

CSS Color and Fonts

CISC-2350-R01 | Fall 2017 | Week 6

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Today's Agenda

- Attendance
- Web review presentations (Tasfia)
- CSS Color
- Typography
- CSS Text
- Midterm Assignment
- Homework Assignment

CSS Color

Color

- Colors enhance sites and make them more rich
- We can change the color of text with:
color : ENTER A COLOR HERE
- We can change the color of backgrounds with:
background-color: ENTER A COLOR HERE
- Pay attention to how much color is on sites you like, often just an accent color or two

3 ways to define color

- **rgb**: express colors in terms of how much red, green and blue are used to make it up

background-color: rgb(100, 30, 90);



- **hex**: six-digit codes that represent the amount of red, green and blue in a color, preceded by a pound or hash # sign

background-color: #641E5A;



- **color names**: there are 147 predefined color names that are recognized by browsers. Full list is [here](#).

background-color: DarkCyan;



hex codes

- Colors are often indexed with 6 numbers/letters after a hashtag
- It's actually RGB color, but to fit up to 255 values within 2 values, the possible value ranges from 0-9 and then a, b, c, d, e, f.
- #000000 is black, #ffffff is white

```
body {  
    background-color: #641E5A;  
}
```



RGB

- RGB is popular in media and programming
- It assigns a number between 0 and 255 for the red channel, green channel, and blue channel
- 0 is nothing for that channel, 255 is full
- (0, 0, 0) is black, (255, 255, 255) is white
- Anytime the three numbers are the same, it will be a shade of grey

```
body {  
  background-color: rgb(100, 30, 90);  
}
```



RGB+A

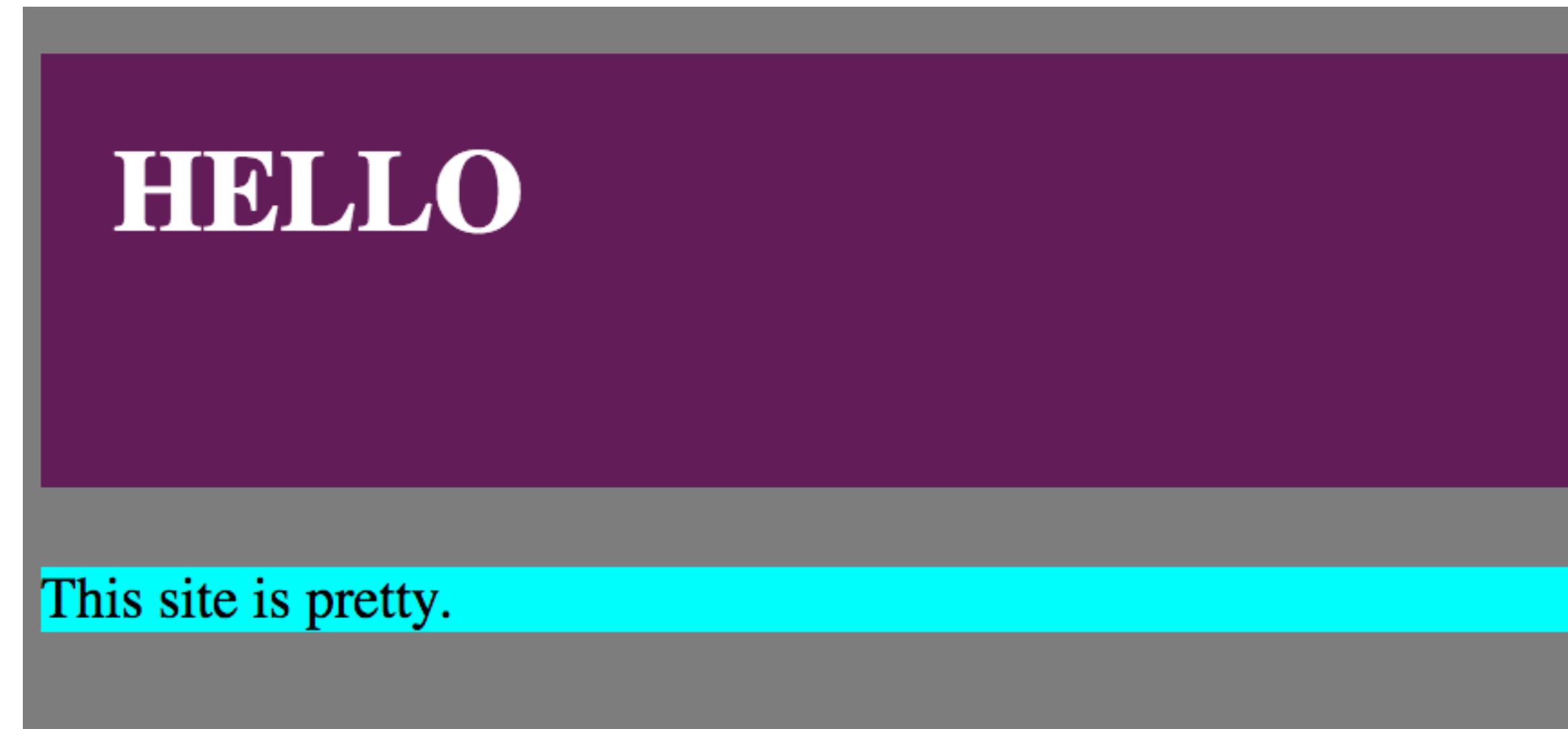
- With RGB we can add an alpha channel, which is transparency
- This is popular if we make text boxes in front of images, and need to see the words more clearly
- Alpha level (transparency) is measured between 0 and 1
- 0 is transparent, 1 is fully opaque

```
body {  
  background-color: rgba(100, 30, 90, 0.5);  
}
```



