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EDPS 6560
Multimedia Learning
Exporting Shapes in Ai and CSS Animations

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Spring 2018
April 18th

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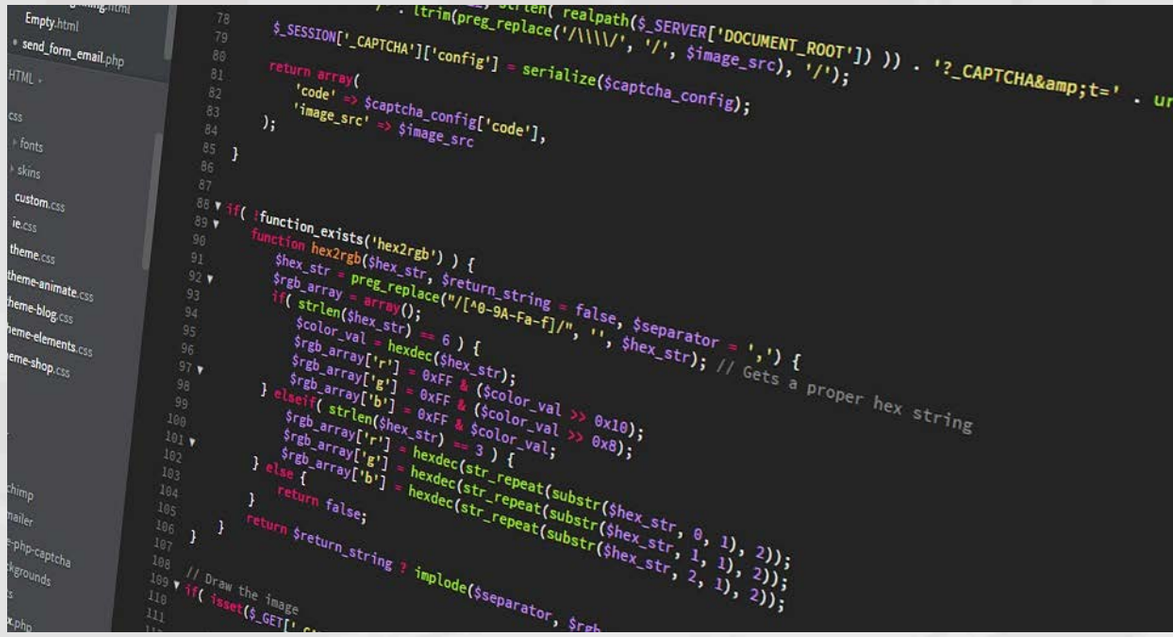
Class Objectives

- By the end of this class you should be able to:
- Demonstrate knowledge of preparing graphics for web, print, and video
- Using the CSS Pseudo Classes and Animations



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HCI Class Business

- Check your assignment submissions – make sure you haven't missed any deadlines!

HCI Class Presentation Schedules - Monday April 23rd

- Pizza will be served, feel free to bring other edible stuff
- Suggested format - 15 min. + 5 min. for question/tech setup for next group
  - 30 min. - Eating and last minute slide preparing
  - 20 min. - Essay Writing – Ryan, Kerriann, Steven
  - 20 min. - Horizonte Vocab Words – Maxine, Kim, Steve, Kyle
  - 10 min. - BREAK
  - 20 min. - Phrasal Verbs – Cassandra, Cheryl, Brian
  - 20 min. - Qualtrics Accelerate – Kyle, Lizz, Clay, Sophia, Kyle
  - 15 min. – Course Wrap-Up

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Class Schedule

5:00-6:30 PM

- Review of CSS Pseudo Classes and Animations

6:30-6:40 PM

- Break

6:40-8:00 PM

- Editing vectors for publication on the web

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CSS Pseudo Classes

Pseudo-classes

- A pseudo-class is used to define a special state of an element.
- For example, when a user hovers the mouse over an element, it is highlighted.
- The syntax of pseudo-classes:

```
selector:pseudo-class{
    property:value;
}
```

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CSS Pseudo Classes

Anchor pseudo-classes

• Most often used to animate CSS properties pertaining to hyperlinks. There are four different values for links:

- :link /* unvisited link */
- :visited /* visited link */
- :hover /* mouse over link */
- :active /* selected link */

• Note that a:hover MUST come after a:link and a:visited in the CSS definition. Furthermore, a:active must come after a:hover.

• Any type of selector may be used in combination with pseudo classes to change CSS properties relative to the state of the element. For a complete list of all relevant pseudo classes, refer to this documentation.

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CSS Animations

Animate.css library

• One quick way to get started is to try this CSS library. Visit the Git Hub repository for the link reference to the library hosted by jsdelivr or cloudfare.

```
<head>
  <link rel="stylesheet"
  href="https://cdn.jsdelivr.net/npm/animate.css@3.5.2/animate.min.css">
  <!-- or -->
  <link rel="stylesheet"
  href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/3.5.2/animate.min.css">
</head>
```

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CSS Animations

Animate.css library

- Add the class “animated” to the element that you want to animate. If you want the animation to loop infinitely, add the “infinite” class.
- Finally, consult the following table of class names to choose an effect.

Class Name			
bounce	flash	pulse	rubberBand
shake	headShake	swing	tada
wobble	jello	bounceIn	bounceInDown
bounceInLeft	bounceInRight	bounceInUp	bounceOut
bounceOutDown	bounceOutLeft	bounceOutRight	bounceOutUp
fadeIn	fadeInDown	fadeInDownBig	fadeInLeft
fadeInLeftBig	fadeInRight	fadeInRightBig	fadeInUp
fadeInUpBig	fadeOut	fadeOutDown	fadeOutDownBig
fadeOutLeft	fadeOutLeftBig	fadeOutRight	fadeOutRightBig
fadeOutUp	fadeOutUpBig	flipInX	flipInY
flipOutX	flipOutY	lightSpeedIn	lightSpeedOut
rotateIn	rotateInDownLeft	rotateInDownRight	rotateInUpLeft
rotateInUpRight	rotateOut	rotateOutDownLeft	rotateOutDownRight
rotateOutUpLeft	rotateOutUpRight	hinge	jackInTheBox
rollIn	rollOut	zoomIn	zoomInDown
zoomInLeft	zoomInRight	zoomInUp	zoomOut
zoomOutDown	zoomOutLeft	zoomOutRight	zoomOutUp
slideInDown	slideInLeft	slideInRight	slideInUp
slideOutDown	slideOutLeft	slideOutRight	slideOutUp

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CSS Animations

Animations

• To further animate CSS properties besides the options made available via pseudo-classes or libraries, you can refer to the CSS animations.

• An animation lets an element gradually change from one style to another. To specify how these are modified through time, you must first specify some keyframes for the animation.

• Here is the syntax:

```
@keyframes example{
        from {background-color: red;}
        to {background-color: yellow;}
}
/* The element to apply this to is */
div{
        animation-name: example;
        animation-duration: 4s;
}
```

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CSS Animations

Animations

• You can also use percentage values to indicate more than two states or separate values by commas to add additional properties, as in this example:

• Here is the syntax:

```
@keyframes example{
        0% {background-color: red;}
        25% {background-color: yellow;}
        50% {background-color: blue;}
        100% {background-color: green;}
}
/*The element to apply this to is*/
div{
        animation-name: example;
        animation-duration: 4s;
}
```

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CSS Animations

Animate.css library

• You can change the duration of your animations, add a delay or change the number of times that it plays:

```
#yourElement {
  -vendor-animation-duration: 3s;
  -vendor-animation-delay: 2s;
  -vendor-animation-iteration-count: infinite;
}
```

Then replace vendor with the corresponding type of browser (e.g., webkit, moz), for a complete list consult the following site.

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Exercise #5: Finalize Your Website

- You are expected to have finalized the positioning of all the HTML elements on your website (not necessarily all the content, use placeholders for remaining elements).
- There are no requirements, although you are free to use positioning property, flexbox containers, and add animations to elements.
- There are a range of different hosting providers to publish your site online. I recommend Amazon S3 or GitHub Pages. However, you can purchase a yearly plan for a virtual private server with Rackspace as well to have access to a Cpanel interface to manage your files.
- In the following slides, you'll find the instructions to get started with GitHub Pages.

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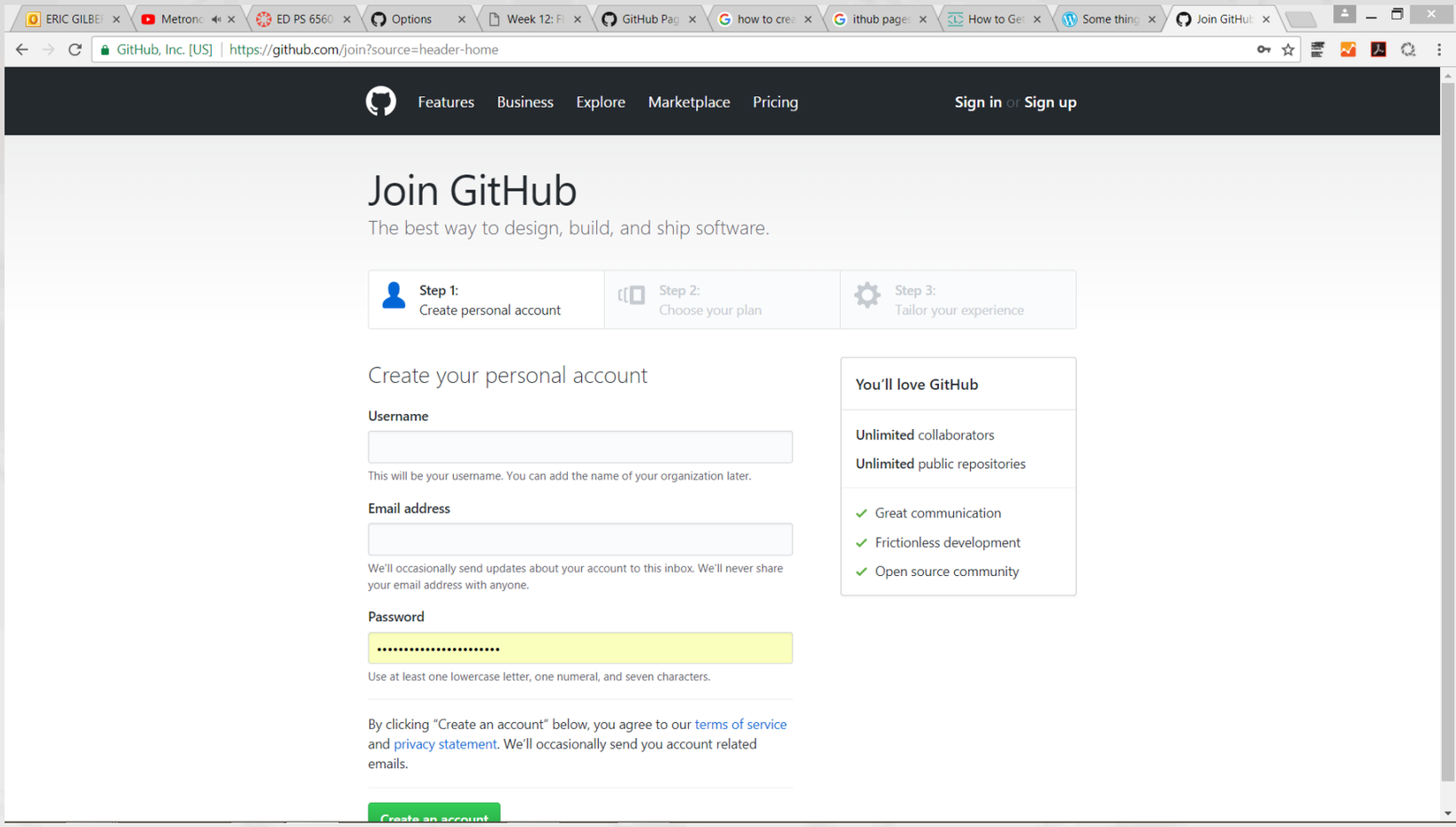
Sign up for an account

