



## GIS Career Awareness Learning Module

Version 1.0 August 18, 2008

### Your Family Tree Page – GIS Application

- **Estimated Time:** 1.5 Hours
- **Learning Goal:** This module will introduce the application of GIS by using Google products. Students will have the opportunities to learn to create their own interactive web map through Picasa and their own webpage based on Google Page. The intended goal of all of the module's learning activities is to demonstrate to students how useful it would be to spatially represent data and imagery on computerized maps (computer/digital cartography).
- **Platforms:** PC, Mac, or UNIX.
- **Software Tools Required:** Web browser with high-speed Internet access.

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**ANSWER ALL QUESTIONS ON THE SEPARATE  
ANSWER SHEET**

## Section One - Google Email Account Creature

You will have to sign up for a GMail account to register for all Google services such as Web publishing space and a Google Maps API “Key.” As a bonus, you will be able to keep and use this GMail Account well after you complete this Family Tree Learning Modules.

Please follow these instructions even if you already have a GMail account. This way, your teacher/instructor can easily review and grade your work.

1. Launch your favorite Web browser and be sure that it is able to access the Internet.
2. Navigate to <http://www.gmail.com>
3. Click on the link, “Sign up for Gmail” on the bottom right-hand side of the page (Figure 1).



**Figure 1:** Sign up for Gmail Account -1

4. Please fill out the text fields on the page showed below and answer the questions A-1, A-2, and A-3 on the separated answer sheet (Figure 2, 3).

## Create an Account

Your Google Account gives you access to Gmail and [other Google services](#). If you already have a Google Account, you can [sign in here](#).

### Get started with Gmail

First name:

Last name:

Desired Login Name:  @gmail.com  
Examples: JSmith, John.Smith

**cara.Johnson.gis** is available

Choose a password:  [Password strength:](#) **Good**  
Minimum of 8 characters in length.

Re-enter password:

Remember me on this computer.

Creating a Google Account will enable Web History. Web History is a feature that will provide you with a more personalized experience on Google that includes more relevant search results and recommendations. [Learn More](#)

Enable Web History.

**Figure 2:** Sign up for Gmail -2

NOTE: Please UNCHECK “Remember me on this computer” and “Enable Search History” in order to protect your privacy! Remember your password; you’ll need it to log on your Gmail account in the future.

*A-1: Please write down the first name you’ve filled in. (Example: Cara)*

*A-2: Please write down the last name you’ve filled in. (Example:*

*Johnson)*



*A-3: Please write down the “Designed Login name” you’ve filled in. If it is NOT available, try to adding a number to the end of the Desired Login Name. (Example: cara.Johnson.gis)*

**Security Question:** What was your first teacher's name  
If you forget your password we will ask for the answer to your security question. [Learn More](#)

**Answer:** Ann

**Secondary email:** familytree.sdsu@gmail.com  
This address is used to authenticate your account should you ever encounter problems or forget your password. If you do not have another email address, you may leave this field blank. [Learn More](#)

**Location:** United States

**Word Verification:** Type the characters you see in the picture below.  
  
tiolanices   
Letters are not case-sensitive

**Terms of Service:** Please check the Google Account information you've entered above (feel free to change anything you like), and review the Terms of Service below. [Printable Version](#)

Google Terms of Service  
Welcome to Google!  
1. Your relationship with Google

By clicking on 'I accept' below you are agreeing to the [Terms of Service](#) above and both the [Program Policy](#) and the [Privacy Policy](#).

**Figure 3:** Sign up for Gmail -3

NOTE: To protect your Privacy, you don't need to fill out your secondary email.

