

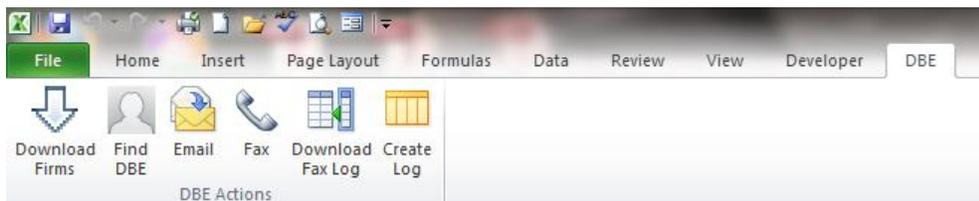
Beginning a “Good Faith Effort”

EXECUTIVE SUMMARY

When construction companies bid on public agency projects in California as a General Contractor, they are often required to advertise to DBE (Disadvantage Business Enterprise) firms in an effort to help these firms become subcontractors on projects. In order to meet this requirement, the general contractor must identify the work required to complete the construction project, and fax or email an advertisement to relevant firms. If this advertisement is not given a “good faith effort”, the general contractor could potential have their bid withdrawn. This VBA project allows a user to fulfill the beginning portion of their “good faith effort” with a couple of clicks. The user can download the database of certified DBEs from the internet to begin the search. Once downloaded, a user form guides the user to finding relevant DBE firms based on location and type of construction project. Once the firms are filtered, the user can then click a button to email and/or fax an invitation to bid the filtered firms. In order to track that the email was sent, and the fax was received, the project records the date and time in a log. The user can then click to create a log that aides them through the final parts of the “good faith effort” which entails physically calling the firms to see if the plan to bid on the project.

IMPLEMENTATION

To accomplish the goal of the project, I broke it down into six main steps: Download Firms, Find DBEs, Email, Fax, Download Fax Log, and Create Log. All of these steps can be controlled with buttons on the ribbon. The buttons and the DBE tab on the ribbon were added so only when this workbook opens, the customized ribbon appears.

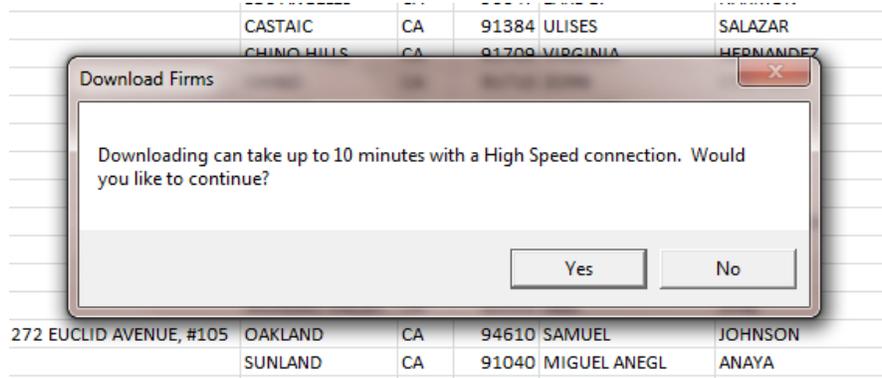


I considered combining the steps in to fewer steps, but I wanted the user to have more control over what is done.

