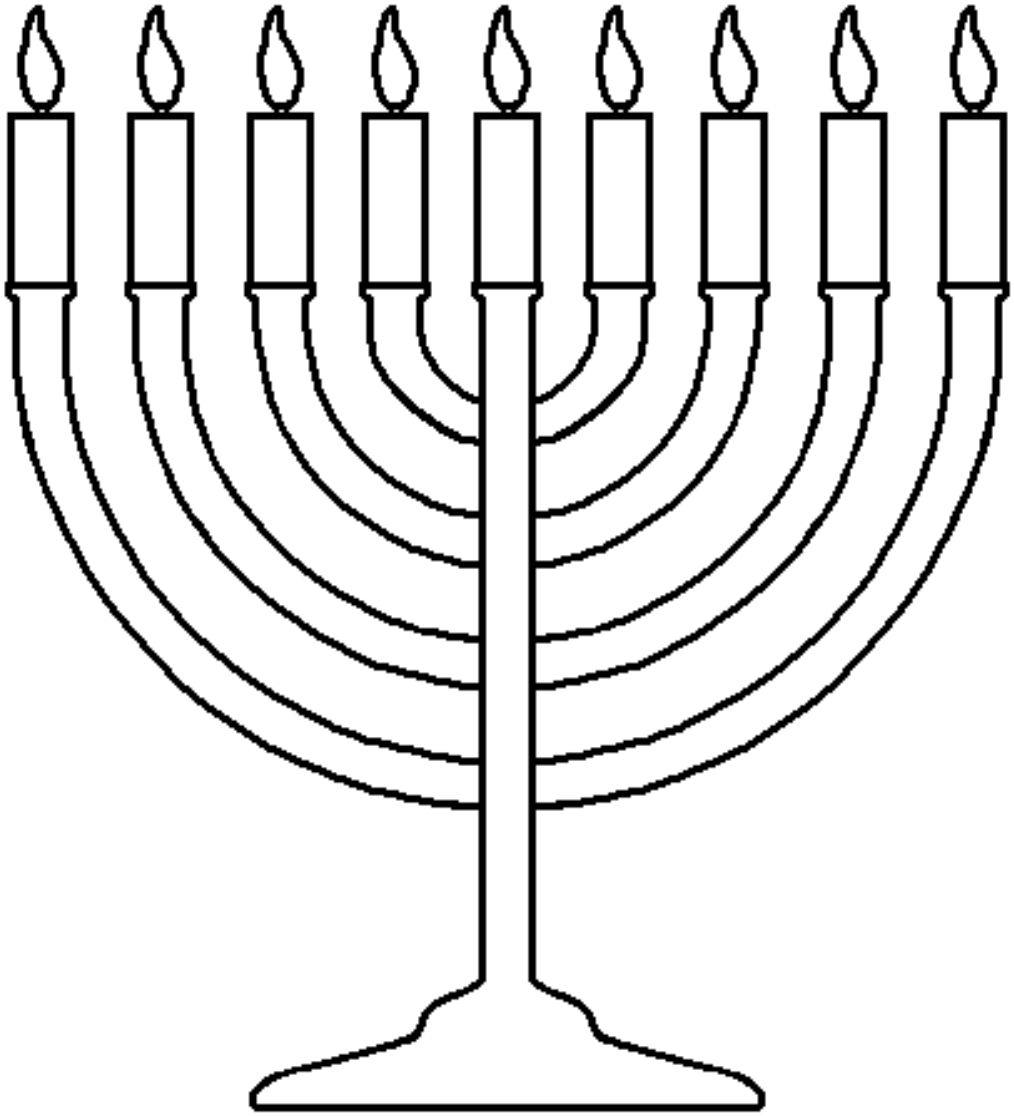


VBA Final

Creating Holiday Calendar Events

By Herbert Hosman

Executive Summary

My project gave me the joy of running into many brick walls metaphorically speaking of course. I had to pivot my idea many many times to reach my current project. I will leave that summary for the discussion of learning and conceptual difficulties encountered portion.

Description of the Biz

This is in reference to a problem I faced at an internship last Summer was co-worker that were inexperienced with technology and calendar events. Pretty much all companies use calendars. Most people use Microsoft Outlook®, but there are a select few that go against the stream. Generally speaking, most desktop and many online interfaces manage calendars and emails quite nicely. The annoying part is that they all do it in different ways that are not always intuitive. This is where my project comes in.

Overview of the System I Built

My system is great for situations like this! It really gets back to basics for those people who like hard file and are afraid of the cloud or syncing. A company can decide their holidays or days the want (which are holidays in my book) and they can distribute a file that contains them all. The nice thing is they can do it all from one place that is easy to use.