background-color

- CSS treats each HTML element as if it appears in a box
- *background-color* sets background color for that box
- When not specified, background color is transparent

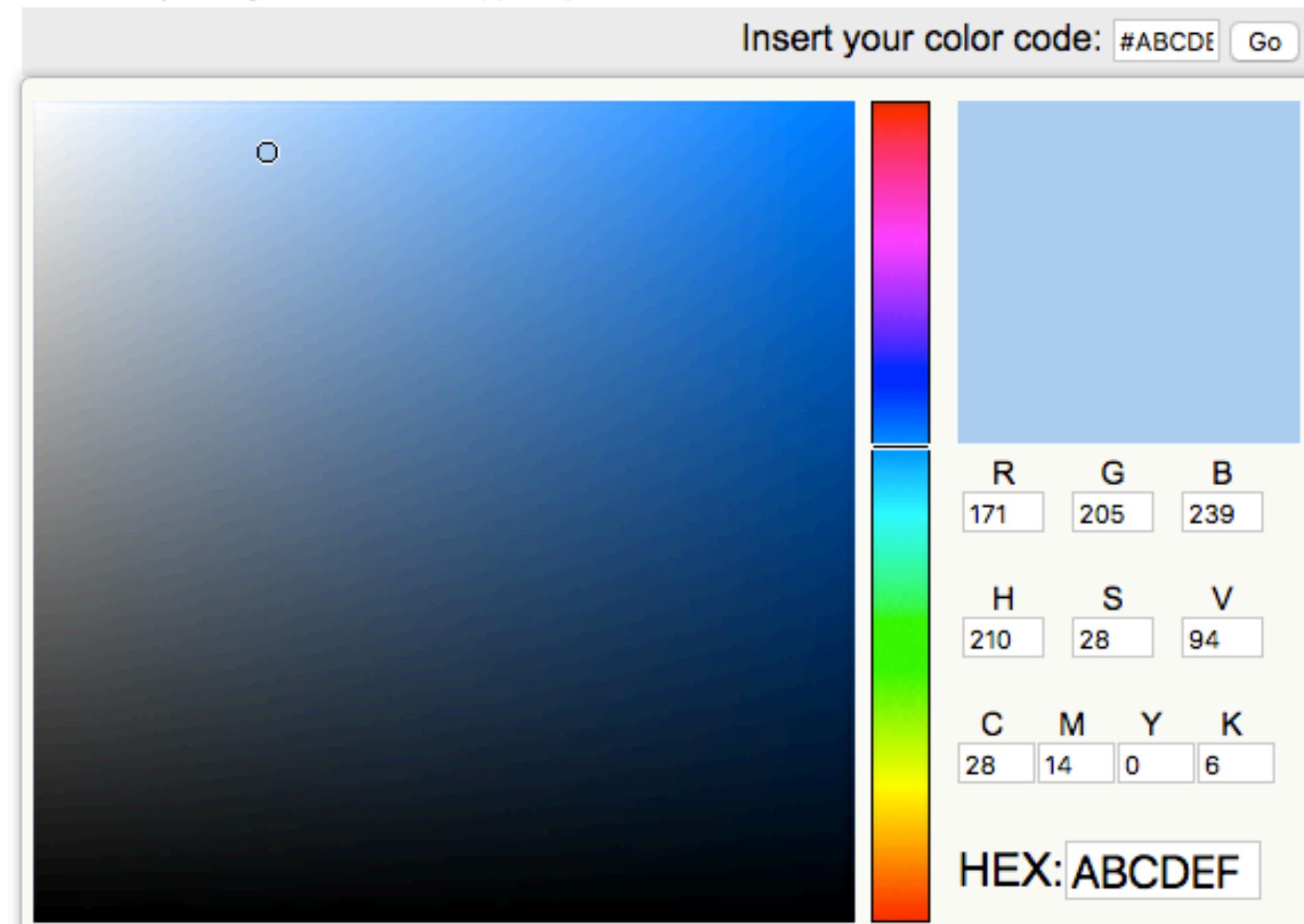


Color picker

HTML Color Picker

HTML Color Picker is the best online tool for choosing colors in hexadecimal , RGB, HSV and CMYK value. It is widely used among web designers and developers. Move the vertical slider to choose color and then click into color square on the left to get HTML color code, All values in input fields are changed. Also you can edit it and see instant color update.

You can start with your own color by writing its color code in upper input field.



Below is a list of recently picked colors. You can see more information about the color code.

Use an html color picker, like this <https://www.colorcodehex.com/html-color-picker.html>

Color tips

- Start with a main color
- Use the tools to generate a palette or come up with one of your own
- Pick secondary colors for things like links and buttons; those are great places to add color
- Pick neutrals such as greys, black and white; don't overestimate the importance of white space
- Use imagery to incorporate color into your page (see example)



GOOGLE

All the Greatest Gadgets Announced at Google's Big Show

ARIELLE PARDES



PHOTOGRAPHY

That Flag-Burning NFL Photo Isn't Fake News. It's a Meme

LAURA MALLONEE

HARDWARE

Google's Gadget Vision: Same Stuff, Different Screens

DAVID PIERCE



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Welcome to Processing 3! Dan explains the new features and changes; the links Dan mentions are on the [Vimeo page](#).

[» Download Processing](#)