1. Navigate to this website: https://github.com/join?source=header-home
2. Choose a username, email, and password. Create an account.



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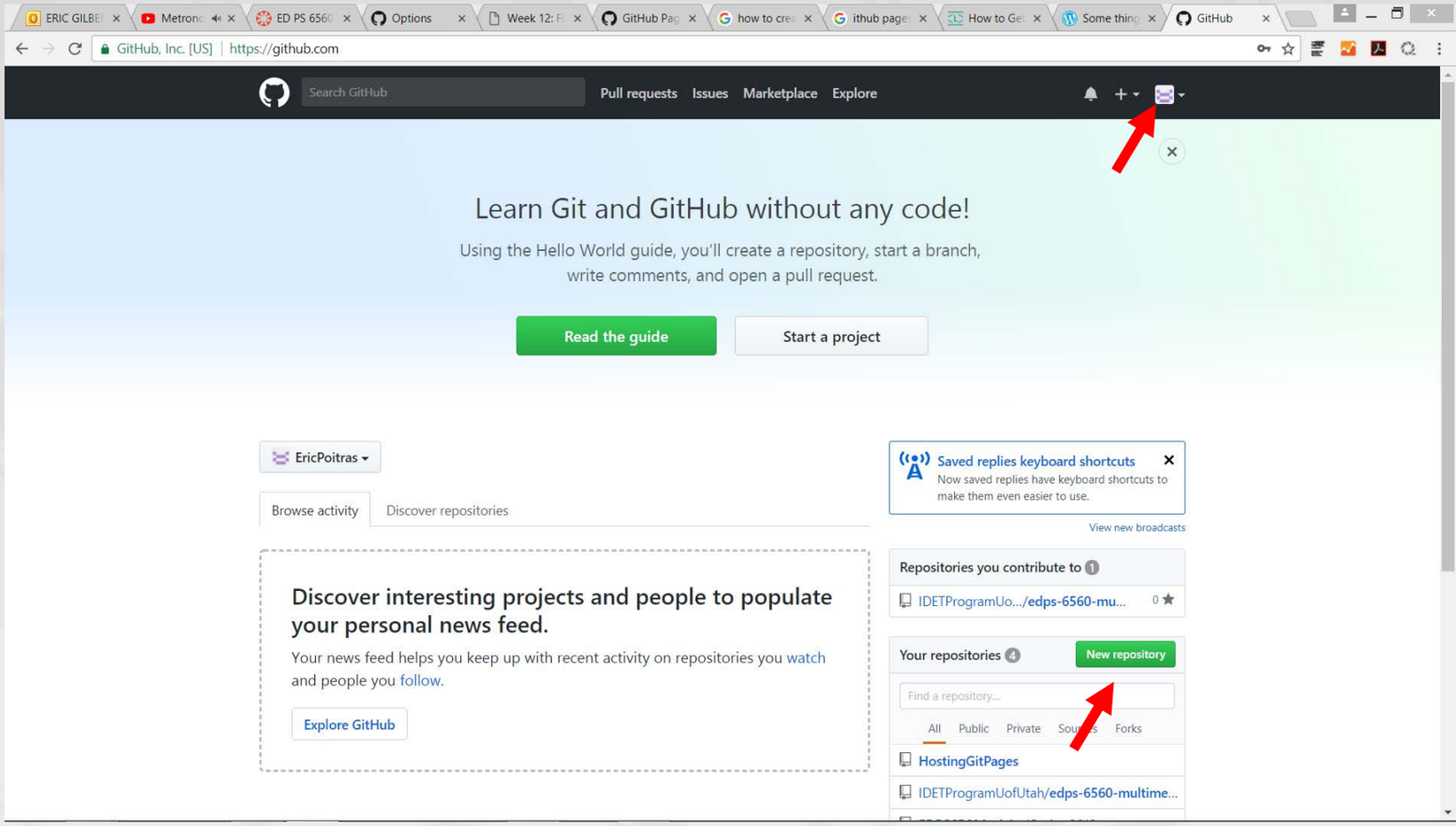
Creating a repository

1. Navigate to your profile page once you've signed in to the platform.
2. Select New Repository.



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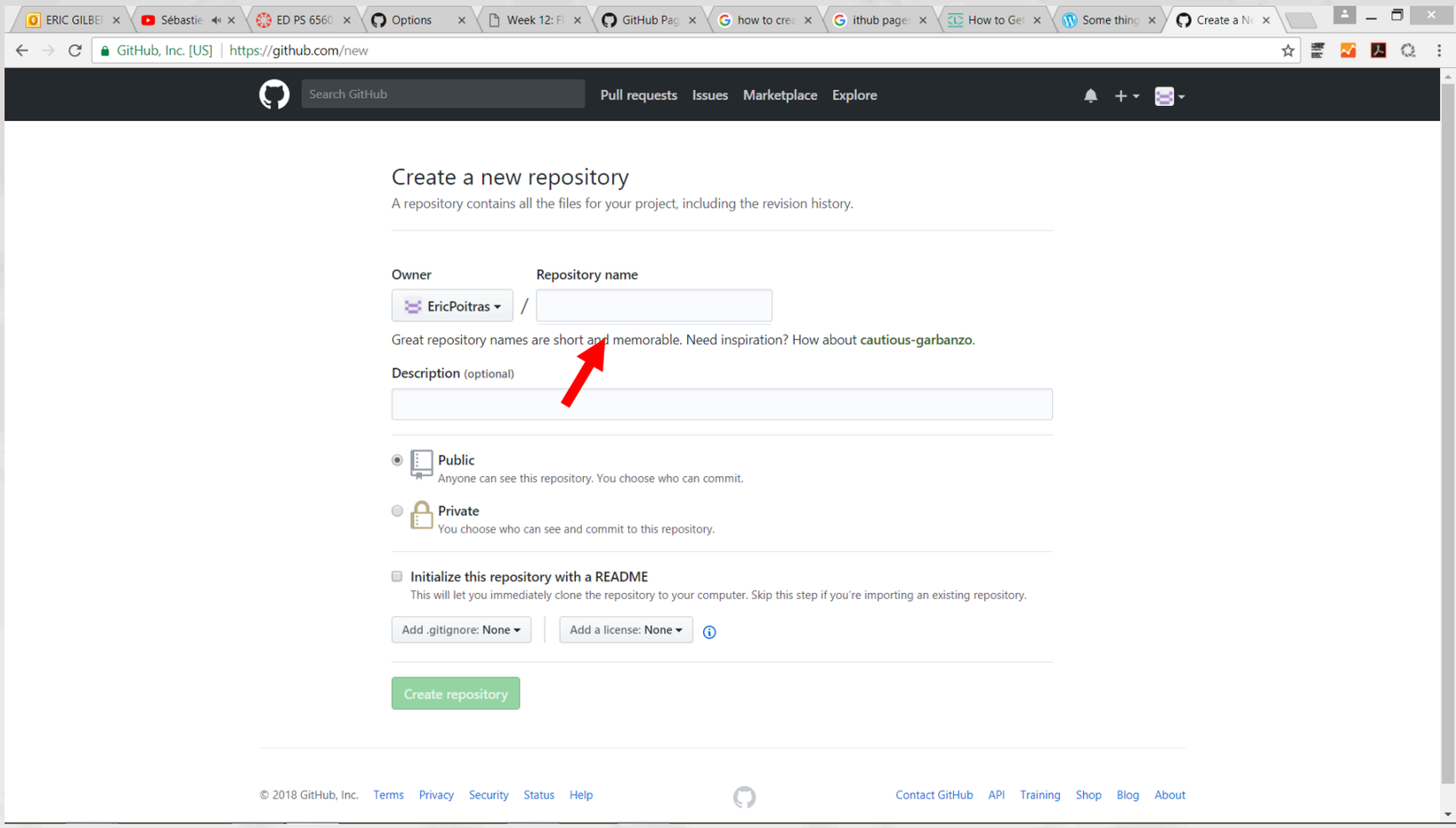
Creating a repository

1. Write a name for the repository. Write also a short description.
2. Choose Public. Then, specify that the repository should be created with a Readme file.
3. Create the repository.



