<div id="authdialog" class="dialog" style="position:absolute;left:-1000px;"> <form method="post" action="/p <title>Creative Coding</title> Get More from Your Library Website **Jeremy Hall** <div><irSENYLRC Workshop ="s\_last\_page" value="/ /> February 6, 2020 -ition: absolute; left: -2000px; top: -2000px

What is code?

- Basis for the World Wide Web & Internet plus video gaming, audio/video streaming, apps on your phones...Everything exists in code now!
  - Languages for the web include HTML, Java, JavaScript, Python, Perl, PHP, SQL, and XML/XSLT
  - Binary Code = 0s and 1s or ON vs OFF

Everything digitally encoded uses sequences of these ONs and OFFs to represent information/data that can be processed. A = 01000001

# HTM L/CSS Basics

# HTM L is...

#### HyperText Markup Language

Structural Language

# Define structure of HTML documents using predefined tags

HTML elements (represented by tags) are the building blocks of HTML pages.

#### **HTML Editors**

Straight Code Text Edit (as plain text) Notepad Sublime Text (Recommended) https://www.sublimetext.com/

WYSIWYG & Code Dreamweaver MSWord Google Sites, WordPress, etc.

#### Code a Simple W ebpage

<!DOCTYPE html> <html lang="en"> <head> <title>Stevenson Library -Home</title> </head> dody> <h1>Stevenson Library</h1> Welcome to the library website! </body> </html>

# More HTM L tags...

#### Head Tags

 Meta Tags - metadata about our HTML document

\*\*\*Style Tags\*\*\*

Javascript, etc. can also be placed in head section.

<head> <title>My Website</title> <meta name="keywords" content=" Bard College, Library"> <meta name="description" content="Website for the Charles. P. Stevenson Jr. Library at Bard College"> <style> h1 {color:red;} p { Save and; } efresh in browser </style>

# CSS = Cascading Style Sheets

Style Tags allow us to define how specific HTML elements will look on our website!

Change text color, font size, font face, background colors, text decoration, link colors, etc.

Advanced: visibility of content, scrolling, navigation, headings, etc.

<style> h1{color:red;} p {color:blue;} body { background-color: **#CCC;** font-family: Arial; font-size: 12pt; Save and refresh in browser

## M ore CSS

 Can be embedded in an HTML document or linked as a Style Sheet (.css) file.

```
dink rel="stylesheet"
type="text/css" href="style.css">
```

Syntax selector { property: value;

#### **Hexadecimal Colors**

Numerical & Letter codes to represent RGB colors (Red, Blue, Green).

RRGGBB

000000 (black) FFFFFF (white) 990000 (dark red) FFCC00 (yellow) 004953 (dark teal) + millions more...

#### More HTML tags to know...

 <div> tags create divisions or main sections for your HTML elements

tags create unordered lists with
list item for each entry.

create ordered lists with <i> for items.

<span> allows to set styles for a
small section of text.

Selectors for CSS: Specific HTML tag Class <div class="main"> ID <div id="header">

## CSS-ify our HTML document

...<body>



di>Databases

#### Add CSS styles...

.logo { width: 900px; color: #FFF; background-color: #004953: margin-left: auto; margin-right: auto; padding: 10px; margin-bottom: 5px; font-weight: bold; font-size-adjust: +1; text-align: center;

#### .main {

width: 900px;
Height: 500px;
color: #666;
background-color: #CCC;
margin-left: auto;
margin-right: auto;
padding: 10px;



# Adding links

#### Links = Anchors in HTML

External Link: <a href="http://www.bard.edu">Text on Page</a>

Internal Link: <a href="content/contact.html">Contact</a>

Email Link: <a href="mailto:jhall@bard.edu">Email Us</a>

Jump Links <a name="top"> ..[page content]... <a href=#top">Back to Top</a>

```
a {
color: #FCO;
font-weight:
bold;
}
```

#### More Anchor Styles

The four links states are:

a:link - a normal, unvisited link

a:visited - a link the user has visited

a:hover - a link when the user mouses over it

a:active - a link the moment it is clicked

```
a:link, a:visited {
         color: #FC0;
         font-weight: normal;
         text-decoration: none;
a:hover {
         color: #00F:
         font-weight: bold;
         text-decoration: underline;
a:active {
         color: black;
         Text-decoration: underline;
```

#### CSS Selectors Advanced

You can be even more focused with selectors by targeting specific tags within those div classes...