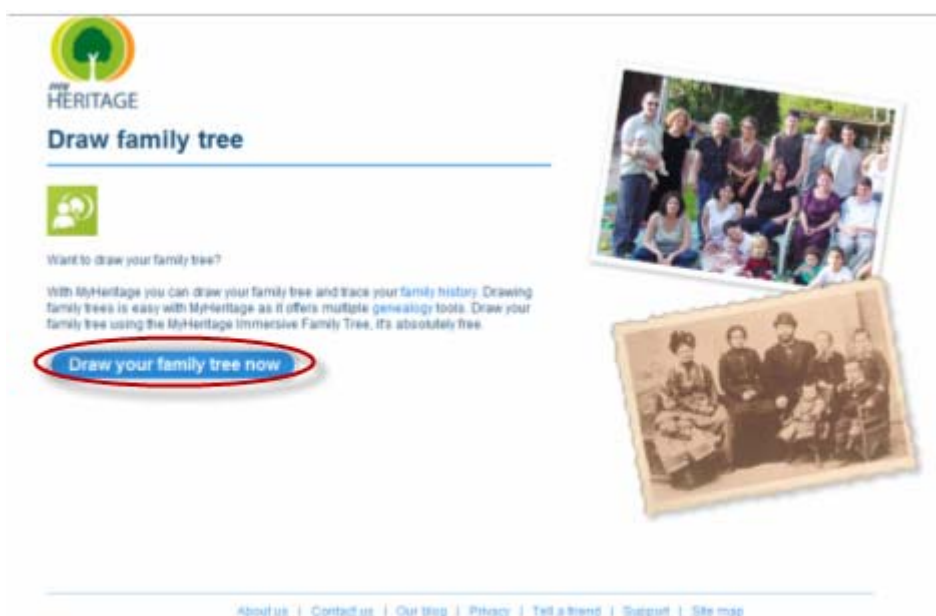
Please press the "I accept. Create my account." button at the bottom of the page. If all goes well, you will get a "Congratulations!" indicating your GMail account has been successfully created.

On your own time, from now on, you can log on to your GMail account from any computer. Just navigate to <http://www.gmail.com> and type your Login Name and Password (from above), then click on the "Sign in" button to access your GMail account. GMail has a lot of cool features. When you have a chance, try to learn how to use it. For the purposes of this learning module section, we only need to account to sign up for Picasa and Web publishing space.

## Section Two – Family Tree File Creature

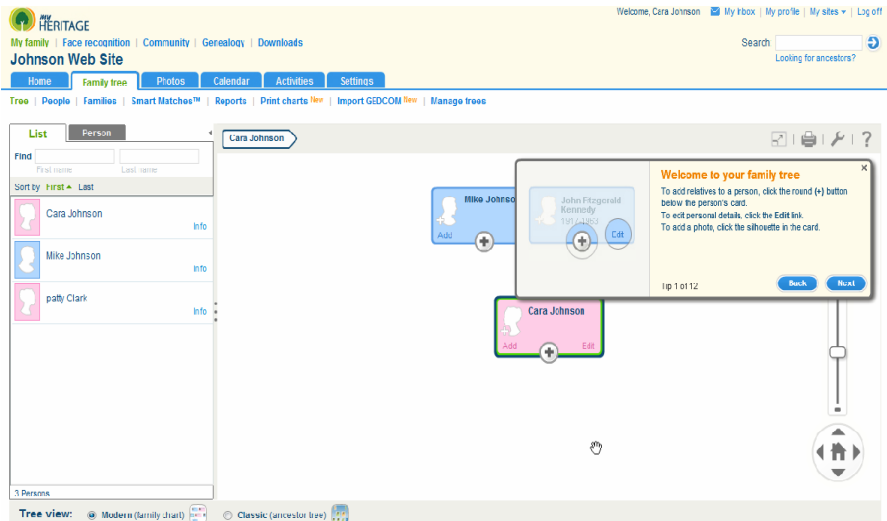
A family tree is a chart that represents family relationships in a conventional tree structure form, which is broadly used in the study of genealogy. The longest family tree in the world is that of Confucius (551-479 BC), the Chinese philosopher and educator. His family tree spans more than eighty generations and includes more than two million members. The study of genealogy is never easy, until the widespread use of internet and computers today. Many software and websites provide the way to create family tree. In our module, we will use a free online website “My Heritage” to draw your family tree. After creating your family tree, you need to save it as a PNG file to publish this image on your own Google Page later.