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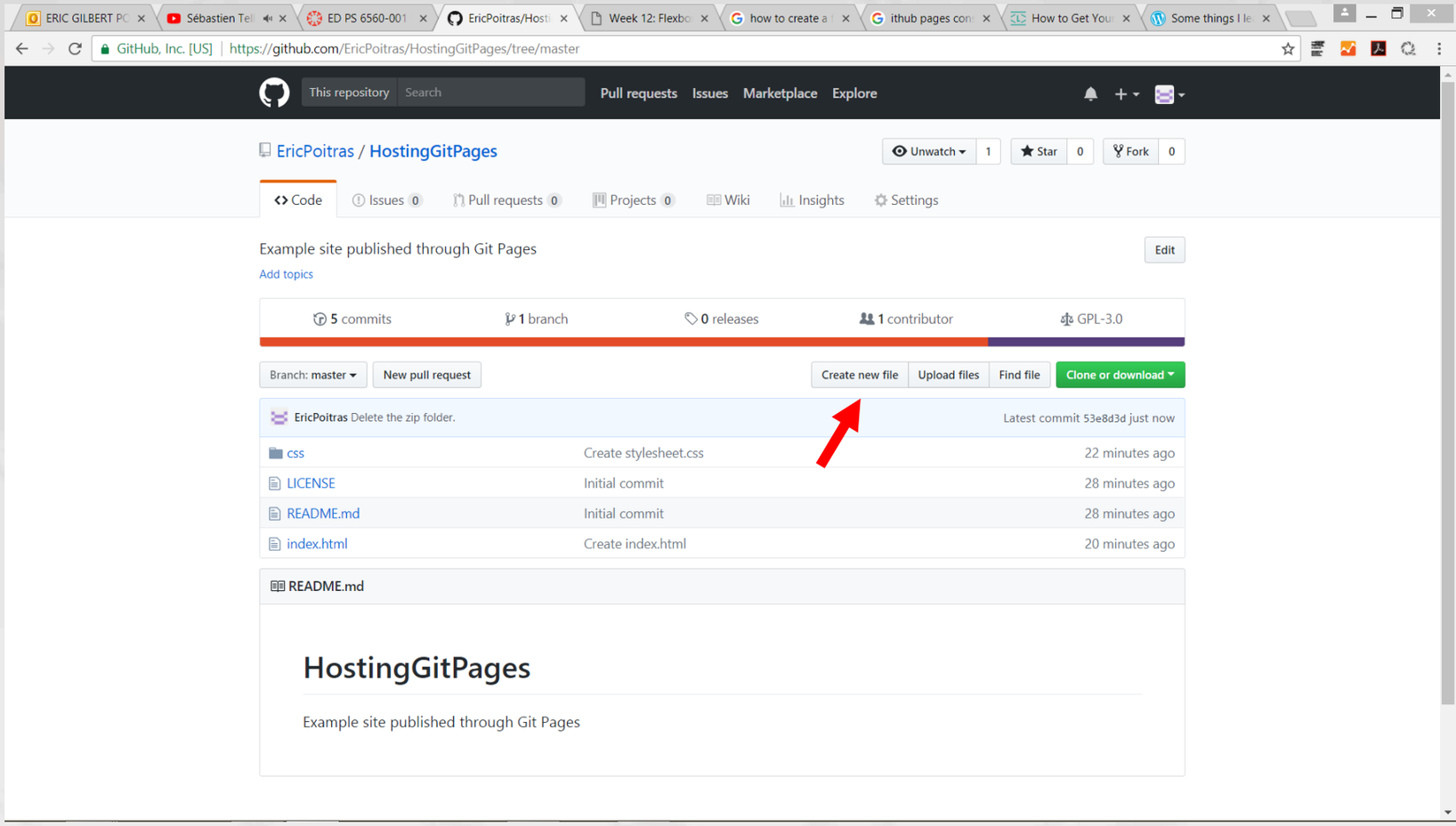
Creating the folder structure for your website

1. We will need to replicate the folder structure for your website to the respository, including the css folder, assets folder (if applicable), and index.html.
2. GitHub pages requires the use of an index.html file.
3. Select Create New File.



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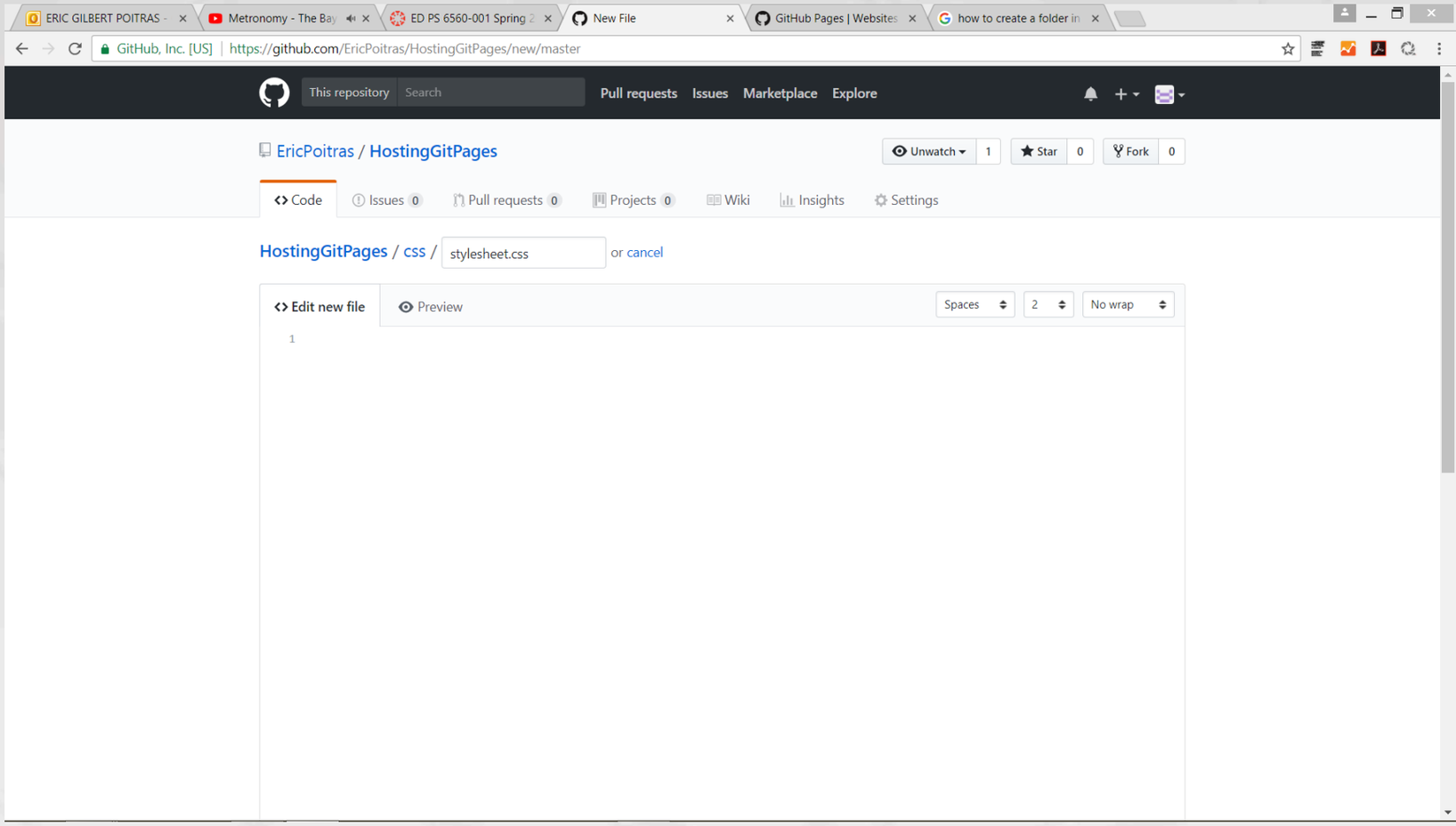
Creating the folder structure for your website

1. Write “css/” to create a folder.
2. Then, write stylesheet.css
3. Copy and paste the code of your stylesheet to the document.



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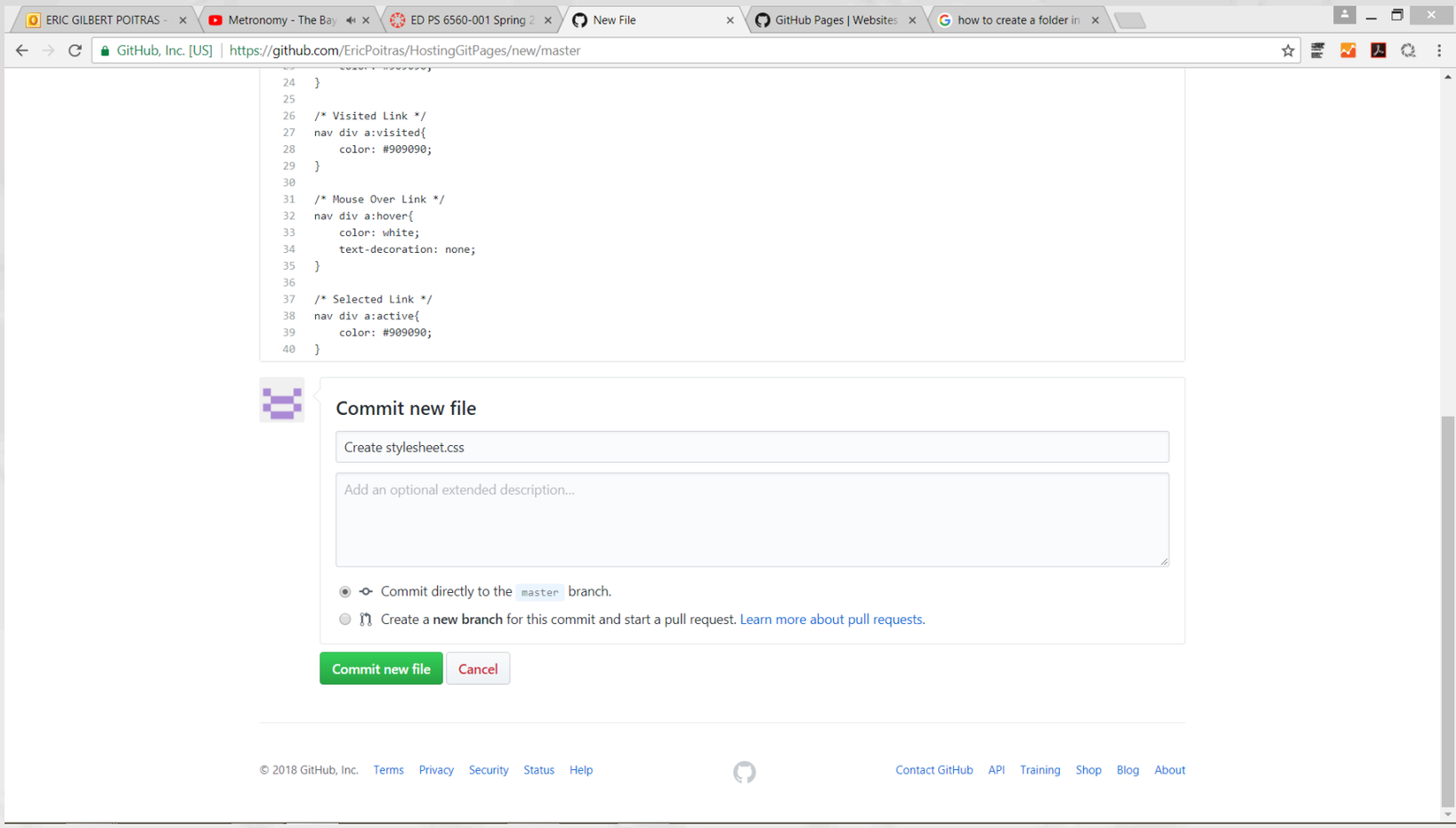
Creating the folder structure for your website

1. Scroll down.
2. Write a note for the history of changes made to this document. (e.g., create stylesheet.css)
3. Choose Commit to master branch. This specifies that the modification is accepted and does not require approval from the author of the repository.
4. Choose Commit changes.



