

Creating your personal website

Installing necessary programs

Creating a website

Publishing a website

The objective of these instructions is to aid in the production of a personal website published on the Carnegie Mellon University website. This is an entry level document designed for Macintosh users.

[**http://andrew.cmu.edu/70-271-htmlman**](http://andrew.cmu.edu/70-271-htmlman)
Mac Edition

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Background Information

Every Carnegie Mellon student has a permission to access the **CMU network**, which is a local Internet connection. A local 'internet' is really an intranet, which is simply a network of local computers that includes one or more servers. While a public or global Internet space is a lot like a local intranet space, the primary difference being that the distance is longer. These spaces are still directories on hard drives (or perhaps entire hard drives) inside server machines. As with the intranet, the server's purpose of existence is to serve files out to client machines, in this case CMU students.

The CMU network provides each user with their own **Andrew Filing Space (AFS)** to store files and specifically a **www Directory**. The www directory is a storage directory inside a user's AFS space, which means that the www directory has to be inside the main user directory (same as the public, private, library, and bin directories). The purpose of the www directory is to give the user a place to 'put' their website, but the user must first register with the network.

Register for CMU network at: <http://netreg.net.cmu.edu/>

Spaces on the intranet, outside AFS are pre-allocated directories on the CMU server. These spaces are available to the user only because he or she has already been granted permission to access them (usually done via password and login). The servers themselves are simply computers, usually bigger and faster than what we use at home, with one purpose of existence: to serve out files over the network to client machines as client machines submit requests for those files. There's no real difference for the user between this and a public/global Internet space.

A user must have an authenticated identification on **Andrew** (the name given to the CMU server) with the **Unix host** before accessing their AFS space. Unix is an operating system, performing the same function as Windows XP, Mac OS9, OSX, etc. To access it from a Mac, you need a program that will allow you to log onto a Unix machine remotely (from a location other than the Unix machine itself). Once you log on using your **Andrew User ID** and **Password**, you should be able to use Unix command lines as if you were sitting at a Unix Terminal.

Andrew identification includes:

User ID: *YourAndrewID@andrew.cmu.edu*

User Password: *YourAndrewPassword*

Permission to access AFS, the server or any given user main directory is based on this password and login, but only Secure Copy (SCP) programs are now granted access for security reasons. CMU maintains security with access rights (like keys to held by a server administrator or directory administrator) that grant personal access rights to a directory by creating a login and password, which are tied to the security measures of that directory. Inside their AFS a user can store Webfiles collected from Internet websites. A website is composed of several elements including HTML text. The basic HTML based website takes a text file with the extension .html. This text file is essentially a formatted text document not unlike word documents, the difference being that it is written in raw text – meaning all formatting is done using raw text tags. Images on a website are brought into the text files using a formatting tag .

Section 1: Installing necessary programs

This section details procedures for setting up your internet connection and installing the necessary software.

Network registration (CMU wireless internet setup)

Installing *Geni*

Installing *Taco*

Installing *Fugu*

Network registration (CMU wireless internet setup)

- 1 Open Safari (**Applications** ⇒ **Safari**).
- 2 Let's check if you have network connection. In Safari: go to <http://www.yahoo.com>
Does the website appear in your Safari?
If **YES**, your computer is already registered and you can skip to the next page.
If **NO**, follow these steps:
- 3 In Safari: go to <http://www.cmu.edu/computing/downloads/certificates/>
- 4 Follow the instructions provided in the Safari page and install **Certificates** for your version of Mac OS as well as any browsers (such as Safari) that you use
- 5 In Safari: go to <http://netreg.net.cmu.edu/>
- 6 In Safari: click the green button **Enter** located at the bottom of the page. If you are prompted for a *User ID* and *Password*, type your *Andrew ID* and *Andrew Password* (the same ID and Password you use for your andrew email)



- 7 In Safari: click the blue link **Register New Machine** under the section **Registered Machines**.
- 8 In Safari: locate the dropdown box right of the label **Network**, under the section **Select the Network**.
- 9 In Safari: click the down-arrow of the dropdown box and select **Wireless Network**.
- 10 In Safari: click the **Continue** button to the right of the dropdown box.
- 11 In Safari: type your *computer name* in the text-field under **Hostname**.