Download Firms

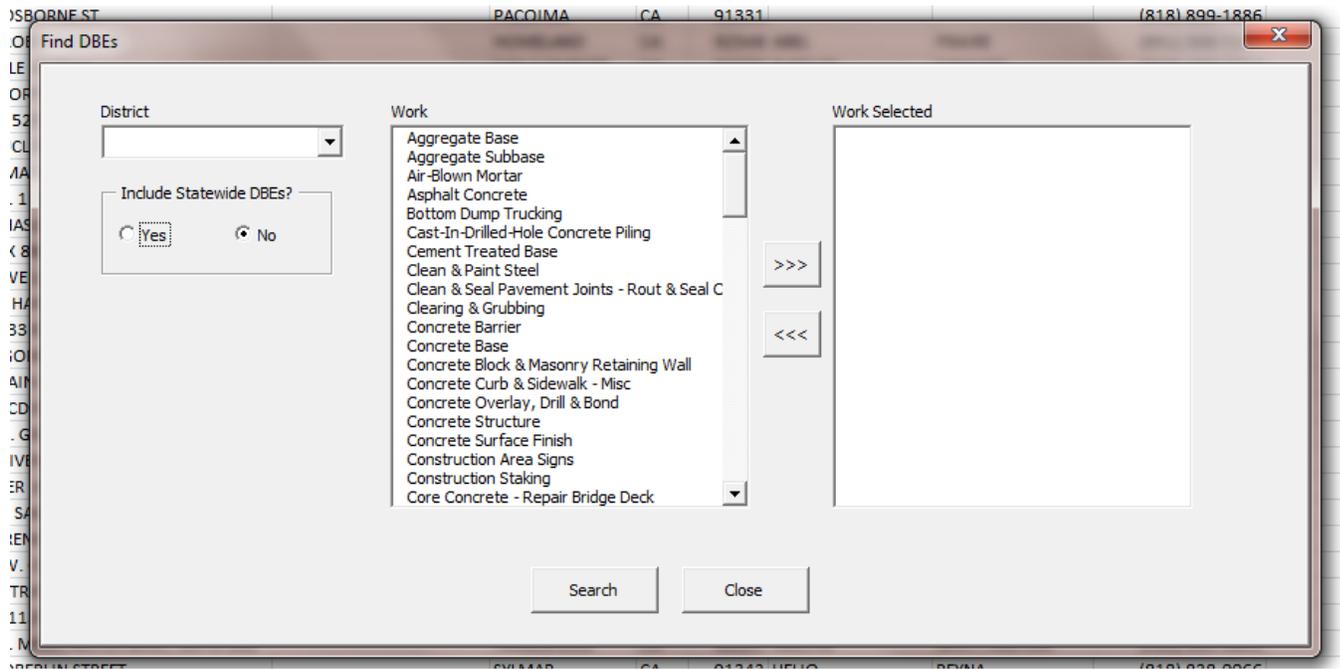
The list of all certified DBEs and their respective data is located online with a link that connects to an excel file. When the *Download Forms* button is clicked, the computer goes online, opens the excel file, then saves the file. It then imports the sheet with all the data into the project workbook. This process

does not need to happen every time the project is run because the data is not updated daily. The button allows the user to choose when to go online and get the most recent data. The file stores the data in a hidden sheet, so the user cannot click on it. This download can take while, so before the download runs, the following message box appears.

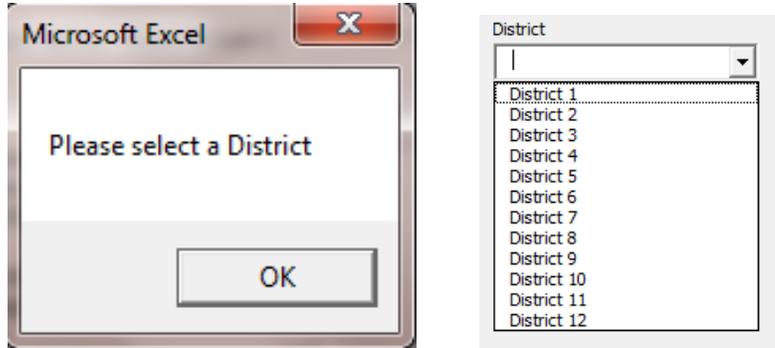


Find DBE

This opens up the following user form:



There is a drop down menu that has a list of the different districts within the state of California. This allows the user to select the district where the construction project will be located, and to find the DBE firms that do work in that district. If no district is selected, the following message box appears and ends the sub procedure.



