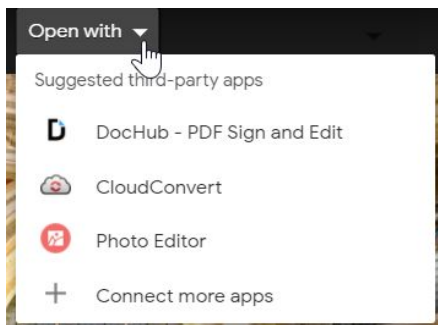
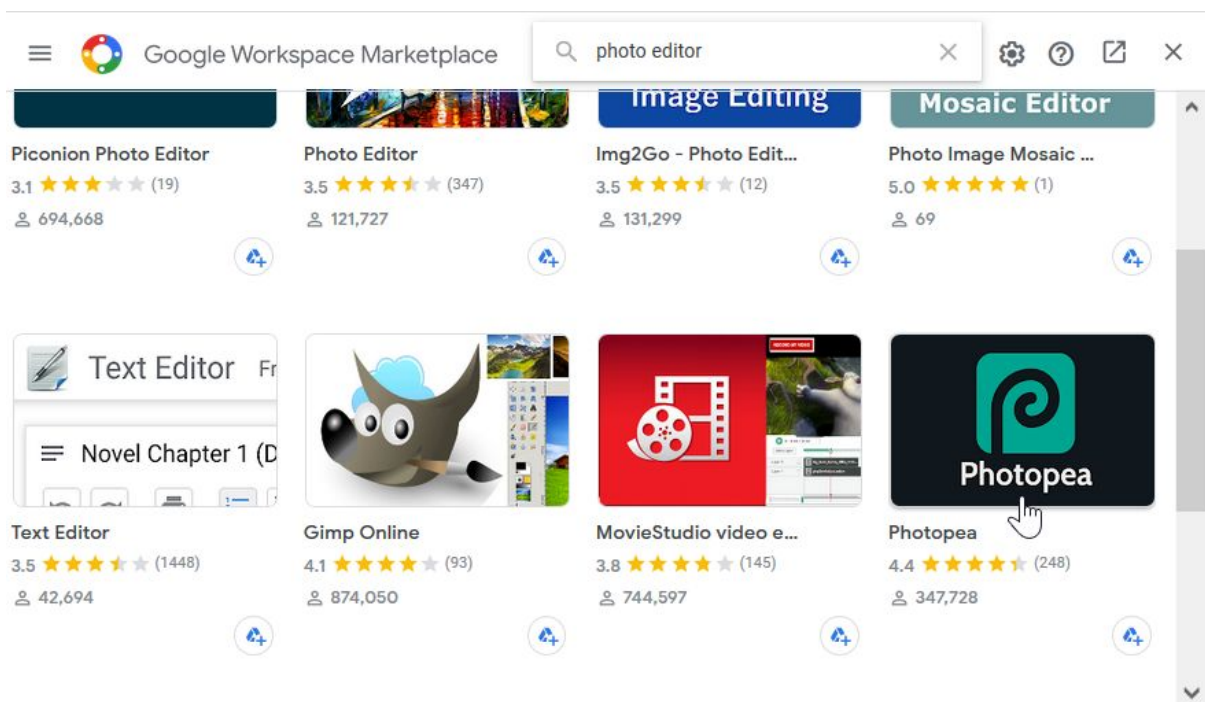


## Appendix A: Connecting to a Third-Party App (using Photopea)

1. **Double-click** on our image again to open it in **preview mode**.
2. **Click** on “**Open with**” at the top of the screen. We are presented with some suggestions for apps that can open this type of file.
3. However, instead of accepting one of the suggestions, we will search for an app ourselves. **Click Connect more apps**.