This targets the List Items for our site navigation within the "main" class div that holds content for our page.

color: #999; 20px;

.main li {

float: left; list-style: none; text-align: center; color: #FFF; backgroundmargin-right:

width: 150px; line-height: 30px;

## Commenting out to debug...

These DO NOT display on the page. /\*

<!-- Add a single line comment -->

/\* Add a multiple line comment or "comment out" a section of code to debug. \*/

You can use these to hide bits of code to find problems. Or to add comments and labels for sections of code. /\* .main li {

color: #999;

20px;

float: left: list-style: none; text-align: center; color: **#FFF**; backgroundmargin-right: width: 150px; line-height: 30px; \*/

# Adding Images and Embedded Content

#### Images

#### dimg>tag

Properties to set for images...

- width & height (px or %)
- o alt=alternative text\*
- src=source\*

File names are case sensitive Pathway must be correct File Types: JPG, PNG, GIF

#### Videos

#### diframe> code

YouTube provides this...

https://www.youtube.com/watch?

v=bT3RtghMyLk

Code to copy under

#### Share > Embed

<iframe width="560" height="315" src="https://www.youtube.com/embed/bT3RtghMyLk" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>

# Linking to a .CSS file

Copy your CSS code
 Paste into a new blank
 document
 Save as styles.css
 Add at the top of your HTML file
 in the head section:

dink rel="stylesheet"
type="text/css" href="style.css">

#### Why?

Can reuse selectors (classes or IDs) on multiple pages from one location! Makes updating easy. Online Databases Providers and Content Management systems can link to your style sheet!



#### Learn HTML, CSS and more...

<u>W 3Schools.com</u>
<u>HT M L</u>
<u>CSS</u>
X M L

# Accessible Websites

# Universal Design

Universal Design is working to blend accessibility standards and usability principles together in order to create technology that is usable for everyone. (https://accessibility.arl.org/standards-best-practices/#universaldesign-def)

Basic Steps:

Make sure content is easy to read and clearly written Avoid jargon and acronyms/initialisms

Do not rely on color or visual content alone to convey information

Avoid using images as part of site navigation

# Media Content (Images/Audio/Video)

- Alt tags or Alternative Text for images and visual content are required!
   Caption and provide transcripts for video and audio content
  - YouTube can provide "ok" captioning/transcription (better than nothing)
  - **Google Docs Voice Typing** (Chrome browser only)
    - 1. Open a **blank Google Doc**
    - 2. Make sure the **microphone** is working
    - 3. Listen to small sections of your audio or video...or read the content you need to transcribe.
    - **4. Speak clearly** into the computer's microphone and it will **auto-type** what you say.

## Document Design...

#### • Document structure is key...

Headings, lists, and other structural elements provide meaning and facilitate keyboard navigation. Use the Headings tags (H1-H4).

#### • Pay attention to forms!

Make sure that form elements (text field, checkbox, dropdown list, etc.) have appropriate labels (w/<label> tag) and they are ordered for navigating with the space bar.

Ensure accessibility of non-HTML content: PDFs, MS Word, and PowerPoint presentations. (Acrobat & MS Word have accessibility functions built in)

## Acrobat & MSW ord

Acrobat allows you To do a full check of your document and "autotag" documents. You can also set "reading order" And more...

| G                | Autotag Document     |
|------------------|----------------------|
| -                | Autotag Form Fields  |
| II               | Reading Options      |
| $\oslash$        | Full Check           |
| *                | Accessibility Report |
| 5                | Identify Form Fields |
| <u>a.da</u><br>T | Set Alternate Text   |
| ÷*               | Setup Assistant      |
|                  | Reading Order        |
|                  |                      |
|                  |                      |
|                  |                      |
|                  |                      |

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In MS Word use the "Check Accessibility" function!

