

EDPS 6560 Multimedia Learning Exporting Raster Graphics for Web Publication

Eric Poitras, Ph.D. eric.poitras@utah.edu

Spring 2019 February 6th



Class Objectives

By the end of this class you should be able to:

- Demonstrate knowledge of filters
- Demonstrate an understanding of importing, exporting, organizing, and saving raster graphics
- Link an external style sheet
- Understand Bootstrap 4 utilities for CSS grids



Class Schedule

5:00-5:30 PM

Styling HTML Elements Using CSS Grids

5:30-6:00 PM

• Effects and Photograph Composition

6:00-6:10 PM

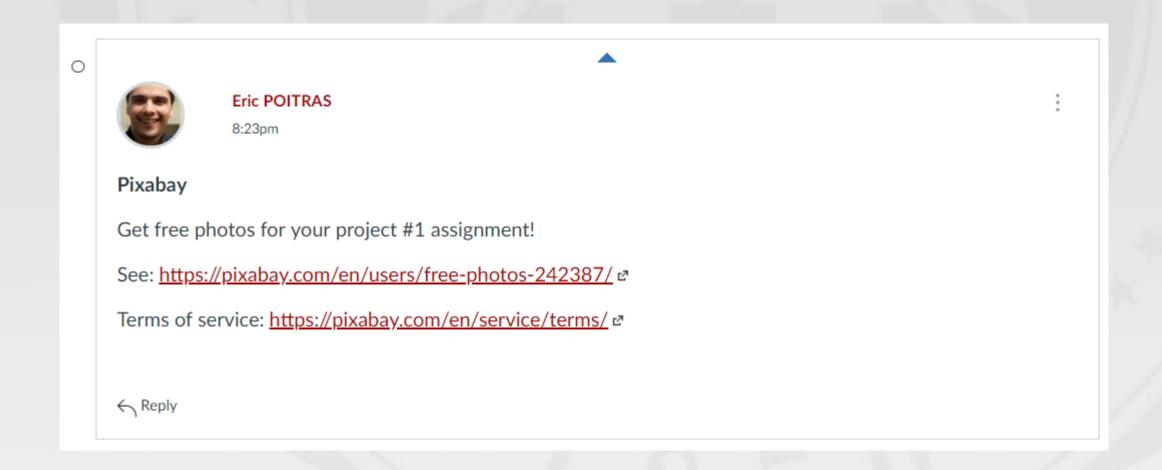
Break

6:10-8:00 PM

Work on the Project #1 Assignment



Digital Assets Forum





CSS Syntax and Selector

CSS Syntax

- The CSS syntax consists of a selector and declaration statement.
- The selector identifies a single or multiple elements to assign styling properties
- The declaration, denoted by curly braces, includes properties and values. See the <u>CSS Reference</u> for the complete list of properties.

```
Example:
```

```
h1{
    color: blue;
    /* Comments are written like this... */
}
```



Inline Style

Inline style

- An inline style may be used to apply a unique style for a single element.
- To use inline styles, add the style attribute to the relevant element.

Example:

<h1 style="color:blue;margin-left:30px;">This is a heading</h1>



Internal Style Sheet

Internal Style Sheet

- An internal style sheet may be used to apply unique styling properties to single pages.
- Internal styles are defined within the <style> element, inside the
 <head> section of an HTML page:

```
Example:
<style>
Add styling properties here
*/
</style>
```



External Style Sheet

External Style Sheet

- External style sheets allow you to assign CSS styling properties to every page within a website
- •, Each page must include a reference to the external style sheet file inside the k> element. The k> element goes inside the <head> section:
- Example:
- <link rel="stylesheet" type="text/css" href="css/stylesheet.css"</pre>
- •This link reference to the stylesheet defines the type of document through the type and relation attributes



Variable Width Column

 Alternatively, you can <u>resize each column to the width of its content</u> using col-{breakpoint}-auto, for example as in "col-md-auto" in the row below.

1 of 3 Variable width content 3 of 3



Vertical Alignment

• In order to vertically align *multiple* columns within rows of a certain height, use "align-items-start", "align-items-center", and "align-items-end" in the same div container as "row".