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Processing is a flexible software sketchbook and a language for learning how to code within the context of the visual arts. Since 2001, Processing has promoted software literacy within the visual arts and visual literacy within technology. There are tens of thousands of students, artists, designers, researchers, and hobbyists who use Processing for learning and prototyping.

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[Particle Flow](#)

by NEOANALOG



[Objectifier](#)

by Bjørn Karmann

p5.js

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Hello! p5.js is a JavaScript library that starts with the original goal of [Processing](#), to make coding accessible for artists, designers, educators, and beginners, and reinterprets this for today's web.

Using the original metaphor of a software sketchbook, p5.js has a full set of drawing functionality. However, you're not limited to your drawing canvas, you can think of your whole browser page as your sketch! For this, p5.js has addon [libraries](#) that make it [easy to interact](#) with other HTML5 objects, including text, input, video, webcam, and sound.

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San Diego

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World Maker Faire: Sept 23 + 24, 2017
That's a Wrap!

Stay tuned for details on 2018



World Maker Faire: Sept 23 + 24, 2017
Meet the Makers
New York Hall of Science, New York, NY

Color tools

- There are online tools to get numbers of colors
 - Paletton is good for complimentary colors
 - Here's a simple Hex color tool
 - This for pairing colors together
- Some color inspiration: <https://www.awwwards.com/websites/colorful/>

Typography

Typeface terminology

Serif

A serif is a small decorative flourish on the end of the strokes that make up letters and symbols.

Sans Serif

Sans Serif fonts do not have any flourishes at the end of strokes.

Monospaced

Monospaced fonts, letters, and characters each occupy the same amount of horizontal space.