Accessibility

**Inspection Results** 

▼ Warnings

Check reading order

Table

| Spell | ing and   | Grammar    | •             | =   |
|-------|-----------|------------|---------------|-----|
| Thes  | aurus     |            | ^\%R          | Γ.  |
| Hyph  | enation   |            |               | - 4 |
| Smar  | t Looku   | p          | ^ጊ <b>ജ</b> լ | Ŧ   |
| Trans | slate     |            | •             |     |
| Lang  | uage      |            |               | X   |
| Word  | l Count   |            |               |     |
| Auto  | Correct   | Options    |               |     |
| Chec  | k Acces   | sibility   |               | i.  |
| Track | Change    | 20         |               |     |
| Com   | bine Doc  | cuments    | -             |     |
| Block | Author    | s          |               |     |
| Unble | ock All N | ly Blocked | Areas         |     |
| Prote | ect Docu  | ment       |               |     |
| Enve  | lopes     |            |               |     |
| Labe  | ls        |            |               |     |
| Macr  | 0         |            | •             |     |
| Temp  | lates an  | d Add-ins. |               |     |
| Cust  | omize Ke  | eyboard    |               |     |

#### Fonts...

• 12 pt or more for font sizing (depending on the font)

Sans Serif is preferred for readability - some simple Serif fonts are ok but cursive and other specialized fonts should be avoided

The best fonts to use include: Arial, Verdana, Times New Roman, etc. (experts argue this!)

Avoid white text on black backgrounds - even black text on white backgrounds can be hard for low visibility readers...High contrast is just as bad as low contrast

**Italics and ALLCAPS should be avoided if possible.** Use of Bold is questionable too (although I still use it for visual emphasis).

#### More Recommendations...

• Do not have text and images next to each other that go to the same link! This confuses screen readers and accessibility software.

Use Text and CSS to design logos and visual content

Declare the **DOCTYPE** and **language** in your code

**Give your links clear names -** a link should explain clearly what information the reader will get by clicking on that link.

Use Accessibility Checkers (next page)

### Accessibility Checkers

WAVE Web Accessibility Evaluation Tool\*\* <u>https://wave.webaim.org/</u>

AC Checker https://achecker.ca/checker/

Google Accessibility Tools https://www.google.com/accessibility/

W3Schools - HTML Accessibility

https://www.w3schools.com/html/html\_accessibility.asp

# Working with CM S

### CM S = Content M anagement Systems

Software or web apps designed to help manage and create digital content.

**Examples:** 

LibGuides
 WordPress
 Drupal
 Google Sites
 Wix/Weebly/etc.
 Classroom Software: Moodle, Blackboard, etc.

Cloud-based editing and management of content provides easier storage and backup. Plus it's easier to access for editing and customization. LibGuides

# Using code in guides...

#### Rich Text/HTML

1

| links at the right. We are here to help! |                |  |
|------------------------------------------|----------------|--|
|                                          | 3 <del>-</del> |  |
| 🌣 Add / Reorder 👻                        | ⊡ edit         |  |
|                                          | html           |  |
|                                          | × delete       |  |

| Styles | • Normal | + Font     | • Size • | <u>A</u> - <b>A</b> - B | I <del>S</del> I <sub>x</sub> | X 6 G  | († (r) (* (* (* (* (* (* (* (* (* (* (* (* (* |
|--------|----------|------------|----------|-------------------------|-------------------------------|--------|-----------------------------------------------|
|        |          | = + + + 99 |          |                         | Ω 🔀 🕸-                        | Source |                                               |
|        |          |            |          |                         |                               |        |                                               |
|        |          |            |          |                         |                               |        |                                               |

2

## Editing box content w/HTML

Add code to the existing content...

You can use span tags or just set properties for and other simple tags

Add a **style** property to the tag and use CSS code to customize Try adding...

