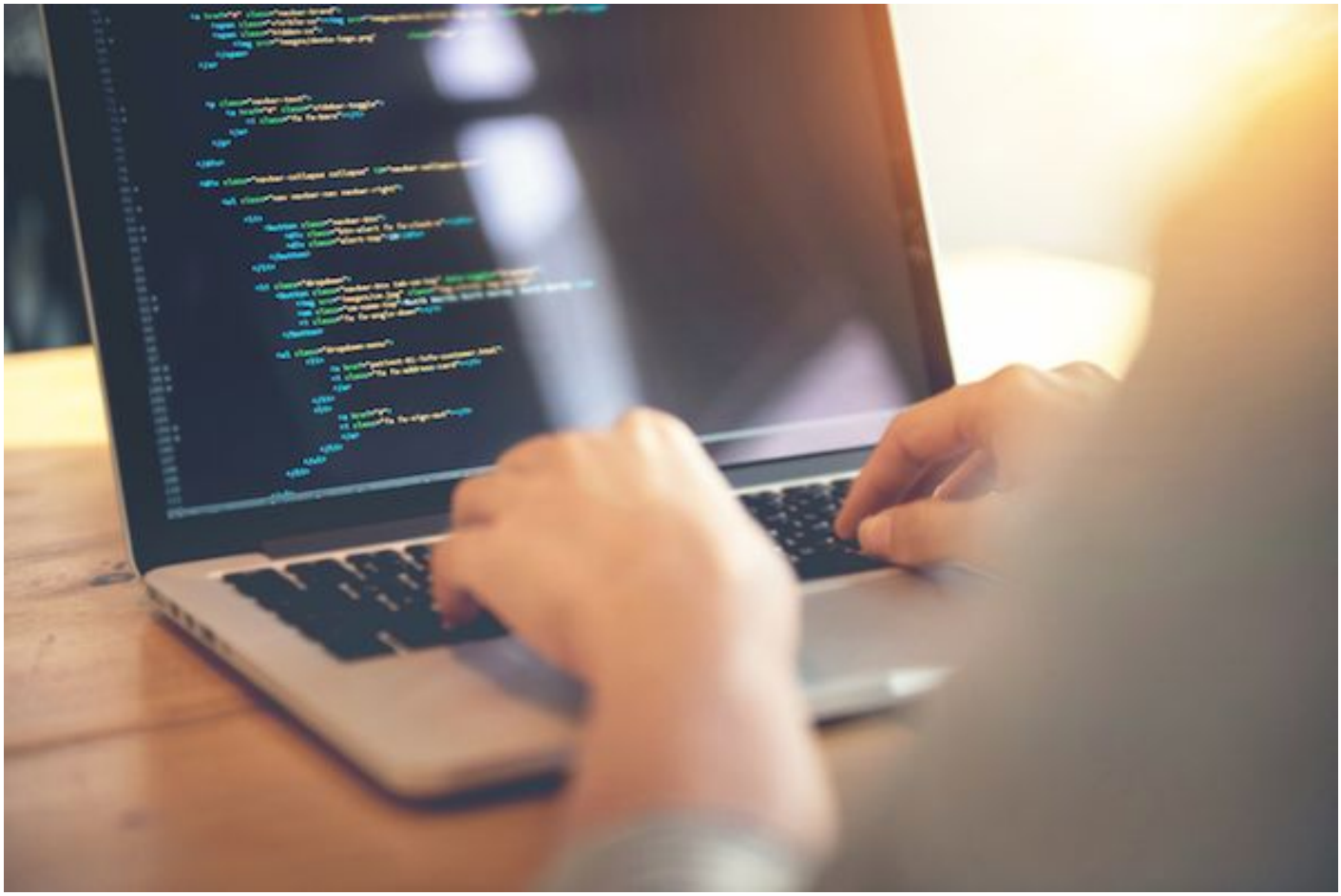
# LBYEC2A

*Computer Fundamentals and Programming 1*



## Laboratory Activity 1

Getting Started

By

John Carlo Theo S. Dela Cruz || EQ1

## OBJECTIVES

- To have a visual representation of what will we expect throughout this course.
- To familiarize ourselves with tools such as:
    - VSCode
    - Office Productivity
        - Word
        - Excell
- For students to have a foundation knowledge of programming starting from basic (HTML and, CSS)
- To know the difference between HTML and CSS
- To create a simple web page using HTML and CSS
    - Insert ordered and unordered lists
    - Insert image
    - Modify the font-size, and font-family