1. Launch your favorite Web browser and be sure that it is able to access the Internet.
2. Navigate to <http://www.myheritage.com/page/draw-family-tree>.
3. Click the “Draw your family tree now” button on the bottom of the page (Figure 4).



**Figure 4:** My Heritage Website

4. Follow the instructions of the website and create your own family tree (Figure 5) and answer questions A-4, A-5, and A-6 on the separated answer sheet. Please limit your family members' number to ten in our module activities. You're free to add more members to your family tree and edit it on this website in the future.



**Figure 5:** Creating Your Family Tree

*A-4: Please write the names of your family members listed on the family tree and simply introduce them, especially their migration. You'll need this to develop your own web page later.*

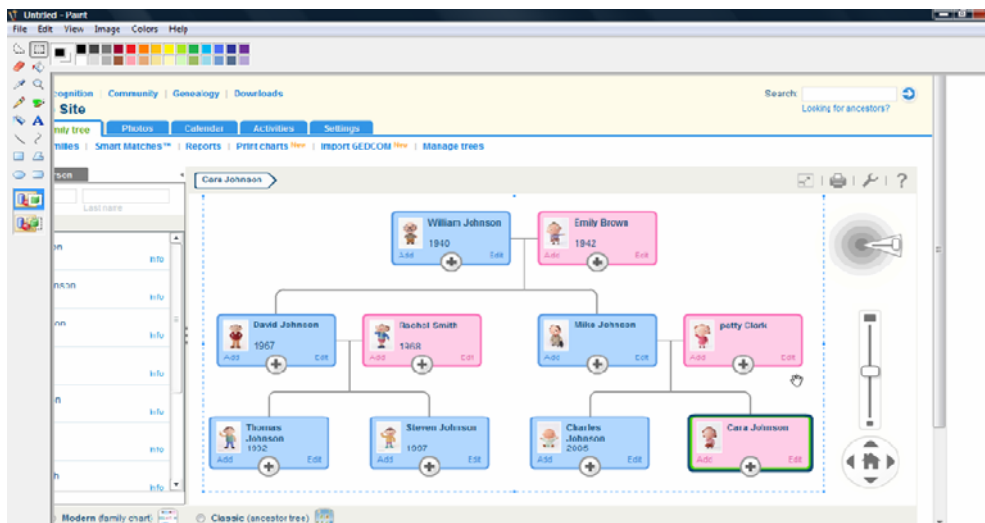
*(Example: My name is Cara Johnson. My little brother Charles and I were both born in San Diego and we live with our parents here. My father Mike met my mom Patty Clark when he was going to university at New York. When they married, they moved to San Diego and live here till now.*

*My grandpa William Johnson and grandma Emily Brown are living in San Francisco now. Grandpa always said that he has visited many countries and almost everywhere in America, but San Francisco has the greatest bridge in the world - the Golden Gate Bridge, and he wanted to retire there. Now, he and grandma have finally stopped here.*

*My uncle David, his wife Rachel Smith, and their younger son Steven live in Salt Lake City. Their older son Thomas is in Texas. Thomas is a genius. He is only 16 years old, but he is in his freshman year. )*

