Hyper Text Markup Language

HTML Tags and element

- markup language (contents: images, texts, forms) not programing language

- one and the same thing

- Content and Structure

live server for http protocol

```
<p> </p>
<a> </a>
<img>
```

index.html

- starting point

- default homepage file name

- document type <!DocTYPE html>

- root element <html> </html>

- head :info meta data

- body : renders into the page

- serries of different tags that make up the page

http over file protocol

Tags and elements

- <p></p> Paragraph tag
- important - **bold**
- emphasis - *italics*
- <small></small> small text

```html
<p>
  This text is now <small>small</small>; now its wrapped inside <strong>bold</strong> lets use emp tag <em>italics</em>
</p>
```

This text is now small now its wrapped inside **bold** lets use emp tag *italics*

Heading Tags

- 1 to 6, 1 being most importance

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h5>Heading 4</h5>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

List item

unordered list

```
<h2>unordered list</h2>
<ul>
  <li>unordered List</li>
  <li>unordered</li>
  <li>unordered</li>
  <li>unordered</li>
</ul>
```

odored list

```
<h2> ordered list</h2>
<ol>
  <li>lorem12</li>
  <li>lorem12</li>
  <li>lorem12</li>
  <li>lorem12</li>
</ol>
```

unordered list

- unordered List
- unordered
- unordered
- unordered

ordered list

1. lorem12
2. lorem12
3. lorem12
4. lorem12

<Div></Div> and Tag

- group things together

- used for styling sections

- span way to add css or js inside a part of text

single tags

- <"br"> does not need a closing tag
- <hr> septate contact with horizontal rule
- <img> image should have a src att to it
  - uses relative path or url
  - atl for screen reader or laoding when image fails
- <a> anchor tag links to pages
  - href: hyperlink references
  - styled automatically by the browser

comments and extra

- ctrl + / add comments to html
  `<blockquote cite="google.com">some nice quote</blockquote>` quote something from other site adds indentation
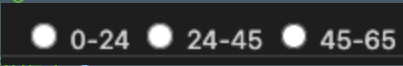- src, href, cite, alt

Forms

Label and input fields

- these are what forms are made of

- tags label and inputs

- different types of attributes
  - `for` : used in <label> to create association with input field
  - `text` : we want text from user
  - `email` : we want email (simle validation provided)
  - `password` : we want password
  - `radio` : radio button
  - `submit` : a button to submit form

other attributes

- `required` : makes field required
- `name` attr can be used for server side processing
  - group different part of forms together
  - multiple radio buttons
- `value` : to set the value
- `placeholder` : text to display when field is empty

```
<input type="radio" value="1" name="age" id="age1">
<label for="age1">0-24</label>
<input type="radio" value="2" name="age" id="age2">
<label for="age2">24-45</label>
<input type="radio" value="3" name="age" id="age3">
<label for="age3">45-65</label>
```

○ 0-24 ● 24-45 ○ 45-65

Select box

```
<label for="quiz>select correct answer</label>
<select name="quiz" id="quiz">
  <option value="1"> answer 1 </option>
  <option value="2"> answer 2 </option>
  <option value="3"> answer 3 </option>
</select>
```

select correct answer answer 1

select correct answe

✓ answer 1

answer 2

answer 3

Text Area

- text area is used for long text
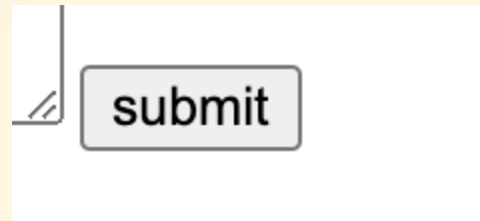
- `row`:size in rows

- `cols`: size in cols

```
<label for="comments">comments</label>
<textarea name="comments" id="comments" cols="30" rows="10"></textarea>
```

submit button

- input type submit and value the text to show
  - browser takes all the data and sends it to

```
<input type="submit" value="submit">
```

Form summary

- form is a collection of fields
- we saw how to create a form
- input types like text, email, password radio and so on
- how to sue label, id and name attr
- how to use select box
- how to use text area
- how to create a submit button

inline/block html element

- in line => line up next to each other span, img, strong, em
- block => take up the whole width p, div, h1, h2 ....

HTML 5: Sementic

- severe new tab to structure tings properly div is too generic

- more descriptive

discriptive tags

- `main` : main content of webpage, unique to page

- `section` : certain section of the page

- `article` : a post

- `aside` : define related content (beside an article showing things related to it)

- `header` : nav , title so on

- `footer` : footer of the page

HTML-Sementic

```html
<header>
  <h1>   Qasim Header </h1>
  <section>
    <img src="2022-05-03-01-11-11.png" alt="header image">
    <div class="headerDiv">
      <h2> welcome to <br> <span>QasimClass</span></h2>
    </div>
  </section>
  <nav>
    <ul>
      <li><a>home</a></li>
      <li><a>about</a></li>
      <li><a>contact</a></li>
    </ul>
  </nav>
  <main>
      <article> <h2> lorem12 </h2>
      <p></p>
      </article>
      <ul>
      <li><a>home</a></li>
      <li><a>about</a></li>
      <li><a>contact</a></li>
    </ul>
  </main>
</header>
```