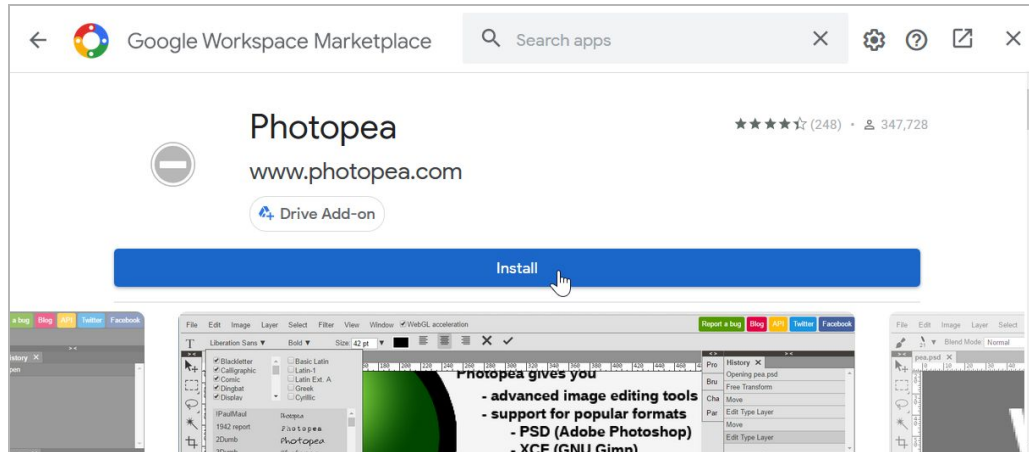


4. In the Search Box, **type photo editor** and **press** Enter.
5. **Find** the app called **Photopea** and **click** it. You may need to **scroll down**.

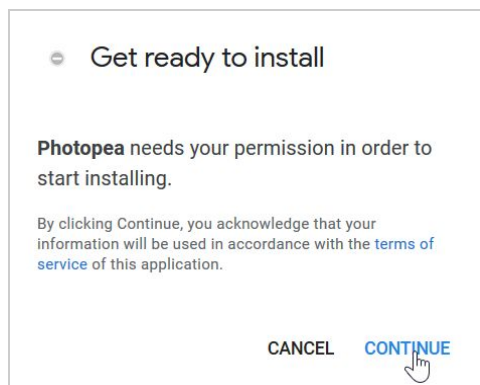


6. **Notice** the large, blue “Install” button. The wording for this button is a bit misleading. Nothing gets installed onto your computer’s hard drive, as would happen if we installed a more traditional software application. Because it’s a Google Drive app, nothing gets put on your hard drive. The app only lives in the cloud. “Installing” the app just means that you are giving the app permission to access your Google Drive files.

7. **Click** the blue **Install** button. This will connect this app to our Drive account.

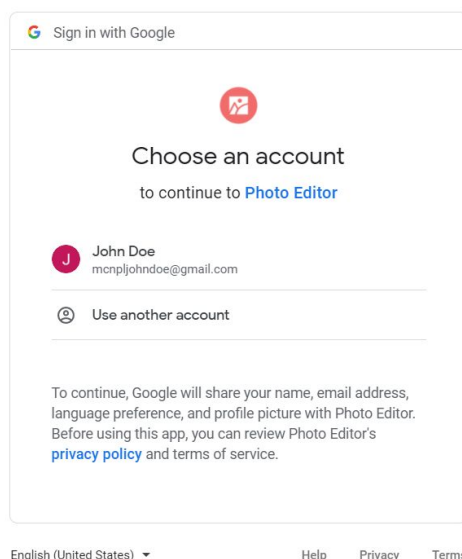


8. In order to install it, we must first give the app permission to access our Google Drive files. **Click** Continue.

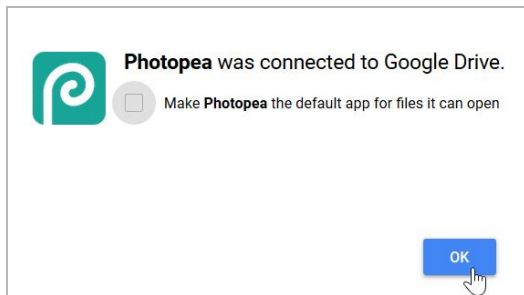


9. **Notice** a popup window appears.

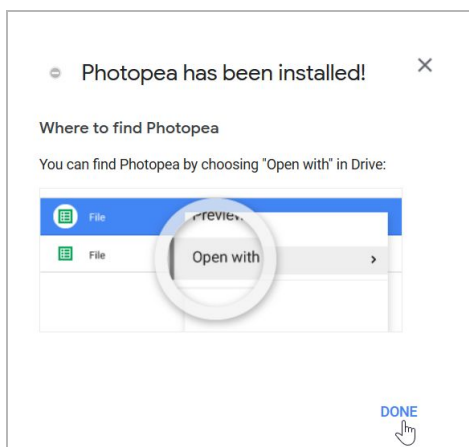
10. You may be asked to choose which Google Account you want to use (it is possible to be signed into multiple Google Accounts at once). **Click** on your Google Account.