NOTE: Your *computer name* can be any name you please, but since no two computers are allowed to have the same name on the network, it is recommended that you use your *AndrewID* followed by a one or two digit number.

- 12 Determine your *Hardware Address*.
 - i Minimize all open windows (-)
 - ii Click **Apple** ⇒ **System Preferences**
 - iii Click the **Network** icon
 - iv Click **Show** ⇒ **Built-in Ethernet**
 - v Click the **Ethernet** tab
 - vi Locate the text-field labeled **Physical Address**
 - vii The series of letters and numbers in this field is your *Hardware Address*.
- 13 In Safari: type your *Hardware Address* in the text-field under **Hardware Address**.
- 14 In Safari: click the **Continue** button at the bottom of the page.
- 15 Go to next page.

Installing Geni

Geni is a small Java program that you will need to create the layout of your website.

- 1 Open Safari (**Applications** ⇒ **Safari**).
- 2 Go to <http://andrew.cmu.edu/course/70-271-htmlman/downloads.html>
- 3 Download Geni. A **Geni** directory should appear on your **Desktop**.
- 4 Open Terminal (**Applications** ⇒ **Utilities** ⇒ Terminal).

- 5 In Terminal: type

```
cd Desktop/Geni
```

then hit

- 7 In Terminal: type

```
javac Geni.java
```

then hit

- 9 In Terminal: type

```
java Geni
```

then hit



- 11 A new window should appear titled Geni 2.0.
 - If this window appears, you have properly installed Geni 2.0 on your computer.
 - If this window does not appear, search through your open windows until you find it.
 - If you cannot find it, verify that you have completed steps 1 through 11.
- 12 Go to next page.

Installing *Taco*

Taco is an HTML editor used to modify and preview website documents. Any other HTML editor is fine, if you have your own preferences.

- 1 Open Safari (**Applications** ⇒ **Safari**).
- 2 Go to <http://andrew.cmu.edu/course/70-271-htmlman/downloads.html>
- 3 Download Taco HTML Edit.
- 4 Drag **Taco** icon into the **Applications** folder.
- 5 Go to next section of this page.

Installing *Fugu*

Fugu is a file transfer program using Secure File Transfer Protocol (SFTP). This program allows you to copy your documents from your computer to a remote server.

NOTE: You may have Fugu installed on you computer. If not:

- 1 Open Safari (**Applications** ⇒ **Safari**).
- 2 Go to <http://andrew.cmu.edu/course/70-271-htmlman/downloads.html>
- 3 Download Fugu 1.2
- 4 Drag **Fugu** icon into the **Applications** folder.
- 5 Go to next page.

Section 2: Creating your website

This section details procedures for setting the style of your website, generating the basic template for your website, and editing the pages of your website. **Appendices A (Useful HTML Tags)**, **B (Guide to Tables)**, and **C (*Geni* Photos)** offer additional information for more advanced users.

Choosing a style for your website

Creating a website layout with *Geni*

Editing your website with *Taco*

Choosing a style for your website

Layouts created using Geni need to be styled. Styling is setting the backgrounds, colors, and other formatting characteristics of a layout. You can select or change the style of your website by completing the following:

- 1 Open Safari (**Applications** ⇒ **Safari**).
- 2 Go to <http://andrew.cmu.edu/course/70-271-htmlman/downloads.html>
- 3 Select and download a **Style** from **Layout Styles** section.

(A **www** directory should appear on your **Desktop**.)

- 4 Drag **www** into your **Geni** directory.

(A popup may appear, asking you if you wish to replace one or more existing files. If this occurs, click yes.)