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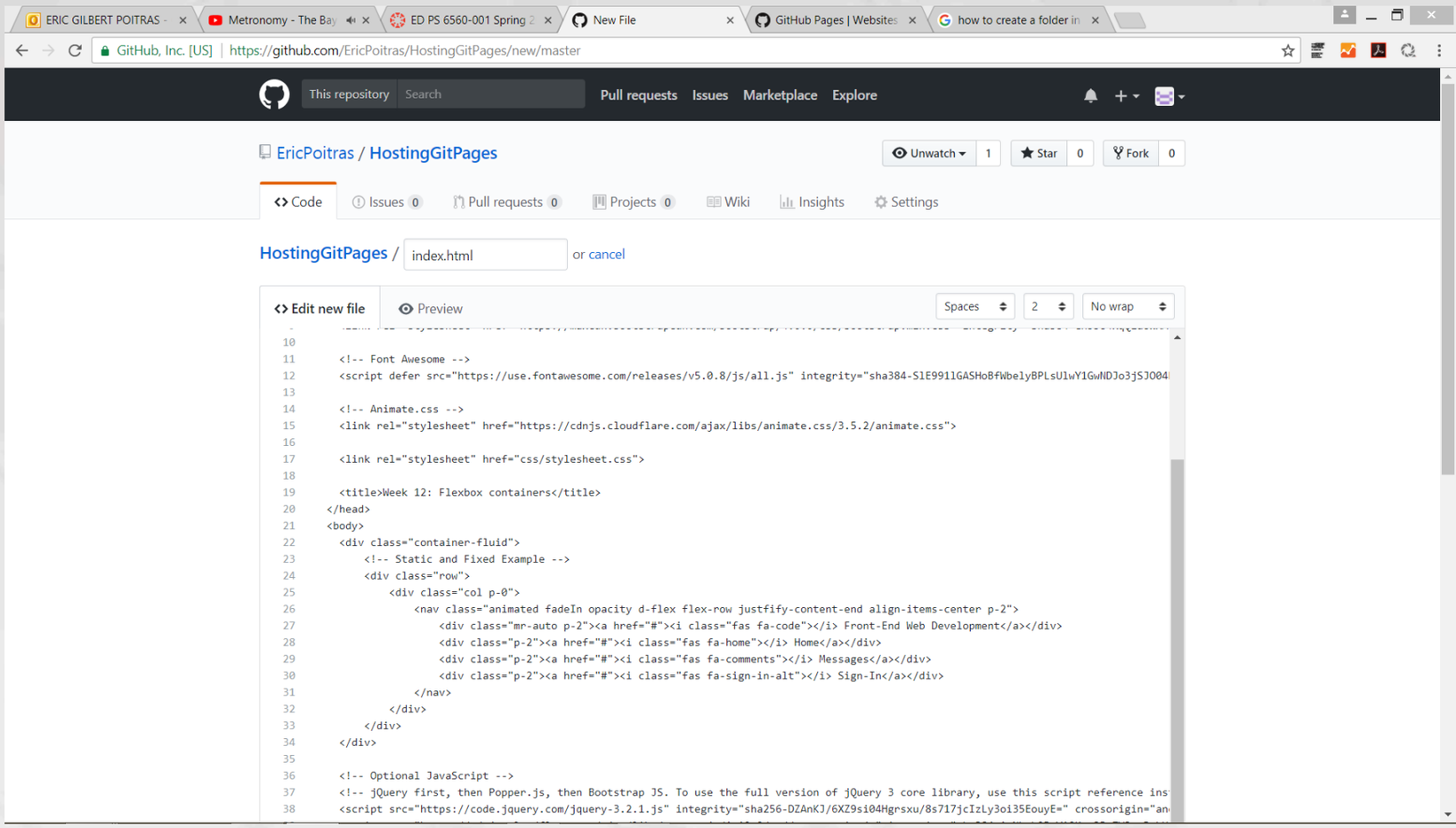
Creating the folder structure for your website

1. In the root directory, create the index.html through the same steps.
2. Copy paste your code.



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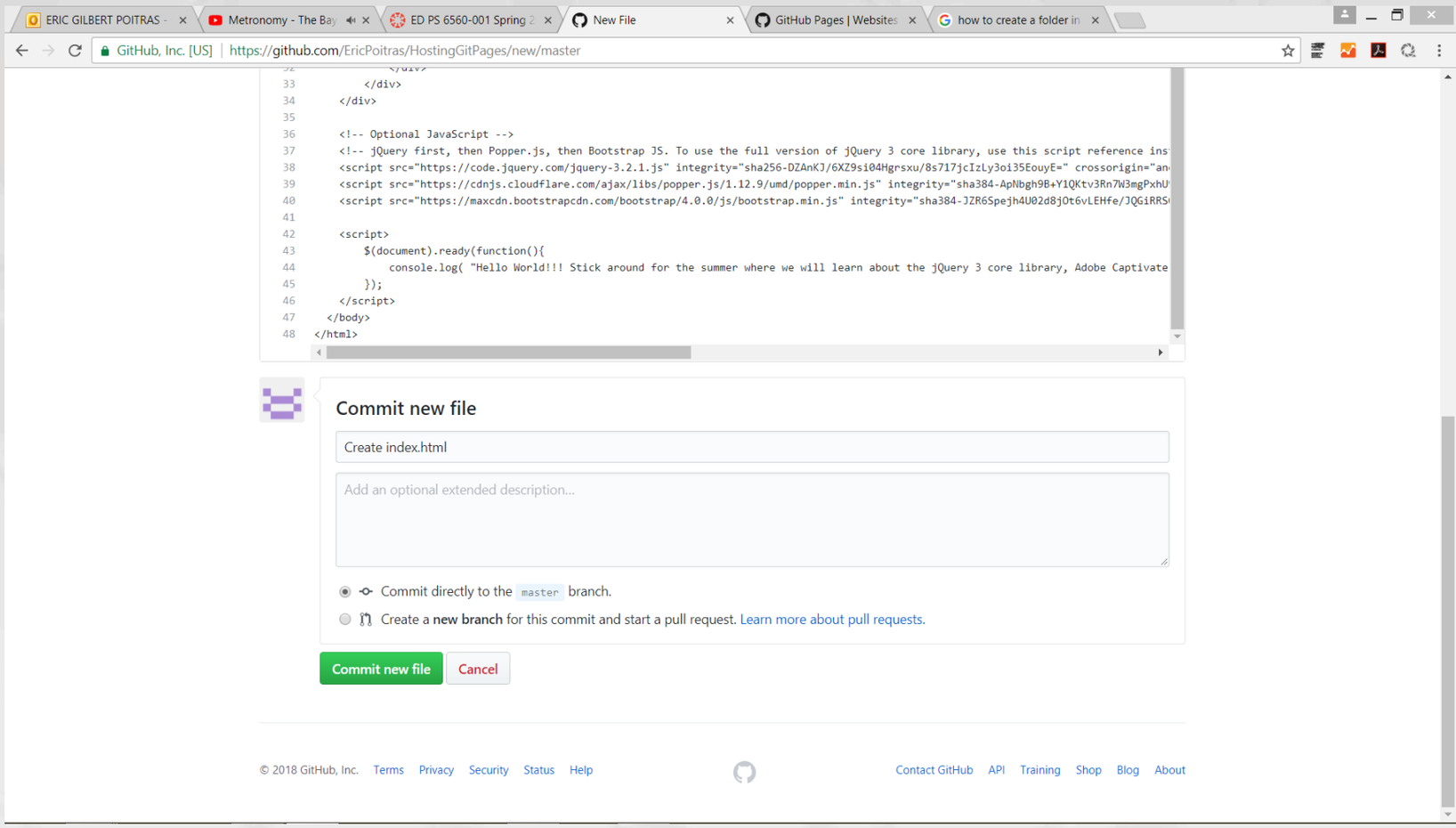
Creating the folder structure for your website