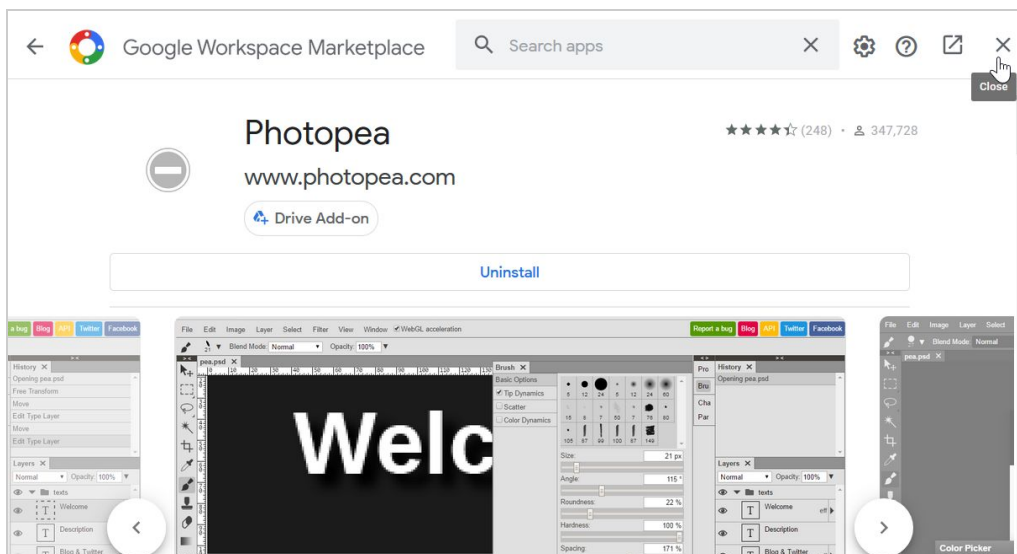
11. It then asks if it can be the “default app” for files it can open. Enabling this option would mean double clicking a photo in our Google Drive will instantly open it in the app instead of the Preview Window. We would prefer this remain unchanged, so let’s **uncheck** this setting and **click** OK.



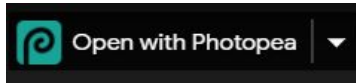
12. A message appears confirming that we connected the app to our account. **Click** Done.



13. We are returned to the Marketplace. **Notice** how the blue Install button has been replaced with a white Uninstall button. This means the app was successfully connected to our account. However, as we will see in a moment, the app isn’t fully connected yet. (Note that this is NOT how most apps work. Most apps would be fully set up by now.)



14. **Close** the Marketplace dialog.
15. We are returned to the Preview Window. **Notice** how it now says “Open with Photopea” at the top.



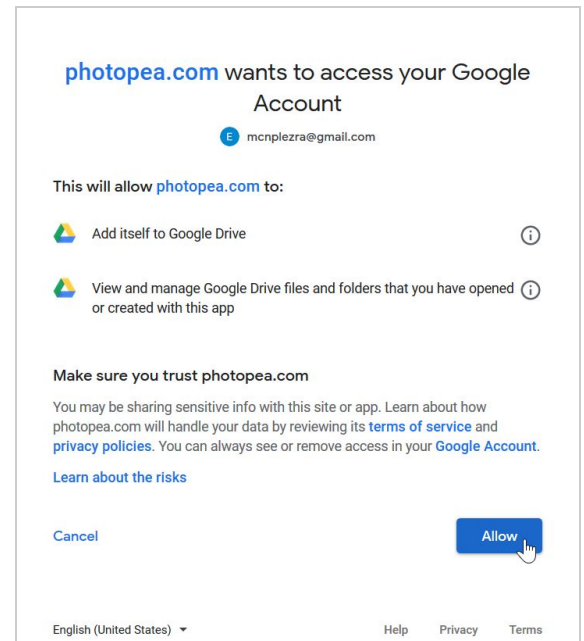
16. **Click** “Open with Photopea”.
17. **Notice** that Photopea opens in a **new tab**.
18. **Notice** how it hasn’t loaded our photo. This is because we are not done setting up the app (this is unusual--most apps would be set up by now!).
19. **Notice** the yellow bar at the top of the screen. The browser has blocked a popup window from appearing. **Click** Options, then **click** the last option in the list.