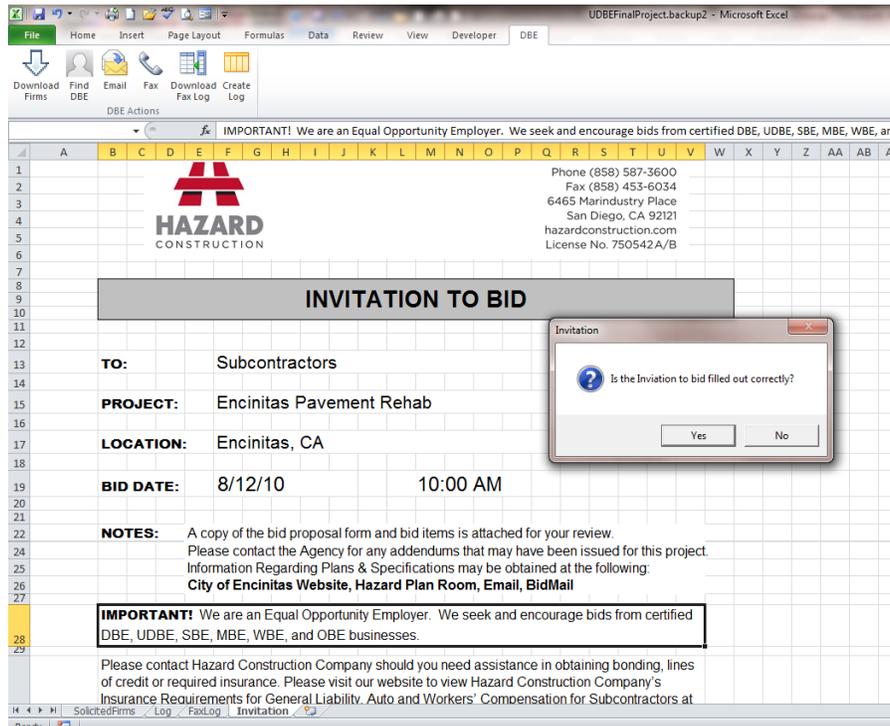
Some DBE firms do work throughout the entire state, so the form allows the user to select if they want these firms to be included in the search. It defaults to "No" when the form initializes. The user then can select which trades to include in the search by moving the item to the *Work Selected* box. The user simply highlights the item and clicks the right arrow. It is then deleted from the *Work* box and added to the *Work Selected* box. To move it back, simple reverse the process.

Once the *Search* button is clicked, the program goes to the database with all of the certified DBE firms, and finds firms matching the search criteria. The firms that meet the search requirements are placed in the neatly formatted *SolicitedFirms* sheet. There are many firms that come through twice because they are listed as doing multiple types of work that are included in the *Work Selected* box. The process includes removing the duplicate listings.

