User Interface” tab. This is the main page of the spreadsheet where the recruiter will spend the majority of his or her time. There are two control buttons on this page as noted in the screen shot below:



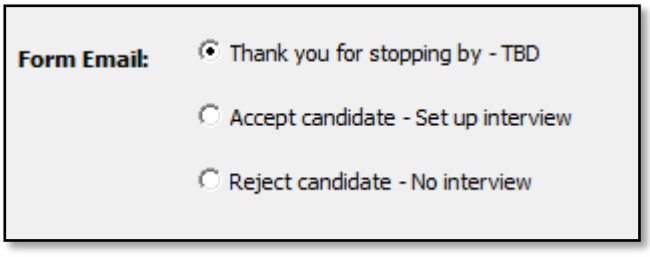
1. “Add Candidate Information”

When the recruiter presses the “Add Candidate Information” button, a User Form will pop up where the recruiter will then enter the information that was provided by the student at the conference.



The recruiter will proceed to populate the blank text-box fields, including first name, last name, school, and email address. The recruiter then has the option to select a marketing position from the position drop-down field.

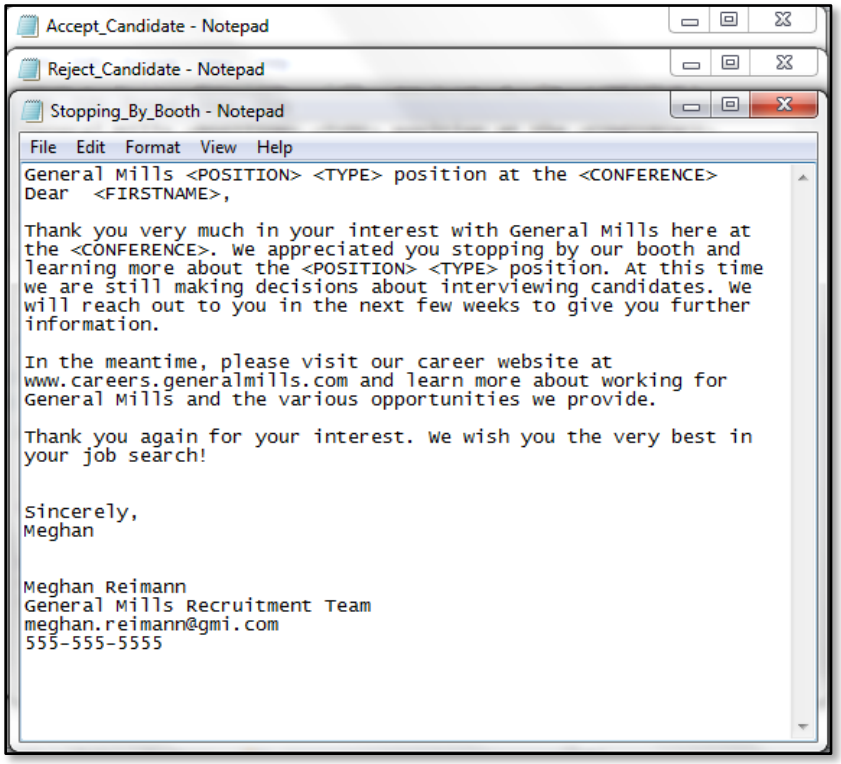
The type of position, the name of the conference the candidate is attending, and the type of form email to be sent are all radio buttons where only one in each grouping can be selected. For example, the recruiter cannot select both the “National Black MBA Conference” and the “National Society of Hispanic MBAs Conference”.