20. It asks you to select a Google Account. **Click** on your Google Account.

21. Next, it shows us a complete listing of the permissions the app will be given.

- a. It is **very important** to review these permissions to make sure the app is not requesting too many. Apps can abuse their permissions by using them to steal or otherwise tamper with your data. The permissions that this particular app is requesting is normal, but some apps may request overly intrusive permissions.
- b. **Notice** the message at the very bottom. It warns us that we may be sharing sensitive data with the app. Remember that this is a third-party app not created by Google. We will talk more about app permissions later.

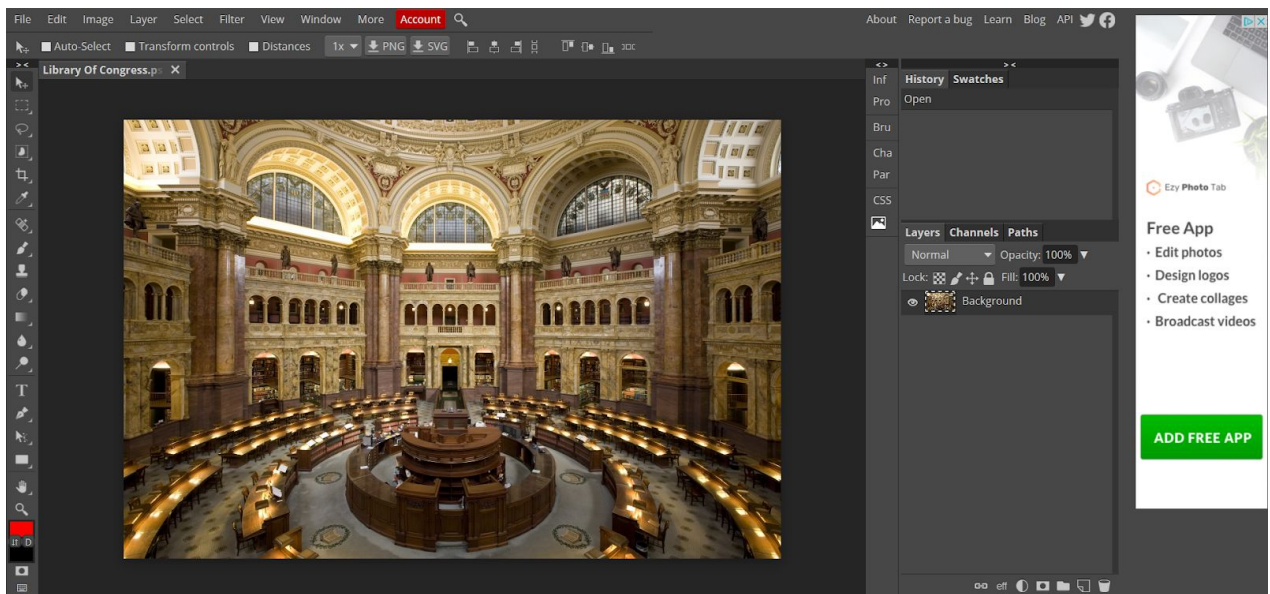


22. **Click Allow**.

23. We are returned to the Photopea app. **Notice** how it STILL is not showing us our photo. This is because, when the app first opened, it wasn't fully set up.

24. **Refresh** the browser tab to reload the app.

25. **Notice** how our photo now appears. We can now edit it using the app.



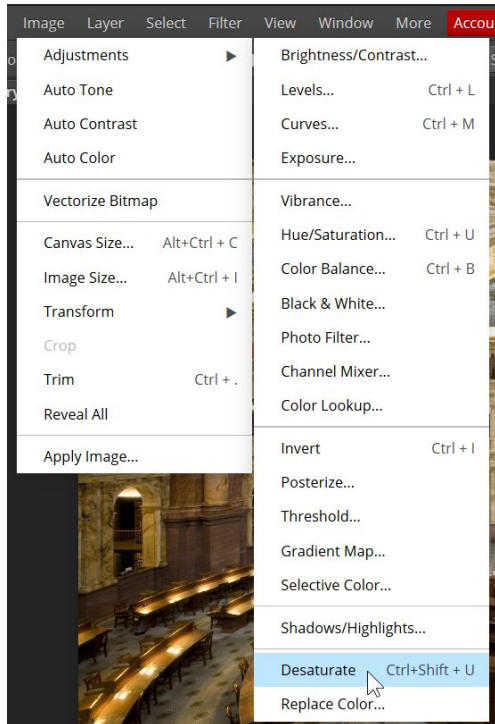
**Why is this app free?**  
They make money from the advertisements they display on the app.