A1	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	DBA Name	Address Line 1	Address Line 2	City	State	Zip Code	Contact First Name	Contact Last Name	Bus. Phone Number	Bus. FaxNumber	Email	Ethnicity	Firm ID	Work Code Desc
1	D & E SERPA TRUCKING, INC.	881 HOWE ROAD		MARTINEZ	CA	94553	DIANNE OR EDWARD	SERPA	(925) 228-8013	(925) 228-3366	deserpatrucking@sbcglobal.net	HISPANIC	8337	BOTTOM DUMP TRUCKING
2	D J ROCHA TRUCKING, INC.	8028 ROBERT ST.		HILMAR	CA	95324	BETTY JEAN	ROCHA	(209) 664-2002	(209) 812-1891	brocha23@aol.com	HISPANIC	32202	BOTTOM DUMP TRUCKING
3	HUGO'S TRUCKING	12876 OSBORNE ST.		PACOMA	CA	91331			(818) 899-1886	(818) 897-6054		HISPANIC	35967	BOTTOM DUMP TRUCKING
4	HAMMER-DOWN TRANSPORTATION, INC.	3311 W. MANCHESTER BLVD., SUITE 202		INGLEWOOD	CA	90305	MELVIN	WHITTINGTON	(310) 590-0852	(323) 750-0098	hamdowtran@yahoo.com	BLACK	38442	BOTTOM DUMP TRUCKING
5	L S TRUCKING	PO BOX 525		SAN FERNANDO	CA	91341	LUIS	MIRANDA	(818) 383-2678		ismiranda5@yahoo.com	HISPANIC	35881	BOTTOM DUMP TRUCKING
6	SAN JOSE TRANSPORT	281 YAMANE DRIVE		GILROY	CA	95020	JAMES	VERGARA	(408) 848-4441	(408) 848-1774	jim@sanjosetransport.com	HISPANIC	1993	BOTTOM DUMP TRUCKING
7	GARCIA PAVING COMPANY, INC.	2951 SOUTH ELM		FRESNO	CA	93706	STEVEN	GARCIA	(559) 266-3358	(559) 266-8337	cliff@garciapaving.com	HISPANIC	373	CEMENT TREATED BASE
8	J.L. GONZALEZ EXPRESS	7654 ESCONDIDO CANYON RD.,		ACTON	CA	95510	JOSE LUIS	GONZALEZ	(818) 339-4765			HISPANIC	36204	BOTTOM DUMP TRUCKING
9	U.S. CONCRETE CONSTRUCTION, INC.	30634 HASLEY CYN. ROAD		CASTAIC	CA	91384	LUISES	SALAZAR	(661) 259-3522	(661) 799-1038	les@us-concrete.net	HISPANIC	38294	CEMENT TREATED BASE
10	DESTINATION ANYWHERE, INC.	1603 BARCELONA STREET		LIVERMORE	CA	94550	JASHARINDER PAL	SINGH	(209) 836-9400	(209) 835-1144	info@destinationanywhereinc.com	ASIAN SUB	37840	BOTTOM DUMP TRUCKING
11	ROBIN EXPRESS	37125 LOCUST STREET #C		NEWARK	CA	94560	ROBIN	SINGH	(510) 792-2727	(510) 792-2439	robinespress13@yahoo.com	ASIAN SUB	38649	BOTTOM DUMP TRUCKING
12	FAYE STEWART TRANSPORTATION SERVICE LLC	3056 N 33RD AVENUE		PHOENIX	AZ	85017	FAYE	STEWART	(602) 233-5000	(602) 233-1131	faye@fayestewarttrans.com	CALC	36972	BOTTOM DUMP TRUCKING
13	L. RILEY TRUCKING	23746 LIVEWOOD LANE		HARBOR CITY	CA	90710	LESLIE	RILEY	(323) 231-5083	(323) 231-5083	lrileytruck@aol.com	BLACK	36514	BOTTOM DUMP TRUCKING
14	DRAGON MATERIAL TRANSPORT, INC.	4543 N. HAYES AVE		FRESNO	CA	93723	SUMMER	BRADFORD	(559) 351-8822	(559) 276-0818	dmtsbs@sbcglobal.net	HISPANIC	37444	BOTTOM DUMP TRUCKING
15	MAX TRANSPORTATION	23532 MAGIC MOUNTAIN PKWY, #104		VALENCIA	CA	91355	MAXIMINO P.	GUTIERREZ	(818) 390-0658			HISPANIC	37686	BOTTOM DUMP TRUCKING
16	RIVERA TRUCKING, LLC	12645 WELLS PLACE		CHINO	CA	91710	DORIN	CYNTHIA L.	(951) 212-5619	(909) 614-7073		NAT AM	7988	BOTTOM DUMP TRUCKING
17	CLAY MIRANDA TRUCKING, INC.	3220 W. BELMONT		FRESNO	CA	93722	DEBORA	COOPER	(559) 275-6250	(559) 275-6091	cmtdebbie@aol.com	OTHER	5568	BOTTOM DUMP TRUCKING
18	PRUITT TRUCKING, INC.	214 W. POPPYFIELDS DR.		ALTADENA	CA	91001	LAWRENCE	PRUITT	(626) 398-4500	(626) 398-5551	pruitttrucking@hotmail.com	BLACK	36558	BOTTOM DUMP TRUCKING
19	RICHARD'S TRUCKING	10244 VON KLEIBEN RD.		SONORA	CA	95370	RICHARD	SANTOS	(209) 604-4883	(209) 532-3117	richtruck@aol.com	HISPANIC	28884	BOTTOM DUMP TRUCKING
20	M. HADNOT TRUCKING	204 W. 23TH STREET,		LOS ANGELES	CA	90061	MARSHALL	HADNOT	(213) 276-2635			BLACK	38261	BOTTOM DUMP TRUCKING
21	A & M GENTRY TRUCKING	3736 E. AVENUE, T-6		PALMDALE	CA	91350	MARY	GENTRY	(661) 285-0776	(661) 285-5011	marystrucks@aol.com	CALC	5470	BOTTOM DUMP TRUCKING
22	ROBINSON & SONS INC	2405 MADRONCILLO STREET		SAN DIEGO	CA	92114	RONNIE	ROBINSON	(619) 750-2274	(619) 286-2274	robinson20@hotmail.com	BLACK	36252	BOTTOM DUMP TRUCKING
23	RALPH E. HERNANDEZ TRUCKING, INC.	P.O. BOX 880		CHINO HILLS	CA	91709	VIRGINIA	HERNANDEZ	(909) 591-0871	(909) 591-0506	rehtrucking@msn.com	HISPANIC	798	BOTTOM DUMP TRUCKING
24	FREEMAN CONTRACTING	14432 STATELINE RD		BROOKINGS	OR	97415	TED	FREEMAN, JR.	(541) 469-4433	(541) 469-9004	CARI.FREEMAN@FREEMANCONTRACTING.BIZ	NAT AM	26357	BOTTOM DUMP TRUCKING
25	CAKESSE TRANSPORTATION, INC.	10469 W. COLIURT		OAKLAND	CA	94603	RONALD	CAKESSE	(510) 589-3072	(510) 382-9112	ccakesse@att.net	BLACK	35295	BOTTOM DUMP TRUCKING
26	ABC TRANSPORTATION INC.	3540 SANDDOLLAR COURT		UNION CITY	CA	94587	SINGH. GILL	GURSEWAK	(510) 909-5098	(510) 489-7001	abetrawsine@yahoo.com	ASIAN PAC	38534	BOTTOM DUMP TRUCKING