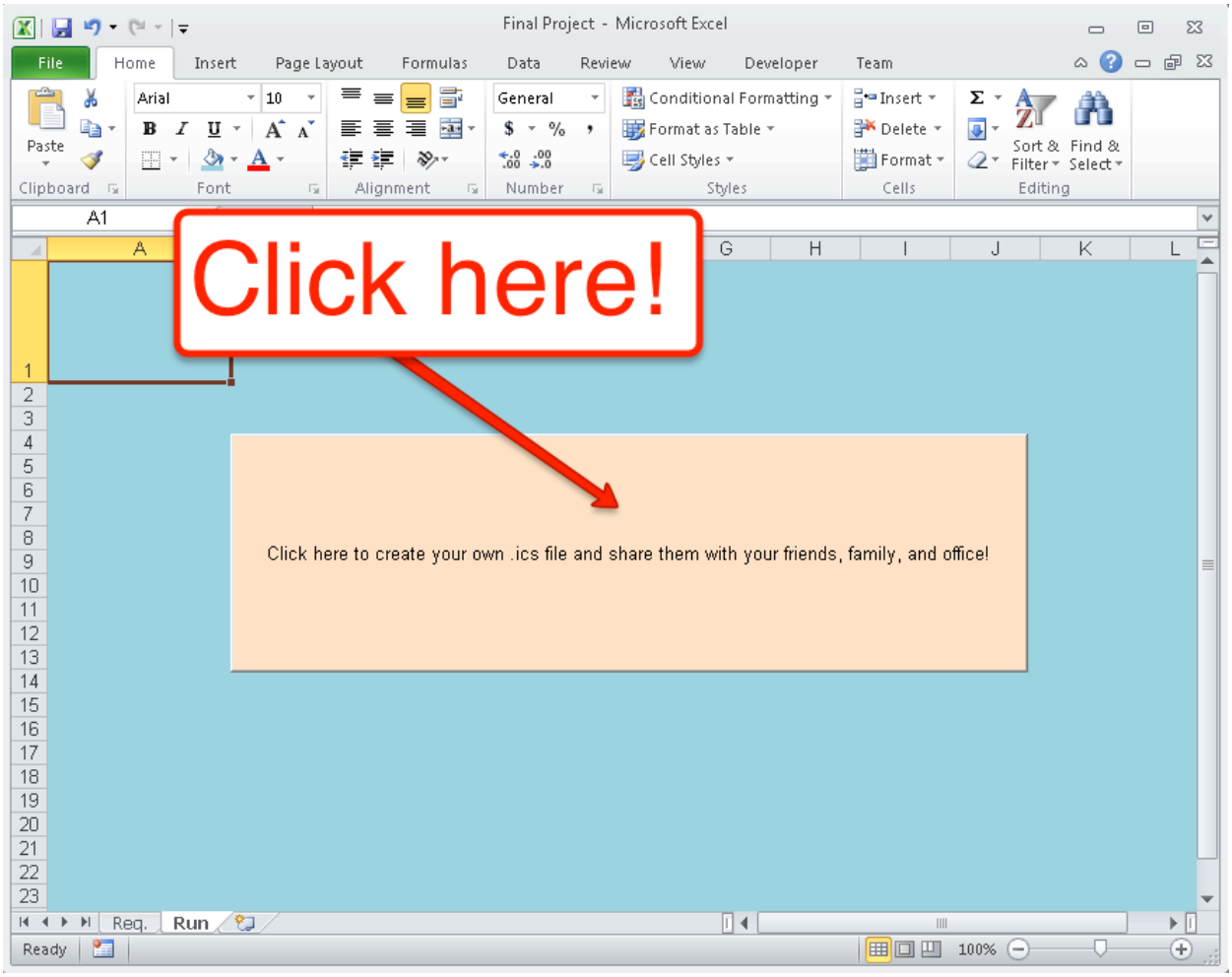
This program…

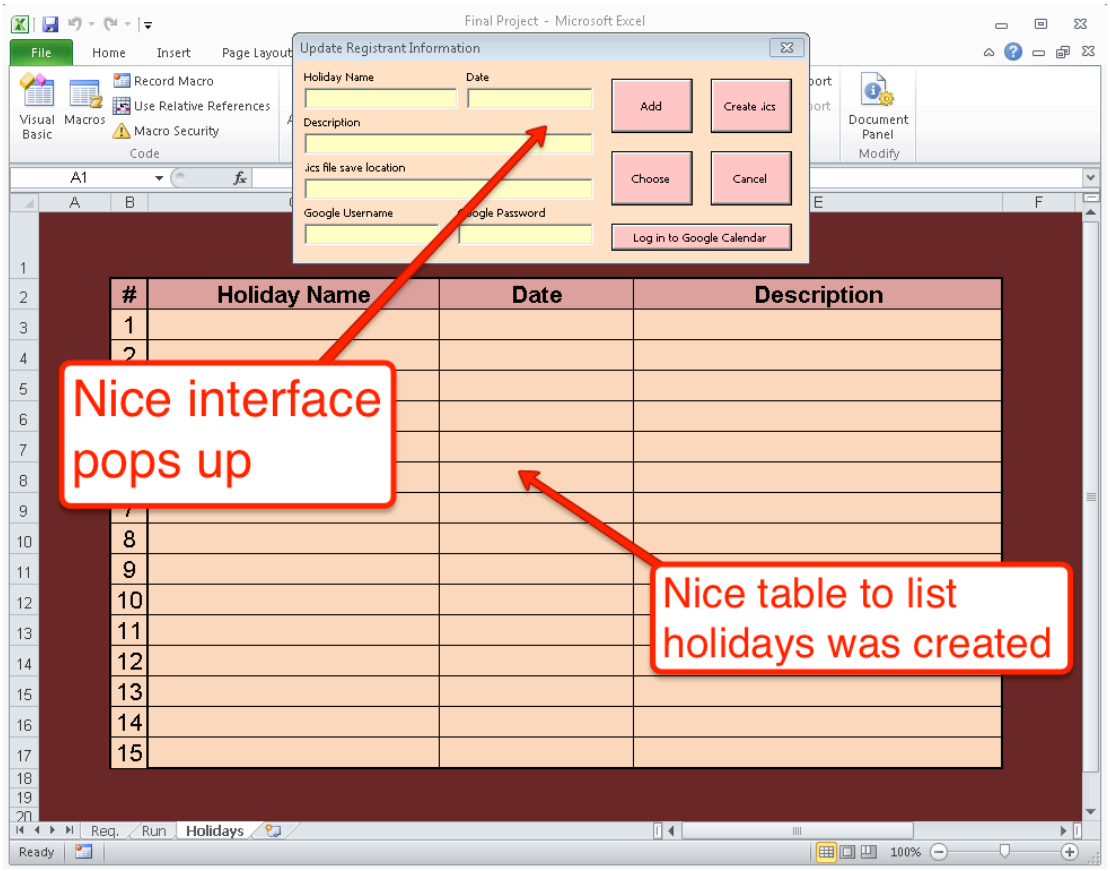
- Runs at the click of a button
- Create the necessary pages on the fly
- Opens a nice user interface to do all the needed
- Visually displays results as your creating events
- Allows you to designate a file path you would like
- Create a .ics file with all holidays you created
- Allows you to cancel out of the interface
- And will even open IE and log into Google Calendar for you