26. Next, we are going to apply an effect to our image.

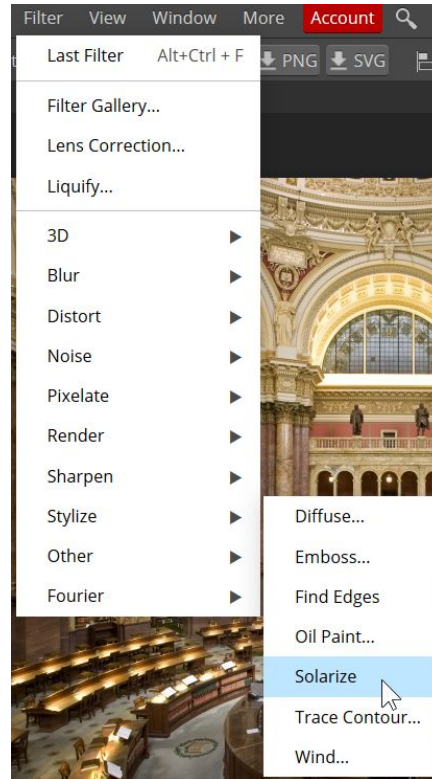
**LEFT partner picks:**

**Image > Adjustments > Desaturate**

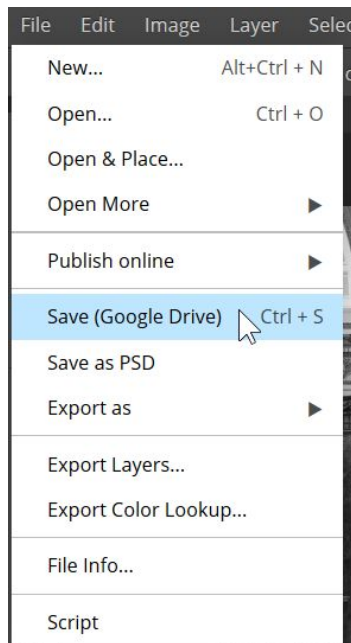


**RIGHT partner picks:**

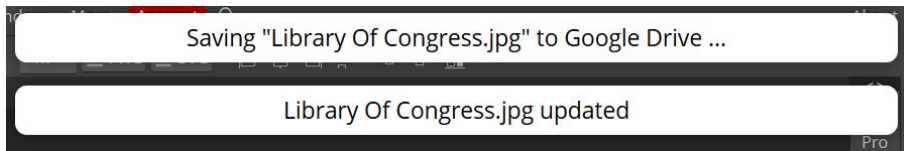
**Filter > Stylize > Solarize**



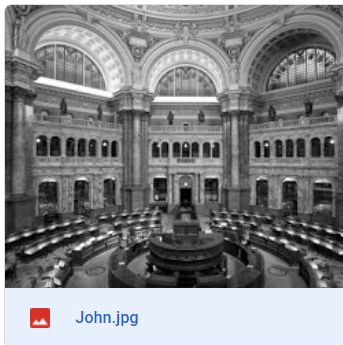
27. Now we have to save our changes. **Click** File, then **click** Save (Google Drive)



28. **Notice** the messages that appear briefly at the top of the screen, which confirm that the changes were saved.



29. Now that we are done editing the image, **close** the **browser tab**. This will return us to the browser tab that has our Google Drive files in it.
30. **Notice** how the image file thumbnail has updated to show the changes we just made to our image. This confirms that our changes were indeed saved.



31. **Remember**, it may take a few seconds for the thumbnail to **sync** with the cloud and update. If the thumbnail does not update after thirty seconds, try doing a **browser refresh**.

## Appendix B: URL Shorteners (bitly.com)

If we wanted to share the shareable link of our food list with somebody over the phone, or write it down on a napkin at a dinner party, we simply wouldn't be able to because the link is so long.