One of three columns	One of three columns	One of three columns	
One of three columns	One of three columns	One of three columns	
One of three columns	One of three columns	One of three columns	



Vertical Alignment

• In order to vertically align *single* columns within rows of a certain height, use "align-self-start", "align-self-center", and "align-self-end" in the same div container as "row".

One of three columns		
	One of three columns	
		One of three columns



Horizontal Alignment

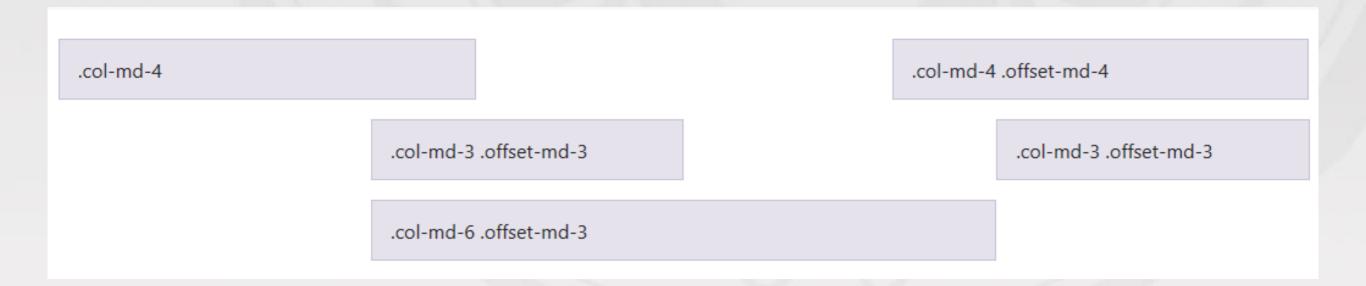
• In order to <a href="https://www.new.no.ni.nlm.no.ni.n

One of two columns		One of two columns			
	One of two columns		One of two columns		
		One of two columns		One of two columns	
One of two columns			One of tw	o columns	
One of two columns				One of two columns	



Offsetting Columns

- In order to move columns, you can rely on both <u>offsets</u> or <u>margin</u> utilities. The .offset-md-* classes move columns to the left along a certain unit of width.
- The .mr-auto will force columns away from each other within a row.





Review BS4 CSS Grid

Purpose	Level	Examples
Variable width content	.col-{auto}	.col-auto, .col-sm-auto (replaces unit of widths)
Vertical alignment (all columns)	.row	.align-items-start .align-items-center .align-items-end
Vertical alignment (single columns)	.col	.align-self-start .align-self-center .align-self-end
Horizontal alignment (all columns)	.row	.justify-content-start .justify-content-center .justify-content-end .justify-content-around .justify-content-between
Horizontal alignment (offset single columns)	.col	.offset-3, .offset-md-3
Horizontal alignment (margin single columns)	.col	.ml-auto, .mr-auto, .ml-md-auto



What will we be learning today?

By the end of today, you should be able to:

- 1. Composing images
- 2. Publishing images for the web

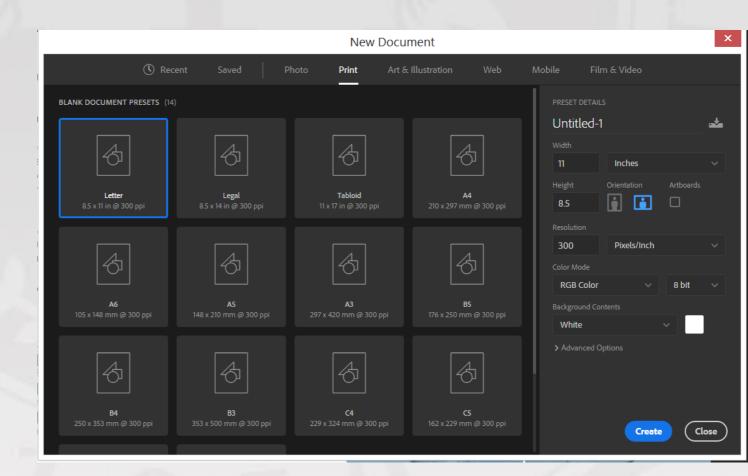




Choose a Preset

Open Photoshop and choose New.