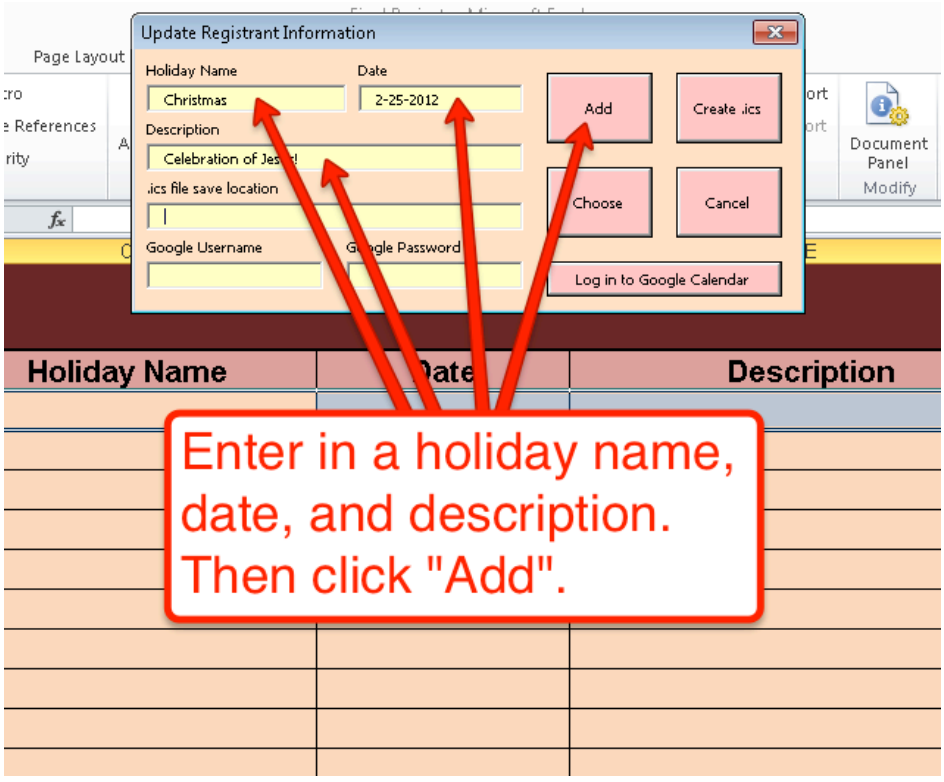
The following pages will walk you through the easy process!