## MATERIALS

1. Visual Studio Code
2. Google Workspace
    a. G-Documents
    b. G-Spreadsheet
3. Microsoft Office
    a. Word
    b. Excell
4. Diagram.net
5. Snipping Tool

## PROCEDURE

I. MS-WORD - Personal Portfolio / Resume
   A. Download a template design for a portfolio/resume
   B. Use the tools in MS Word to fill out the details in the portfolio
      1. Text Box
      2. Font Interface
      3. Shapes
   C. Export as PDF

II. MS-EXCEL - Formula, Functions, and Graphs
   A. Formulas and Functions
      1. Create and Copy the table details
      2. Set the total Score and Percentage of the quiz, recitation, and long exam
         a) Identify the total score of each student regarding their results
         b) After identifying the total scores, we should convert them into percentage form.
      3. Get the total sum of all scores and identify the final rating or percentage.

   B. USE of Function IF
      1. Create and copy the table details
      2. Use the function If and set the passing rate to greater than or equal to 70 and the remarks would display “Passed”, while if it doesn’t reach the expected value,  it would mark it as “Failed”.

   C. Graphs and Chart
      1. Create and copy the table details
      2. Highlight the year and the data
         a) Press Insert and Chart and it automatically layout the Chart/Graph

b) To add titles to the Chart/Graph:
    (1) press the Chart Design tab
    (2) Add Chart Element
    (3) then press the Axis Titles (Vertical and Horizontal)

III. HTML - Creating a simple web page

A. Create a folder
    1. Open Visual Studio Code and open that specific folder
B. Create a new file and make sure that the file ends with '.html'.
C. Place the proper syntax of HTML
    1. <html>
    2. <head></head>
    3. <body></>body>
    4. </html>
D. <head>
    1. <title> Input the title of the website. </title>
E. <body>
    1. <h1> input the header </h1>
    2. <p1> input a paragraph or text </p1>
    3. <h2> another header</h2>
        a) List
            (1) Use OL - ordered pair for numerical, roman numeral kind of listing,
            (2) Use UL - unordered pair for graphical dots/square or bulleted formed listing.

IV. HTML with CSS- Creating a website with Images

A. Download the pictures that you want to put in your background and a separator (blue bar)
B. Transfer the files of the pictures to the folder where your code is being executed.
C. Create a new file in VS Code and end the file name with '.html'
D. Copy-paste the code from the previous activity into the new file.
E. Background Image
    1. Add a syntax in the body function and input the file name of the

background image.

a) <body background=" name of file">

F. Separator (blue bar)

1. Insert the blue bar image inside the <body> and between the line where you want to put the separator.

a) <img src=" name of file" height ="10" width ="1000"/> (The value of the height and width is depending on the aspect ratio or the size of the image.)

```
<center><img src="image/whitebar.png" alt="whitebar.png"
    height="100"
    width="10000"
    /></center>
```

G. CSS External (Special Activity)

1. Revert <body background> into <body>
2. Create a CSS File
3. Define the function of the body and put background image

a)

```
body{
    background-image: url(image/Topography.png)
    object-fit: contain;
```

4. Link the CSS File to HTML

a)

```
<head>
    <link rel="stylesheet" type="text/css" href="CSS_Activity.css">
    <title>COMPUTER TECHNICIAN</title>
```

## RESULTS AND DISCUSSION (*Include the screenshots and discussions per problem solution*)

1. MS-WORD

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CONTACT

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09959847319

#130, E. Aguinaldo Ave. Phase 1. AFPOVAI.
Taguig City, Philippines

SKILL and EXPERIENCES

MS Word, Excel, PowerPoint
- 5 Years

Adobe Premiere Pro
- 3 Years

Adobe Photoshop
- 3 Years

WORK EXPERIENCE

- Freelance Graphic Designer 2019 - Present
- Freelance Photographer 2019 - Present

