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DEPARTMENT OF EDUCATION

Technical Vocational Livelihood

11

Computer Programming

Computer Programming (ICT) – Grade 11

TECHNICAL   VOCATIONAL   LIVELIHOOD

Quarter 2 – Module 1 CSS Background, Color, Gradients and shadow First Edition, 2020

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Computer Programming

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Quarter 2
Self Learning Module 1
CSS Background, Color, Gradients and Shadow

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Introductory Message

For the Learner:

Welcome to the Computer Programming for the ICT Module on CSS Background, Color, Gradients and Shadow!

The hand is one of the most symbolized part of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:

Expectation - These are what you will be able to know after completing the lessons in the module

Pre-test - This will measure your prior knowledge and the concepts to be mastered throughout the lesson.

Recap - This section will measure what learnings and skills that you understand from the previous lesson.

Lesson- This section will discuss the topic for this module.

Activities - This is a set of activities you will perform.

Wrap Up- This section summarizes the concepts and applications of the lessons.

Valuing-this part will check the integration of values in the learning competency.

Post-test - This will measure how much you have learned from the entire   module. Ito po ang parts ng module.
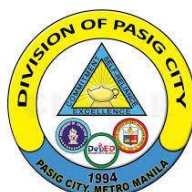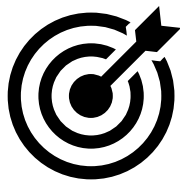
EXPECTATION

The students should be able to:

- understand CSS background, color, gradients and shadow in designing webpage.
- perform and apply the use of CSS background, color, gradients and shadow when designing webpage.
- cite the importance of background, color, gradients and shadow in designing webpage.

PRE–TEST

Instruction: Select the letter that corresponds to the correct answer.

1. The image below shows a _____.

   A. Repeating a linear-gradient
   B. Radial Gradient - Differently Spaced Color Stops
   C. Repeating a radial-gradient
   D. Linear Gradient - Left to Right

2. The image below shows a _____.
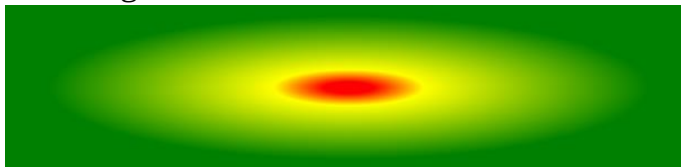
   A. Repeating a linear-gradient
   B. Radial Gradient - Differently Spaced Color Stops
   C. Repeating a radial-gradient
   D. Linear Gradient - Left to Right

3. CSS background property that has an example value of no-repeat.
   A. background-image
   B. background-position
   C. background-repeat
   D. background-status

4. CSS background property that has an example value of right bottom.
   A. background-image
   B. background-position
   C. background-repeat
   D. background-status

5. CSS background property that has an example value of url(image1.png).
   A. background-image
   B. background-position
   C. background-repeat
   D. background-status
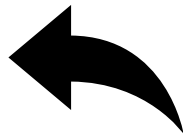
RECAP

Quarter 1 Module 18 defined opacity, differentiated horizontal and vertical navigation bar and discussed how to make a tooltip. In your own words describe the following terms:
- CSS Opacity
- CSS Navigation Bar
- CSS Tooltip

LESSON

CSS Backgrounds

CSS backgrounds allow the user to add multiple background images to one element and it allow greater control of the background element. Take note that not all browser can support CSS background and its properties.

CSS3 Multiple Backgrounds

Using background-image property we can add multiple images in one element. It can be done in two way using either the individual background properties or the background shorthand property.

Individual background properties
```
#multiple {
   background-image: url(image1.png), url(image2.png);
   background-position: right bottom, left top;
   background-repeat: no-repeat, repeat;
   padding: 5px;
```

}

Shorthand property

#multiple {

    background: url(image1.png) right bottom no-repeat, url(image2.png) left
top repeat;