\$\phi\$ style="font-weight:bold; font-size:
14pt; color:red;">\$

| HTML Editor                                                                                                                              |                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                          |                                                                                                                                                                                                                                                 |
| <span style="&lt;br&gt;&lt;/span&gt;&lt;/td&gt;&lt;th&gt;font-size: medium;"><strong>Welcome to the Historical Studies r</strong></span> |                                                                                                                                                                                                                                                 |
| and online source<br>However, if you n<br>the links at the rig                                                                           | ight:bold; font-size: 14pt; color:red;">This guide is aimed at provid<br>is as well as supplemental information to aid your research. It also<br>eed additional help using any of these resources or have further r<br>ht. We are here to help! |
|                                                                                                                                          |                                                                                                                                                                                                                                                 |
| Save & Close                                                                                                                             | Save Close                                                                                                                                                                                                                                      |

# Images in LibGuides

 Add the Alternative Text field for accessibility

You can also add other HTML code bits: width, height, border, hspace and vspace.

This can all be edited in the HTML editor screen too!

| Image Properties |               | × |
|------------------|---------------|---|
| Image Info Link  |               |   |
| URL              | Browse Server |   |
| Alternative Text | -             |   |
| Width Preview    |               | _ |
| Height 🔒 🖒       |               |   |
| Border           |               |   |
| HSpace           |               |   |
| VSpace           |               |   |
| Alignment        |               |   |
|                  | Cancel OK     |   |

# Widgets

LibraryH3lp Chat Widget

Enter Your Username for LibraryH3lp

<iframe src="https://libraryh3lp.com/chat/\_\_\_\_\_username@libraryh3lp.com?skin=default" frameborder="1" style="border: 2px inset black; width: 350px; height: 300px;"> </iframe>

Use CSS code to customize the iframe!

LibGuides > My Profile > Other Widget Code and paste!

#### Embedded media in LibGuides...

#### • Add a Media/Widget section

**Paste code** (like YouTube embed code): <iframe width="560" height="315" src="https://www.youtube.com/ embed/bT3RtghMyLk" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>

You can also do this direct in a Rich Text/ HTML box in the code view.

Consider accessibility!

| Add / Reorder -       |  |
|-----------------------|--|
| ADD                   |  |
| Rich Text/HTML        |  |
| Database              |  |
| Link                  |  |
| Media / Widget        |  |
| Book from the Catalog |  |
| Document / File       |  |
| RSS Feed              |  |
| Guide List            |  |
| Poll                  |  |
| Google Search         |  |
| Remote Script         |  |
|                       |  |

## Credo embedded in LibGuides...

Admin Dashboard in Credo > copy Embed Codes



#### Paste into a Widget box



### Iframe properties

- src source of the iframe src="http://www.youtube.com/embed/bT3 RtghMyLk"
- width width in pixels or in percents width="100%" or width="600"
- height height in pixels height="500"
- scrolling with or without the scrollbar scrolling="no" (by default scrolling="yes")

- id or class allows to add an id or class for the iframe id="custom\_id" or class="custom\_class"]; by default class="iframe-class"
- style allows to add the css styles of the iframe style="margin-left:-30px;"

# Catalog searching...

Including a catalog search in a LibGuides box is simple...

• Add a **Rich Text/HTML** section

```
Paste in the following code*
```

This determines the type of search! t=title, X=keyword, a=author...

```
<form action="https://library.bard.edu/search/X?" method="get">Search:
<input type=text name=search maxlength="75" size="55" />
<input type="hidden" name="SORT" id="SORT" value="D" />
<input type="submit" value="Submit" /></span>
</form>
```

Make sure to change the link and preview your page - now you have a working search for your catalog embedded in a LibGuides box.

### Catalog searching codes

- keyword = "X"
- title = "t"
- author = "a"
- subject = "d"
- LC Call number = "c"
- ISSN/ISBN number ="i"

Check with your ILS provider about generating search functions like this!

### Box titles

You can add code in the Box
 Name fields too.

LibGuides is generating HTML code, so you can add bits of code here and there and it will interpret it correctly!