E-Mail

Using the sendGmail function from class, emails are sent to all of the firms that match the search criteria. The program first pops up a message box asking the user to verify the Invitation to Bid is filled out correctly. Only if the user clicks “Yes,” will the program proceed.



It then looks to see if the firm has an email address. If it does not, it places a “No Email” string into *Email Sent* and *Time Sent* columns on the *SolicitedFirms* sheet. If there is an email address, the following process occurs:

1. Creates a PDF of the *Invitation* sheet
2. Opens the *EmailMessage.htm* file in the folder
3. Replaces the dedicated fields in the *EmailMessage.htm* file with the firms information
4. Sends the email with the *EmailMessage.htm* file as the message, and attaches the PDF
5. Returns as True or False to the *Email Sent* column depending if it connected and sent
6. Returns the time in the *Time Sent* column

The *EmailMessage.htm* is a file within the folder that is a standard message sent to all. At the end of sending, a message box informs the user that all the emails were sent, or attempted to be sent.

Fax

The fax button uses many of the same techniques as the Email button described above. I set up an account with an online fax provider that allows faxes to be sent through email. The only differences are the follow:

1. Looks to make sure there are 10 digits in the firms fax field
2. Only faxes the invitation PDF because I only want to send one page
3. Emails to the *faxnumber@rcfax.com*
4. Does not place the result of the sendGmail function, or the time sent in the spreadsheet because I need to verify that the fax went through and not just sent. The next step does this step.