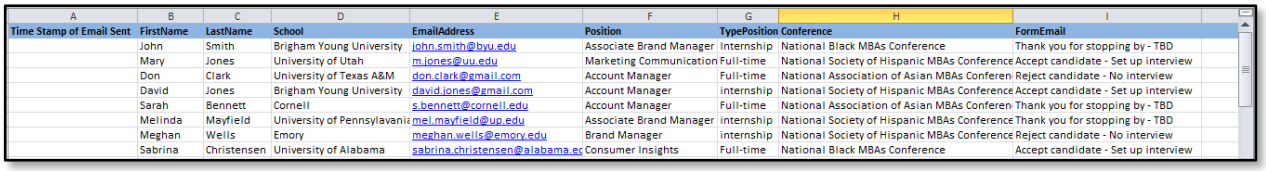
As mentioned above, the recruiter will select a type of form email to be sent to the candidate based on the perceptions of the recruiter and his or her team. There are three email options. The first is a message that essentially gives the recruiter more time to make a decision. A full-text version of this message can be found on the following page. The second option is a message that tells the candidate that he or she will be given an initial phone-screen interview. The final option is a

message that tells the candidate that he or she will not be considered for the position at this time. It is critical for the recruiter to choose the right radio button so that the appropriate message is communicated.

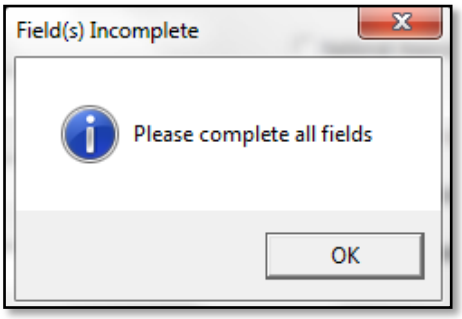
Each of the three form emails will be uniquely tailored to the candidate's personal information. For example, in the message below, all text in "< >" will be populated with the candidate's desired marketing position, the type (internship or full-time), the conference attended, and his or her first name. This is similar for the "Accept" candidate email as well as the "Reject" candidate email.



Once all fields are completed, the information is then populated onto the "Data" tab in the spreadsheet (shown below). If the recruiter fails to complete all fields, a message box will display when pressing "OK" that will prompt the recruiter to finish all fields.



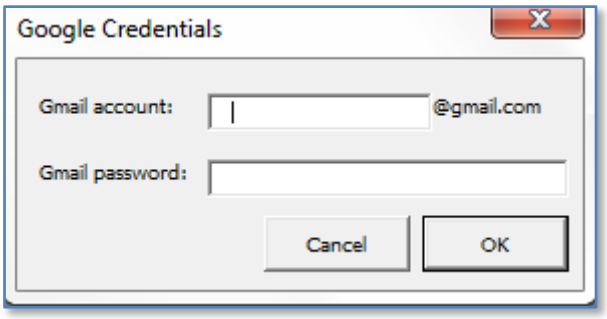
Time Stamp of Email Sent	FirstName	LastName	School	EmailAddress	Position	TypePosition	Conference	FormEmail
	John	Smith	Brigham Young University	john.smith@byu.edu	Associate Brand Manager	Internship	National Black MBAs Conference	Thank you for stopping by - TBD
	Mary	Jones	University of Utah	m.jones@uu.edu	Marketing Communication	Full-time	National Society of Hispanic MBAs Conference	Accept candidate - Set up interview
	Don	Clark	University of Texas A&M	don.clark@gmail.com	Account Manager	Full-time	National Association of Asian MBAs Conferen	Reject candidate - No interview
	David	Jones	Brigham Young University	david.jones@gmail.com	Account Manager	internship	National Society of Hispanic MBAs Conference	Accept candidate - Set up interview
	Sarah	Bennett	Cornell	s.bennett@cornell.edu	Account Manager	Full-time	National Association of Asian MBAs Conferen	Thank you for stopping by - TBD
	Melinda	Mayfield	University of Pennsylvania	mel.mayfield@up.edu	Associate Brand Manager	internship	National Society of Hispanic MBAs Conference	Thank you for stopping by - TBD
	Meghan	Wells	Emory	meghan.wells@emory.edu	Brand Manager	internship	National Society of Hispanic MBAs Conference	Reject candidate - No interview
	Sabrina	Christensen	University of Alabama	sabrina.christensen@alabama.ec	Consumer Insights	Full-time	National Black MBAs Conference	Accept candidate - Set up interview



2. "Send Email to Candidate(s)"

Once the recruiter has completed entering all of the candidate information from a conference, the recruiter is now ready to send the emails. In this specific workbook, the Gmail email platform is utilized for the automated process, although Outlook or other email programs could be made available with a tweak of the code.

