Tutorial 03 – More on HTML

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HTML Image Tag <IMG>

- images are defined with the <img> tag.
- It is empty, it contains attributes only, and does not have a closing tag.

```
<img
    src="url"
    alt="Alternative text"
    width="### px"
    height="### px"
>
```

src: source attribute

- The source (src) attribute specifies the URL (web address) of the image.

alt: alternative text

- alt attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the src attribute, or if the user uses a screen reader).

width: width attribute

- width attribute specifies the width of an image in pixels (default) or percentage (%).
- In HTML5, the value must be in pixels.

height: height attribute

- The height attribute specifies the height of an image, in pixels.

Graphics

Some common web graphical file formats:

- GIF (graphics interchange format): support animation
- JPEG (Joint Photographic Experts Group): higher compression
- PNG (Portable Network Graphic)
    - Used for clip art
    - Support a transparent background
    - Do not support animated clip art
    - Have a .png file extension

Exercise of image
Given the following HTML Code

```
<IMG SRC="PolyU_HKCC.png" alt="HKCC Logo">
```

1. How to show the logo in the middle of the screen?
2. How to show the following pattern using the SAME image?
   Hint: use an attribute HEIGHT
3. How to show the logo without downloading the image to the local hard disk?

Background color

We can specify the background color of a webpage by using the bgcolor attribute of body tag.

```
<BODY BGCOLOR="RED">
```

- Color can be specified by name, HEX values, RGB values.

HEX value

- HEX value specify the Red (R), Green (G) and Blue (B) values in hex-decimal ranging from 00 to FF (i.e. 255 in decimal).

```
<BODY BGCOLOR="#FF0000">
```

RGB Value

- RGB value specify the red, blue and green values in decimal numbers.
- Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.

- ```
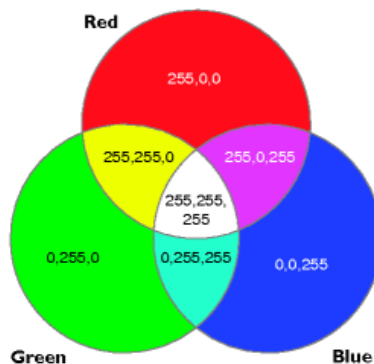 <BODY BGCOLOR="rgb(255,0,0)">
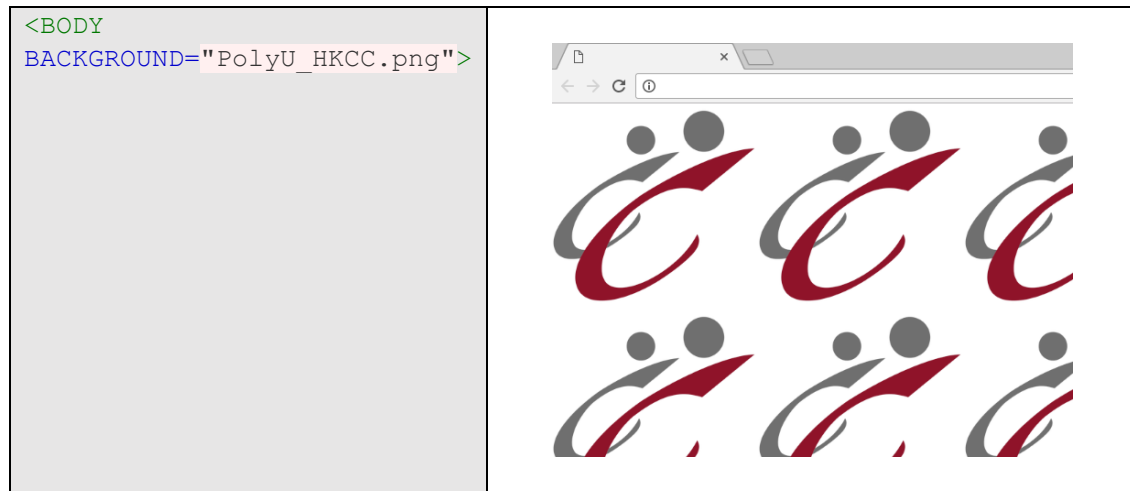 ```

Figure 1: RGB Color Model

Common color names:

Reference: https://www.w3schools.com/colors/colors_names.asp

Background image

- We can specify an image as background image by using the background attribute of <body>.