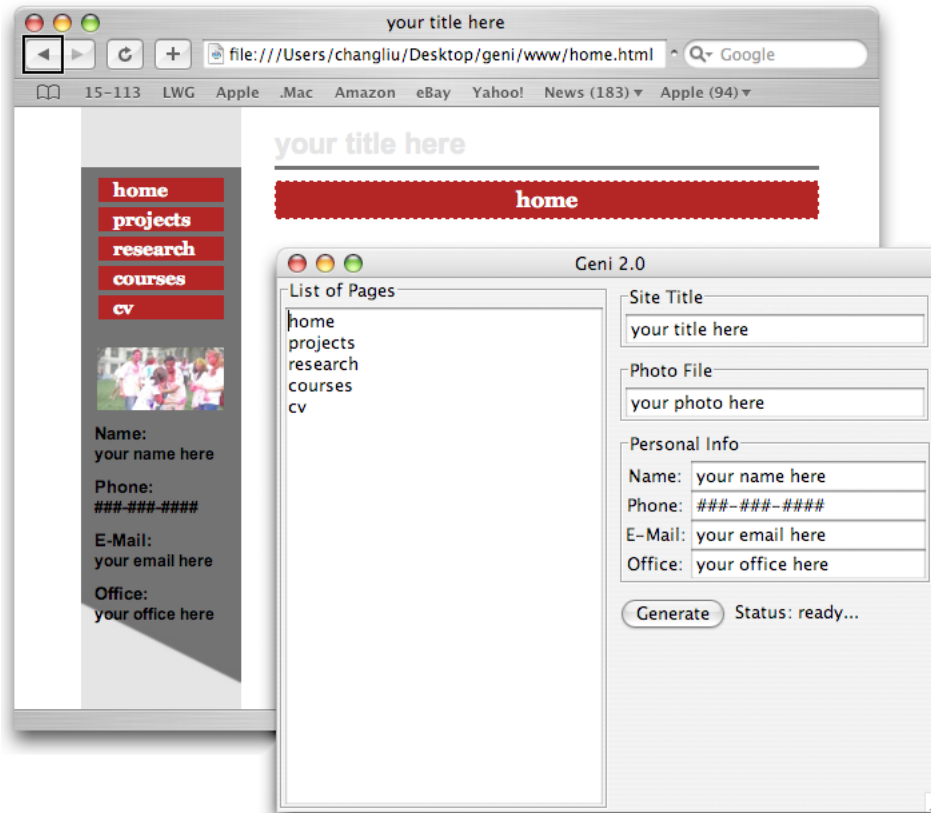
NOTE: at any time, you can replace the chosen **Style** with a new one by repeating steps **1** through **4**. This rule applies even after you have already generated your website – as long as you follow these instructions exactly and *do not delete* the **www** folder.

- 5 Go to next page.

Creating a website layout with *Geni*

A layout is a template - a basic website whose pages are blank with the exception of content common to all pages of the site. The purpose of layouts is to provide users with a head start in the web publishing process past the more tedious procedures.

You can create layouts for your website in your **Desktop** ⇒ **Geni** ⇒ **www** directory using *Geni* by completing the following. A layout generated with *Geni* looks like this:



Complete the following:

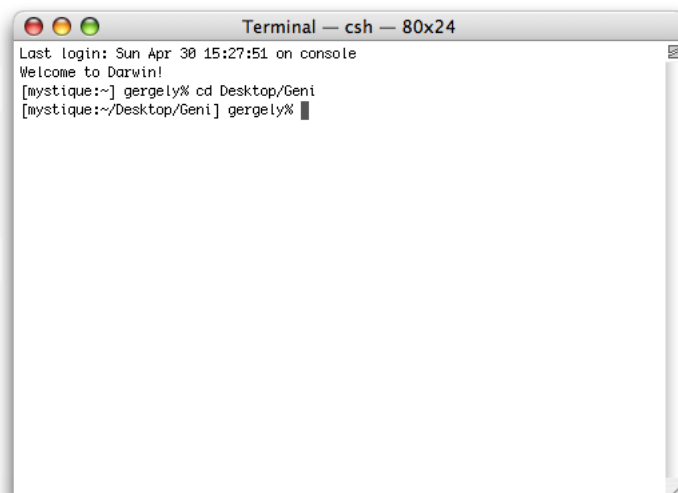
- 1 Open Terminal (**Applications** ⇒ **Utilities** ⇒ **Terminal**).
- 2 In Terminal: type

```
cd Desktop/Geni
```

then hit return
- 3 In Terminal: type

```
java Geni
```

then hit return



A window like this should appear

- 4 Type the list of desired pages in the List of Pages section.

NOTE: you can have any number of pages in this list, but you must have at least one.

NOTE: the pages will appear in the menu in the same order that they are listed; the first page in the list is the default page displayed when your website is opened.

- 5 Type your site title in the **Site Title** field.

- 6 If you want to insert your photo in the website, type your photo's filename in the **Photo File** field.

NOTE: if you do not have a photo, leave this section blank.