EDUCATIONAL BACKGROUND

- De La Salle University 2021-Present
  MANILA
  Bachelor of Science in Computer Engineering
- Don Bosco Technical Institute 2008-2020
  MAKATI
  High School

ORGANIZATION / AFFILIATIONS

- Assistant Vice President of Promotions 2021-Present
  ACCESS (Association of Computer Engineering Student)
- Vice President 2017-2019
  Teatro Busko

AWARDS / ACCOMPLISHMENTS

- Academic Excellence Award 2019
  Grade 12
- Outstanding Member Award 2017
  Teatro Busko
- Academic Excellence Award 2017
  Grade 10

In this activity, we created our Resume / Portfolio with the use of MS-Word or G-Documents; both software provides the same functionality. The purpose of this activity is for us to allow ourselves to input our desired information regarding our past experiences.

2. MS-EXCEL

| NAME OF STUDENTS | QUIZ | | | TOTAL | % | RECITATION | | | TOTAL | % | LONG EXAM | | | TOTAL | % | FINAL RATING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | | | 1 | 2 | 3 | | | 1 | 2 | 3 | | | |
| | 15 | 15 | 15 | 45 | 100% | 20 | 20 | 20 | 60 | 100% | 100 | 100 | 100 | 300 | 100% | 100% |
| ABC | 5 | 11 | 9 | 25 | 56% | 12 | 15 | 14 | 41 | 68% | 60 | 68 | 89 | 217 | 72% | 68% |
| DEF | 7 | 12 | 8 | 27 | 60% | 11 | 16 | 15 | 42 | 70% | 80 | 68 | 90 | 238 | 79% | 74% |
| GHI | 5 | 12 | 7 | 24 | 53% | 12 | 17 | 16 | 45 | 75% | 90 | 78 | 95 | 263 | 88% | 78% |
| JKL | 6 | 14 | 8 | 28 | 62% | 13 | 13 | 16 | 42 | 70% | 78 | 76 | 67 | 221 | 74% | 71% |
| MNO | 9 | 13 | 9 | 31 | 69% | 10 | 16 | 16 | 42 | 70% | 89 | 88 | 95 | 272 | 91% | 82% |

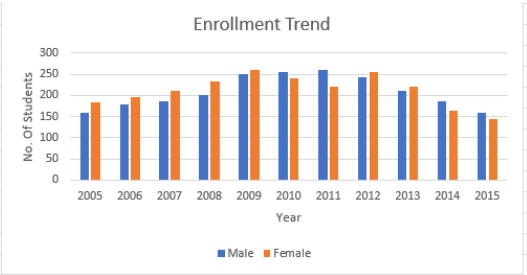
The first part of the Activity is for us to create a table and fill out the data. We will use the addition to get the total sum; Division to get the percentage of each category.

| Name of Students | Final Rating | Remarks |
|---|---|---|
| ABC | 68% | Failed |
| DEF | 74% | Passed |
| GHI | 78% | Passed |
| JKL | 71% | Passed |
| MNO | 82% | Passed |

In this table, we will use the function IF, to validate the standard of the passing rate. In this case, we set our passing rate if the final rating is equal to or greater than 70%, or else it would mark as 'Failed'.

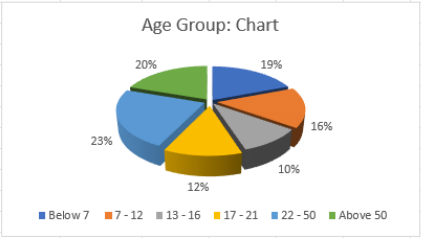
C. GRAPHS

| YEAR | STUDENTS | |
|---|---|---|
| | MALE | FEMALE |
| 2005 | 158 | 183 |
| 2006 | 179 | 196 |
| 2007 | 186 | 212 |
| 2008 | 201 | 234 |
| 2009 | 250 | 260 |
| 2010 | 255 | 240 |
| 2011 | 260 | 220 |
| 2012 | 244 | 255 |
| 2013 | 210 | 220 |
| 2014 | 185 | 165 |
| 2015 | 160 | 145 |