1. Commit the changes to the master branch.



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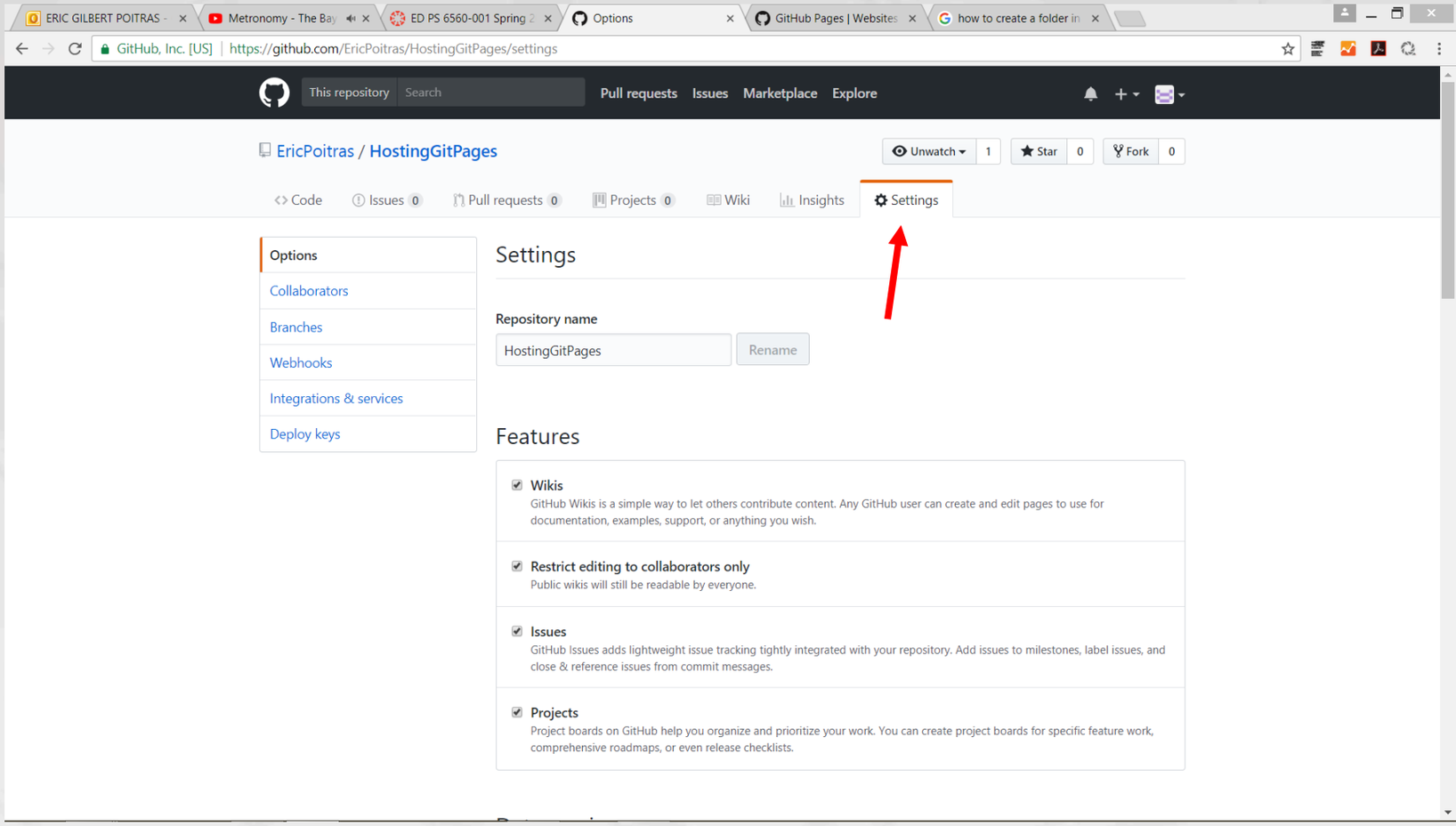
Creating the folder structure for your website

1. Navigate to the Settings of your account.
2. Scroll down until you reach the section “GitHub Pages”.



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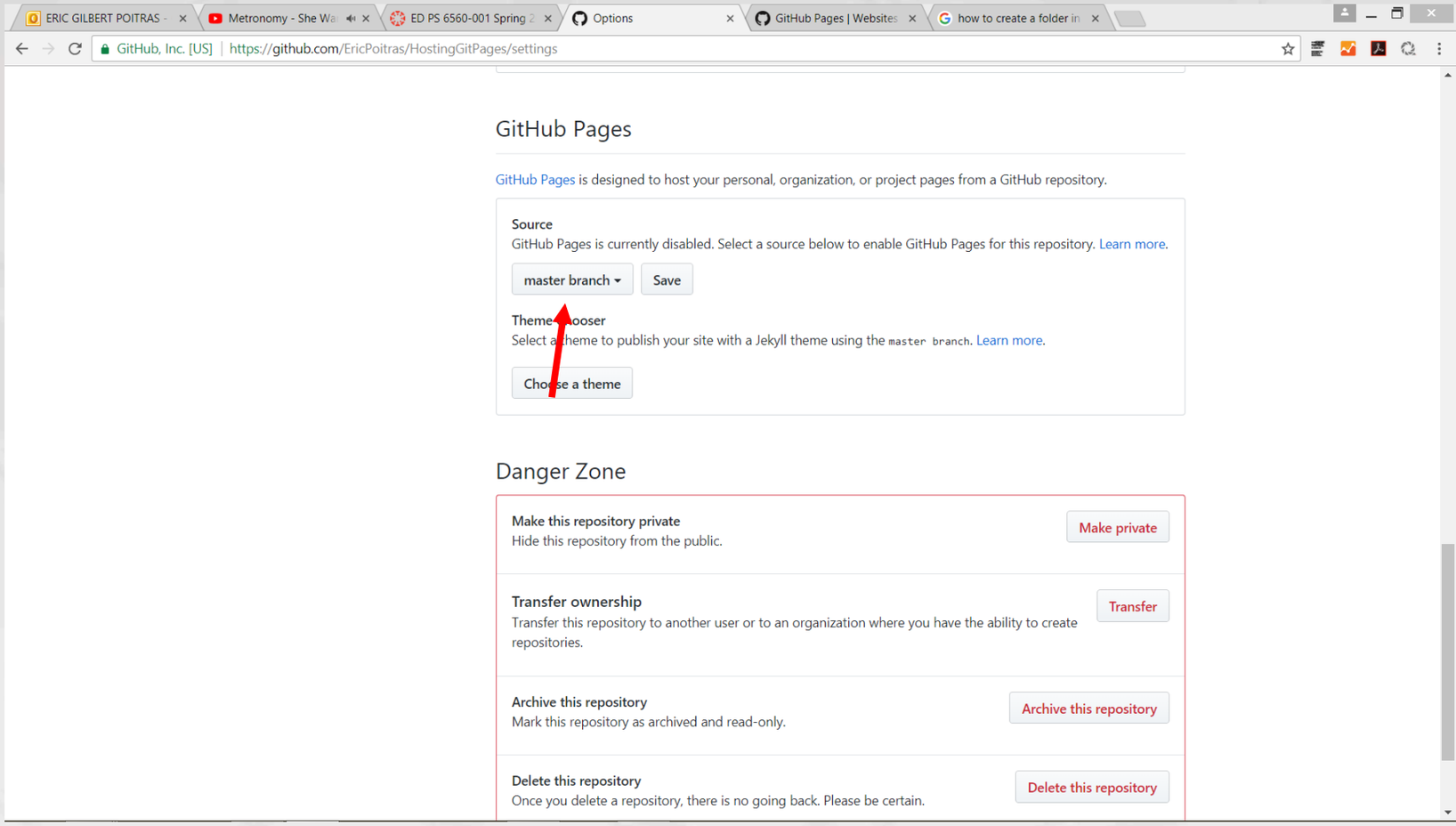
Creating the folder structure for your website

1. In the GitHub pages section, specify that you want to host the website from the master branch.
2. Select Save.



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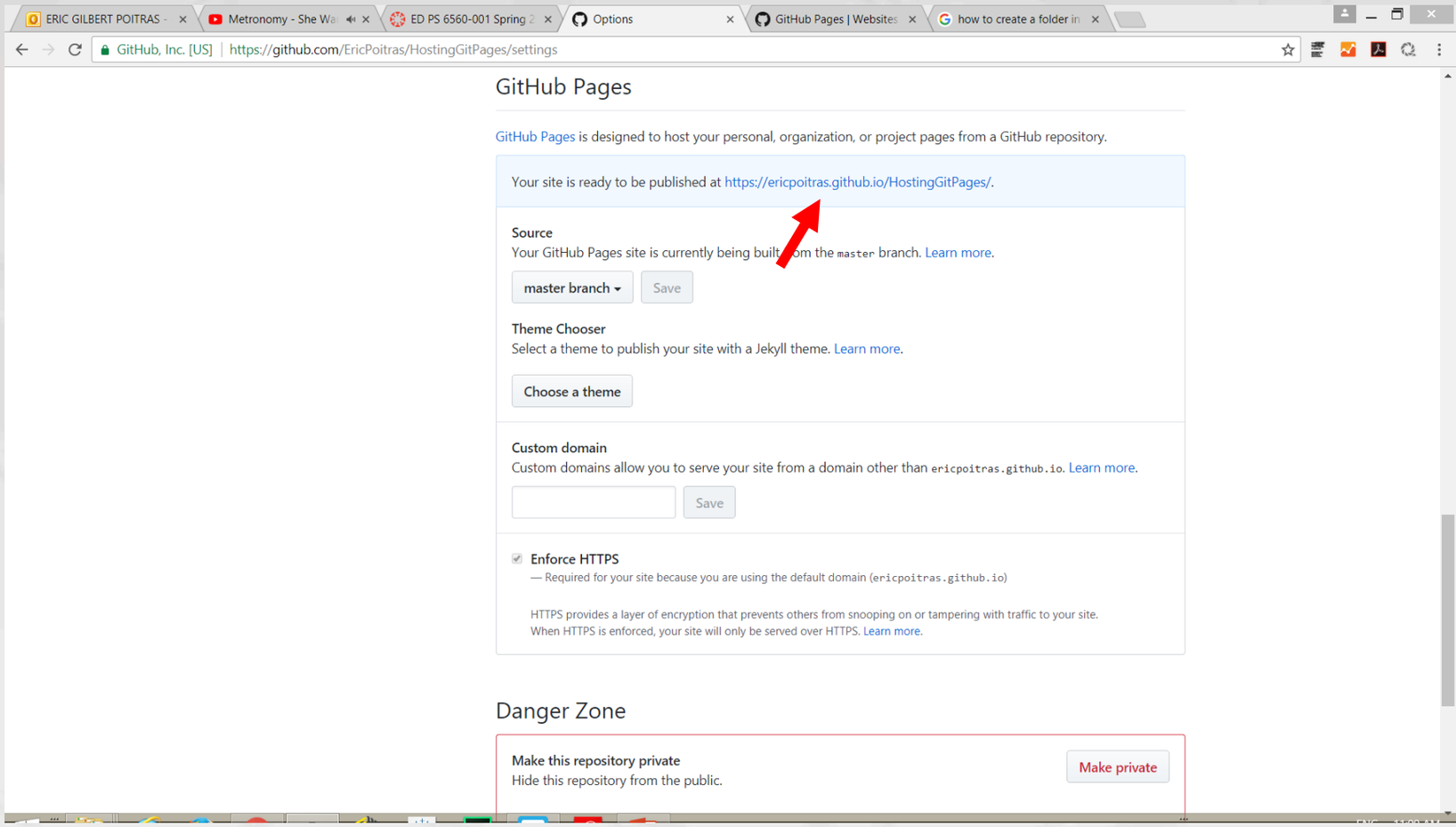
Creating the folder structure for your website