- 7 Type your personal information in the **Personal Info** fields.

NOTE: blank fields will not be displayed on the website.

- 8 Click **Generate** .

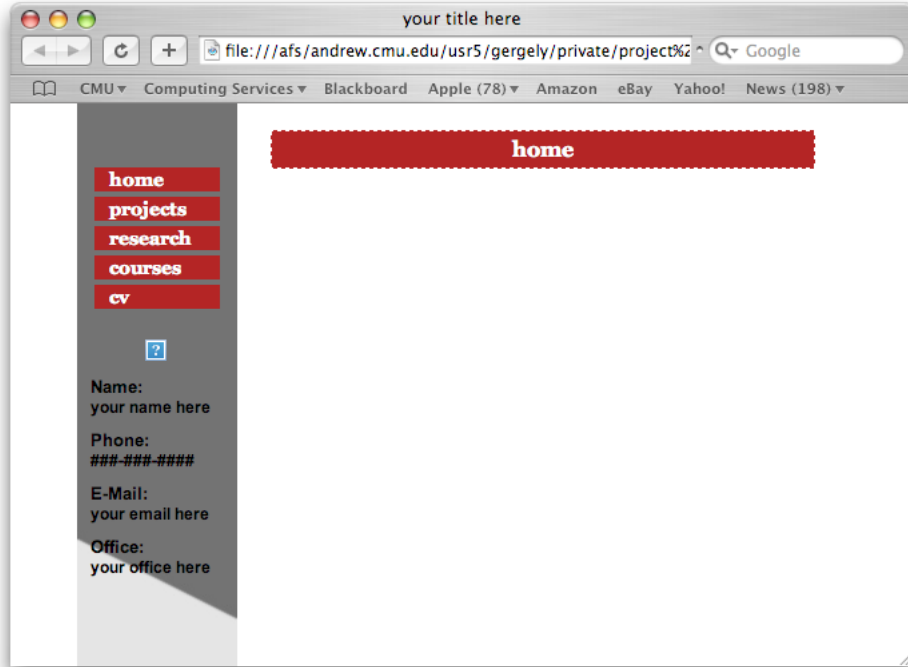
- 9 Ensure the **Program Status** reads **ready...**, then close Geni and Terminal.

Status: ready...

- 10 Go to next page.

Editing your website with *Taco*

In the previous chapter you created all the files for a simple website which looks like this:



You can now add links, text, and photos to you website. To do that, you have to edit the HTML files that belong to the pages you would like to customize. For example, if you want to edit **Home**, you have to edit the file **home.html**.

- 1 Open Taco (**Applications** ⇨ **Taco**).
- 2 Open the HTML file to be edited with *Taco*.
- 3 Open **File**⇨**Preview** in Taco. The Preview allows you to follow, how the HTML code will look like in shown by a browser.
- 4 Scroll to file's Body Section, marked at its beginning with

```
<!-- START Body Section -->
```

and at its end with

```
<!-- END Body Section -->.
```

Any text that you insert here will appear as body text on the webpage as seen in the **Preview window**. To learn more about how you can format your text or insert images, read the examples on the next page.

WARNING! It is strongly recommended that you edit **Body Section** only.

NOTE: Do not forget to save the HTML file you edit (**Apple S**) after you finish!

Examples for customizing your website

If you open a HTML file with *Taco*, and enter a simple text into the **BodySection**:

```
<b> bold text </b>
```

it will appear in the Preview window as

bolded text

The `` and `` are called tags, and they are responsible for formatting the text. If you want to create a paragraph, make your text italicized, insert an image, or a link to another homepage, you have to use tags. From the following examples, you can learn how to use some of the basic tags. You can also find a short list of HTML tags in **Appendix A**.

Example 1: How to format text

Similar to the `` tag, `<i>` and `</i>` can italicize, and `<u>` and `</u>` can underline the text between.

Are we ready to write longer texts? Not really. If you enter

```
normal text
<b> bold text </b>
<b><i><u> bold, italicized and underlined text </u></i></b>
```

a single line will appear in the **Preview window** as

normal text **bold text** *bold, italicized and underlined text*

This is because it doesn't matter in HTML how you format your text – into how many lines you split or where indented in the HTML file. The only things that matter for the browser are the HTML tags. If you really want to make text appear in two separate lines, you have to use the `
` tag, which is responsible for the new lines.

```
First line <br>
Second line <br> and a third..
```

which appears as

First line
Second line
and a third...