Typeface

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Monospaced

Monospaced fonts, letters, and characters each occupy the same amount of horizontal space.

Georgia
Times
Times New Roman

Arial
Verdana
Helvetica

Courier
Courier New

Font stack

It's important to understand that the browser will only display font if it's installed on user's computer.

Font stack - a collection of more than one typeface in an order of preference to be displayed in the browser if some of the typefaces are not found.

font-family: Georgia, Courier, serif;

Tips for choosing fonts

- Don't have too many fonts! Limit yourself to 2-3 maximum.
 - 1 body font
 - 1 headline font
- Make sure fonts are readable, not too big or too small
- You can also look into Google Fonts, which are free to use:
<https://fonts.google.com/>
- Examples of nice web typography: [here](#) and [here](#)

Body text

1. Choose something simple. Sans Serif usually works well, but some serif can also be readable.
2. Make sure you can read it when you have a lot of it in a paragraph!
3. Choose something with multiple weights, such as bold and italics

Body text examples

Apparently we had reached a great height in the atmosphere, for the sky was a dead black, and the stars had ceased to twinkle. By the same illusion which lifts the horizon of the sea to the level of the spectator on a hillside, the sable cloud beneath was dished out, and the car seemed to float in the middle of an immense dark sphere, whose upper half was strewn with silver. Looking down into the dark gulf below, I could see a ruddy light streaming through a rift in the clouds.

yes

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no

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yes

Headline text

1. Choose something that communicates what you want. This is the place to have fun and set your visual style.
 - If you want something clean and bold, pick a font that says that. If you want something vintage, then do that. If you want to make something spooky-themed, there are fonts for that as well.
2. Make sure it is different enough from your body font but not too different. You can be the judge of that! Google fonts has suggestions on font pairing
3. Think about hierarchy of information. What is the most important, what is the least. Also don't make your headlines too long!

Headline text examples

A funky retro headline

A rounded and friendly headline

A classy vintage headline

Headline text examples

A HANDWRITTEN HEADLINE

A typewriter-like headline

A clean and modern headline

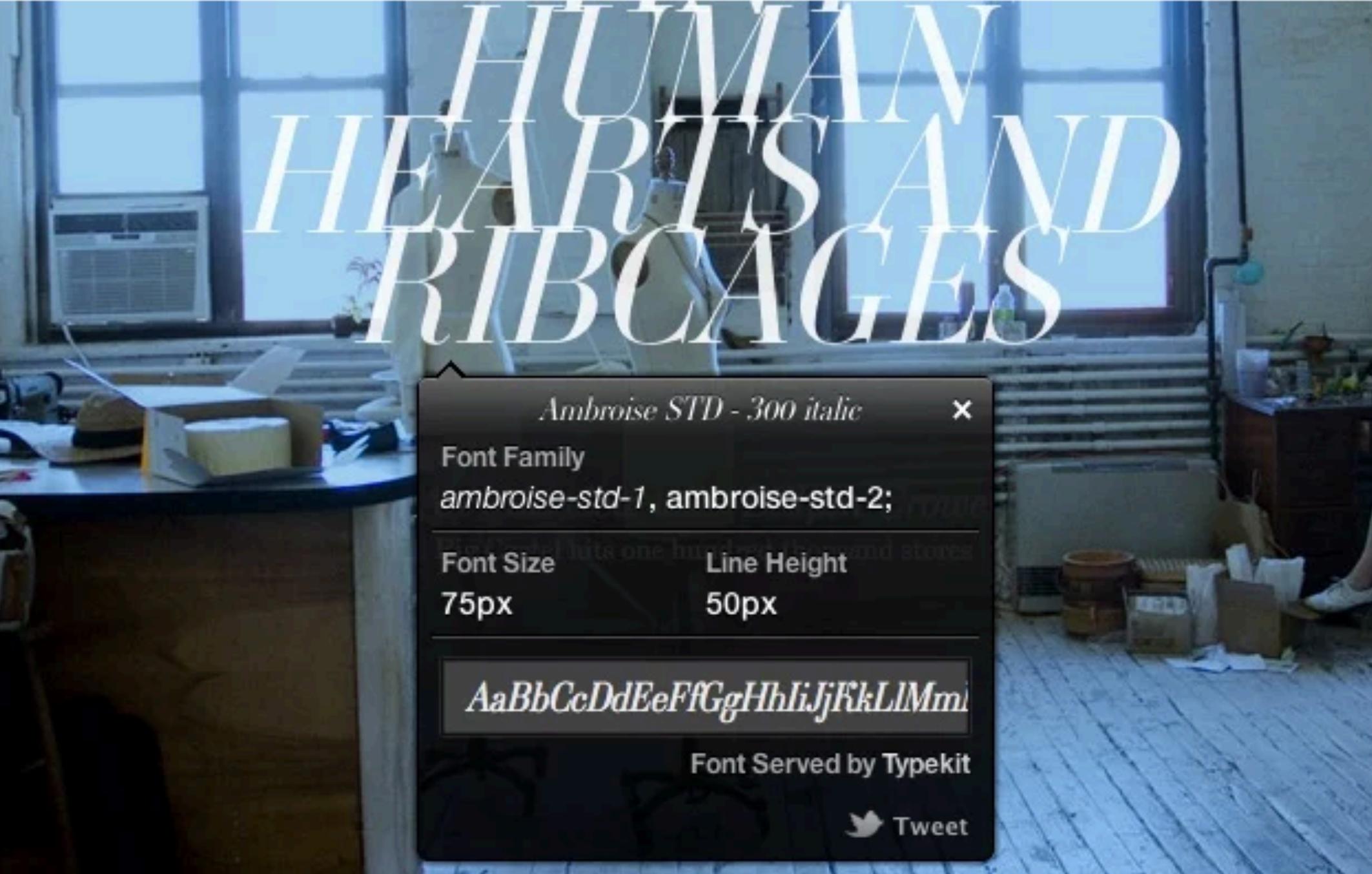
What font is that?