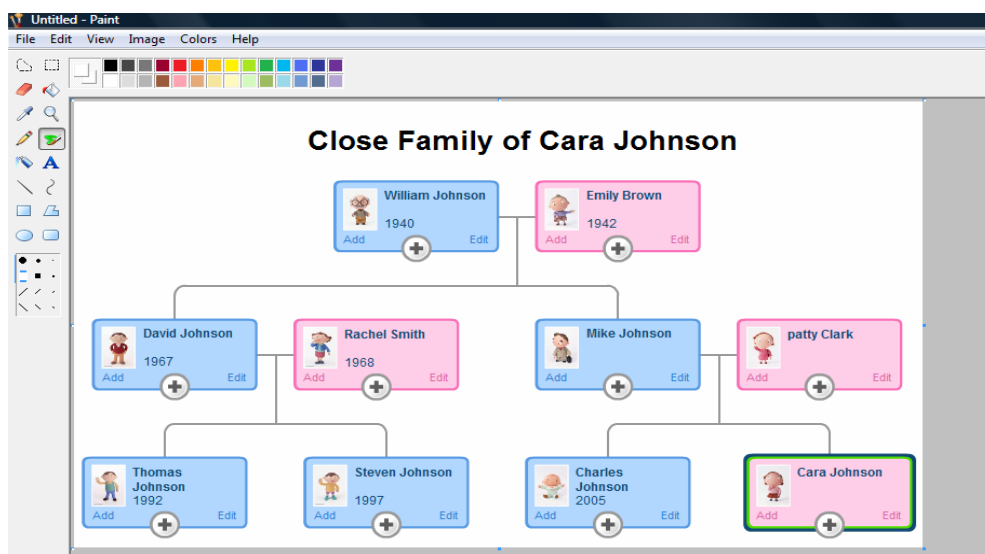
You need to save your family tree as a PNG file now. In our module, we choose to use the ‘Paint’ function bundling with Windows System to edit and save the image. If other software is available to do this on your computer, you’re free to use them.

5. When finish creating your family tree, you are going to save a PNG file of your family tree.
  - Move it to the center of the screen.
  - Press the “PrtSc SysRq” key on the keyboard.
  - Use the “Start” Button. (Start>All Programs>Accessories>Paint)
  - Go to the “Edit” pull-down menu and press “Paste” (Figure 6).



**Figure 6:** Edit the Family Tree Image in “Paint” - 1

- Cut and edit the image (Figure 7).



**Figure 7:** Edit the Family Tree Image in “Paint” – 2

- Go to the “File” pull-down menu and press “Save as”. Choose the save type as PNG file.

*A-5: Please write down the name of your family tree image.*

*(Example: Close Family of Cara Johnson)*

*A-6: Please write down the route you save your family tree image.*

*(Example: F:/San Diego State/Project/Family Tree Module)*

### **Section Three –Geo-tagging your family members on Picasa**

After creating a Google account in section one, we can use the Google web photo album Picasa now. Picasa web album is a free Google application which provides 1 GB free space for everyone to upload, edit, and geo-tag their photos on the web. In this section, you’ll upload your members’ photos to Picasa and geo-tag these photos on the Google map.

**Part I:** Uploading the photos of your family members to Picasa

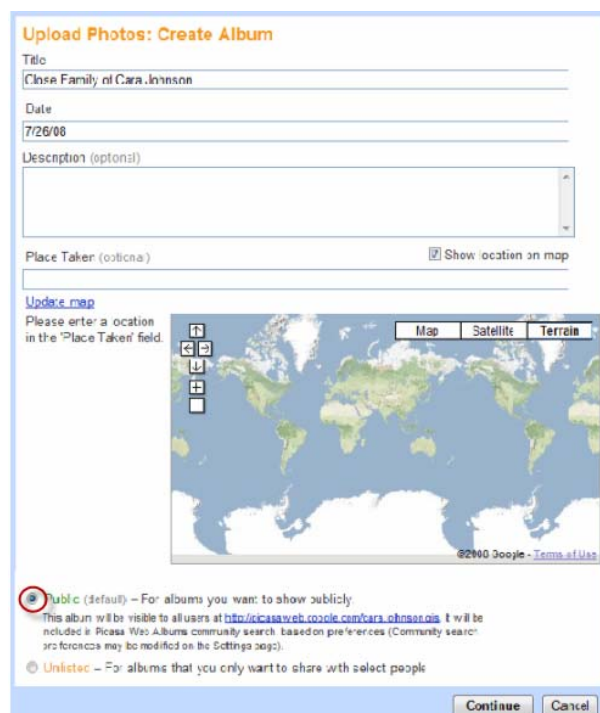
1. Launch your favorite Web browser and be sure that it is able to access the Internet.
2. Navigate to <http://picasaweb.google.com> and log in with your Gmail account.
3. Click “upload” button, to create an album and upload photos (Figure 8, Figure 9).