Select the Print > Letter 8 by 11 inch option. Change the orientation to horizontal.





Place and resize an image

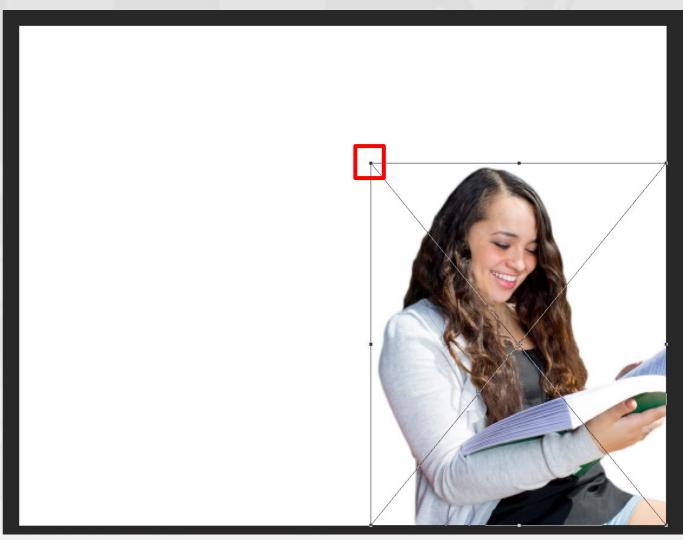
Choose File > Place Embedded.

Navigate to the file. Left click on the workspace while the icon is loaded with the image.

Resize the image by selecting the Move tool and SHIFT + dragging the corner of the image to position it in the lower left corner.

Choose Place.





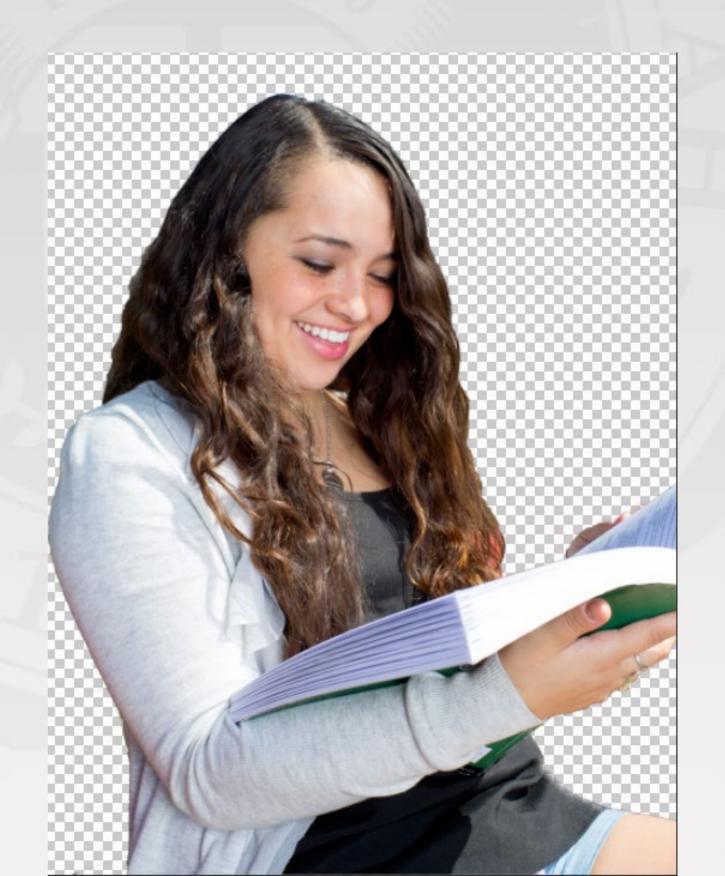


Adding preset style effects to layers

Click Add a layer style (<u>fx</u>.) to add effects to layers.

Explore for yourself some of the options available.

I simply added a drop shadow effect for the foreground to popup from the background image.