1. A confirmation message should appear with the url address of your site.
2. Navigate to the url address.



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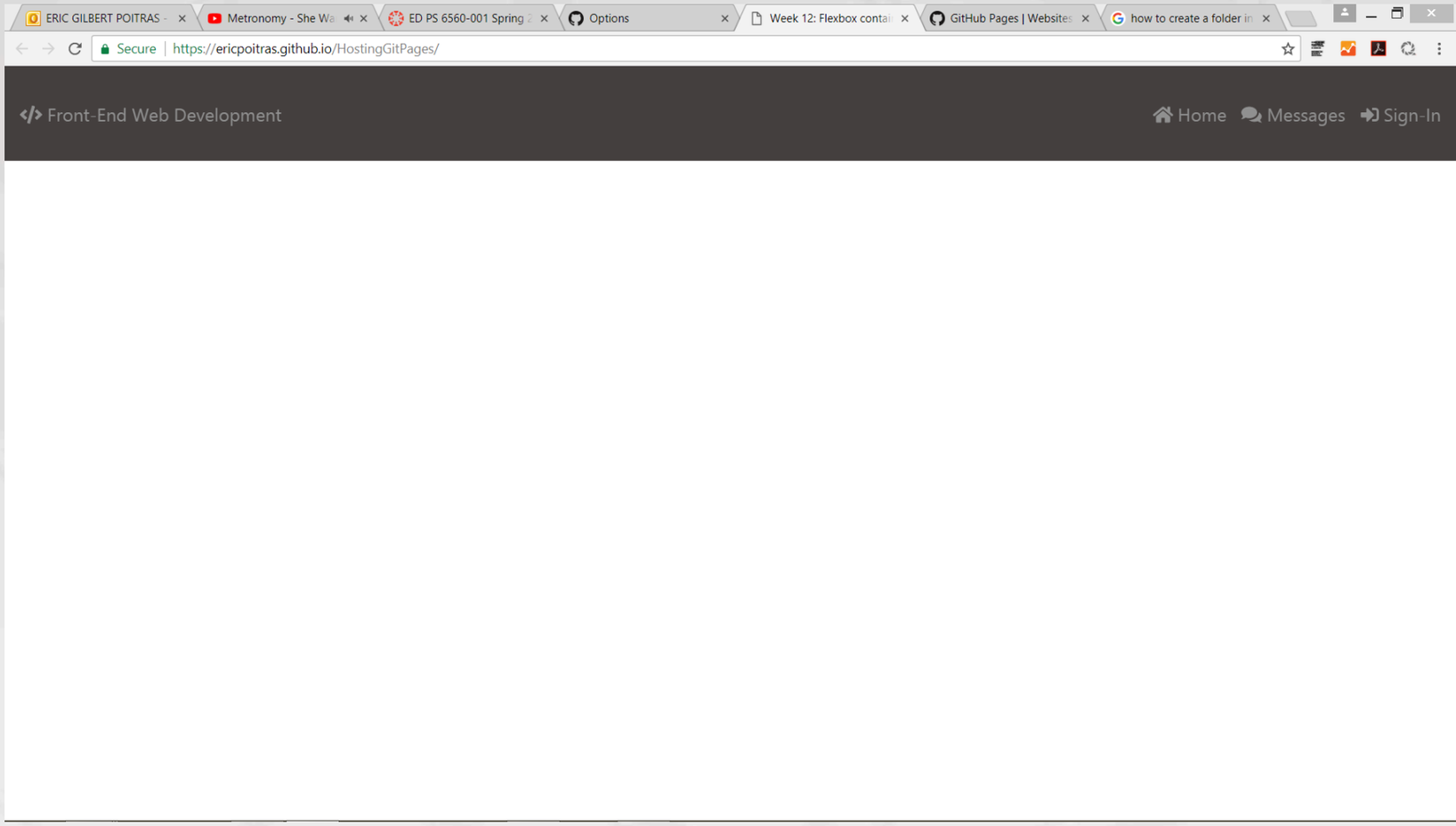

Creating the folder structure for your website

1. Test the functionalities of your site to make sure everything works properly.

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Break (10 min.)

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What will we be learning today?

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

1. Identify elements of the Illustrator user interface and demonstrate knowledge of their functions
2. Using the Appearance Panel
3. Publishing Vector Graphics
4. Tracing Rasters to Convert Into Vectors

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Using the Appearance Panel

1. Select the logo icon with either the direct selection tool or the corresponding layer in the Layers panel.
2. Select the Appearance panel icon.
3. The Appearance panel organizes all the fill and outline colors as well as effects applied to them as layers.

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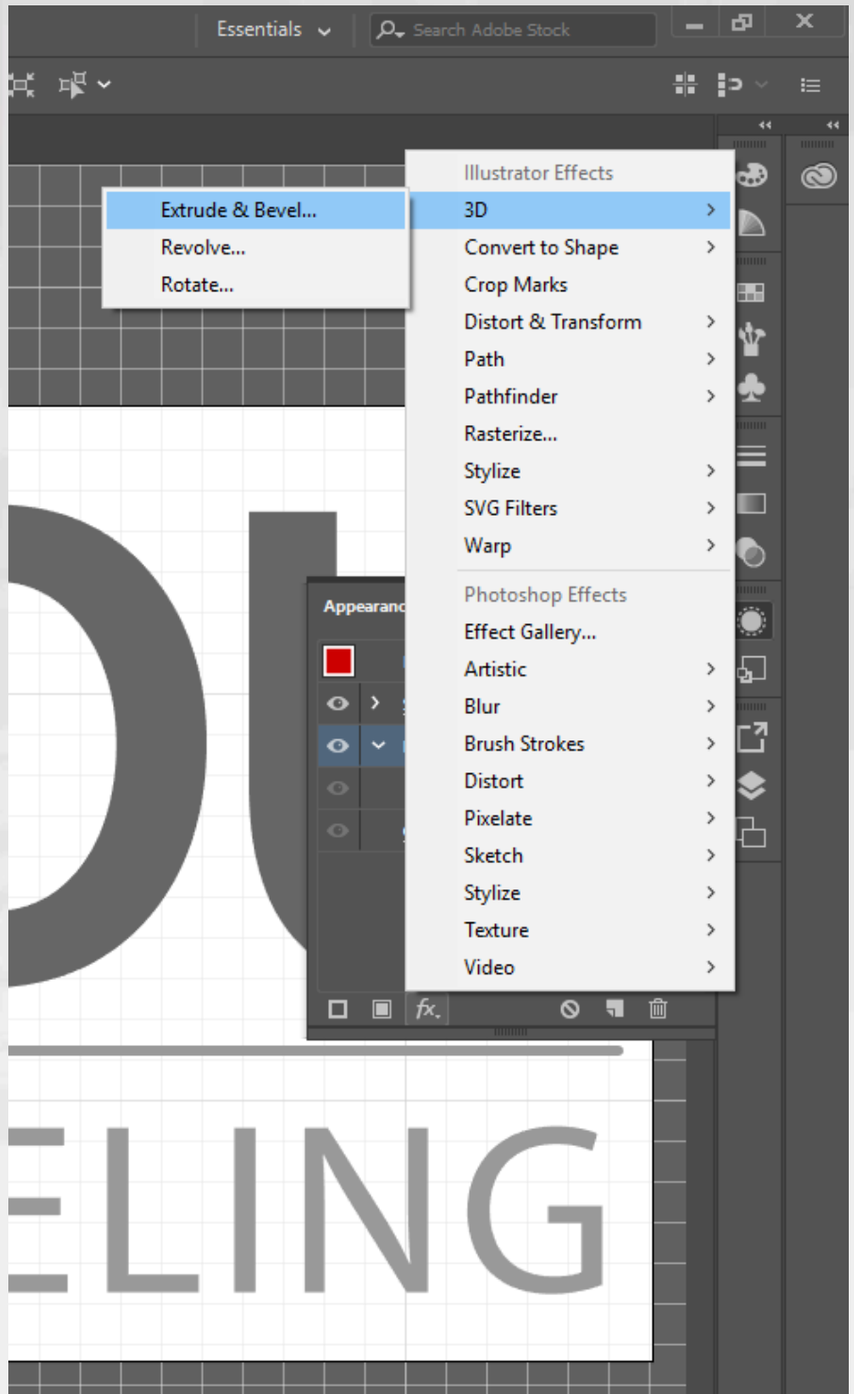
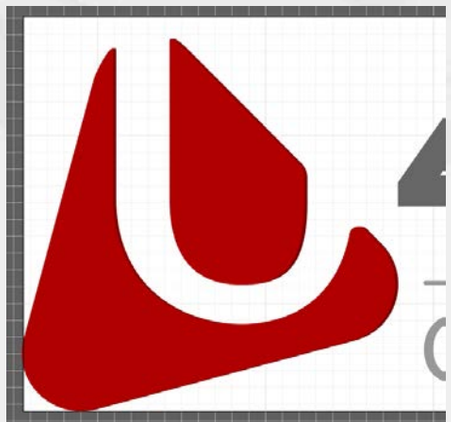
Using the Appearance Panel

1. In the Effects panel, select 3D > Extrude and Bevel.
2. Select the Preview checkbox to view the effect properties.
3. For the Position dropdown menu, select Front.
4. For rotation around the X axis, select 1 degrees.
5. For the Bevel dropdown menu, select None.
6. Select10pt for Extrude Depth.
7. Select Ok to accept the effect properties.
8. Repeat the same process for the second shape in the logo.