**Figure 8:** Upload Photos to Picasa – 1

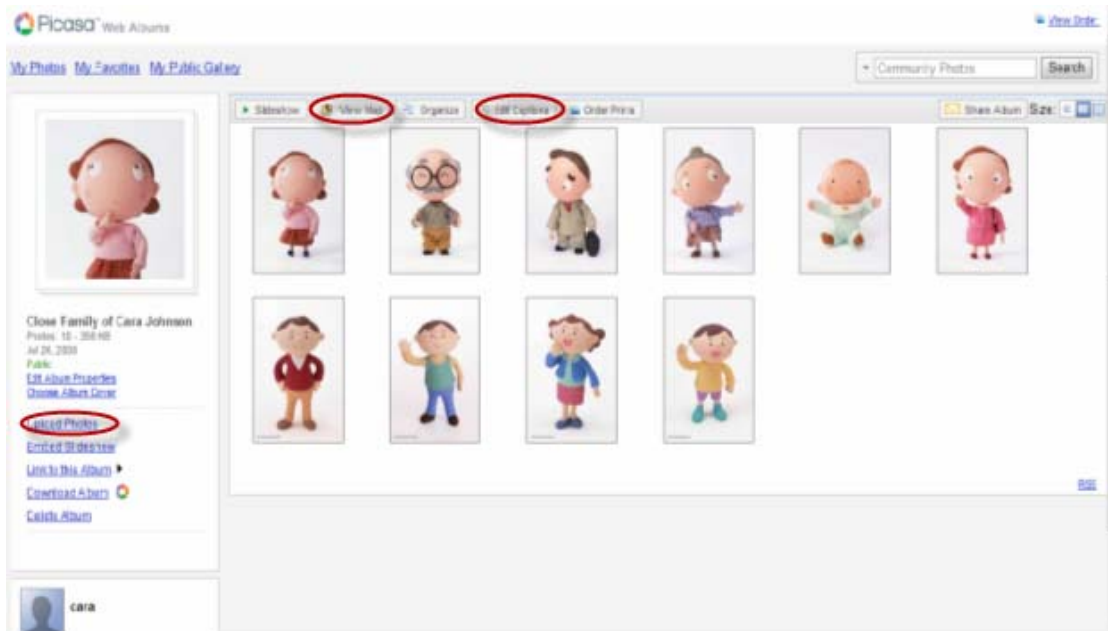
NOTE: You do NOT need to download Picasa software for uploading your photos. Just by clicking a “upload” button, as shown in Figure 8, you can create an album and upload photos. If this is not your first time to log in Picasa, the screen will be a little different with Figure 8.



**Figure 9:** Upload Photos to Picasa - 2

NOTE: Fill out the form and choose the “Public”, then more people can see your album and your teacher can record your grades.