 **WhatFont**
offered by chengyinliu.com

★★★★★ (1179) | [Developer Tools](#) | 727,458 users

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Ambroise STD - 300 italic

Font Family
`ambroise-std-1, ambroise-std-2;`

Font Size
75px

Line Height
50px

`AaBbCcDdEeFfGgHhIiJjKkLlMmI`

Font Served by Typekit

 Tweet

Added to Chrome 

 Compatible with your device

The easiest way to identify fonts on web pages.
[PLEASE refresh tabs after installation to load WhatFont.]

What is the easiest way to find out the fonts used in a webpage? Firebug and Webkit Inspector are easy enough to use for developers. However, for others, this should not be necessary. With this extension, you could inspect web fonts by just hovering on them. It is that simple and elegant.

It also detects the services used for serving the web fonts. Supports Typekit and Google.

 [Website](#)

 [Report Abuse](#)

Additional Information

Version: 2.0.6
Updated: June 16, 2016
Size: 115KiB
Language: English

WhatFont plugin

Font combination resources

1. [Canva's Ultimate Guide to Font Pairing](#)
2. [Canva Font Combinations Tool](#)
3. [Typewolf](#)
4. [Fonts In Use](#)
5. [Typ.io](#)

CSS Text

Default Web Fonts

Verdana

Arial

Arial Narrow

Arial Black

Helvetica

Century Gothic

Courier

Courier New

COPPERPLATE GOTHIC

Times

Times New Roman

Georgia

Geneva

Gill Sans

Tahoma

Trebuchet

Comic Sans

Impact

Palatino Linotype

Book Antiqua

Lucida Console

Lucida Sans Unicode

Serif

Sans-Serif

Setting the font-family

- *font-family* property sets the font in your CSS
- Presented as a hierarchy of choices (1st choice, 2nd choice, 3rd choice)
so it's good to have a fallback for older browsers that can't render

```
body {  
    font-family: Georgia, Courier, serif;  
}  
  
h1, h2, h3 {  
    font-family: Arial, Verdana, sans-serif;  
}
```

Custom web fonts: Google Fonts

Add link in <head> of HTML

```
<link href="https://fonts.googleapis.com/css?  
family=Roboto" rel="stylesheet">
```

Use with font-family property in CSS

```
font-family: 'Roboto', sans-serif;
```

Google Fonts: step 1

Google Fonts: step 2

Custom web fonts: @font-face

- *@font-face* allows you to set a font, even if it's not installed on user's computer
- It is important that the license for the font permits it to be used in this way

```
@font-face {  
    font-family: liberator;  
    src: url('fonts/liberator.otf');  
}  
  
h1, h2, h3 {  
    font-family: liberator, Georgia, serif;  
}
```