D. CHART

| Age Group | Number |
|---|---|
| Below 7 | 340 |
| 7 - 12 | 280 |
| 13 - 16 | 180 |
| 17 - 21 | 215 |
| 22 - 50 | 412 |
| Above 50 | 350 |




Graphing and Charting are just a plug-and-play basis in Microsoft Excel. Just simply highlight the data that will be needed for graphing and charting and click Insert then choose what kind of data illustration you would like to choose, either Graphing or Charting. After that, it will automatically appear, and you just need to

add the labels to the Graph. To add an axis title, select the graph or chart then “Chart Design” will appear in the tab section, then select Add Chart Element, then click on the Axis Titles. There would be an option whether you would like to put a horizontal or vertical axis title in your graph.

3. HTML

DelaCruz1.html > html

```
<!DOCTYPE html>
<html>
    <head>
        <title>COMPUTER TECHNICIAN</title>
    </head>
<!--Comment-->
    <body bgcolor="F8C8DC">
        <center><h1>Computer Technician</h1></center>

        <center><p1>Hello, My name is John Carlo Theo S. Dela Cruz, a Computer Engineering student.</p1></center>

        <h2>Informations</h2> <!--2nd Header-->

        <ol type="1"> <!--Ordered List-->
            <li>Birthday</li>
            <ul type="disc">
                <li>April 22, 2002</li>
            </ul>

            <li>Address</li>
            <ul type="disc">
                <li>Taguig, Philippines</li>
            </ul>

            <li>Hobbies</li>
            <ul type="disc"> <!--Unordered List-->
                <li>Cycling</li>
                <li>Web3, NFT, Crypto</li>
                <li>Video Games</li>
                <li>Photography, Videography</li>
            </ul>

        </ol>

    </body>
</html>
```

Lab Activity 2.1 is an introduction activity to HTML, it gives an overview of how to create a simple web page. We should be familiar with the common syntax of HTML and which includes the !doctype Html, head, and body. In the HTML Head section, the code contains the information about the web page’s title. The body section is where all the content of a web page is contained; <h1> Header Tag is specified as a heading level, <p> Paragraph is defined as the paragraph or the web content. <ol> is setting an ordered pair and list items will be marked with numerical values, while <ul> is setting an unordered pair and list items will be marked with circles by default (dot). Those basic tags will be used in order to create a simple web page.

4. HTML WITH CSS

```
<head>
    <title>COMPUTER TECHNICIAN</title>
</head>
<body background="image/Topography.png">
    <center><h1 style="font-family:Tahoma; color: whitesmoke">Computer Technician</h1></center>
    <!--Div-->
    <center><img src="image/whitebar.png" alt="whitebar.png"
        height="100"
        width="10000"
        /></center>
    <!--Div-->
```

Laboratory Activity 2.2's objective is for us to attach a horizontal bar image, and apply a background image. I added a syntax in the body tag to set a background image on the web page, and the function <img src> to attach a picture on the webpage, you can customize its size and width according to your choice.

```
<!DOCTYPE html>
<html>
    <head>
        <link rel="stylesheet" type="text/css" href="CSS_Activity.css">
        <title>COMPUTER TECHNICIAN</title>
    </head>
    <body>
```

A special Laboratory Activity 2.3, is about CSS and how can we apply CSS in HTML. Technically HTML is all about the functions and the web content; CSS is about the style of the webpage, it is more about how the web page will look like. In this activity, our approach is by using an External CSS; by creating a separate CSS File, and in that file, we will apply the background image in the body tag.

```
body{
    background-image: url(image/Topography.png);
    object-fit: contain;
}
```

## SUMMARY and WHAT I LEARNED (*Sample:*)

In this Module, I was able to appreciate the use of the productivity tools (Microsoft Word and Excel), their functionality, and their purpose. I also appreciated the fact that we are building a foundation for our journey in programming. I've learned that HyperText Markup Language (HTML) is the backbone structure of a web page, and Cascading Style Sheets is about how the web page is being designed with a simple design language that is intended to stylize the web page. As I progress through this module I was able to appreciate programming in a way that I was more motivated to create and design more web pages. This activity enabled me to fully understand HTML and it helped me build a foundation as I start my journey as a Computer Engineering Student.