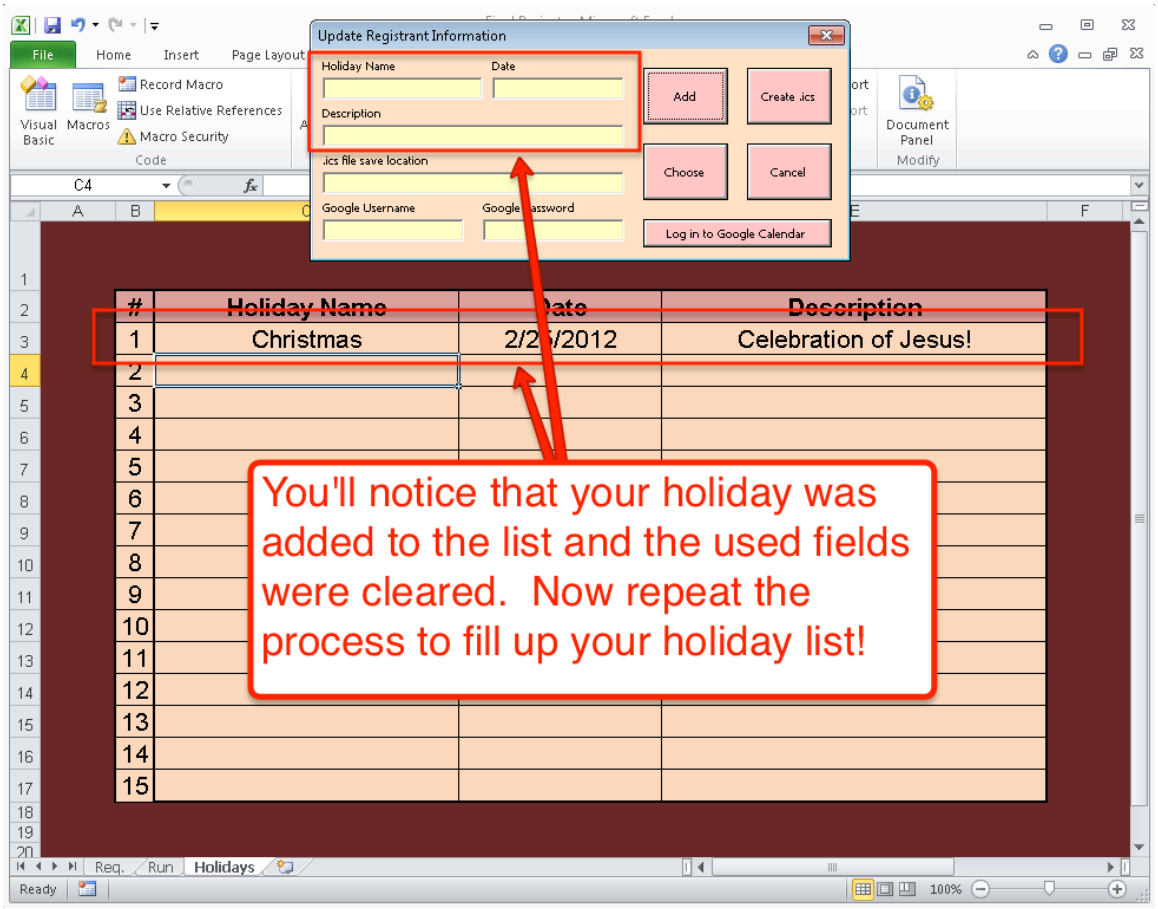
How to Create Your Own Holiday Calendar

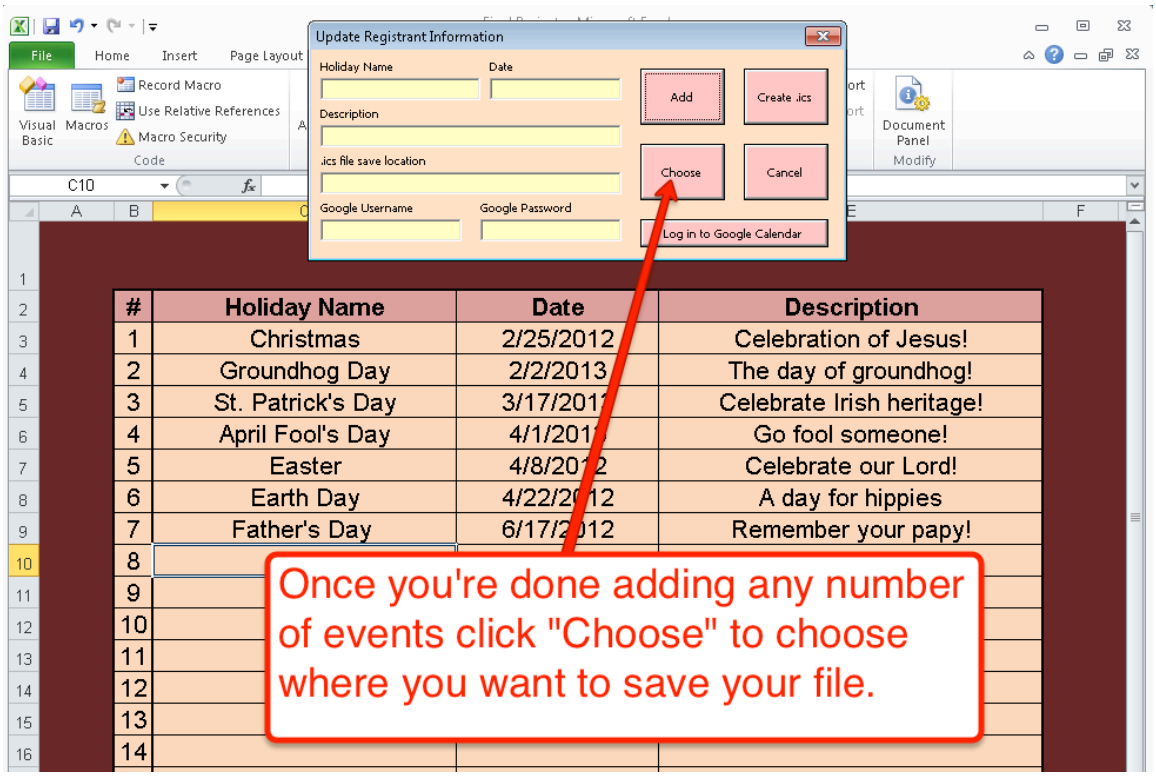
Once the workbook is opened, you should see an incredibly large button. Click it! You know you want to! Notice, beside the project requirements page it is the only page currently.