Font conversion

- Different browsers support different formats for fonts
- You can convert fonts using [**Font Squirrel**](#)

	EOT	OTF / TTF	WOFF	WOFF2	SVG
IE 8-11	X				
IE 9-11	X	X	X		
Edge 12 - 14		X	X		
Firefox 40-45		X	X	X	
Chrome 43-49		X	X	X	
Safari 8-9		X	X		X
Opera 32-35		X	X	X	
iOS Safari 8.4-9.1		X	X		X
Android 4.4 - 44		X	X		
Chrome for Android 46		X	X	X	

Text properties we can change

1. Size of the text
2. Weight of the text (ex: light, bold)
3. Capitalization (uppercase, lowercase)
4. Decoration (underline, strikethrough)
5. Spacing (between characters, or between lines)
6. Alignment (ex: left, center)
7. Shadow

1. font-size

- Font can be sized with pixels, percentages and ems (the size of an m at the standard font size the browser is set to, which is user adjustable).
- The default size of paragraph text in a browser is 16 pixels.
- Pixels is recommended to use most often, because % and ems will change if user's default text size is different

```
body {  
    font-size: 14px;  
}  
  
h1 {  
    font-size: 200%;  
}
```

2. font-weight

- Allows you to create bold text
- We used **bold** in our HTML documents, but you can also apply that in CSS

```
.titles {  
    font-weight: bold;  
}  
  
#name {  
    font-weight: normal;  
}  
  
#id {  
    font-style: italic;  
}
```

3. text-transform

- Can transform selections to uppercase, lowercase or capitalise (the first letter of each word)

```
body {  
    text-transform: lowercase;  
}  
  
h1, h2, h3 {  
    text-transform: uppercase;  
}  
  
#name {  
    text-transform: capitalize;  
}
```

4. text-decoration

- Can add underline, overline, line-through and blink

```
h1 {  
    text-decoration: blink;  
}
```

```
.cities {  
    text-decoration: line-through;  
}
```

5. Text spacing

We can change the spacing between letters, between words, or between lines of text to make it more readable.

- **line-height (leading)**, ie vertical spacing, between lines
- **letter-spacing (kerning)**, ie horizontal spacing, within words
- **word-spacing** (width of spaces between words)

Recommended to use **ems** to measure all of these so it's relative to the font sizes selected.

```
h1 {  
    font-size: 24px;  
    letter-spacing: 0.2em;  
}
```

6. text-align

- text-align allows to format left, center, right, or justified
- vertical-align allows to align text in various ways

```
h1 {  
    text-align: left;  
}  
  
p li {  
    vertical-align: text-top;  
}
```

7. text-shadow

- **CSS 3 allows for drop shadow on words, though not all browsers support it**

```
text-shadow: -1px -2px 3px #666666;
```

- The first variable indicates how far to the left or right the shadow should be (negative is to the left)
- The second variable indicates the distance to the top or bottom
- The third variable is optional and is amount of blur on the shadow (higher is more blur)
- Finally the color of the shadow is the hex code

Styling links

- We can style links and state of links with CSS
- The options are:
 - link (for anything that's a link)
 - visited (for a link that's been visited)

```
a:link{  
    color: deeppink;  
    text-decoration: underline;  
}
```

```
a:visited{  
    color:blue;  
    text-decoration: underline;  
}
```

Hover and active states

- Hover (when user hovers over), active (when user activates something)
- Could be used with buttons, links and more

```
myButton:hover {  
    background-color: red;  
}
```

```
myButton:active {  
    background-color:blue;  
}
```

Questions?

Midterm Assignment

Midterm Assignment 1

A multi-page (at least 3) website responding to one of the 3 assignment prompts. It's an individual project.