When the recruiter presses the "Send Email to Candidate(s)" control button, a User Form pops open to prompt the recruiter to enter his or her Gmail username and password. Once the recruiter presses "OK", the previously selected emails are sent to the candidates, populated with the personal information provided (as described previously).

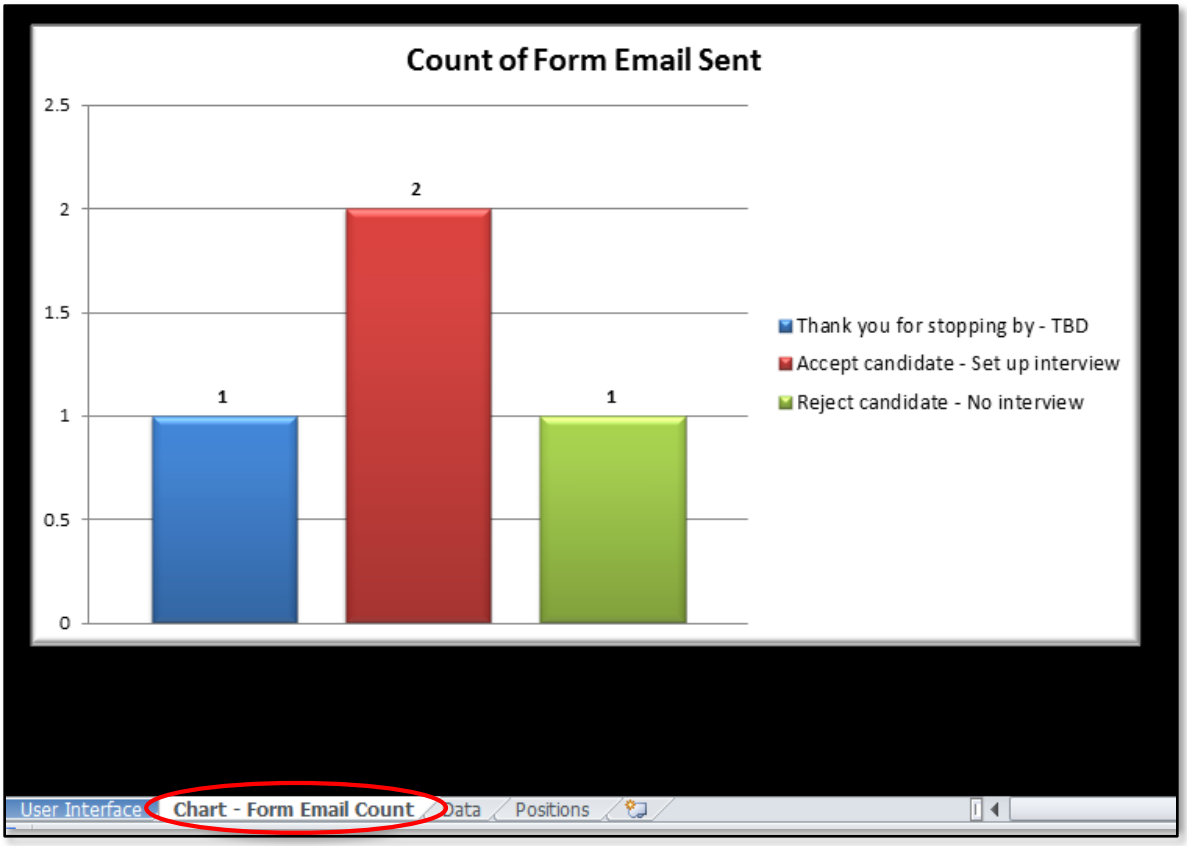


	A	B	C
1	**Time Stamp of Email Sent**	**FirstName**	**LastName**
2	4/11/2012 22:01	John	Smith
3	4/11/2012 22:01	Mary	Jones
4	4/11/2012 22:01	Don	Clark
5	Error Sending	David	Jones
6	4/11/2012 22:01	Sarah	Bennett
7	4/11/2012 22:01	Melinda	Mayfield
8	4/11/2012 22:01	Meghan	Wells
9	4/11/2012 22:01	Sabrina	Christensen