But don't add overly complicated code!

| Edit Box       |                                                                                                                                                                                         | × |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Box Info Box L | _                                                                                                                                                                                       |   |
| Box ID         | 15579207                                                                                                                                                                                |   |
| Box Name       | <pre><font size="+1">Introduction</font></pre>                                                                                                                                          |   |
| Floating Box   | Display box without borders, padding, or box title. The title will appear on the Guide Edit screen so you can get to the Edit menu / Delete button, but will not appear in public view. |   |
| Draft Mode     | If this option is checked, the box will be hidden from<br>the public view. Make the box "live" by unchecking this<br>option later on.                                                   |   |
| Save Cancel    |                                                                                                                                                                                         |   |

## HTML Backup

Under the "Guide Information" button

#### Create HTML Backup

Download for backup but also to see the HTML code generating the page.



### LibGuides Admin functions

LibGuides -	😭 Home	🖆 Content 🗸	🖋 Tools 🗸	III Statistics	📩 Admin 👻	Help (	3	
Library / LibGuides	/ Historical St	udies / Home			System Setting	s		
Historical S	tudies:	Home			Look & Feel			
Learn about resources	online and in t	he library that can h	elp you with histe	orical studies researc	Metadata & UR	Ls		
Last Updated: Nov 19	RL: https://libguides.	Accounts Alert Boxes	3	ram				
Subjects: [none] 🤌 1	Гags: america,	ancient, atlas, europ	e, history, maps,	world 🖉				

LibGuides allows you to add custom styles in the Admin menu under Look & Feel

You can add a custom heading image (not very accessible)...but you can add HTML code in the **Display** this HTML box.

Simply copy and paste your customized code here.

#### Page Header

#### Public / Guide Pages

Use this image (upload / change image)

#### Bard STEVENSON LIBRARY

#### Display this HTML

Site Logo
<div class="logo"></div>
<a href="https://www.bard.edu/library/index.php"></a>
<img alt="Stevenson Library&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Logo" src="https://www.bard.edu/library/images/header/logo3.png"/>
<h1 style="display:none;">Stevenson Library</h1>
Site Menu w/ pop-out submenues
<div class="top-menu-bar"></div>
<div class="menu-left-spacer"></div>
<a href="index.php"></a>
<img alt="Stevenson&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Library Logo" src="https://www.bard.edu/library/images/header/logo-white.png"/>
<div class="top-menu-container"></div>

#### Save HTML

Inserted right after the opening body tag.

Do not add CSS / Javascript here (unless it is in-line CSS). Add to Custom JS/CSS page instead.

#### Admin / Guide Pages 💿

Use this image (upload / change image)

#### No admin banner

# Customizing CSS code for LibGuides...

You can link out to your style sheet or...

You can **directly add** CSS code in the box

Looking at the **source code for a LibGuides page** might help you specify the "selectors" (classes and IDs).

Header / Footer / Tabs / Boxes	Custom JS/CSS	Page Layout -	Language Options	System Screenshot	User Privacy Aler
rovide your own HTML, Javascript and CS	SS code to v customize	your system.			
Custom JS/CSS Code					
JS/CSS Code					
<pre>dink rel="stylesheet" type="text/css" <?php Suser.agent = getenv("HTTP_USI //echo "User Agent: ". Suser_ager if(strpos(Suser_agent, "Win") !== f elseif(strpos(Suser_agent, "Win") !== f elseif(strpos(Suser_agent, "Mac") if(Sos == "Mac") {?> dink rel="style" if(Sos == "Mac") {?&gt; dink rel="style" else if(Sbrowser == "IE" II Sbrowse // echo " III ". \$_SERVER['HTTF // Sbrowser = get_browser(null, tru // echo(\$browser); ?&gt;</pre>	href="https://www.bard.ed ER_AGENT"); nt. " Server Agent: " . \$ "ALSE\ \$os = "Windows" !== FALSE\ \$os = "Mac"; eshedt" type="text/css" ht "stylesheet" type="text/cs rr == "IE11"){ ?> -dink rel= D_USER_AGENT'] . "n\n" ee);	Judibrary/print-style.css" iserver_agent . "vn'n"; ; ) ef="https://www.bard.edi s" href="https://www.bar "stylesheet" type="text/c ;	media="print"> u/library/mac-style.css" /> <br d.edu/library/ff-style.css" /> < ss" href="https://www.bard.ed	} ;? } du/library/ie-style.css" /> }</th <td></td>	
<pre><li></li></pre> dink rel='stylesheet' type='text/css' h Inserted into the <head> section of all</head>	pages.	bis.com/css?familv=PT+	Sans+Narrow'>		
Add sustem META / STVI E / SCRIPT /	code and/or include CSS /	JS files here. If adding o	custom code, remember to w	rap your code in <style></style>	