    }

Example:

```
1   <!DOCTYPE html>
2   <html>
3   <head>
4   <style>
5   #multiple {
6       background-image: url(image1.png), url(image2.png);
7       background-position: right bottom, left top;
8       background-repeat: no-repeat, repeat;
9       padding: 5px;
10  }
11  </style>
12  </head>
13  <body>
14  <div id="multiple">
15  <p>This example has two background images, the first image aligned to the
    bottom and right and the second image is a aligned to the top-left corner.</p>
16  <p>This example has two background images, the first image aligned to the
    bottom and right and the second image is a aligned to the top-left corner.</p>
17  <p>This example has two background images, the first image aligned to the
    bottom and right and the second image is a aligned to the top-left corner.</p>
18  <p>This example has two background images, the first image aligned to the
    bottom and right and the second image is a aligned to the top-left corner.</p>
19  <p>This example has two background images, the first image aligned to the
    bottom and right and the second image is a aligned to the top-left corner.</p>
20  </div>
21  </body>
22  </html>
```
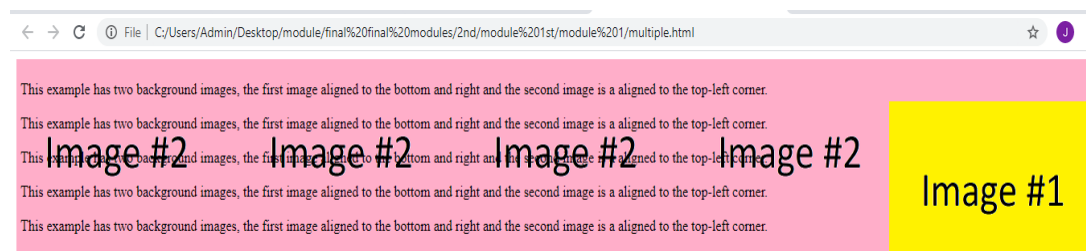
Activate Windows
Go to Settings to activate Win

Output:

← → C | ① File | C:/Users/Admin/Desktop/module/final%20final%20modules/2nd/module%201st/module%201/multiple.html ☆ J

This example has two background images, the first image aligned to the bottom and right and the second image is a aligned to the top-left corner.

This example has two background images, the first image aligned to the bottom and right and the second image is a aligned to the top-left corner.

Image #2   Image #2   Image #2   Image #2

This example has two background images, the first image aligned to the bottom and right and the second image is a aligned to the top-left corner.

Image #1

This example has two background images, the first image aligned to the bottom and right and the second image is a aligned to the top-left corner.

      Background-size property allows you to change the size of background images. It can be specified in lengths, percentages, or by using one of the two keywords such as contain and cover.

      Contain resize the background image, both its width and its height must fit inside the content area, depending on the proportions of the background image and the background positioning area.

      Cover resize the background image so that the content area is completely covered by the background image, both its width and height are equal to or exceed the content area.
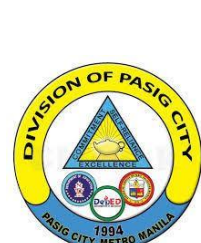
Example:

```html
<!DOCTYPE html>
<html>
<head>
<style>
#size {
    border: 1px solid black;
    background:url(image1.png);
    background-size: 200px 150px;
    background-repeat: no-repeat;
    padding:15px;
}
.contain {
    border: 1px solid black;
    height:150px;
    width:180px;
    background:url(image1.png);
    background-repeat: no-repeat;
    background-size: contain;
}
.cover{
    border: 1px solid black;
    height:150px;
    width:180px;
    background:url(image1.png);
    background-repeat: no-repeat;
    background-size: cover;
}
</style>
</head>
<body>
<div id="size">
<p>The following example resizes a background image (using pixels):</p>
<p>The following example resizes a background image (using pixels):</p>
<p>The following example resizes a background image (using pixels):</p>
<p>The following example resizes a background image (using pixels):</p>
</div>
<div class="contain">
<p>This is contain.</p>
</div>
<div class="cover">
<p>This is cover</p>
</div>
</body>
</html>
```
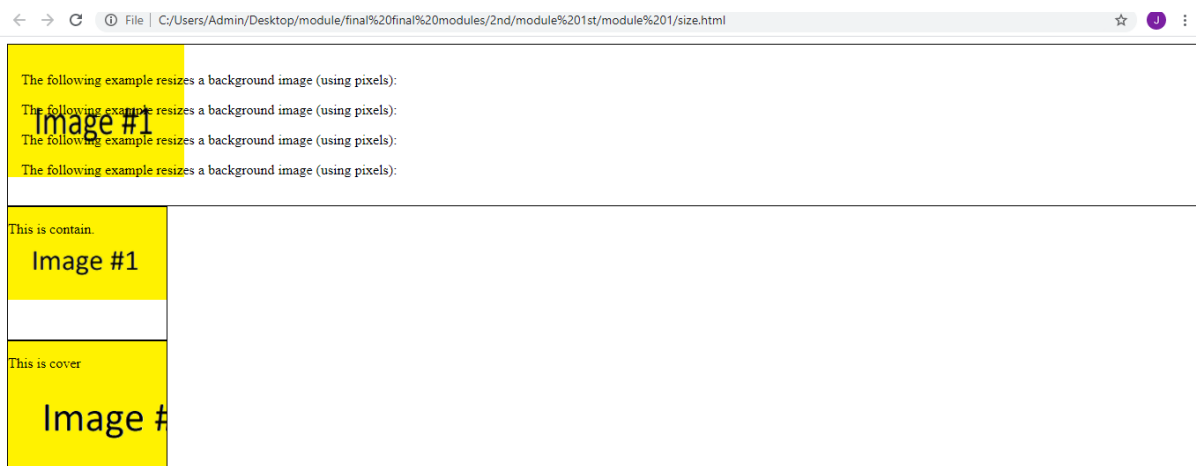
Output:

Full Size Background Image

This will cover the entire browser window. You just need HTML element to be your selector.

Example: (try it with your PC to see what happens)
html {
    background: url(image1.png) no-repeat center fixed;

```
    background-size: cover;
}
```

Background-origin Property

Background origin property- defines where the background image is positioned. Example: value are border-box and content box

Example: (try it with your PC to see what happens)
```
#example {
    border: 5px solid black;
    padding: 20px;
    background: url(image1.png);
    background-repeat: no-repeat;
    background-origin: border-box;
}
```

Background-clip Property

Background-clip property defines the painting area of the background.
Three different values:

- border-box - the background is painted to the outside edge of the border.
- padding-box - the background is painted to the outside edge of the padding
- content-box - the background is painted within the content box

Example: (try it with your PC to see what happens)
```
#example {
    border: 5px dotted black;
    padding: 20px;
    background: yellow;
    background-clip: content-box; }
```

CSS Color

CSS supports color names, hexadecimal and RGB colors.
In addition, CSS also introduces:

- RGBA colors - rgba(red, green, blue, alpha)
- HSL colors - hsl(hue, saturation, lightness)
- HSLA colors - hsla(hue, saturation, lightness, alpha)
- Opacity – transparent to opaque

Example: (try changing the values with your PC to see what happens)
```
rgba(255, 0, 0, 0.2);
hsl(0, 100%, 30%);
hsla(0, 100%, 30%, 0.3);
rgb(255, 0, 0);opacity:0.2;
```

CSS Gradients

Gradients allows us to display transitions between two or more specified colors.
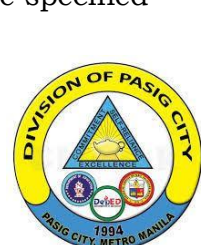
Two types of gradients:
- Linear Gradients (to bottom, to top, to right, to left, to bottom right, etc.)
- Radial Gradients (defined by their center)

Linear Gradients

In creating a linear gradient, you must define at least two-color stops. Color stops are the colors you want to render for the smooth transitions.

Syntax:

background: linear-gradient (direction, color-stop1, color-stop2, ...,);

Example: (try changing the values with your PC to see what happens)

gradient {

  background: linear-gradient (to right, red , yellow); }

Output:

Using Angles
Syntax:

background: linear-gradient (angle, color-stop1, color-stop2);

Example: (try changing the values with your PC to see what happens)

gradient {

background: linear-gradient (-90deg, red, yellow); }

Output:

Repeating a linear-gradient
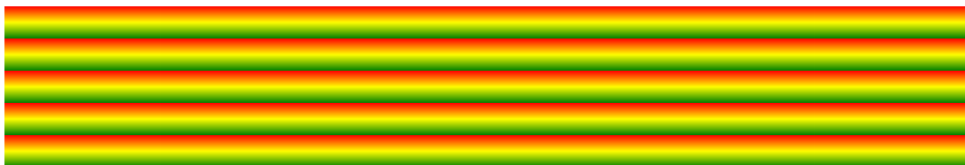
Repeating-linear-gradient() function is used to repeat linear gradients.

Example: (try changing the values with your PC to see what happens)

gradient {

background: repeating-linear-gradient(red, yellow 10%, green 20%);}

Output:

CSS3 Radial Gradients

Radial gradient defines by its center. In creating a linear gradient, you must define at least two-color stops.
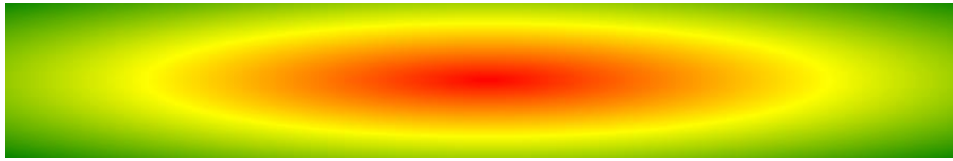
Syntax:

background: radial-gradient(shape size at position, start-color, ..., last-color);

Example: (try changing the values with your PC to see what happens)
gradient {
background: radial-gradient(red, yellow, green);}
Output:

Radial Gradient - Differently Spaced Color Stops
Example: (try changing the values with your PC to see what happens)
gradient {
    background: radial-gradient(red 5%, yellow 15%, green 60%);}

CSS Shadow Effects

CSS shadow effects has the following properties:
- text-shadow
- box-shadow

text-shadow

Specifying the horizontal shadow and the vertical shadow.
Example: (to see what happens try it with your PC)
    h1 {text-shadow: 2px 2px;}

Adding color to the shadow.
Example: (to see what happens try it with your PC)
    h1 {text-shadow: 2px 2px yellow;}

Adding blur effect to the shadow.
Example: (to see what happens try it with your PC)
    h1 {text-shadow: 2px 2px 5px yellow;}

Adding more than one shadow to the text.
Example: (to see what happens try it with your PC)
    h1 {text-shadow: 0 0 3px #FF0000, 0 0 5px #0000FF;}

box-shadow

Specifying the horizontal shadow and the vertical shadow.
Example: (to see what happens try it with your PC)
    div {box-shadow: 5px 5px;}

Adding color to the shadow.
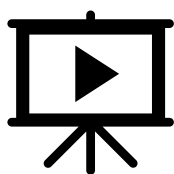Example: (to see what happens try it with your PC)
    div {box -shadow: 5px 5px yellow;}

Adding blur effect to the shadow.
Example: (to see what happens try it with your PC)
    div {box-shadow: 5px 5px 3px yellow;}

ACTIVITIES

Create a webpage about your own understanding of the lesson and apply the use of CSS background, gradients, color and shadow.

Rubrics:

	Needs work	Developing	Meets Standard	Score
Content (Good content should be relevant)	Information is not always clear or correct. The theme or main idea of the Web page is more or less clear but does not relate to the purpose or theme of the project.	Information is clear and correct. The theme or main idea of the Web page is more or less clear and related to the purpose or theme of the project	The content has accurate and useful information. The theme or main idea of the Web page is clear and related to the purpose or theme of the project.	
	15	20	25	
Visual Design (Appearance)	Background, text format and color usage are randomly chosen with few consistent elements throughout.	Background, text format and color usage are somewhat consistent with little inappropriate variation.	Background, text format, and color usage are carefully chosen to produce a consistent screen layout for all your pages	
	15	20	25	
Structure and Navigation (Good navigation gets you where you want to go quickly)	Site is difficult to navigate.	Site is sometimes difficult to navigate.	Readers can get around your website with ease.	
	15	20	25	
Innovation (The idea is new, or merely iterating on a previous idea)	Website has no unique style.	Some of the page has unique style.	Website has a unique style.	
	15	20	25	
			Total	**/100**

   *Answer the Worksheet number 1 and submit a soft copy/hard copy of your completed activity to your subject teacher on the following meeting.
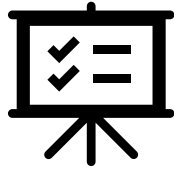
WRAP–UP

Instructions: Describe the following below based on how you understand the lesson.

- background-clip
- background-image
- background-origin
- background-size
- Linear Gradients
- Radial Gradients
- Box-shadow
- Text-shadow

VALUING

Instructions: Read and answer the following questions carefully in two to three sentences each number.

1. What do you think is the importance of using CSS background, color, gradients and shadow?
   _____
   _____
   _____

2. How will you use the knowledge you acquired in this module?
   _____
   _____
   _____

POST TEST

Instructions: Select the letter that corresponds to the correct answer.

1. _____ resize the background image, both its width and its height must fit inside the content area,
   - A. contain
   - B. cover
   - C. repeat
   - D. no-repeat

2. _____resize the background image so that the content area is completely covered by the background image
     A. contain
     B. cover
     C. repeat
     D. no-repeat

3. This specifies where the background images are positioned
     A. background-image
     B. background-origin
     C. background-repeat
     D. background-clip

4. This can add one or more shadows to an element.
     A. box-shadow
     B. text-shadow
     C. element-shadow
     D. font-shadow

5. RGBA stands for _____.
     A. red, green, blue, access
     B. red, green, blue, alpha
     C. red, green, blue, aim
     D. red, green, blue, aqua

KEY TO CORRECTION

Post-test:	Pre-test:
1. A	1. D
2. B	2. B
3. B	3. C
4. A	4. B
5. B	5. A

REFERENCES

- Accessed August 26, 2020 11:30Am https://www.w3schools.com
- Accessed August 26, 2020 12:00nn https://www.tutorialrepublic.com