Download Fax Log

After the fax button is clicked, the user must wait a while for all the faxes to go through the system. It is best to wait about two hours before clicking the *Download Fax Log* button. When the button is clicked, Excel opens up an internet explorer, inputs user name and password information, and navigates its way to downloading the fax log. It then saves the CSV file to the current folder, imports the sheet to the workbook, and uses text to columns based on delimited information. Once the sheet is imported, the fax result (if the fax went through or not) and the time is recorded in the *SolicitedFirms* sheet. It does this by looping through the solicited firms fax numbers, finding the corresponding fax number on the fax log, and transferring the fax result and time information.

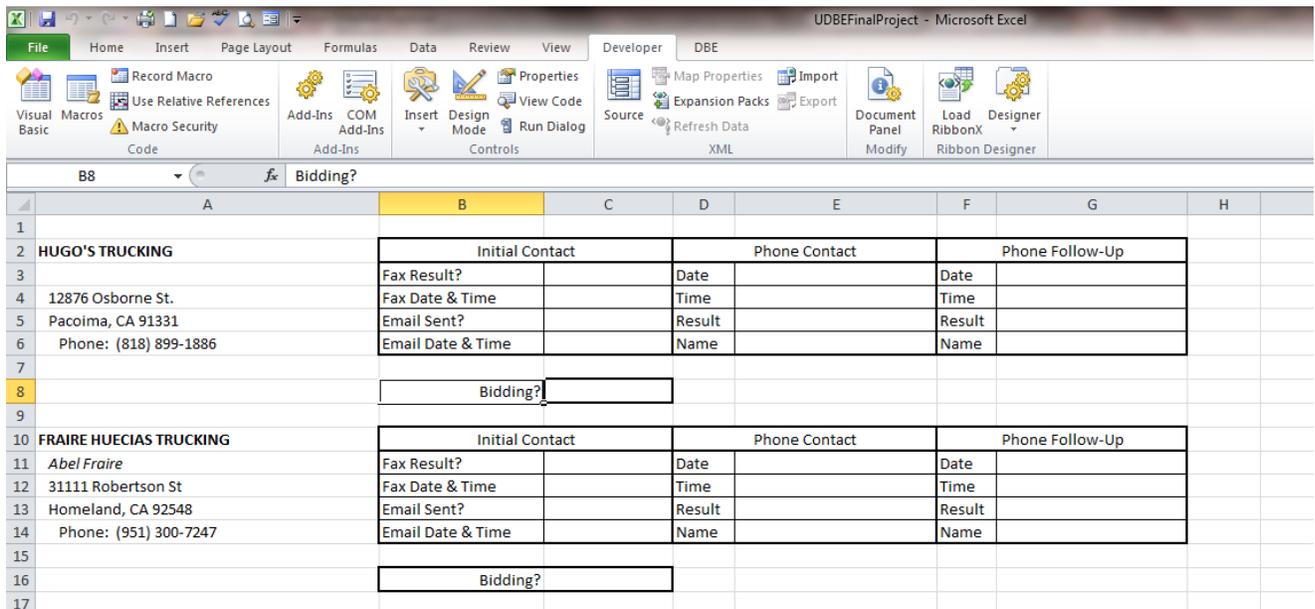
The screenshot shows a web application interface for a 'Call Log'. A download dialog box is open, displaying a CSV file link: `call_log_1886567718020110413101446%2Ecsv`. The main page shows a table of call log records with columns for Type, Phone Number, Name, Location, Date / Time, Action, Result, and Length. The table contains several entries, including outgoing and incoming faxes with various results like 'Fax Receipt Error', 'Partial Receive', 'Sent', 'Receive Error', and 'Fax Send Error'.