Drawing a Rectangle

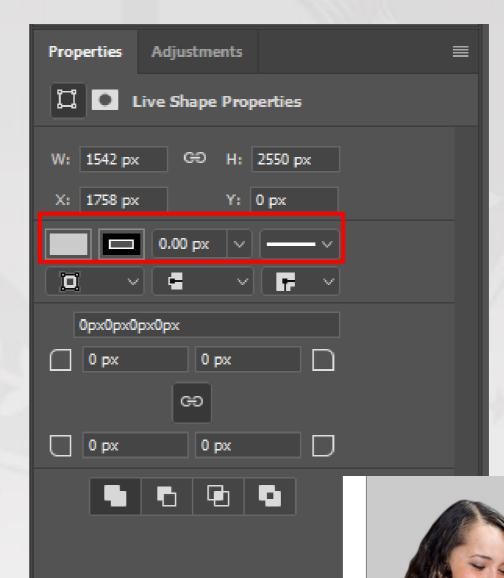
Select the Rectangle Tool. Left click and drag to draw the rectangle.

To align it with the workspace, use the Move tool. Choose Place.

Select the Rectangle layer. In the Properties panel, assign a light gray color and Opx of width to the border.

The opacity can be set in the layers panel.

Adjust the order of the layers to move the rectangle layer below the image in the stacking order.



Q

四



Writing Text

Select the Horizontal Text Tool. Left click on the workspace and drag to define the multiline text area.

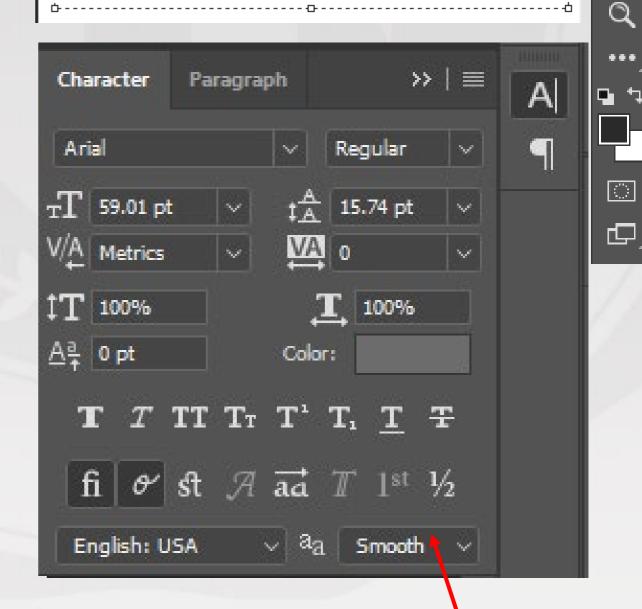
For single line text, select once.

Highlight the text, you will see the properties that you can customize to style the text in the control panel.

Select the paragraph styling options, you will have additional options to style whole paragraphs.

Take some time to experiment with these options.

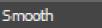
Maria Golson struggles in math. She is now in enrolled in the undergraduate physics program, which has an introductory math course as a prerequsitie. She is very passionate about learning and hopes to land a job as a laser engineer when she completes the program. Her biggest challenge so far has been calculating derivatives. She spends most of her time outside of class talking with her friends and working on example problems featured in the textbook. Because office hours with the professor are limited to only a few during the week, she often gets stuck on these problems and feels frustated about her lack of progress in the course.





















Looking Forward to the Project #1 Assignment

Start working on your assignment using the tools that we've covered so far in Photoshop, if you have any questions, just let me know.

Maria Golson

Maria Golson struggles in math. She is now in enrolled in the undergraduate physics program, which has an introductory math course as a prerequsitie. She is very passionate about learning and hopes to land a job as a laser engineer when she completes the program. Her biggest challenge so far has been calculating derivatives. She spends most of her time outside of class talking with her friends and working on example problems featured in the textbook. Because office hours with the professor are limited to only a few during the week, she often gets stuck on these problems and feels frustated about her lack of progress in the course.