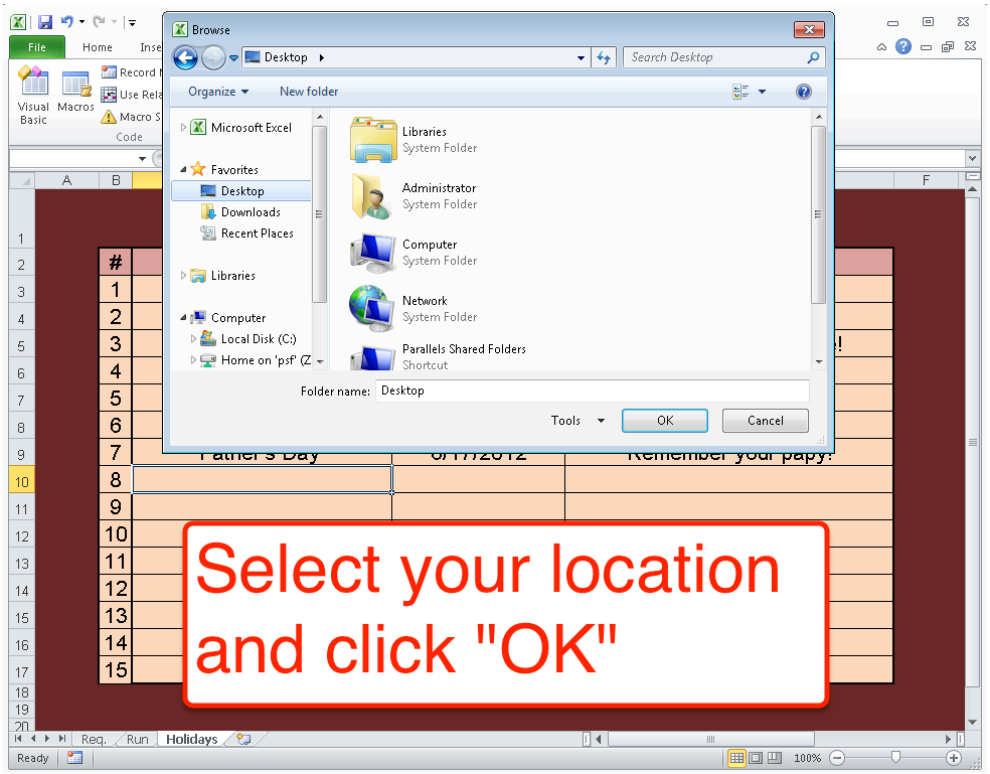


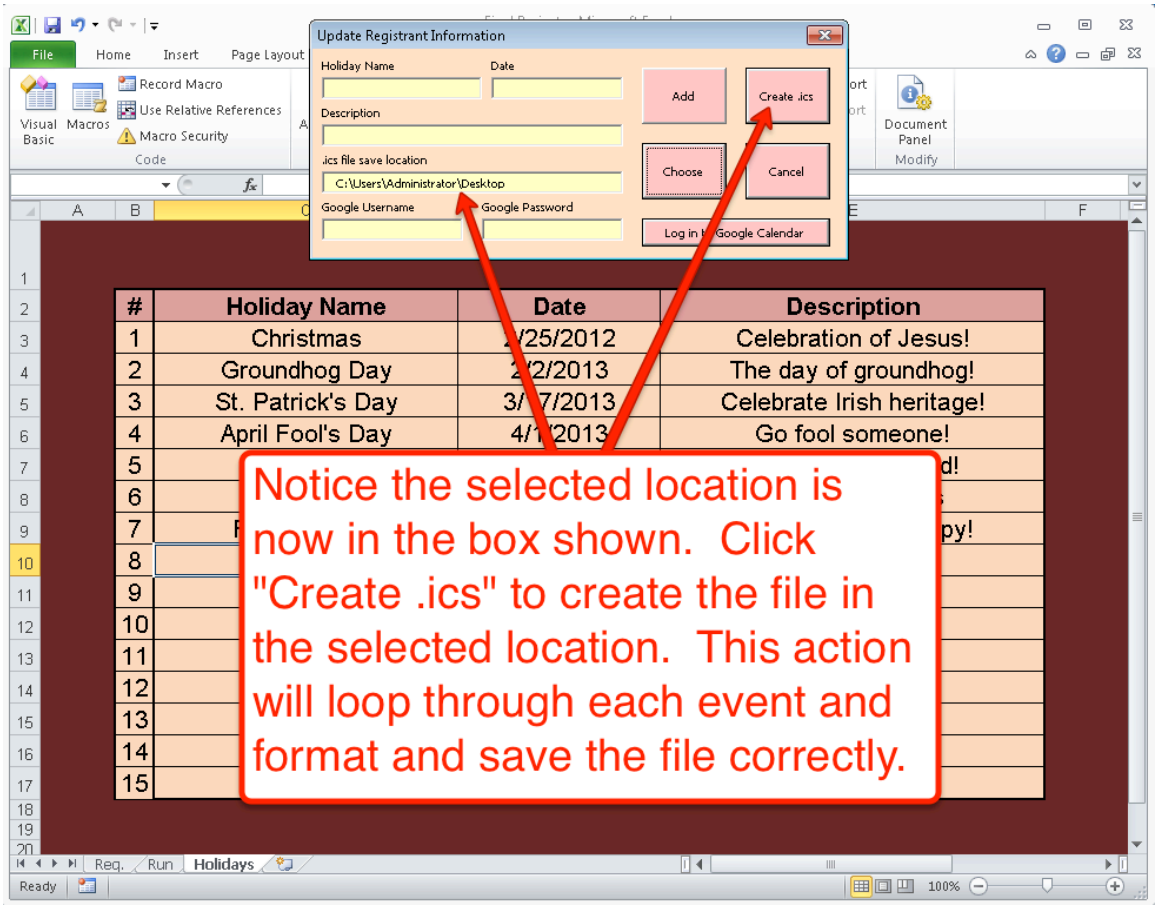

Final Project - Microsoft Excel
Update Registrant Information
Holiday Name
Date
Description
.ics file save location
Google Username
Google Password
Add
Create .ics
Choose
Cancel
Log in to Google Calendar
Nice interface pops up
Nice table to list holidays was created
Holidays