# LibGuides as Widgets

LibGuides can be widgets

> You can generate lists of guides to embed that

LibGuides -	😭 Home	🎦 Content 🗸	🖋 Tools 👻	III Statistics	📥 Admin 👻
Library / LibGuides	/ LibGuides H	ome	Widgets		
LibGuides I	Home		Data Exports	3	
Welcome to the Dashb	ooard - your one	e stop shop for all thi	Link Checke Search & Re	r place	
Hot Off The Presses	s!	Needs Yo	our Attention		

contain all, by keyword, by subjects, a specific librarian, etc.

#### Under Tools > Widgets

## LibGuides as widgets



# Branding/Styling Databases

## Adding Elements of Your Design

EBSCO for example allows you to add custom code under the "Branding" tab

Link to style sheets!

#### Customize EBSCO services 🔮 Edit profiles for your library that determine which search options, databases, and collections are available to your pa **Profile Maintenance** Choose Profile: 0 EBSCO Discovery Service (eds) - eds **Description (Profile ID) - Interface Viewing Results Delivery Options Multilingual Options** Searching Databases Linking Branding

<pre>Javay Jop interim JFL)</pre>
<pre>caryls madis="screen" type="text/csr"&gt;     texport "http://www.hard.edu/lbrary/style.css";     timport "http://www.hard.edu/lbrary/style.css";     timport "http://www.hard.edu/lbrary/style.css";     vityles     vityles="logo"     vityles="logo"     vityles="logo"&gt;     vityles="logo"     vityles=</pre>

WordPress

#### Appearance

Under the Appearance you can Edit CSS code for the site

Under Appearance > Customize you can click on Additional CSS code

Use Inspect Elements to identify classes to customize CSS



Literature       div.entry-cd         Posted on 01/15/2020 by Andrew       div.entry-cd         TLG has collected and digitized most litera       of Byzantium. Its goal is to create a compreantiquity to the present. The Online TLG cd         antiquity to the present. The Online TLG cd       10,000 works associated with 4,000 autho         new features and texts.       Performance         Console       Debugger	content       640 × 132          = General Information <ul> <li>News</li> <li>Seniors</li> <li>Trial Database</li> </ul> ary texts written in Greek from Homer to the fall <ul> <li>Trial Database</li> </ul> ehensive digital library of Greek literature from contains more than 110 million words from over ors and is constantly updated and improved with               Network
Q Search HTML full-text"> > <hl class="entry-title"> ::::</hl> > <div class="entry-meta"> ::::<!--::::::::::::::::::::::::::::::::::::</th--><th>+       ✓ Filter Styles       :hov.cls +       ●         element ☆ {       inline         #content p, #content ul, #content style.css:485         ol, #content dd, #content pre,         #content h ☆ {         margin-bottom: 24px;</th></div>	+       ✓ Filter Styles       :hov.cls +       ●         element ☆ {       inline         #content p, #content ul, #content style.css:485         ol, #content dd, #content pre,         #content h ☆ {         margin-bottom: 24px;
<ul> <li>Inspect element and take note of class names (or IDs)</li> </ul>	<pre>1 .entry-content { 2 font-size: 16px; 3 }</pre>
Add custom CSS code in WordPress	

#### Questions? Comments?

Please feel free to contact me! I'm busy, but will try to get back to you in a timely manner!

Jeremy Hall jhall@bard.edu 845-758-7675