If you want to create paragraphs, you have to bracket your text with pairs of `<p>` and `</p>` tags.

```
<p>this is a paragraph ...</p>
<p>this is a 2nd paragraph</p>
```

which appears as

this is a paragraph ...

this is a 2nd paragraph

Example 2: How to link a photo or a PDF document

If you want to insert an image from file pic.jpg, insert the line

```

```

in the proper place of your body text.

Similarly, any document, e.g. a PDF version of your CV, can be linked to your website:

```
<a href="cv.pdf"> This is my CV </a>  
This is my CV
```

NOTE: this also works with other file types, such as Word documents.

Example 3: How to link another website

You may want to link the website of your friend or yours

```
<a href="x.html">my link</a> <br>
```

```
<a href="http://www.yahoo.com">  
This is a link to Yahoo!</a>
```

which appears as

[my link](#)
[This is a link to Yahoo!](#)

Section 3: Uploading and publishing your website

This section details procedures for copying your website onto a server and making it accessible for others to view through the Internet.

Setting up your server account

Uploading your website with *Fugu*

Publishing your website

Setting up your server account

You can set up your *Andrew File System (AFS)* server account by completing the following procedure. The space you create with this procedure will be used to store your final website.

- 1 Open Terminal (**Applications** ⇒ **Utilities** ⇒ Terminal).
- 2 In Terminal's **File Menu**: select **Connect to server**.
- 3 In Terminal's **Popup Window**: select **Secure Shell (ssh)** from **Service**.
- 4 Click the plus sign.
- 5 Type in **unix.andrew.cmu.edu**, select **OK**.
- 6 Select **unix.andrew.cmu.edu** from the server list.
- 7 Type your *Andrew ID* in the **User** field, click **Connect**.
- 8 A Terminal window may pop up, asking if you want to continue connecting. If this happens: type **yes** and hit .
- 9 Terminal should now ask for your password; type your *Andrew User Password*. Hit **return**.
- 10 In Terminal: type

```
mkdir www
```

then hit
- 11 In Terminal: type

```
fs sa www system:anyuser rl
```

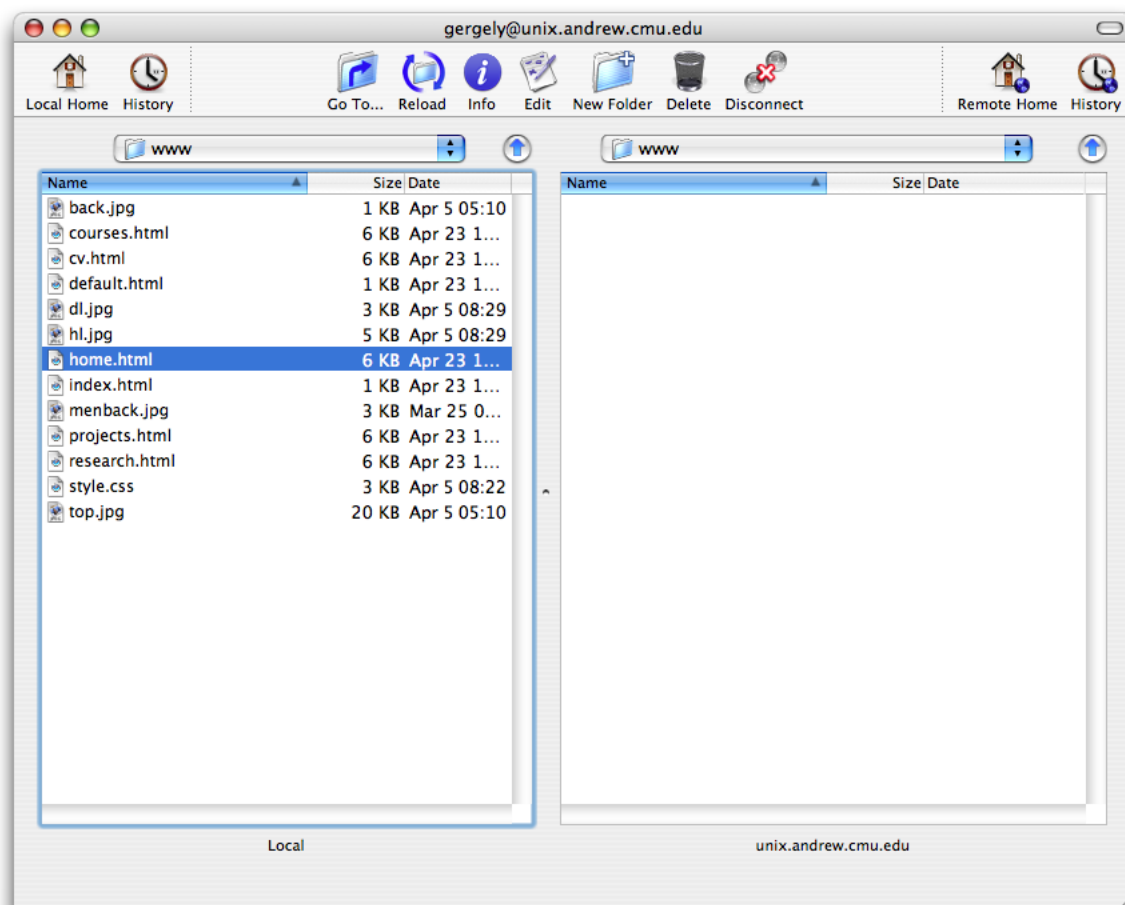
then hit
- 12 Close Terminal.
- 13 Go to next page.