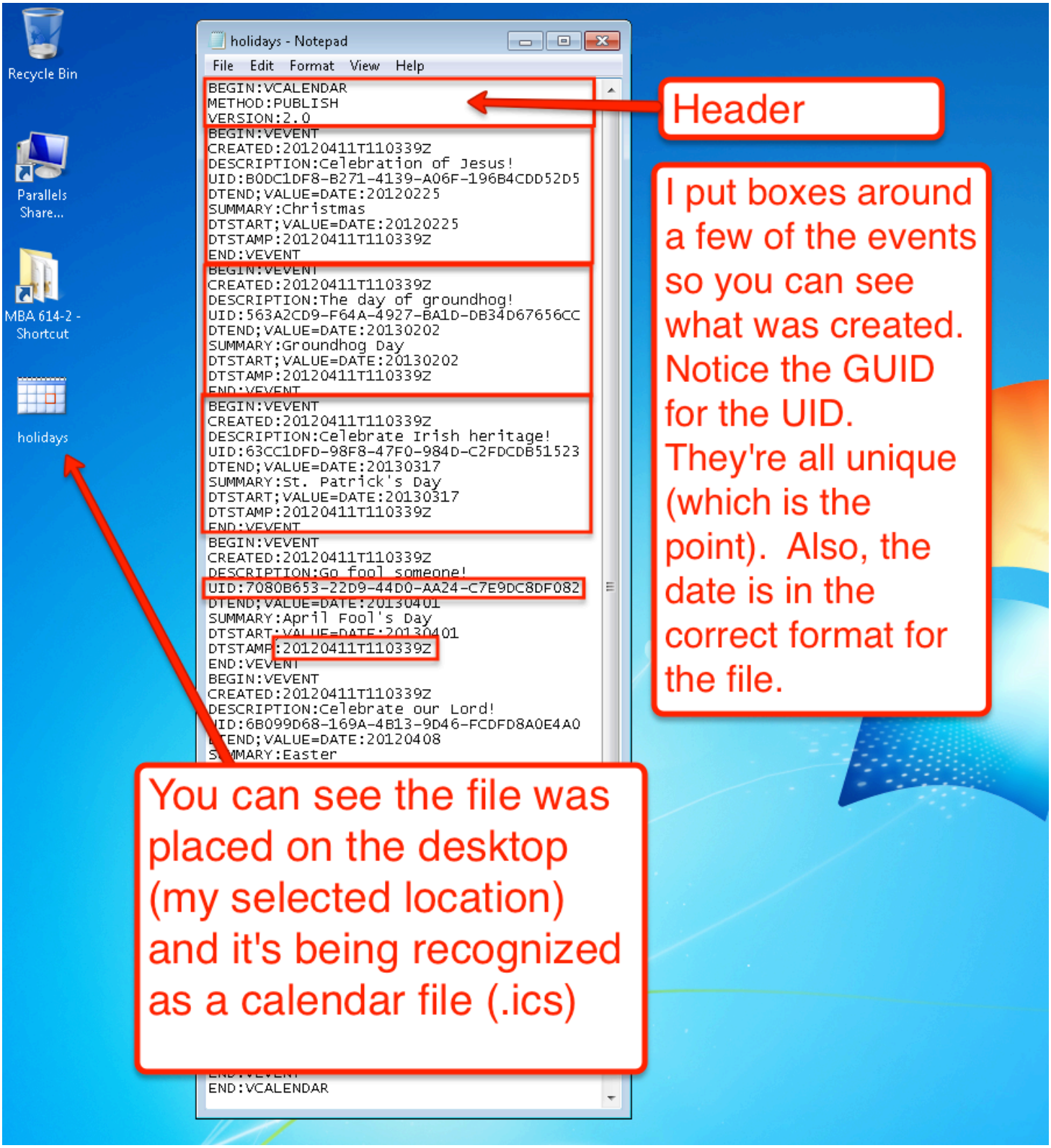

Update Registrant Information
Holiday Name
Christmas
Date
2-25-2012
Description
.ics file save location
Google Username
Add
Create .ics
Choose
Cancel
Log in to Google Calendar
Holiday Name
Description
Enter in a holiday name, date, and description. Then click "Add".

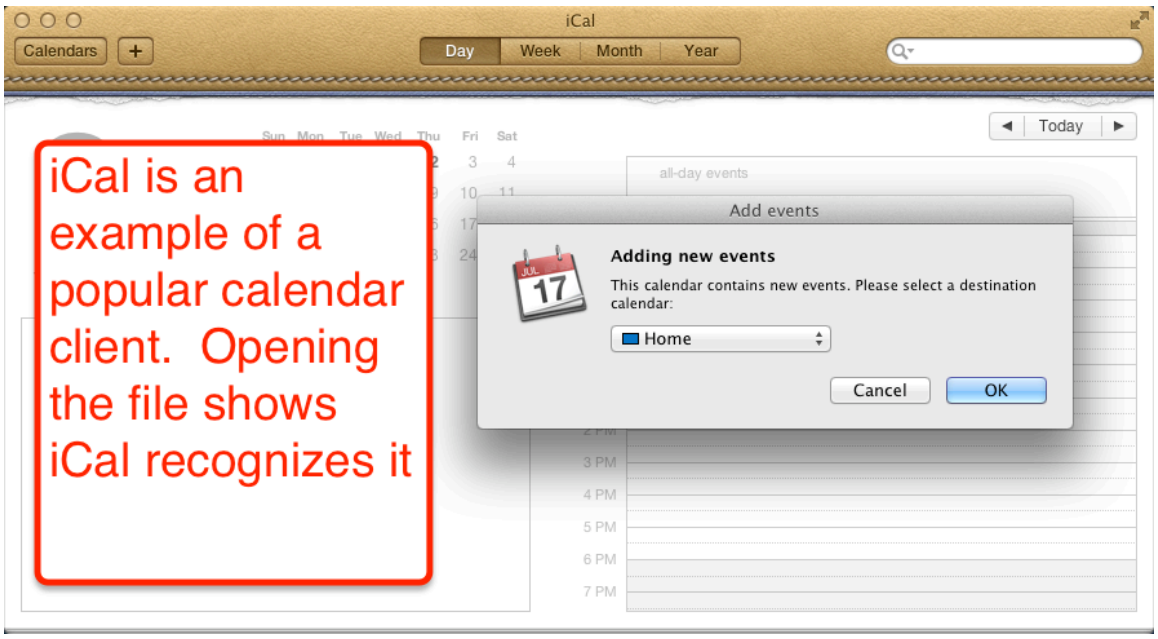

Update Registrant Information
Holiday Name
Date
Description
.ics file save location
Google Username
Google Password
Add
Create .ics
Choose
Cancel
Log in to Google Calendar
| Holiday Name | Date | Description
1 | Christmas | 2/25/2012 | Celebration of Jesus!
You'll notice that your holiday was added to the list and the used fields were cleared. Now repeat the process to fill up your holiday list!