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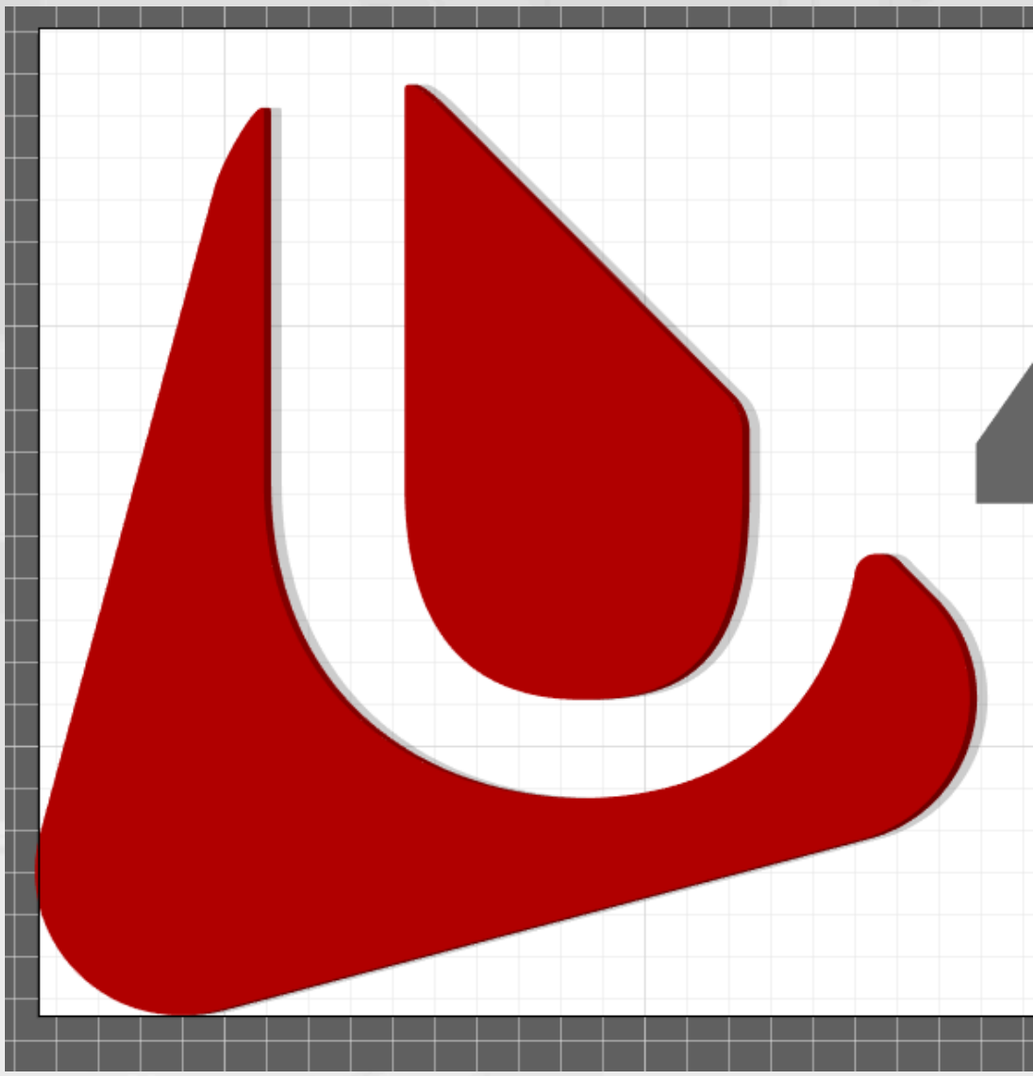
Using the Appearance Panel

1. In the Effects panel, select Stylize > Drop Shadow.
2. Select the Preview checkbox to view the effect properties.
3. Select a Mode of Normal.
4. The Opacity level should be set to 20%.
5. Assign an X Offset of 0.25 px.
6. Finally, assign a Blur value of 0 px.
7. The color should be dark for the Drop Shadow.
8.Select Ok.
9.Repeat the same process with the second shape of the logo icon.



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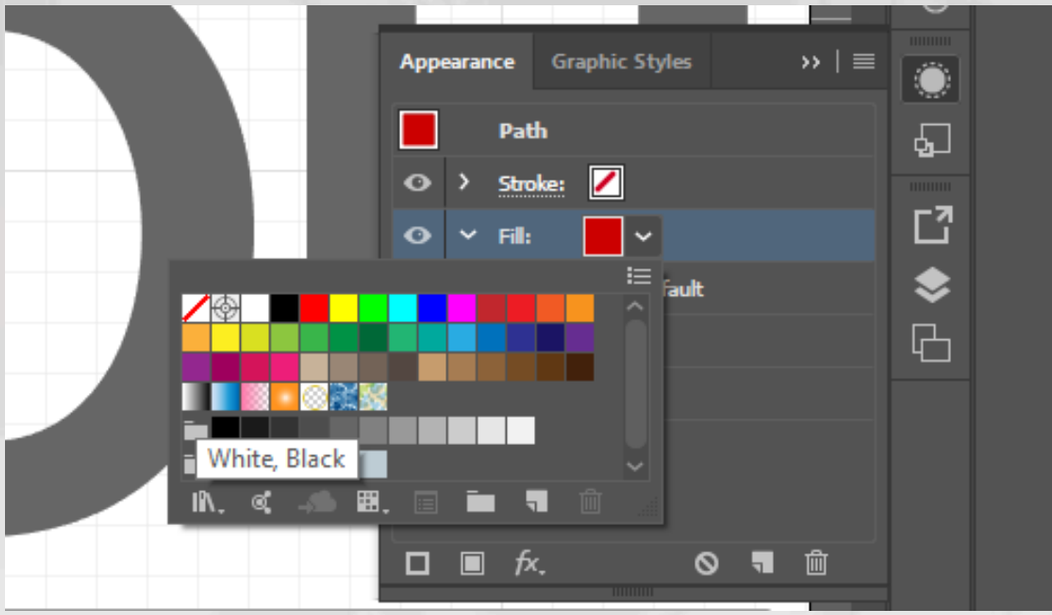
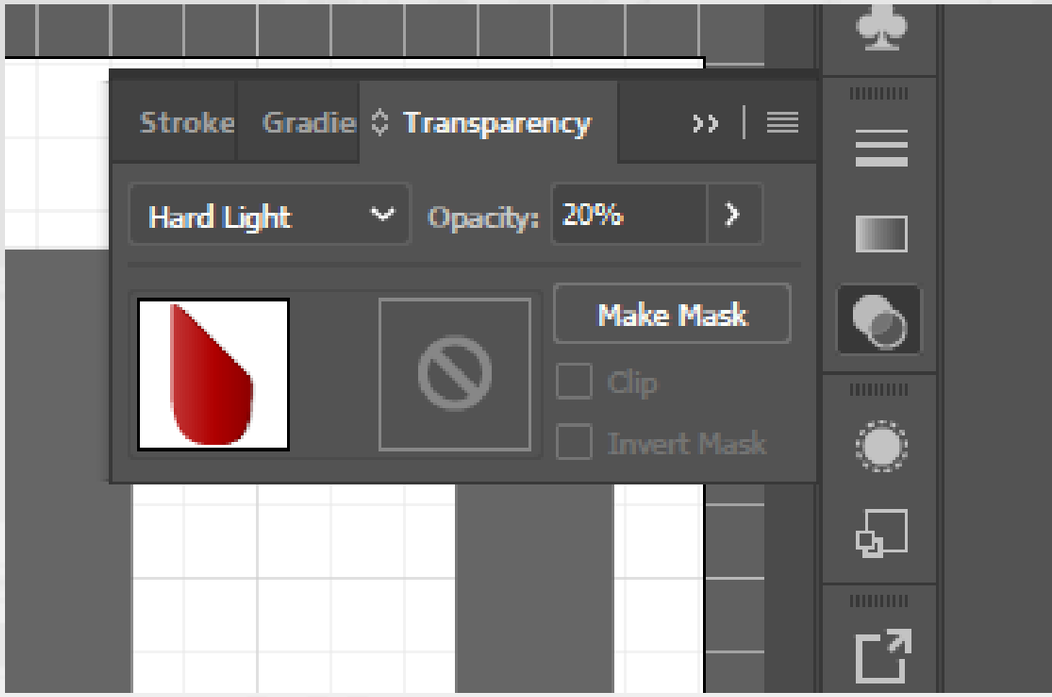
Using the Appearance Panel

1. In the Effects panel, select the Fill color layer. Then Add a New Fill Layer.
2. Select the White, Black color thumbnail option.
3. Using the Transparency panel, set the color preset to Hard Light. The Opacity level should be set to 20%.
4. Select Ok.
5. Repeat the same process with the second shape of the logo icon.





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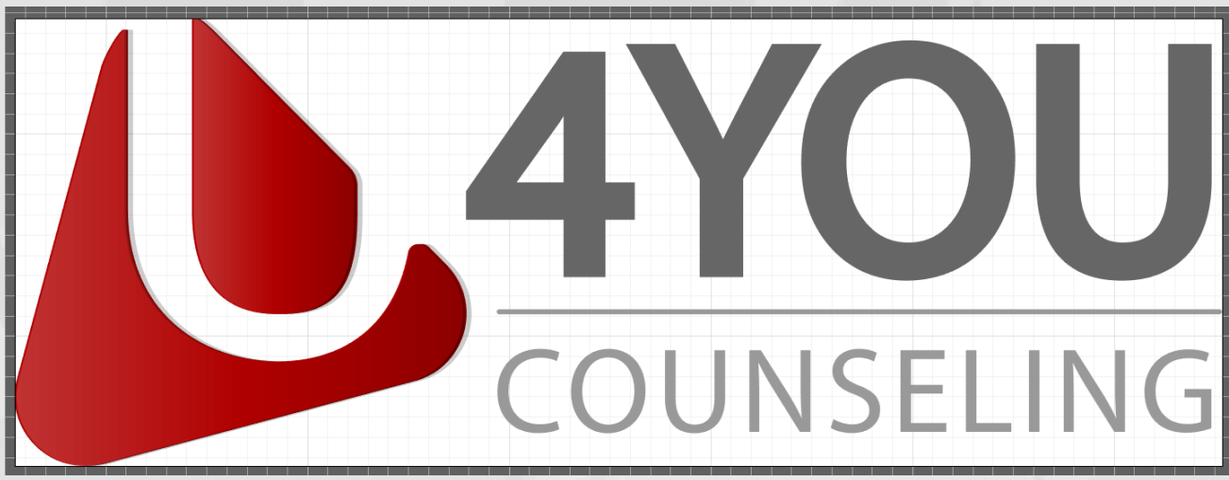
Exporting Graphs

1. Select the text and verify that it was converted to an Outline. Choose Type > Convert to Outline.
2. Choose File > Export > Save for Screens.
3. Save a .png version of the logo.
4. Import the .png in Illustrator on a separate artboard.
5. Notice how the raster graphic cannot be edited any further.