Type	Phone Number	Name	Location	Date / Time	Action	Result	Length
Fax	From: (956) 412-0989	Add Contact	Harlingen, TX	Mon 04/11/2011 3:42 PM	Phone Call	Fax Receipt Error	0:11
Fax	From: (631) 676-1623	RingCentral Service	Ronkonkoma, NY	Fri 04/08/2011 0:13 AM	Incoming Fax	Partial Receive	1:25
Fax	To: (866) 567-7180	Broc Wilde		Fri 04/08/2011 0:13 AM	Outgoing Fax	Sent	1:26
Fax	From: (631) 676-1623	RingCentral Service	Ronkonkoma, NY	Fri 04/08/2011 0:09 AM	Incoming Fax	Receive Error	0:47
Fax	To: (866) 567-7180	Broc Wilde		Fri 04/08/2011 0:09 AM	Outgoing Fax	Fax Send Error	0:48

Create Log

Because the emailing and faxing are only the initial steps of completing a “Good Faith Effort,” a simple log for tracking future phone contact with firms needed to be created. The *Create Log* button does the following steps:

1. Deletes and current log information from clicking the button previously
2. Cycles through all of the solicited firms, and puts their contact information in the *Log* sheet
3. Cycles through all of the solicited firms, and puts their email and fax delivery information in the *Log* sheet
4. Places the tracking table next to each firms information



	A	B	C	D	E	F	G	H
1								
2	HUGO'S TRUCKING	Initial Contact		Phone Contact		Phone Follow-Up		
3		Fax Result?		Date		Date		
4	12876 Osborne St.	Fax Date & Time		Time		Time		
5	Pacoima, CA 91331	Email Sent?		Result		Result		
6	Phone: (818) 899-1886	Email Date & Time		Name		Name		
7								
8		Bidding?						
9								
10	FRAIRE HUECIAS TRUCKING	Initial Contact		Phone Contact		Phone Follow-Up		
11	Abel Fraire	Fax Result?		Date		Date		
12	31111 Robertson St	Fax Date & Time		Time		Time		
13	Homeland, CA 92548	Email Sent?		Result		Result		
14	Phone: (951) 300-7247	Email Date & Time		Name		Name		
15								
16		Bidding?						
17								

After this, the program has done all that it is intended to do. The user can print of the log and begin to make phone calls to the solicited DBE firms to follow up.

LEARNING TOPICS

1. Navigating Pop-ups using the agent class

In order to download the fax log from the online website, I had to click on a link that popped up from the *agent1* that I dimmed. I went to the professor for help with this and was shown the *attach* method within the agent class. However, the pop-up's URL address was always changing except for a small portion. So the *agent* class was modified to attach the URL of a currently opened internet explorer that contained the fixed portion of the URL to a newly dimmed agent. This allowed the program to interact with the pop-up window.

2. Do Loop until something is blank

I learned this in class, but found it very useful in this project. I would usually set up a For Loop with enough loops to make sure I covered all of the data. So if there were 100 lines of data, I

would just do *for x = 1 to 1000* and cover it. But the Do Until helped be more efficient because the rows of data are always changing in the project.

3. Take a Break

During this project there were times that I would work on it late into the night for hours. I have had no computer programming experience previously, and it was addicting to have a problem and try to figure it out. However, there was two times that after working on it for a few hours I ran into a problem and proceeded to try and solve it for the next hour. Both times I failed, but woke up in the morning, opened the project, and figured it out within five minutes. I learned that simple things do not manifest themselves after looking at the computer for hours.

4. Sending an HTML email and not just plain text

In class we learned how to send plain text emails that had no formatting. However, I wanted there to be nice formatting when the email was sent. While looking at this now it seemed like it should have been pretty easy, but it took me a long time. I ended up just saving the message as an .HTM document instead of a text, and modifying the sendGmail function a little to send HTML. Instead of it just sending a plain text string, it sent the html code.

There were a lot more things that I learned from this project. Most were small little things, but even with all the frustrations, it was a lot of fun.