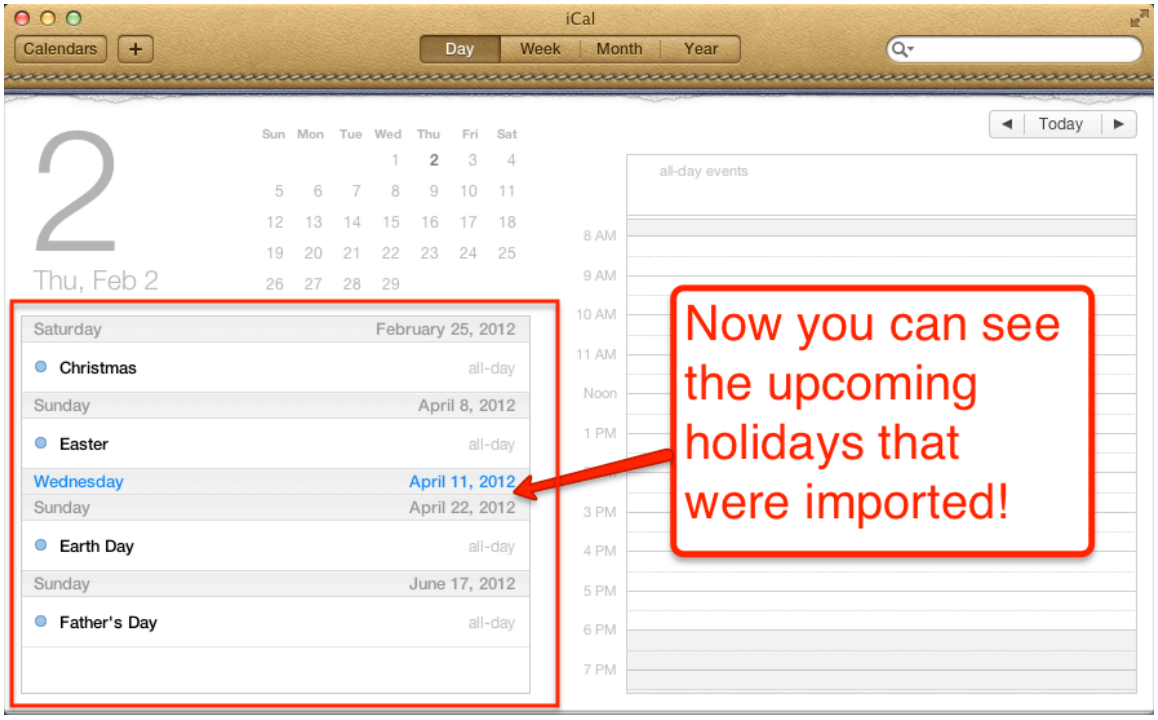

Update Registrant Information
Holiday Name
Date
Description
.ics file save location
Google Username
Google Password
Add
Create .ics
Choose
Cancel
Log in to Google Calendar
| Holiday Name | Date | Description
1 | Christmas | 2/25/2012 | Celebration of Jesus!
2 | Groundhog Day | 2/2/2013 | The day of groundhog!
3 | St. Patrick's Day | 3/17/2012 | Celebrate Irish heritage!
4 | April Fool's Day | 4/1/2012 | Go fool someone!
5 | Easter | 4/8/2012 | Celebrate our Lord!
6 | Earth Day | 4/22/2012 | A day for hippies
7 | Father's Day | 6/17/2012 | Remember your papy!
Once you're done adding any number of events click "Choose" to choose where you want to save your file.

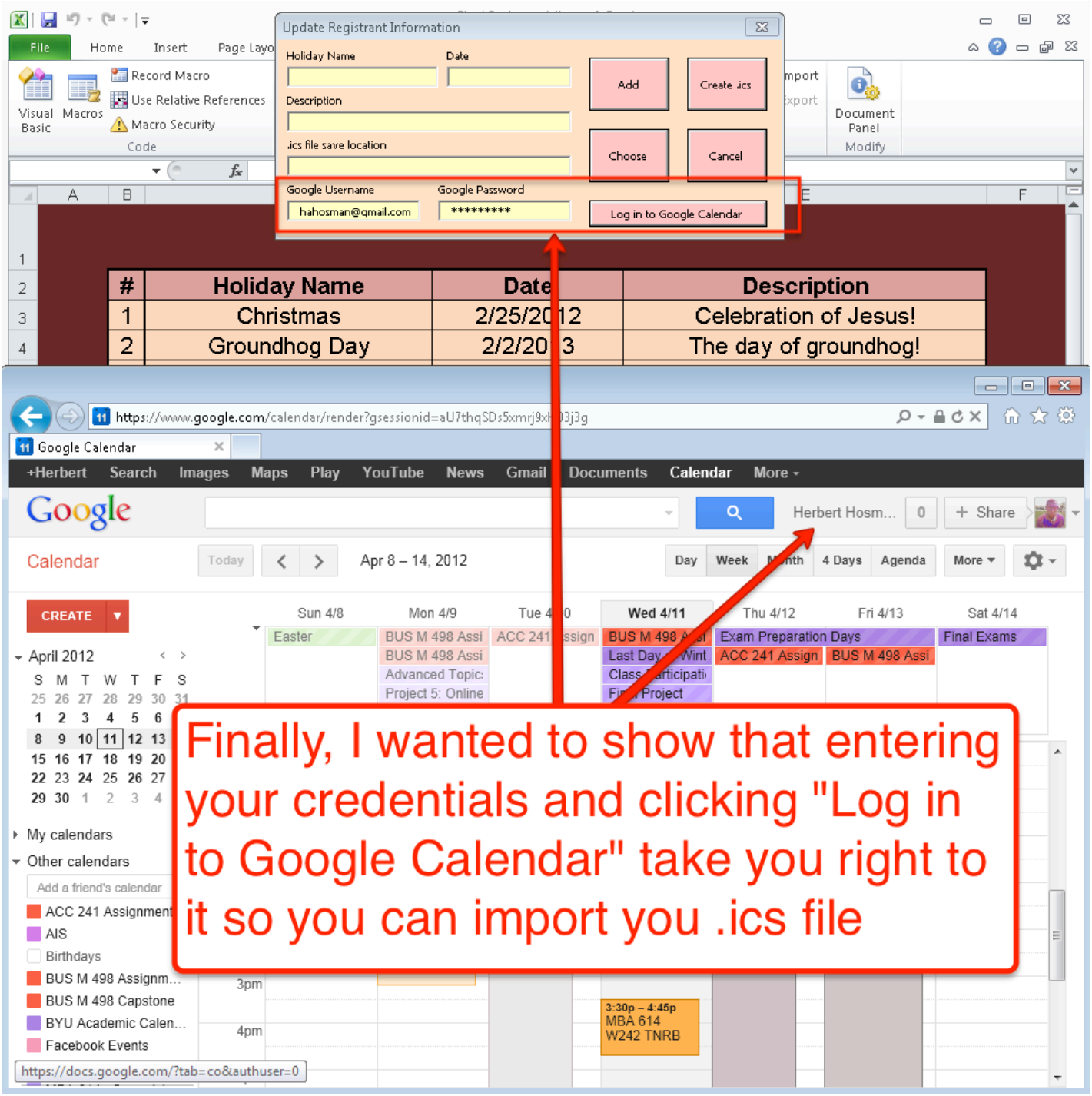

Browse
Desktop
Search Desktop
Organize
New folder
Microsoft Excel
Favorites
Desktop
Downloads
Recent Places
Libraries
Computer
Local Disk (C:)
Home on 'psf' (Z
Libraries
System Folder
Administrator
System Folder
Computer
System Folder
Network
System Folder
Parallels Shared Folders
Shortcut
Folder name: Desktop
Tools
OK
Cancel
Select your location and click "OK"


Update Registrant Information
Holiday Name
Date
Description
.ics file save location
C:\Users\Administrator\Desktop
Google Username
Google Password
Add
Create .ics
Choose
Cancel
Log in to Google Calendar
Holiday Name Date Description
1 Christmas 12/25/2012 Celebration of Jesus!
2 Groundhog Day 2/2/2013 The day of groundhog!
3 St. Patrick's Day 3/17/2013 Celebrate Irish heritage!
4 April Fool's Day 4/1/2013 Go fool someone!
Notice the selected location is now in the box shown. Click "Create .ics" to create the file in the selected location. This action will loop through each event and format and save the file correctly.