- Learn derivatives to estimate - Problems in textbook are too functions through interactive advanced step by step corrective feedback one-on-one tutoring

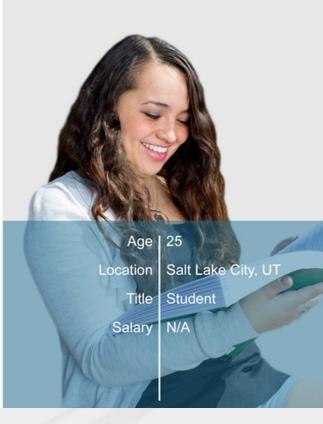
FRUSTRATIONS

- examples available online with Not enough opportunities for
 - No feedback available in example problems

LEARNING METHOD

At Home

MATH Student

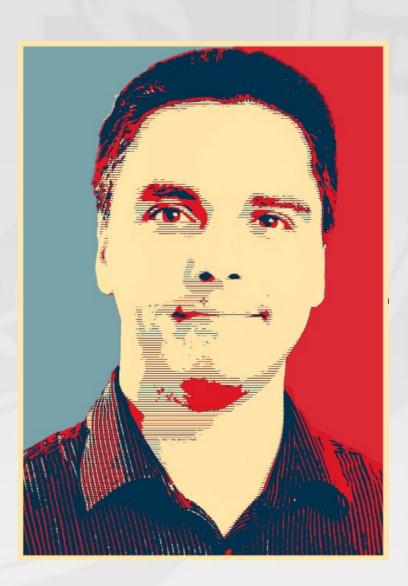




Looking Forward to the Project #1 Assignment









Exporting the photo

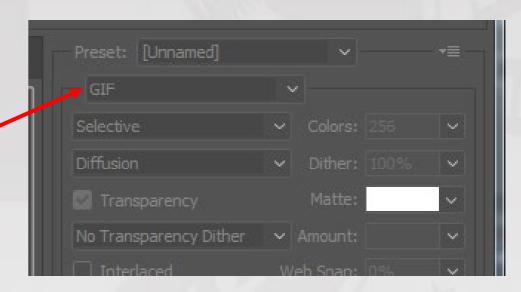
When you are satisfied with the results, save the file in an optimized format for either print or web publishing. For web publication, choose File > Export > Save for Web.

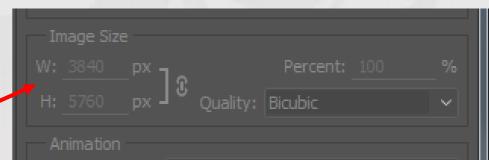
experiment with the Choose width and compression format and image dimension to get the desired file quality/size.

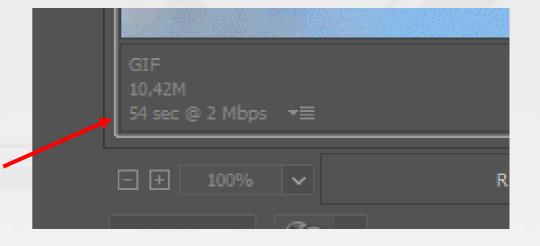
Choose compression settings (file format)

height

Monitor the resulting file size (less than 500Kb for web is ideal)









Break (10 min.)



Looking Forward to Project #1: Raster Graphics in Photoshop

- Apply the skills you have learned in Photoshop to edit a photograph
- For example, you may want to create a user persona as part of the requirements for the HCI class, a professional headshot for your portfolio in GitHub, background image for your site, ...
- You can take your own photograph, use a pre-existing one, or download a Creative Commons licensed one from the web.
- You are expected to demonstrate knowledge of retouching and blending tools, selection tools, filters, and adjustment layers as well as export the project in a format optimized for the web.
- You are required to submit the following files as a compressed zip folder:
 - Revised version of the image (.jpg, .png, ...)
 - Photoshop project file (.PSD)



Looking Forward to Project #1: Raster Graphics in Photoshop

- If you did any destructive edits to correct flaws in the image, just explain the steps you've taken as a comment in Canvas when submitting your assignment.
- Formatting requirements:
 - Prepare the image to be published for the web less than 250Kb or a quarter of a MB.
 - If a filter is applied to the image, enable the smart filter option
- The assignment is due at 11h59PM on Friday, the 8th of February.



Ps Resources

- Photoshop tutorials
 - PHLearn
 - Photoshoptutorials
 - Photoshopcafe
- iOS App (Free)
 - PixIr
 - Adobe Photoshop Express
- Desktop App (Free)
 - GIMP