Your midterm project will include the following:

- Must be posted to Github pages in proper file structure.
- Your code should be neat and well organized, as well as well commented out
- The HTML and CSS code is efficient (no duplications), with CSS in an external style.css file

Required web elements include:

- Minimum of three HTML pages
- Media elements (video, audio, iframes)
- Appropriate usage of HTML elements: text (h, p, ul, ol, li), lists, links, images, div, span
- Use of Classes and IDs in your HTML and as CSS selectors
- CSS color selections
- CSS font selections

All code must be posted to Github by Wednesday, 10/11 6pm. Once you do that, email me 2 links:

1. Link to project repository
2. Link to your Github page

In class presentation 1

1. Five minute presentation to the class
2. Explaining your idea, your code, your visual choices and your process.
3. You will be graded according to a rubric on concept, execution, visual design and effective communication.
4. There will be guest critics.
5. Midterm presentations: Thursday, October 12.

In class presentation 2

1. Explaining your idea, your code, your visual choices and your process.
2. Think of it as an elevator pitch:
 1. Who is your target user? How do you talk to her? Why does she need your product? What problems your product is solving?
 2. Why did you choose this visual identity?
 3. Explain your code (structure, html elements, css fonts, colors you chose)
 4. Process: what worked and what didn't
3. Five minutes is not a long time - rehearse, rehearse, rehearse!

Prompts

- An conceptual, interactive self portrait. Make a digital interpretation of a portrait that has come before you, from painting to photography. This project is not intended to be a portfolio but some kind of creative representation of yourself and who you are that cannot be experienced in another way.
- A piece of hypertext narrative or art, similar to one of these examples <https://rhizome.org/art/artbase/collections/collection-hypertext/>
- Invent a fictional or futuristic product (a machine that could record your dreams, a sneaker that plays music, get creative!) and create a product website for it. Look here for some inspiration <http://www.webdesign-inspiration.com/web-designs/type/product>

Grading rubric

**[https://github.com/rutaitp/CISC-2350-R01-2017/blob/master/
week6/grading_rubric.pdf](https://github.com/rutaitp/CISC-2350-R01-2017/blob/master/week6/grading_rubric.pdf)**

Homework assignments

Week1-Week6

Homework assignments w1-w6

1. Week2: Make a single page website as a response to one of the following subject prompts:

- Tell us about an artist or person who is most influential to you creatively
- Pick a topic you know nothing about on Wikipedia and tell us about it in a new way
- Add required HTML elements (detailed description on Github for Week 2-2)

2. Week3: Building on the same page from last week, add the following:

1. A second HTML page. For the second page you can add additional content and link it in your file.
2. Additional HTML elements (detailed description on Github for Week 3-2)

3. Week4: Using developer tools modify one of the websites by doing the following:

1. Access existing HTML elements through Elements window and change the content in them:
 1. Text in headings, paragraphs
 2. Change images src
2. Access existing HTML elements and also try modifying the style
3. Try experimenting what else you can do (e.g. can you add additional HTML elements?)

4. Week5-1: Apply some CSS to your multiple pages homework from last week as follows:

1. Create a new folder called Week5-1
2. **Copy over** your files from last week into that folder
3. Create a new CSS file and link it in the head of your HTML, following the instructions
4. Use at least 3 selectors in your homework. For example, you can change the background colour of the page, make text a different color, add a border around some elements. Feel free to experiment.

5. Week 5-2: Create a wireframe of your project (at least one page of it), either hand drawn or done some other way that you prefer (Photoshop, etc.) It should illustrate content you're thinking about as well as structure.

6. All homework assignments should be posted on Github and have separate Github Page link working.
7. All missing homework assignments should be posted by Wednesday, 10/10 6pm.

Homework assignment

Homework

- 1. Post your missing homework from Week1-Week6 (to Github).**
- 2. Work on your midterm assignment, which is due next Thursday, October 12th to present in class.**
- 3. By Wednesday 10/10 6pm: post your midterm project to Github.**
- 4. Your midterm project will include the following:**
 - Must be posted to Github pages in proper file structure
 - Your code should be neat and well organized, as well as well commented out
 - The HTML and CSS code is efficient (no duplications), with CSS in an external style.css file
- 5. Required web elements include:**
 - Minimum of three HTML pages
 - Media elements (video, audio, iframes)
 - Appropriate usage of HTML elements: text (h, p, ul, ol, li), lists, links, images, div, span
 - Use of Classes and IDs in your HTML and as CSS selectors
 - CSS color selections
 - CSS font selections
- 6. Office hours on Slack.**