HTML 5: The New Web

Lecture 1
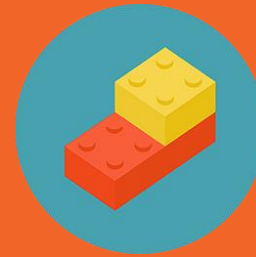
Course Prerequisites

<HTML
CSS}

JS
JavaScript

Course Objectives

Learn about HTML 5 and it's
new features

Learn how to use HTML5 Web APIs and
Plug-ins to build awesome Apps

In 1989, **Tim Berners-Lee** invented WWW and after that HTML

HTML developed to v4 and **W3C** recommended after that XHTML 1.0

In 2004, **WHATWG** was formed in response to slow W3C development

WHATWG gained support by the major browser vendors

HTML History

In 2006, **W3C** announced that they would support **WHATWG**
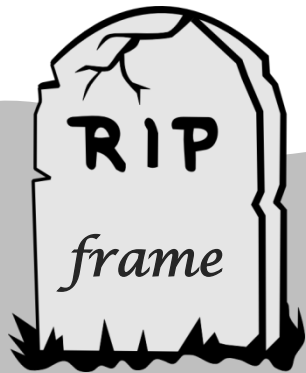
In 2014, **HTML5** **W3C** Final Recommendation

In 2012, **HTML5** **WHATWG** Living Standard

In 2008, the first **HTML5** public draft was released.

R.I.P

RIP *frame*

RIP *applet*

RIP *center*

RIP *font*

RIP *strike*

NewBorn

New Elements

New Attributes

Plug-ins

APIs

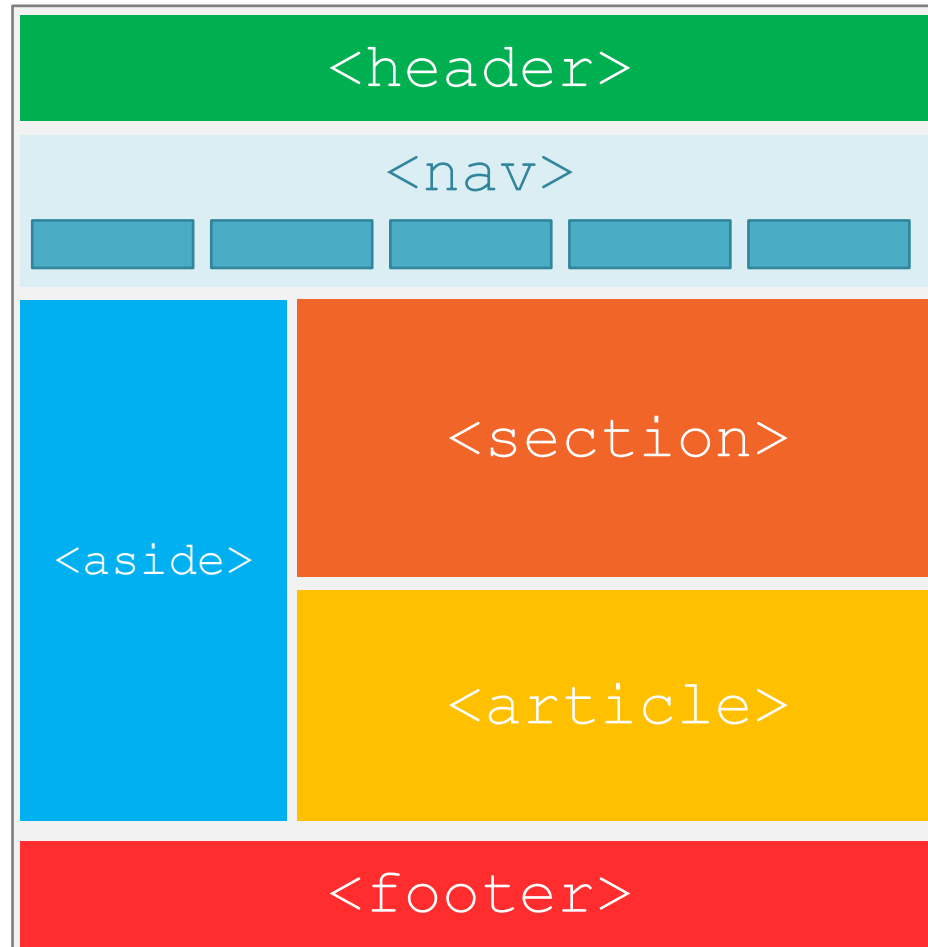# New Elements

Let's Explore Some New Elements

Structural Elements

Semantic Elements

Let's Explore Some New Elements

<details>

```
<details >
        <summary>Hello Guest</summary>
        <p>Welcome to my page .. Enjoy it</p>
</details>
```

▶ Hello Guest

<details>

```
<details open >
        <summary>Hello Guest</summary>
        <p>Welcome to my page .. Enjoy it</p>
</details>
```

▼ Hello Guest

Welcome to my page ... Enjoy it

<mark>

```
<p>We will learn HTML5 Today.</p>
```

We will learn HTML5 Today.

<mark>

```
<p>We will learn <mark>HTML5</mark> Today.</p>
```

We will learn <mark>HTML5</mark> Today.

<figure>

```html
<figure >
        <img  src='juice.png'/>
        <figcaption>Fig.1 -  Juice</figcaption>
</figure>
```


Fig.1 - Juice

New Form Elements

Let's Explore Some New Elements

<datalist>

```html
<input  list="cities"  name='city'>
<datalist  id="cities">
    <option  value="Cairo">
    <option  value="Mansoura">
</datalist>
```

Ma   ▼
Mansoura

<datalist>

```
<input  list="cities"  name='city'>

<datalist  id="cities">

    <option  value="Cairo">

    <option  value="Mansoura">

</datalist>
```

```
Mar                                    ▼
```

<output>

```
<form   action="#"   oninput="res.value = 'Hi, '+name.value">

        <input   type= "text"   name= "name">

        <output   name='res'   ></output>

</form>
```

```
┌─────────────────────────────────────┐
│ a                                   │   Hello, a
└─────────────────────────────────────┘
```

<output>

```html
<form  action="#"  oninput="res.value = 'Hi, '+name.value">

        <input  type= "text"  name= "name">

        <output  name='res'    ></output>

</form>
```

| a l | Hello, a l |

\<output\>

```
<form   action="#"   oninput="res.value = 'Hi, '+name.value">

      <input   type= "text"   name= "name">

      <output   name='res'    ></output>

</form>
```

```
a l i
```
Hello, a l i

<input type="**?**">

```
<input   type="?">
```

number　　　**range**　　　**date**　　　**email**　　　**url**
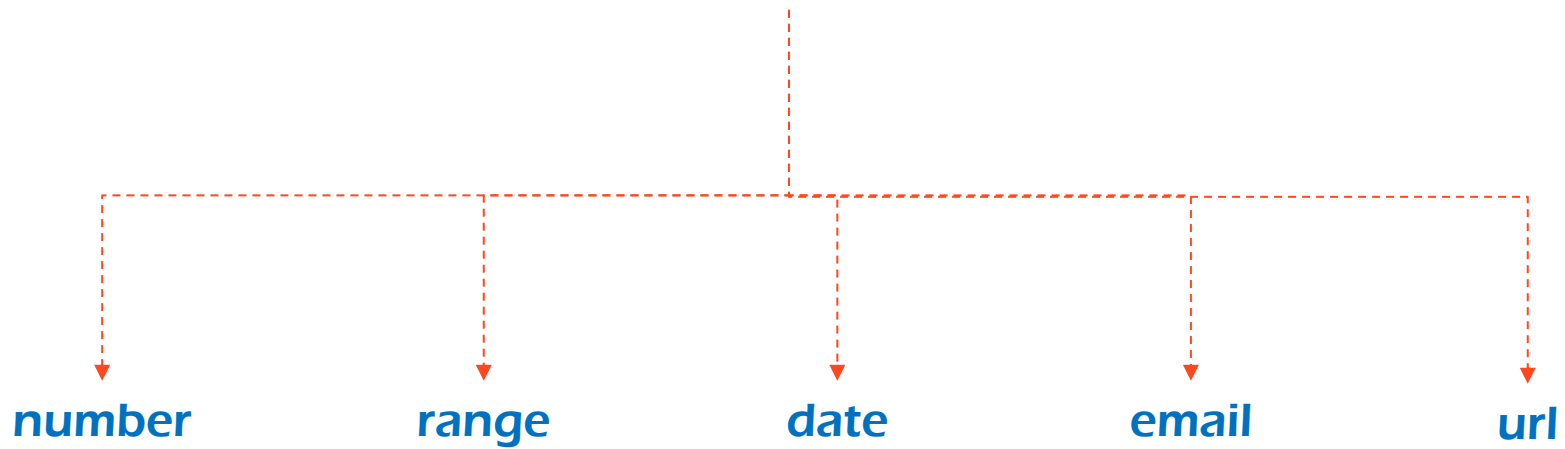
New Attributes

Let's Explore Some New Elements

Let's Explore!

<form>   **no**validate

<input> | autofocus

min   **step** **max**

multiple

required *

placeholder

Plug-ins

Let's Explore Some New Elements

Intro

The purpose of a **plug-in**, is to extend the functionality of the HTML browser.

<object>

object tag used to open files like below in the HTML web page

pdf	swf	html	img

```
<object width="100%" height="500px" data="cv.pdf"></object>
```

Web APIs

Let's Explore Some New Elements

Audio

```
<audio  controls >

        <source src='dream.mp3' type='audio/mpeg'>

        </source>

</audio>
```

Audio

```
<audio  control autoplay >

     <source src='dream.mp3' type='audio/mpeg'>

     </source>

</audio>
```

Audio

```
<audio  control loop >

        <source src='dream.mp3' type='audio/mpeg'>

        </source>

</audio>
```

Audio

```
<audio  control muted >

    <source src='dream.mp3' type='audio/mpeg'>

    </source>

</audio>
```

Video

```
<video  autoplay >

        <source src='brave.mp4' type='video/mp4'></source>



</video>
```

Video

```
<video  autoplay >

        <source src='brave.mp4' type='video/mp4'></source>

        <track src="brave_ar.vtt"  kind="subtitles"
               srclang="ar"  label="Arabic">

</video>
```

Methods

play() | Play the current audio/video source |

pause() | Pause the current audio/video source |

---------------------------------- Example ----------------------------------

```
var audio = document.getElementById('audio-player');

audio.play();
```

Properties

paused	Return whether the audio/video is paused or not.
ended	Return whether the audio/video is ended or not.
autoplay	Return or set whether the audio/video should be played after loading the source or not.

Example

```
var audio = document.getElementById('audio-player');

audio.paused; //false
```

Events

ended	Triggered when the audio/video track is ended
play	Triggered when the audio/video track is started or no longer paused
pause	Triggered when the audio/video track is paused

Example

```javascript
var audio = document.getElementById('audio-player');

audio.addEventListener("ended", function(e){

    e.target.src = "dream.mp3";

    e.target.play();

});
```

Thank You