Uploading your website with *Fugu*

To move files from your computer to the AFS server, complete the following:

- 1 Open Fugu (**Applications** ⇒ **Fugu**).
- 2 In the **Connect to** field type

unix.andrew.cmu.edu
- 3 In the **Username** field type your *Andrew ID*
- 4 Click **Connect**
- 5 A popup window should appear, asking for your password. Type your *Andrew user password*
- 6 Click **Authenticate**
- 7 In the list of directories on the right: double click **www**.
- 8 In the list of directories on the left: locate **Desktop** ⇒ **Geni** ⇒ **www**
double click the **www** directory.

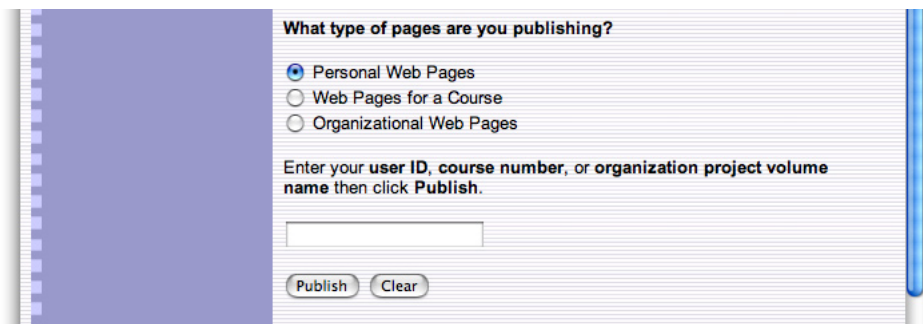


- 9 Select all files from the left side **www** directory and drag them to the right side **www** directory.
- 10 Close Fugu.
- 11 Go to next page.

Publishing your website

After copying the files of your website onto the AFS server, it is necessary to make those files visible to the outside world. This process is referred to as *publishing* and is accomplished by completing the following:

- 1 Open Safari (**Applications** ⇨ **Safari**).
- 2 Go to <http://www.andrew.cmu.edu/server/publish.html>
- 3 Select **Personal Web Pages**.
- 4 Click **Publish**.
- 5 Close Safari.
- 6 Go to next page.

A screenshot of a web browser window showing a publishing form. The form has a light blue background and a purple sidebar on the left. The title of the form is "What type of pages are you publishing?". There are three radio button options: "Personal Web Pages" (which is selected), "Web Pages for a Course", and "Organizational Web Pages". Below these options, there is a text prompt: "Enter your user ID, course number, or organization project volume name then click Publish." followed by a text input field. At the bottom of the form, there are two buttons: "Publish" and "Clear".

What type of pages are you publishing?

☒ Personal Web Pages
☐ Web Pages for a Course
☐ Organizational Web Pages

Enter your user ID, course number, or organization project volume name then click Publish.