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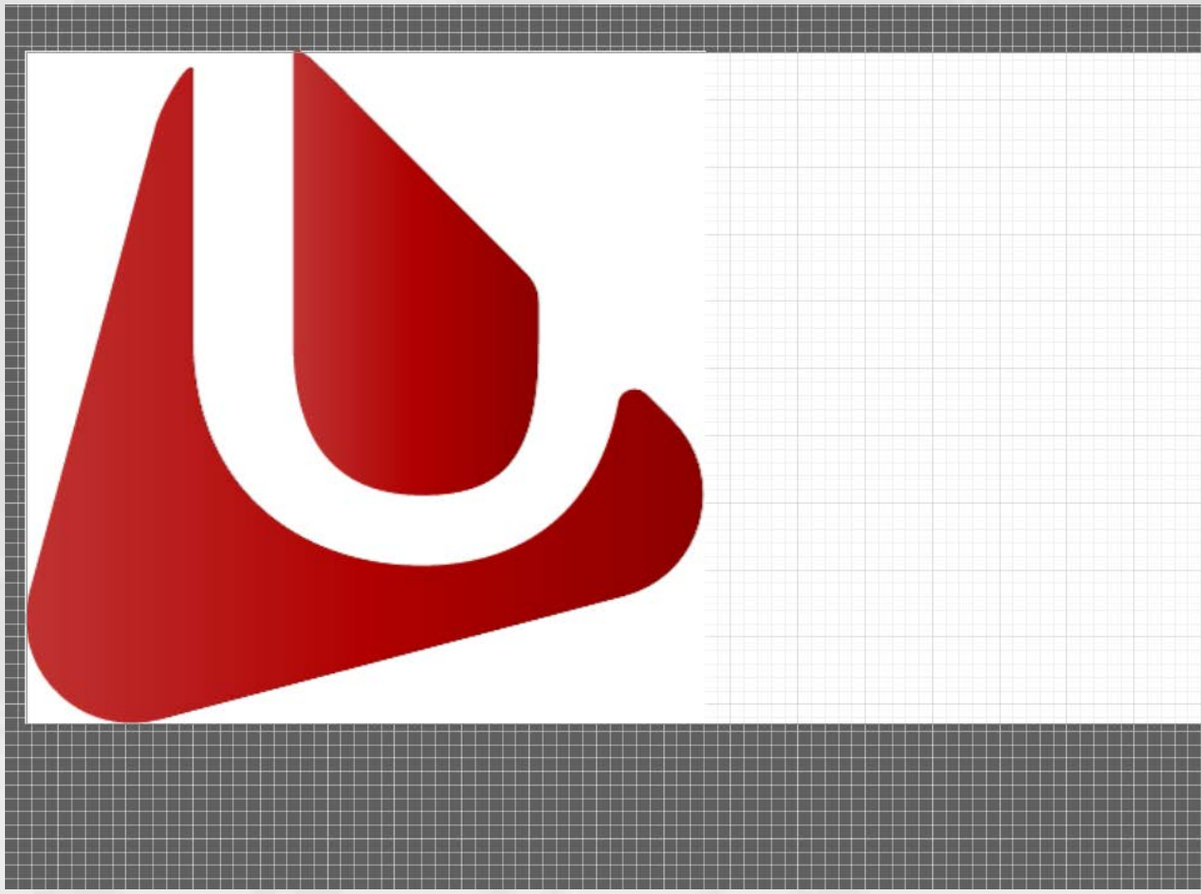
Clipping Raster Graphics

1. Draw a rectangle over the image to define the area to retain.
2. Select using the group selection tool both the shape and the rectangle.
3. Right click + Select Make Clipping Mask.
4. Synonymous to cropping in Photoshop and the pixels are retained but not visible. Right click again to Release the Mask.



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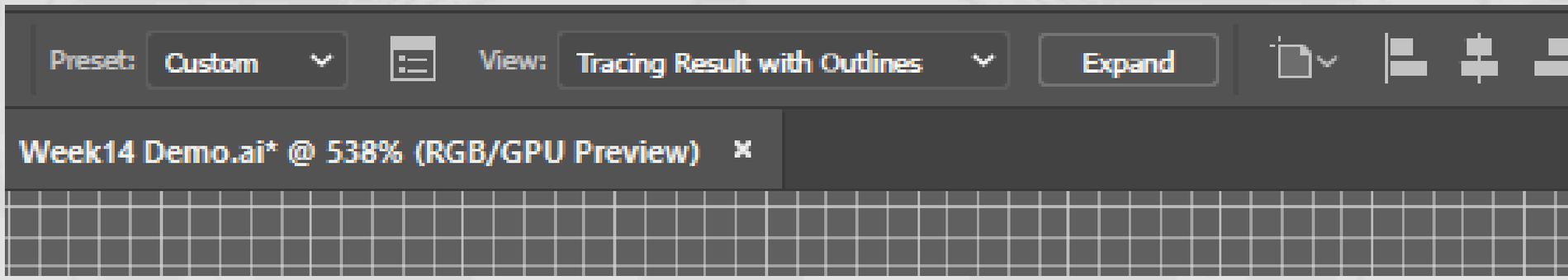
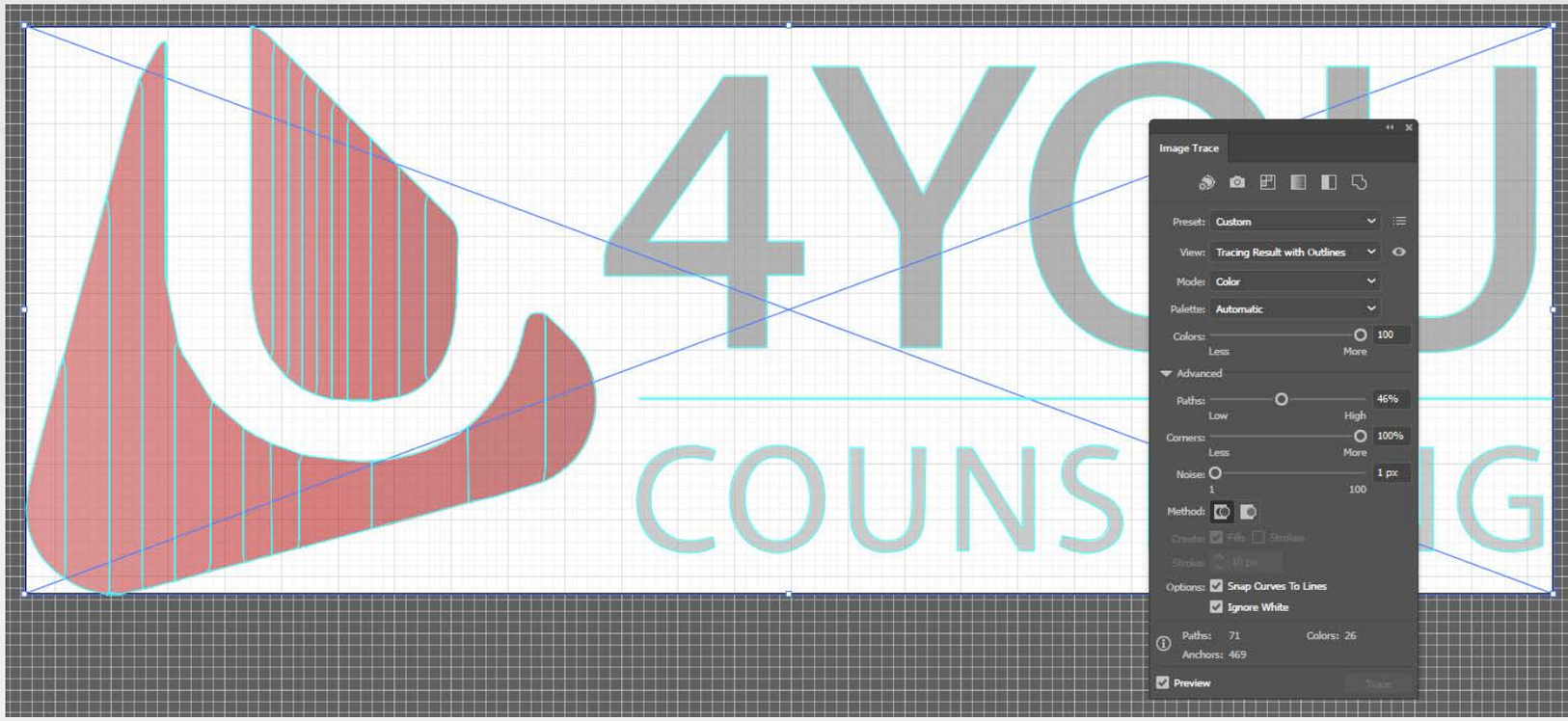


Converting Raster to Vector Images Using the Masking and Tracing Technique

1. Select the raster graphic. Then select Image Trace from the control panel.
2. Open the Image Trace panel. Select Trace Image with Outlines to preview the result. Open the Advanced options and experiment with the different presets and values. Click Expand in the control panel to convert the raster to a vector.



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Project #3: Vector Graphic in Illustrator

- The assignment is due at 11h59PM on Friday, the 2nd of May.
- Create a vector artwork of your own – classroom, work, or otherwise. Some ideas might include:
  - A set of matching system icons
  - A product icon/logo for your company
  - A poster presentation
  - A business card
  - ***A hi-fi prototype for the HCI class***

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Project #3: Vector Graphic in Illustrator

- You are expected to demonstrate knowledge of the type, drawing, and shape tools covered in class to transform objects and export the project in a format optimized for publication on the web (i.e., SVG, PNG).
- You are required to submit both the Illustrator project file and the exported file.
- Formatting requirements:
  - Prepare the image to be published for the web – less than 0.1 MB for icons; 1MB for exported posters/larger projects (Use pdf format if necessary).

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Course Wrap-Up

- Thanks for your tenacity and eagerness to learn. It’s been a pleasure working with you!
- Don’t be afraid of set backs and keep challenging yourselves
  - Adobe Tutorials
  - Codacademy Tutorials
- Keep sharing resources through the forum in the Canvas course section to help each other out
  - Vecteezy, freedesignfile.com, pexels, unsplash.com, code.tutsplus.com, SoloLearn app, …
- I’ve been a critical friend, now its your turn, any thoughts or suggestions for teaching the next cohort? (anonymous feedback can be provided through the teach evals)