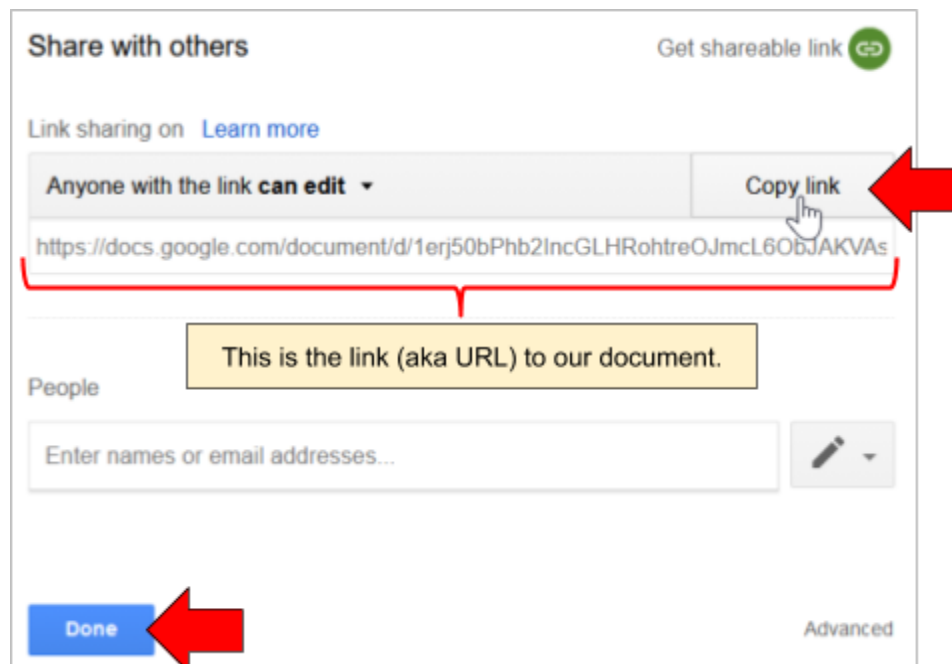
A **URL shortener** can be used to make long URLs much shorter. There are many URL shortener services on the Internet, and many of them are free. We will be using one of the more popular ones called **Bitly**.

**Teacher's Note:**  
If Bitly doesn't work, use TinyURL.com



**First, we need to get the shareable link of our food list and copy it to the clipboard.**

1. **Click** on the file to select it.
2. **Click** the **Share** button in the Options Bar to open the file's sharing settings.
3. In the previous section, we created a shareable link for this file, and assigned edit permissions to the link, so it is already configured to be shareable.
4. **Notice** how **long** the link is. It would be very difficult to read this over the phone or write it down.
5. **Click** the **Copy link** button to copy the link to the clipboard.
6. **Click Done** to close the dialog box.





Now we are ready to create the shortened URL.

1. **Open** a new browser tab.
2. **Type** “bitly.com” into the Address Field and **press** .
3. **Paste** the **URL** of the holiday party document you previously copied into the textbox on the page.
4. **Click** the **Shorten** button.



5. **Notice** the shortened URL appear after a moment (in two places). **Notice** how much shorter it is.



6. **Note** that the URL might **look strange** because it doesn't begin with “www” or have a “.com” in it, but rest assured it is a valid URL.
7. **Also note** that **shortened URLs are case-sensitive**. This means if you type a lowercase letter when you should have typed an uppercase letter (or vice versa) the URL **will not work**.
8. Finally, **note** that, when giving this shortened link to somebody, you do not need to include the **https://** part. Web browsers will automatically add this, so it is not necessary to know.

**Next, we are going to practice how we would share this URL with somebody by writing it down and giving it to our partner.**

1. On the back of your sign-in slip, **write down** the URL, keeping the following things in mind:
  - a. You do not need to write the “https://” part. Start writing at the first “b”.
  - b. Remember to differentiate capital letters from lowercase letters.
2. **Swap** slips with your partner.
3. **Open** a new browser tab.
4. **Type** your partner's URL into the Address Bar of the browser.
5. **Press**  to go to the URL.
6. **Confirm** that it has taken you to the document.
  - a. If you get an error, you may have typed it wrong or your partner may have written it down wrong.
7. **Notice** how the shortened URL has **disappeared** from the Address Bar. This is normal behavior. The shortened URL has **redirected** us to the full URL.