Recycle Bin
Parallels Share...
MBA 614-2 - Shortcut
holidays
holidays - Notepad
File Edit Format View Help
BEGIN:VCALENDAR
METHOD:PUBLISH
VERSION:2.0
BEGIN:VEVENT
CREATED:20120411T110339Z
DESCRIPTION:Celebration of Jesus!
UID:B0DC1DF8-B271-4139-A06F-196B4CDD52D5
DTEND;VALUE=DATE:20120225
SUMMARY:Christmas
DTSTART;VALUE=DATE:20120225
DTSTAMP:20120411T110339Z
END:VEVENT
BEGIN:VEVENT
CREATED:20120411T110339Z
DESCRIPTION:The day of groundhog!
UID:563A2CD9-F64A-4927-BA1D-DB34D67656CC
DTEND;VALUE=DATE:20130202
SUMMARY:Groundhog Day
DTSTART;VALUE=DATE:20130202
DTSTAMP:20120411T110339Z
END:VEVENT
BEGIN:VEVENT
CREATED:20120411T110339Z
DESCRIPTION:Celebrate Irish heritage!
UID:63CC1DFD-98F8-47F0-984D-C2FDCDB51523
DTEND;VALUE=DATE:20130317
SUMMARY:St. Patrick's Day
DTSTART;VALUE=DATE:20130317
DTSTAMP:20120411T110339Z
END:VEVENT
BEGIN:VEVENT
CREATED:20120411T110339Z
DESCRIPTION:Go fool someone!
UID:7080B653-22D9-44D0-AA24-C7E9DC8DF082
DTEND;VALUE=DATE:20130401
SUMMARY:April Fool's Day
DTSTART;VALUE=DATE:20130401
DTSTAMP:20120411T110339Z
END:VEVENT
BEGIN:VEVENT
CREATED:20120411T110339Z
DESCRIPTION:Celebrate our Lord!
UID:6B099D68-169A-4B13-9D46-FCDFD8A0E4A0
DTEND;VALUE=DATE:20120408
SUMMARY:Easter
END:VCALENDAR
Header
I put boxes around a few of the events so you can see what was created. Notice the GUID for the UID. They're all unique (which is the point). Also, the date is in the correct format for the file.
You can see the file was placed on the desktop (my selected location) and it's being recognized as a calendar file (.ics)


iCal
Calendars
Day
Week
Month
Year
Today
all-day events
Add events
Adding new events
This calendar contains new events. Please select a destination calendar:
Home
Cancel
OK
iCal is an example of a popular calendar client. Opening the file shows iCal recognizes it


iCal
Calendars
Day
Week
Month
Year
Today
all-day events
2
Thu, Feb 2
Saturday February 25, 2012
Christmas all-day
Sunday April 8, 2012
Easter all-day
Wednesday April 11, 2012
Sunday April 22, 2012
Earth Day all-day
Sunday June 17, 2012
Father's Day all-day
Now you can see the upcoming holidays that were imported!


Update Registrant Information
Holiday Name
Date
Description
.ics file save location
Add
Create .ics
Choose
Cancel
Google Username
Google Password
hahosman@gmail.com
****
Log in to Google Calendar
| Holiday Name | Date | Description
1 | Christmas | 2/25/2012 | Celebration of Jesus!
2 | Groundhog Day | 2/2/2013 | The day of groundhog!
Google Calendar
Calendar
Apr 8 – 14, 2012
CREATE
Finally, I wanted to show that entering your credentials and clicking "Log in to Google Calendar" take you right to it so you can import you .ics file

Further Notes

Here is a list of things I had to do to accomplish my project if the screen shots don't offer enough distinction.

- Create and design an ActiveX button to run the macro and call the form from the macro
- Create a macro to create, style, format, and name the holidays worksheet
- Create and design a form including naming the objects correctly to reference.
- Create a sub to add the holiday to the worksheet and go to the next open space
- Create a cancel button to exit the form (not in screenshots)
- Create script to open a file browser and return the selected location to a text field
- Create script to create the .ics file
    - Used references to worksheet
    - Looped through list of events, but stopped at the last event
    - Put it into the correct format for the .ics file, including changing a date format
    - Created a GUID for the UID
    - Opened with a header and closed with a footer
- Made sure it was compatible with Google Calendar, Outlook, and iCal.
- Using your agent class, opens a browser, goes to google calendar, and fills out the form and submits.

See code for additional detail.

Discussion of Learning and Conceptual Difficulties

This project was a pretty big roller coaster as I hinted to in the executive summary. I out with the idea to create calendar items on Google Calendar by using your agent class and taking them from excel. I quickly found out that is easier said than done. The brick wall I ran into was that Google Calendar uses so much JavaScript. This makes it hard to pin down id tags. This in turn makes it hard to navigate the page. Google no longer has a readily accessible html version that I could locate of Google Calendar. From there I pivoted to an .ics file because of an experience I mentioned earlier from an internship.

Besides that major thing, it was really just learning new things and filling in the pieces I missed when I wasn't in class. A few example of this are learning how to change date time formatting, writing to a file, learning how .ics files work, figuring out what's important in .ics file and what is client specific, creating a GUID and learning what it really is, using a file browser, manipulating a website, realizing what is JavaScript and what's not, etc.

I generally turned to the Internet for all of my answers and that worked really well. I did all the work and never worked with classmates. I found the project very difficult and time consuming. I spent 35+ hours on it. Overall, it was a great experience and really brought my understanding together and filled in the gaps. Thanks for the opportunity to do it. I hope you're feeling better by the time you read this Gove.