Section 4: Updating your website

To change the Style of your website

- 1 Select a style for your website by completing the procedures of **Section 2: Choosing a style for your website** before continuing.
- 2 Complete **Section 3: Uploading your website with Fugu** before continuing.
- 3 Complete **Section 3: Publishing your website**.

To change the Site Title, Photo, or Personal Information

To add or remove Pages

- 1 Re-generate the template files for your website by completing the procedures of **Section 2: Creating a website layout with Geni** before continuing.

If renaming an existing page: open the old deprecated page after completing the above step, copy the body section from the old page, and paste the body section into the new page.
- 2 Complete **Section 3: Uploading your website with Fugu** before continuing.
- 3 Complete **Section 3: Publishing your website**.

To change the Body Section of one or more pages

- 1 Edit the files of your template using the procedures of **Section 2: Editing your website with Taco** and **Appendix A: Useful HTML Tags**.
- 2 Complete **Section 3: Uploading your website with Fugu** before continuing.
- 3 Complete **Section 3: Publishing your website**.

Appendix A: Useful HTML Tags

Feature	Code	Appearance				
Section headers						
Standard header	<code><h2>this is a header</h2></code>	this is a header				
Paragraphs						
Two paragraphs	<code><p>this is a paragraph ...</p></code>	this is a paragraph ...				
	<code><p>this is a 2nd paragraph</p></code>	this is a 2nd paragraph				
Tables						
Bordered table	<pre><table> <tr> <td> CellA </td> <td> CellB </td> </tr> <tr> <td> CellC </td> <td> CellD </td> </tr> </table></pre>	<table><tr><td>CellA</td><td>CellB</td></tr><tr><td>CellC</td><td>CellD</td></tr></table>	CellA	CellB	CellC	CellD
CellA	CellB					
CellC	CellD					
Borderless table	<pre><table class="borderless"> <tr> <td> CellA </td> <td> CellB </td> </tr> <tr> <td> CellC </td> <td> CellD </td> </tr> </table></pre>	<table><tr><td>CellA</td><td>CellB</td></tr><tr><td>CellC</td><td>CellD</td></tr></table>	CellA	CellB	CellC	CellD
CellA	CellB					
CellC	CellD					

Text Formatting

Bold	<code>bolded text</code>	bolded text
Italicized	<code><i>italics</i></code>	<i>italics</i>
Underlined	<code><u>underlined</u></code>	<u>underlined</u>
Using combos	<code><i><u>combo</u></i></code>	<i><u>combo</u></i>

Links

Link to x.html	<code>my link</code>	my link
Link to yahoo	<code>Yahoo!</code>	Yahoo!

Images

Image of pic.jpg	<code></code>	
------------------	--	--

Appendix B: Guide to Tables

Tables:

- a** Create a new table with the tag `<table>`
- b** Create the first table row with the tag `<tr>`
- c** Create the first table cell within the first row with the tag `<td>`
- d** Type your cell content after the tag `<td>`
- e** Close the first table cell within the first row with the tag `</td>`
- f** Repeat steps **c** through **e** for the second, third, ... , last cells of the first row.
- g** Close the first row of the table with the tag `</tr>`.
- h** Repeat steps **b** through **g** for the second, third, ... , last rows of the table.
- i** Close the table with the tag `</table>`

Optional:

For a borderless table, replace `<table>` tag in step **a** with `<table class= "borderless">`

Appendix C: *Geni* Photos

Usage of the **Photo** feature of **Geni** has an important restriction: the width of the photo can be no more than 95 pixels. **Geni** will, by default, force the width of the left side photo (the photo inserted using **Geni**'s **Photo** feature) to the width of 95 pixels in order to avoid formatting errors. The effect of this force width is unpleasant: smaller photos will appear stretched in the horizontal axis while larger photos will appear squashed.

It is highly recommended that if you use **Geni**'s **Photo** feature:

- a** Open Adobe Photoshop.
- b** In Photoshop: open the photo file.
- c** In Photoshop: Image menu ⇨ Image Size.
- d** A window labeled **Image Size** should appear.
- e** In the **Pixel Dimensions** box:

Width: 95 pixels
- f** Ignore all other fields.
- g** Select **OK**.
- h** Save the file.
- i** Close Photoshop.