## REFERENCES


1. W3 School. Introduction to HTML. Retrieved From: https://www.w3schools.com/html/html_intro.asp

## APPENDIX (*For coding problems, copy all codes here*)

Output / Codes in order:

(MS WORD - MS EXCEL - HTML2.1 - HTML2.2 -HTML/CSS2.3)

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A. FORMULAS AND FUNCTIONS

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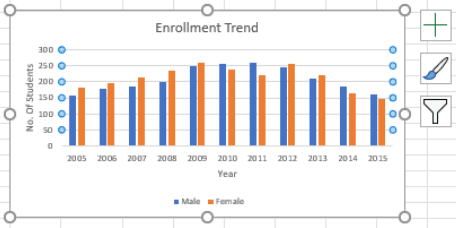


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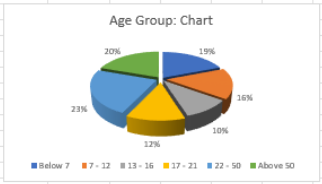

DelaCruz1.html > html

```html
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    </head>
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        <center><p1>Hello, My name is John Carlo Theo S. Dela Cruz, a Computer Engineering student.</p1></center>

        <h2>Informations</h2> <!--2nd Header-->

        <ol type="1"> <!--Ordered List-->
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            <ul type="disc">