```
<BODY
BACKGROUND="PolyU_HKCC.png">
```

Background sound <BGSOUND>

```
<BODY>
    <BGSOUND SRC="bit8.wav">
</BODY>
```

Sound Files

- Browsers generally don't know how to play non-streaming sound files without the help of a plug-in or browser extension
    - o Internet Explorer uses Windows Media Player
- Refer to the sound file name when using <A HREF> tag

Storing Sound in Files

- MIDI (musical instrument digital interface)
- WAV (wave)
- WMA (Windows Media Audio)
- AU (UNIX Audio)
- AIFF (Audio Interchange File Format)
- MPEG (Moving Pictures Experts Group)

HTML Sound <AUDIO>

- Before HTML5, audio files could only be played in a browser with a plug-in (like flash).
- In HTML5, <audio> element specifies a standard way to embed audio in a web page.

```
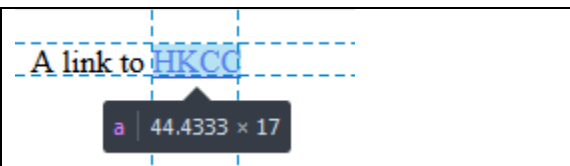<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
```

HTML Link (Hyperlink) <A>

- In HTML, links are defined with the **<a>** tag:

Syntax	Explanation
``` link text ```	- Use the **href** attribute to define the link address - web address (URL): e.g. "http://www.yahoo.com/" - a local file: e.g. "aboutus.html" - a folder: e.g. "/contactus/index.html" - email address: e.g. "mailto:2122xxxx@..." - Use the **target** attribute to define where to open the linked document **_blank** - Opens the linked document in a new window or tab **_self** - Opens the linked document in the same window/tab (default) **_parent** - Opens the linked document in the parent frame **_top** - Opens the linked document in the full body of the window

Using Hyperlinks to Point to Other Web Sites

```A link to HKCC ```	A link to HKCC a | 44.4333 × 17

Using a Graphic as a Hyperlink

- Enter the IMG tag for the graphic in the anchor tag

```
<a href="url">
   <img src="image.jpg" >
</a>
```

- Example:

```
▶ <div id="topShortcutZone" class="clearfix">…</div>
▼ <div id="topZone" class="clearfix">
    ::before
  ▶ <div id="logoWrap">…</div>
  ▼ <div id="departmentWrap">
    ▼ <a class="" href="/en/home/index.html">
        <img src="/filemanager/template/common/images/Logo-HKCC.svg"
        alt="Hong Kong Community College">
      </a>
  </div>
```

Using Hyperlinks to Manage Large Documents

- Hyperlinks provide a convenient way to navigate around a longer web page
- Two anchor tags needed:
  - i. Link: marks the link itself (starting point)

    ```html
    <A HREF="#section-name">link-text</A>
    ```
  - ii. Link target or jump link: it marks place to which the link points (destination)

    ```html
    <A NAME="section-name">Destination</A>
    ```

Links Pointing to Other Pages on the Same Site

- A hyperlink that points to a different file on same site needs only one anchor tag
- That tag contains the name of the HTML file that is the destination, or jump link
- Example:

```html
<a href="blue_bird.html">
   More about blue bird.
</a>
```

HTML Link Exercise

Then, create an HTML file called SEHH1016_T3.html using the above tags. The HTML page includes the following:

- The title should be "Tutorial 3 Exercise".
- page background color of "lightgray" (#d3d3d3).
- The Google image source is http://www.google.com/images/logos/ps_logo2.png, with height set to 32. It is not necessary to download this image file to your local hard disk.
- Google web address: http://www.google.com
- Yahoo web address: http://www.yahoo.com (will be opened in a new tab/window)
- My email address: your HKCC email (e.g. 21xxxxxxA@common.cpce-polyu.edu.hk)

and it looks like: