

Trainer Notes

.Net
Week 1 - Day 1
(WNWD01)

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Session Details

Duration: 6 hours

Time Division:

	Tasks	Duration
1	Objective of the day	5 min
2	Starter brainstorming	15 min
3	Task 1: HTML Introduction	2 hrs
4	Task 2: HTML Forms	1.5 hrs
5	Task 3: HTML Attributes	1.5 hrs
6	Homework	10 min

Learning Objectives

By the end of this session, the students will be able to:

- Develop a basic understanding of Microsoft .NET Platform & .NET MVC

Icebreaking

(15 -20 min)

Materials

Index cards/Post-it Slips (two for each participant)

Markers

Flipchart

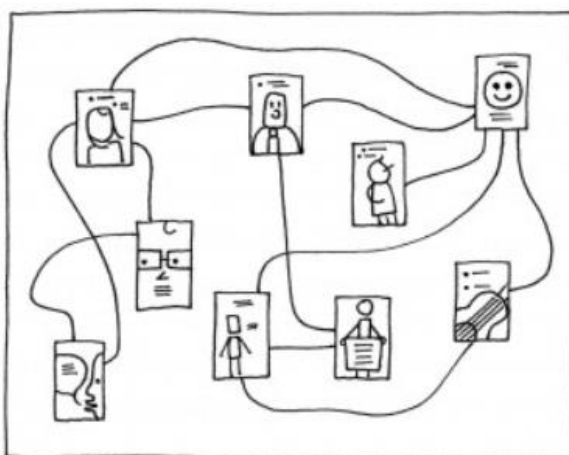
Instructions

Preparation

To set up the game, all participants will need a 5x8 index card/post-it sticky notes and access to markers or something similar to draw their avatar. They will also need a substantial wall covered in butcher paper to create the actual network/chart papers mounted on the wall so that the participants could paste their post-it slips.

Flow

1. The trainer gives the participants clear instructions: "As a group, we are going to build the social network that is in the room right now. We're going to use this wall to do it. But first, we need to create the most fundamental elements of the network: who you are. Start by taking your card and drawing your avatar (profile picture) that you'll be uploading to the network. Save room on the bottom of the card for your name."
2. **Create the avatars.** After a short period of time (and probably some laughter and apologies for drawing ability), the participants should have their avatars and names created.
 - a. At this point, the trainer may add a variation, which is to ask the group to also write two words on the card that "tag" who they are or what they're interested in at the training.
3. **Make the connections.** Next, the trainer directs participants to stand up and bring their cards and a marker to the butcher paper wall/chart paper on the wall, then "upload" themselves by sticking their card to the wall.
4. **The next task is simple:** Find the people you know and draw lines to make the connections. Label the lines if you can: "friends with" or "went to school with" or "went mountain climbing with." This continues for a time and is likely to result in previously undiscovered links and new friends. The chart will look something like this:



Note: The trainer will add details to the activity according to the available time for the activity. They may skip point 4.

Conclusion: The activity will be concluded by sharing that the learning journey will be easy and fruitful if the participants help each other and stay connected to exchange knowledge with each other.

Task 1: HTML Introduction

(2 hrs)

What is HTML

- HTML stands for Hyper Text Markup Language
- HTML is a markup language that is used to create web pages.
- The structure of a Web page is described in HTML.
- HTML is made up of a number of different elements.
- HTML components specify how the content should be displayed in the browser.
- HTML components are used to identify different parts of content, such as "this is a heading," "this is a paragraph," "this is a link," and so on.

Your first HTML Document

It's a text document with the extension.html or.htm that contains text and tags written between " > " that provide instructions for configuring the web page.

Every HTML document includes two parts:

- one part that is visible to/in the browser and can't be changed directly and that shows the entire content of the page.
- another part contains the source code of the page with which we can modify the HTML document. This part is the one we'll work with.

To see the source code of any HTML document you just have to click the right mouse button inside the page (text area) and click on "View source" or "View Frame-Source". The Text Editor will open a document containing the source code of the page.

Structure of an HTML Document

An HTML 5 document mainly consists of a Head and Body. The Head contains the data, which informs the browser and even web servers that it is an HTML 5 document. On the other hand, the Body contains content that web browsers actually display.

Each and every HTML 5 document employs a unique combination of elements and content to define a page. The structure of all the property documented pages is the same and contains

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>
```

```
</body>  
</html>
```

Example Explained

- The <!DOCTYPE html> declaration defines that this document is an HTML5 document
- The <html> element is the root element of an HTML page
- The <head> element contains meta information about the HTML page
- The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The <h1> element defines a large heading
- The <p> element defines a paragraph

What is an HTML Element?

The HTML element is everything from the start tag to the end tag:

```
<tagname>Content goes here...</tagname>
```

Examples of some HTML elements:

```
<h1>My First Heading</h1>
```

```
<p>My first paragraph.</p>
```

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>
 	<i>none</i>	<i>none</i>

Note: Some HTML elements have no content (like the
 element). These elements are called empty elements. Empty elements do not have an end tag!

<a>	Html links	
-----	------------	------

Example: [This is a link](https://www.w3schools.com)

	Html image	
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Task 2: HTML Forms

(2 hrs)

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

The <form> Element

The HTML <form> element is used to create an HTML form for user input:

<form>

.

form elements

.

</form>

<form>	Html form	</form>
--------	-----------	---------

Input Element

The HTML <input> element is the most used form element.

An <input> element can be displayed in many ways, depending on the type attribute.

<input>	The input tag is used within < form> element to declare input controls	</input>
---------	---	----------

	that allow users to input data	
--	---------------------------------------	--

The HTML `<input>` element is the most used form element.

An `<input>` element can be displayed in many ways, depending on the `type` attribute.

Here are some examples:

Type	Description
<code><input type="text"></code>	Displays a single-line text input field
<code><input type="radio"></code>	Displays a radio button (for selecting one of many choices)
<code><input type="checkbox"></code>	Displays a checkbox (for selecting zero or more of many choices)
<code><input type="submit"></code>	Displays a submit button (for submitting the form)
<code><input type="button"></code>	Displays a clickable button

All the different input types are covered in this chapter: [HTML Input Types](#)

Instructor will explain the other relevant points.

Student Practice Task

Create an html document with proper headings, paragraphs, links, and breaks

Task 3: HTML Attributes

(1 hr)

HTML attributes provide additional information about HTML elements.

- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like: `name="value"`

The href Attribute

The `<a>` tag defines a hyperlink. The `href` attribute specifies the URL of the page the link goes to:

Example: `Visit W3Schools`

The src Attribute

The `` tag is used to embed an image in an HTML page. The `src` attribute specifies the path to the image to be displayed:

Example: ``

There are two ways to specify the URL in the `src` attribute:

1. **Absolute URL** - Links to an external image that is hosted on another website. Example: `src="https://www.w3schools.com/images/img_girl.jpg"`.

Notes: External images might be under copyright. If you do not get permission to use it, you may be in violation of copyright laws. In addition, you cannot control external images; it can suddenly be removed or changed.

2. **Relative URL** - Links to an image that is hosted within the website. Here, the URL does not include the domain name. If the URL begins without a slash, it will be relative to the current page. Example: `src="img_girl.jpg"`. If the URL begins with a slash, it will be relative to the domain. Example: `src="/images/img_girl.jpg"`.

Tip: It is almost always best to use relative URLs. They will not break if you change domain.

The width and height Attributes

The `` tag should also contain the `width` and `height` attributes, which specifies the width and height of the image (in pixels):

Example: ``

The alt Attribute

The required `alt` attribute for the `` tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the `src` attribute, or if the user uses a screen reader.

Example: ``

The style Attribute

The **style** attribute is used to add styles to an element, such as color, font, size, and more.

Example: `<p style="color:red;">This is a red paragraph.</p>`

Each HTML heading has a default size. However, you can specify the size for any heading with the **style** attribute, using the CSS **font-size** property:

Example: `<h1 style="font-size:60px;">Heading 1</h1>`

The Lang Attribute

You should always include the **lang** attribute inside the `<html>` tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

The following example specifies English as the language:

```
<!DOCTYPE html>
<html lang="en">
<body>
...
</body>
</html>
```

Country codes can also be added to the language code in the **lang** attribute. So, the first two characters define the language of the HTML page, and the last two characters define the country.

The following example specifies English as the language and United States as the country:

```
<!DOCTYPE html>
<html lang="en-US">
<body>
...
</body>
</html>
```

The Title Attribute

The **title** attribute defines some extra information about an element.

The value of the title attribute will be displayed as a tooltip when you mouse over the element:

Example: `<p title="I'm a tooltip">This is a paragraph.</p>`

We Suggest: Always Use Lowercase Attributes

The HTML standard does not require lowercase attribute names.

The title attribute (and all other attributes) can be written with uppercase or lowercase like title or TITLE.

However, We recommend lowercase attributes in HTML, and demand lowercase attributes for stricter document types like XHTML.

We Suggest: Always Quote Attribute Values

The HTML standard does not require quotes around attribute values.

However, We recommend quotes in HTML, and demand quotes for stricter document types like XHTML.

Good: `Visit our HTML tutorial`

Bad: `Visit our HTML tutorial`

Sometimes you have to use quotes. This example will not display the title attribute correctly, because it contains a space:

Example: `<p title=About W3Schools>`

Single or Double Quotes

Double quotes around attribute values are the most common in HTML, but single quotes can also be used.

In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:

```
<p title='John "ShotGun" Nelson'>
```

Or vice versa:

```
<p title="John 'ShotGun' Nelson">
```

A complete list of all attributes for each HTML element, is listed in our: [HTML Attribute Reference](#)

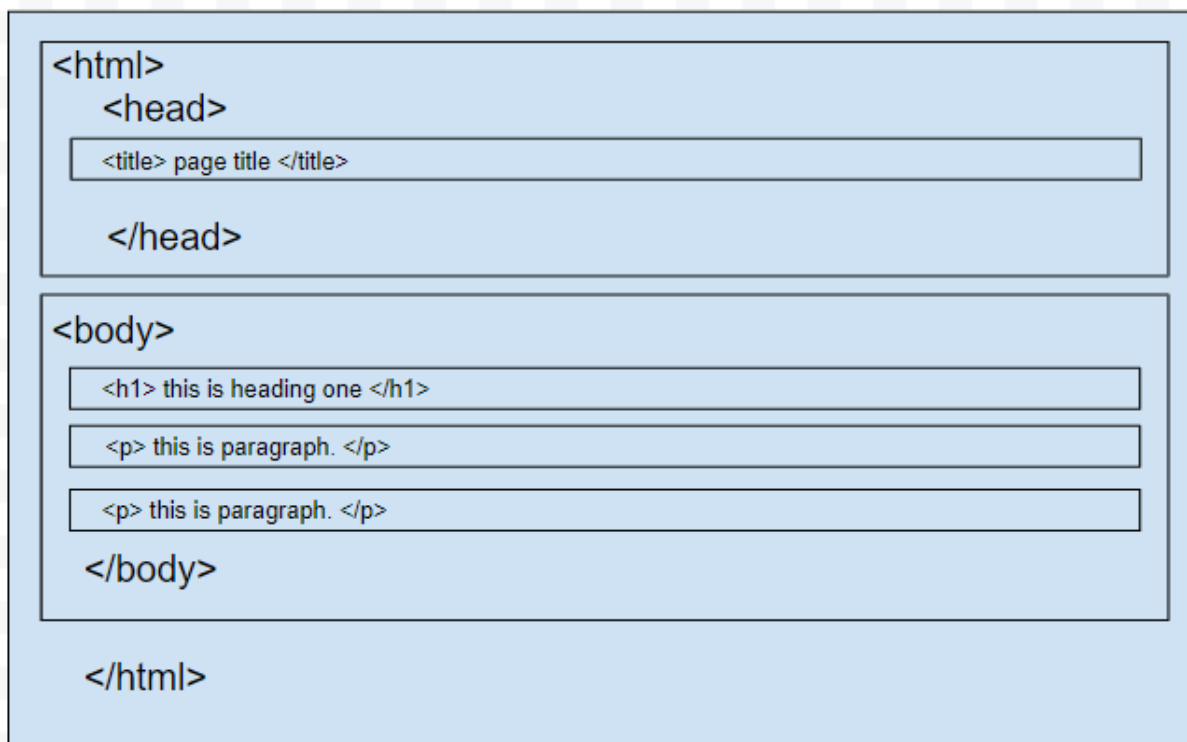
Student Practice Task

Display five different images. Skip two lines between each image. Each image should have a title.

Important points:

- All HTML elements can have attributes
- The href attribute of <a> specifies the URL of the page the link goes to
- The src attribute of specifies the path to the image to be displayed
- The width and height attributes of provide size information for images
- The alt attribute of provides an alternate text for an image
- The style attribute is used to add styles to an element, such as color, font, size, and more
- The lang attribute of the <html> tag declares the language of the Web page
- The title attribute defines some extra information about an element

HTML Page Structure



Note: The content inside the <body> section (the white area above) will be displayed in a browser. The content inside the <title> element will be shown in the browser's title bar or in the page's tab

Homework

Create your own website and save your code online, try any free website builder.