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            <li>Address</li>
            <ul type="disc">
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            <li>Hobbies</li>
             <ul type="disc"> <!--Unordered List-->
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                <li>Web3, NFT, Crypto</li>
                <li>Video Games</li>
                <li>Photography, Videography</li>
             </ul>

        </ol>

    </body>
</html>
```
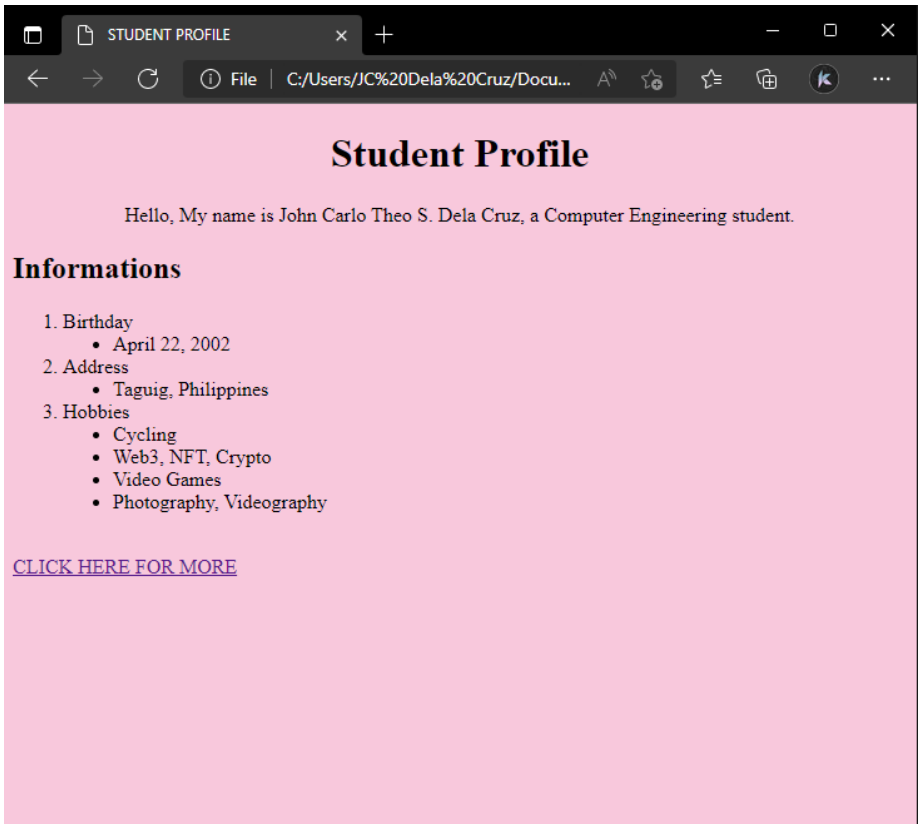
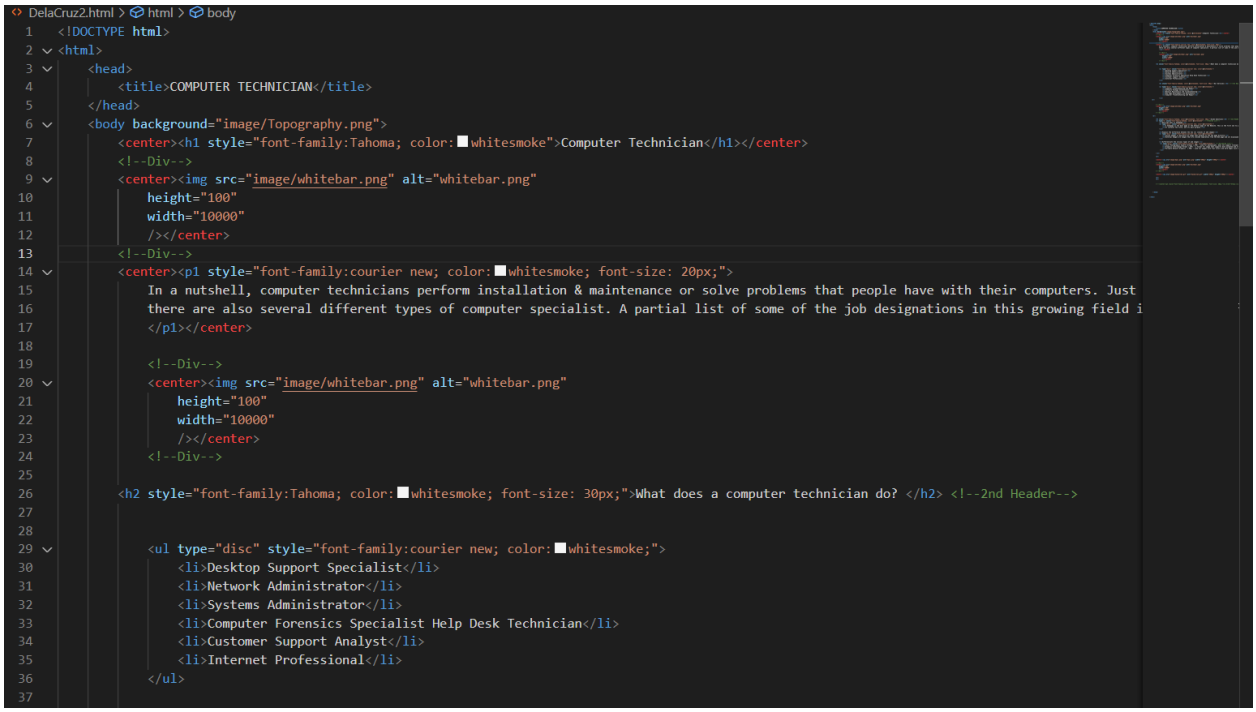


STUDENT PROFILE
File | C:/Users/JC%20Dela%20Cruz/Docu...
Student Profile
Hello, My name is John Carlo Theo S. Dela Cruz, a Computer Engineering student.
Informations
1. Birthday
• April 22, 2002
2. Address
• Taguig, Philippines
3. Hobbies
• Cycling
• Web3, NFT, Crypto
• Video Games
• Photography, Videography
CLICK HERE FOR MORE