If the email address provided for the candidate was valid (and entered in by the recruiter correctly), the first column in the "Data" worksheet will display the day and time of the email sent. If the email address is not valid, the words "Error Sending" will display, alerting the recruiter to follow-up.

Charting / Reporting

Finally, the recruiter is able to track the number of form emails being sent to the candidates by selecting the “Chart – Form Email Count” tab in the workbook. This chart visually depicts the number of emails being sent so that recruiters do not over or under select candidates for the various positions.



Learning and Conceptual Difficulties

I'll be completely honest—VBA was perhaps the hardest course I have taken in my MBA program! I come from having no programming experience, so all of the concepts taught this semester were completely new. Learning VBA was like learning a foreign language and with more practice I know I can become better—but for right now I have a long way to go!

Although the scope of this project was small and simplified, I still encountered many issues that I found challenging. Oftentimes I knew exactly what I wanted to do to complete a task, but I had forgotten how to write the VBA code for the procedure, so I had to refer back to the homework, project, and in-class exercises for assistance. If what I needed to do was not exactly how or what we did in class, I found that I needed to ask for help from either James or Prof. Allen. Some of my major challenges were with writing loops. I still have a hard time knowing when to use a "Do While…" versus a "Do Until…". Additionally, figuring out how to build the logic into "If…Then…" statements can also be tricky for me. These two items were especially apparent when I was writing the code for the "Send Email to Candidate(s)" functions. For example, at first I started writing multiple "If…Then…" statements to get the appropriate type of form email to send correctly. When I could not get the macro to work, I had to go see Prof. Allen for assistance. He was able to show me how to greatly streamline my code with the "Select Case" statement. It made so much sense once I saw it, but it had not occurred to me on my own, which was a little frustrating. I hope to get better at applying the concepts I've learned over the course of this semester.

Another issue I came across was grouping the radio buttons on my User Form. I knew that I wanted to use radio buttons for the recruiter to select specific fields, but I was unsure how I could get it so that just one was selected in each grouping. With James' assistance, he was able to show me how to group radio buttons using the "GroupName" field in the "Properties" box of the radio buttons. This proved to be very helpful when populating the spreadsheet.

Finally, I learned that when creating a new program or worksheet, it's important to understand the structure before just jumping in. It wasn't until fairly close to the end that I realized that I didn't quite know what the best way would be for the recruiter to interact with the worksheet. I ended up creating the "User Interface" spreadsheet as I felt like this would be the most user-friendly, but it definitely made me realize that I should have had a better plan from the beginning. As any good author knows, a best practice in writing papers is to sit down and outline the key points and sections that one wants to cover. I believe it would be valuable for all programmers to go through a similar exercise where he or she would map out the key functionalities prior to writing the code so that the code doesn't have to be modified in order to fit the requirements.

Assistance

On this project I received assistance from the following individuals on the respective items:

Prof. Allen
- I utilized the in-class file we created to do automatically generated emails in order for the Gmail functionality to work appropriately
- He assisted me with the coding for selecting the appropriate text file to transmit to the candidates (Select Case statement)

James Tall
- Drop down box in the User Form (loop)
- Loop function for the User Form so that candidate information would be populated on the next blank line
- "If…Then…" statement for the "Send Email to Candidate(s)" sub procedure so that candidates would not be emailed multiple times if they had already been emailed previously.

Keith Jones
- I could not remember whether we used the "Form Controls" or "ActiveX Controls" when creating command buttons, so Keith was able to help clarify for me.