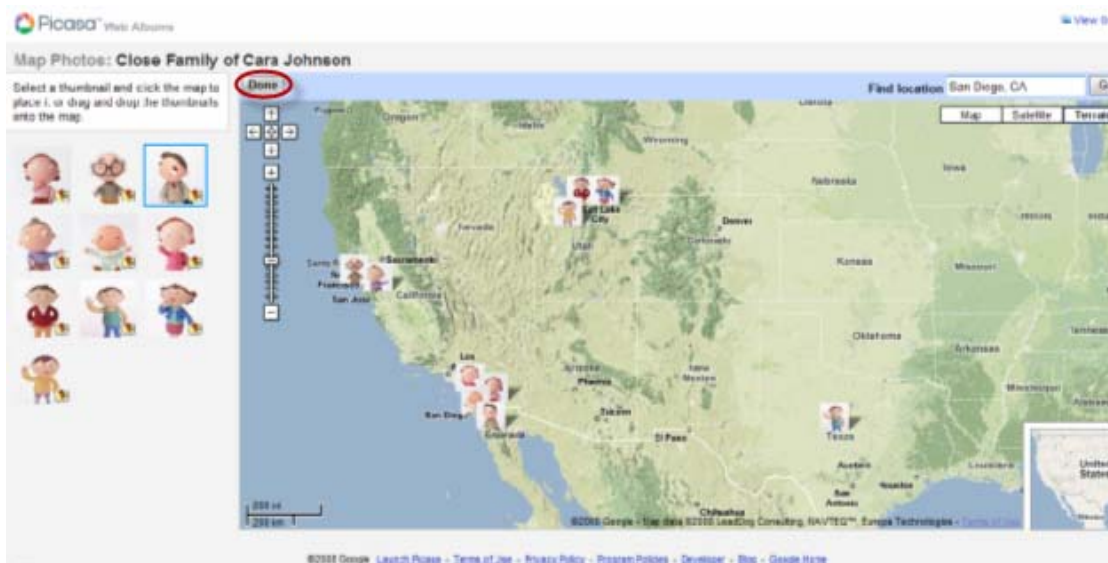
4. When finish uploading, you will see figure 10 as below. You can use “Edit Captions” button to edit each photo and use “upload photos” button to upload more photos in the future.



**Figure 10:** Upload Photos to Picasa – 3

**Part II:** Geo-tagging your family members on Google map

5. Press “View Map” button in figure 10. You’re free to choose different map types (e.g. map, satellite, or terrain) as the background.
6. Drag each photo of your family members to where they live now. You can use the zoom in or zoom out button to locate the photos (Figure 11).



**Figure 11:** Geo-tagging your family members’ photos

7. Click “Done” button to save these geo-tagging information of your album.

Please answer the following questions on the separated answer sheet:

*A-7: Please write down the title of your web album.*

*(Example: Close Family of Cara Johnson)*

*A-8: Please write down the website of your geo-album. You should include the “http://” at the beginning also.*

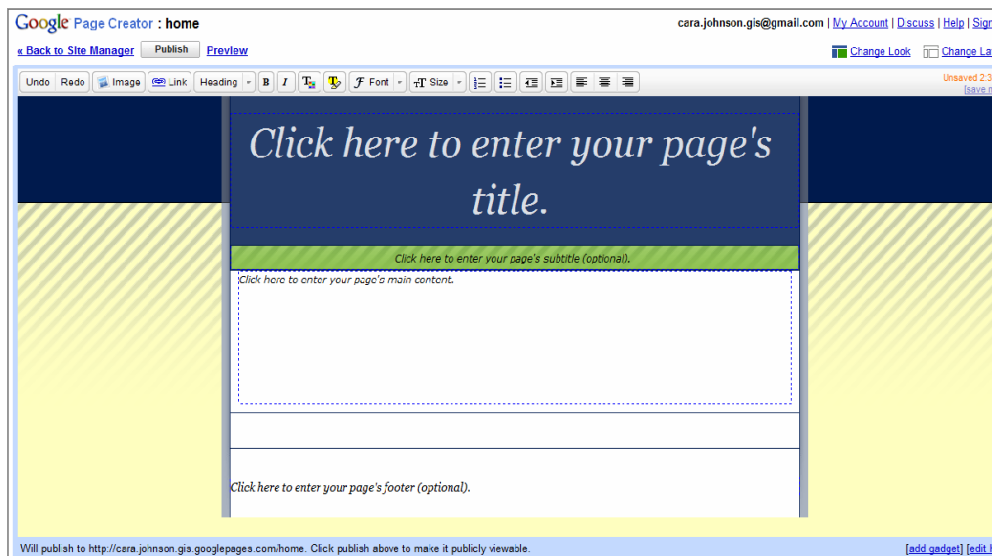
*(Example:*

*http://picasaweb.google.com/cara.johnson.gis/CloseFamilyOfCaraJohnson/photo#map)*