DelaCruz2.html > html > body
<!DOCTYPE html>
<html>
<head>
<title>COMPUTER TECHNICIAN</title>
</head>
<body background="image/Topography.png">
<h1 style="font-family:Tahoma; color: whitesmoke">Computer Technician</h1>
<!--Div-->
<img src="image/whitebar.png" alt="whitebar.png"
height="100"
width="10000"
/>
<!--Div-->
<p1 style="font-family:courier new; color: whitesmoke; font-size: 20px;">
In a nutshell, computer technicians perform installation & maintenance or solve problems that people have with their computers. Just
there are also several different types of computer specialist. A partial list of some of the job designations in this growing field i
</p1>
<!--Div-->
<img src="image/whitebar.png" alt="whitebar.png"
height="100"
width="10000"
/>
<!--Div-->
<h2 style="font-family:Tahoma; color: whitesmoke; font-size: 30px;">What does a computer technician do? </h2> <!--2nd Header-->
<ul type="disc" style="font-family:courier new; color: whitesmoke;">
<li>Desktop Support Specialist</li>
<li>Network Administrator</li>
<li>Systems Administrator</li>
<li>Computer Forensics Specialist Help Desk Technician</li>
<li>Customer Support Analyst</li>
<li>Internet Professional</li>
</ul>

```
            <h2 style="font-family:Tahoma; color:whitesmoke; font-size: 30px;">Our Services:</h2> <!--3rd Header-->

            <ul type="disc" style="font-family:courier new; color:whitesmoke;">
                <li>Computer Troubleshooting and Repair</li>
                <li>Software Package Installation</li>
                <li>Network Maintenance and Troubleshooting</li>
                <li>Web Page Development and Maintenance</li>
                <li>Computer Troubleshooting and Repair</li>

            </ul>
    <br>


        <!--Div-->
        <center><img src="image/whitebar.png" alt="whitebar.png"
            height="100"
            width="10000"
            /></center>
        <!--Div-->

    <br>

        <h3 style="font-family:Tahoma; color:whitesmoke; font-size: 30px;">Guide Questions</h3> <!--2nd Header-->
        <ol type="1" style="font-family:Tahoma; color:whitesmoke"> <!--Ordered List-->
            <li>Describe what is homepage</li>
            <ul type="disc" style="font-family:courier new; color:whitesmoke;">
                <li>A homepage is the main page or the default page of the Website. This is the first one to pop out of your screen.</li>
                <li>It contains the title, and its main purpose.</li>
            </ul>

            <li>Explain the difference between the two (2) classes of web images</li>
            <ul type="disc" style="font-family:courier new; color:whitesmoke;">
                <li>Inline Images is basically an image that display on the web page directly</li>
                <li>External Images are images that are stocked separately from the Web page and are displayed.</li>
            </ul>

            <li>Differentiate the various types of web images</li>
             <ul type="disc" style="font-family:courier new; color:whitesmoke;"> <!--Unordered List-->
                <li>Joint Photographic Experts Groups (.JPG) - used for photographs, does not support transparency.</li>
                <li>Graphics Interchange Format (.GIF) - a format for image that supports both animated and static.</li>
```

```
            <li>Differentiate the various types of web images</li>
             <ul type="disc" style="font-family:courier new; color:whitesmoke;"> <!--Unordered List-->
                <li>Joint Photographic Experts Groups (.JPG) - used for photographs, does not support transparency.</li>
                <li>Graphics Interchange Format (.GIF) - a format for image that supports both animated and static.</li>
                <li>Portable Network Graphics  (.PNG) - used for images with flat colors and hard edges such as logo, illustrations and it suppor
             </ul>

        </ol>

        <br>

        <center><img src="image/bpos.png" alt="bpos.png" width="300px" height="300px"></center>

        <!--Div-->
        <center><img src="image/whitebar.png" alt="whitebar.png"
            height="100"
            width="10000"
            /></center>
        <!--Div-->

        <center><img src="image/hasbullah.gif" alt="hasbullah.gif" width="300px" height="300px"></center>

        <br>
        <br>


        <!--<center><p3 style="font-family:courier new; color:whitesmoke; font-size: 20px;"><a href="https://www.youtube.com/watch?v=dQw4w9WgXcQ"



    </body>


</html>
```

DelaCruz_CSS_Activity.html > html > head

```html
<!DOCTYPE html>
<html>
    <head>
        <link rel="stylesheet" type="text/css" href="CSS_Activity.css">
        <title>COMPUTER TECHNICIAN</title>
    </head>
```

CSS_Activity.css > ...

```css
body{
    background-image: url(image/Topography.png);
    object-fit: contain;
}

h1{
    text-align: center;
    font-family:Tahoma;
    color: whitesmoke;
}
```