#### **Step 4: Web Publishing**

You will need to obtain web space to publish your own web page and Google page provide such a free platform. This will be your own website as long as you want to keep it; but, you will need to follow the steps in this learning module so that your teacher can grade it. Consult them with any questions about what you can or cannot do with your web space. Some things that you definitely should not do with your website include publishing copyrighted information or content such as videos, MP3s, manuscripts, and images that you do not have permission to copy or distribute. Additionally, do not publish anything containing any derogatory content.

1. Launch your favorite Web browser and be sure that it is able to access the Internet.
2. Navigate to <http://pages.google.com>.
3. Sign in to Google Page Creator using the same information from your GMail account.
4. Scroll to the bottom of the resulting Web page. Click on the checkbox and the button, “I’m ready to create my pages”.
5. A simple home page design will appear and you need to change a few things later (Figure 12).



**Figure 12:** Your Home Page

NOTE: Your page colors and text styles may be different from figure 12. Don't worry about this right now. You can customize your Website later. You will specifically need to add something similar to the following.

Please answer the following questions on the separated answer sheet.

**A-9:** *Please write down your page title.*

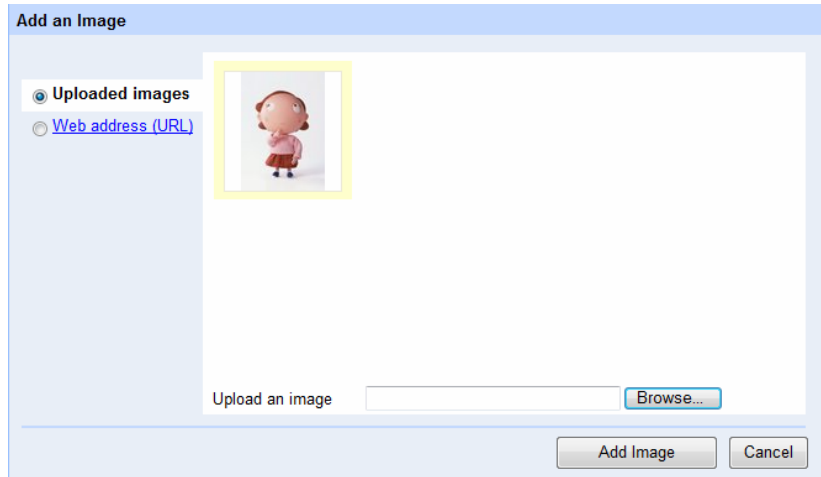
*(Example: Close Family of Cara Johnson)*

**A-10:** *Please write down your main content. You need to simply introduce your family members, especially their migration. You can refer to the question A-4 you've already finished.*

**A-11:** *Please write down your page's footer. (Hint: the bottom part of your Web page tells viewers a little about the purpose of the Website or the copyright)*

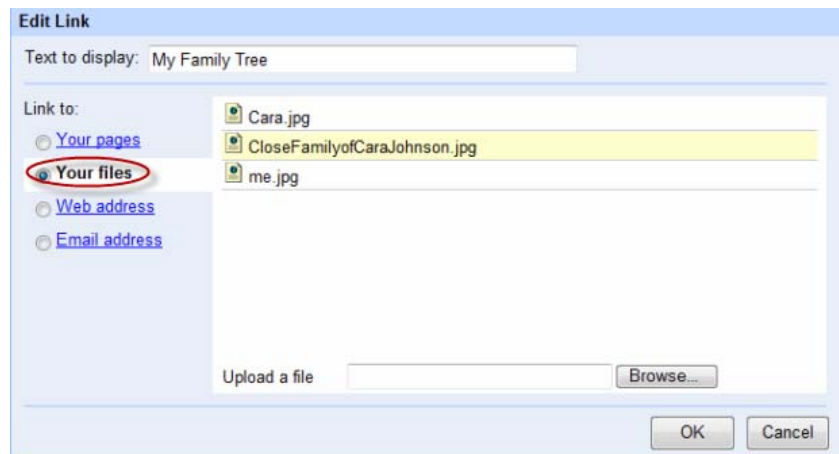
*(Example: © Department of Geography, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182)*

6. Upload your own photo onto your page and create links to your family tree image and geo-album map.
- Press the “Image” button to upload your own photo (Figure 13).



**Figure 13:** Upload Your Own Photo

- Press the “Link” button and choose “Your file”, browse to the route you’ve saved in question A-6 (Figure 14).



**Figure 14:** Link to Your Family Tree Image

- Press the “Link” button and choose “Web address”, copy the answer you’ve finished in question A-8 (Figure 15).

**Edit Link**

Text to display:

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Link to:

- [Your pages](#)
- [Your files](#)
- [Web address](#)
- [Email address](#)

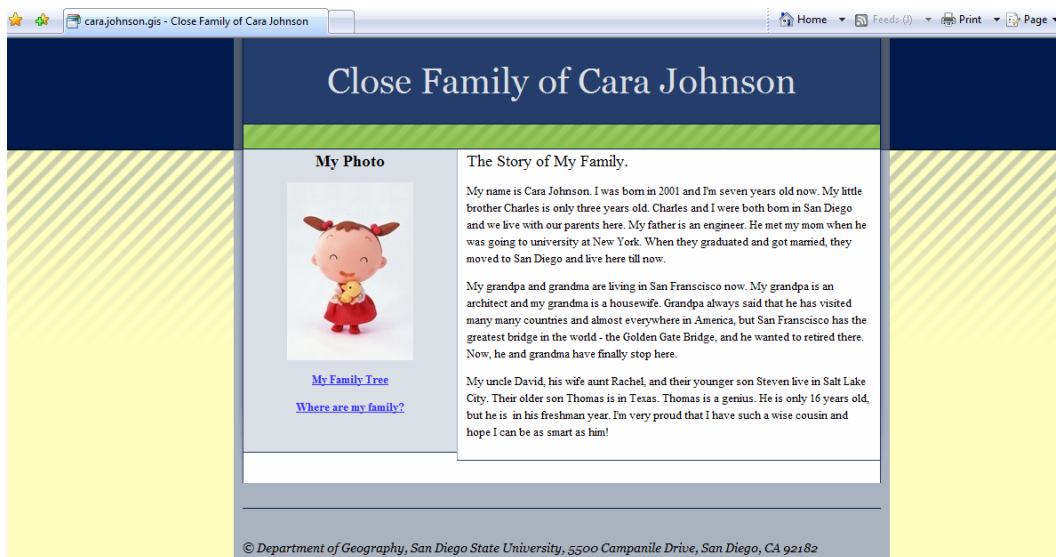
**To what URL should this link go?**

[Test this link](#)

Not sure what to put in the box? First, find the page on the web that you want to link to. (A [search engine](#) might be useful.) Then, copy the web address from the box in your browser's address bar, and paste it into the box above.

**Figure 15:** Link to Your Picasa web map

7. When finished editing, remember to press “Public” to save your web page. Press “view live” to see your own page on line (Figure 16).



**Figure 16:** Example of Your own web page

Please answer the following question on the separated answer sheet.

**A-12:** Please write down the website of your own web page.

(Example: <http://cara.johnson.gis.googlepages.com/home>)