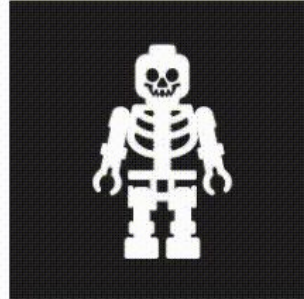


HTML

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HTML
structure



CSS
presentation/appearance



JavaScript
dynamism/action



<https://d2v4zi8pl64nxt.cloudfront.net/javascript-seo/5948abfc0e2df5.02876591.gif>

HTML

- HTML stands for Hyper Text Markup Language
 - Latest major version of HTML; Introduced in October 2014
- Provides the basic structure for content presentation
 - Browsers read and interpret HTML documents to render web pages
 - Goes hand in hand with CSS (Cascading Style Sheets)
 - CSS control presentation and visual style
 - Aspects like colors, fonts, spacing, and overall layout of the page
 - Also supports embedded code, executed at client-side browser: Javascript



DAILY FROM: AHMEDABAD, CHANDIGARH, DELHI, JAIPUR, KOLKATA, LUCKNOW, MUMBAI, NAGPUR, PUNE, VADODARA

JOURNALISM OF COURAGE

MYNUCLEAR
BUTTON BIGGER
THAN YOURS:
TRUMP TOKIMChinese road
team enters
Arunachal,
India seizes
equipmentSUSHANT SINGH &
SAMUDRA GUPTA
KASHYAP
NEW DELHI, GUWAHATI, JAN 3

MONTHS AFTER the two countries de-escalated from a stand-off at Doklam on the Sikkim-Bhutan border, the Indian Army and Indo-Tibetan Border Police (ITBP) have foiled a Chinese attempt to build a track on the Indian side of the Line of Actual Control (LAC) in Tuting area of Arunachal Pradesh.

While the Chinese workers were told to return to their side of the LAC, their road construction equipment was seized. Sources, however, denied a Doklam-like eyeball-to-eyeball face-off between the two sides at the construction site on the LAC, and said there was no direct contact between Indian and Chinese soldiers during the incident.

CONTINUED ON PAGE 2

BANDH IN MAHARASHTRA

Dalit protests shut down state, RSS blames 'Breaking India Brigade'

Second to die in Maharashtra is 16-yr-old; Bhide, Ekbote named in fresh complaint

EXPRESS NEWS SERVICE
MUMBAI, PUNE, JANUARY 3

IN THE second death since the Dalit-Maratha clashes broke out on Monday, a 16-year-old boy, Pralhad Jadhav, died in Nanded on Wednesday, as protesters hit the streets of Mumbai, Pune and several towns of Maharashtra for the second day, enforcing a statewide bandh called by Dalit groups which led to a near-complete shutdown.

Police said Jadhav was crushed by a mob near Tansa police station in Nanded. "About

CONTINUED ON PAGE 2



Protesters block traffic on Western Express Highway near Goregaon in Mumbai on Wednesday. *Anita Chakravarty*

12

THE EDITORIAL
PAGE

Faultlines in
Marathi society
BY SUHAS PALSHIKAR

Trains crawl, buses pelted with stones

EXPRESS NEWS SERVICE
MUMBAI, JANUARY 3

THE STATE-WIDE bandh called by Dalit groups in Maharashtra led to a near-complete shutdown in the financial capital Wednesday, with suburban local services hit repeatedly on all three lines, road traffic stalled at various key traffic junctions and shops and establishments in very large parts of the suburbs remaining completely closed for the day.

The bandh call follows the January 1 attack on Dalits in Bhima Koregaon near Pune, when

nearly 3 lakh Dalits were headed to a memorial pillar in Koregaon to mark the 200th anniversary of the Battle of Koregaon in which 800 British troops including Mahar soldiers of the Bombay Native Infantry held off a 30,000-strong Maratha army led by Peshwa Bajirao II.

From early Wednesday, Mumbai Police personnel including riot control police were deployed at sensitive locations including Ramabai Nagar in Chhatkopar, Worli Naka, Amar Mahal in Chembur, Thane and near most railway stations.

CONTINUED ON PAGE 2

MAHARASHTRA P7

● POLITICS TO UNITE BACKWARD CASTES, ISOLATE BJP

● AMBEDKAR TAKES CENTRE STAGE IN DALIT POLITICS

● DALIT MLAs FROM BJP PLAY SAFE, SENA LEGISLATORS VOCAL

FULL COVERAGE
PAGES 3, 4, 5, 7, 9Spark was lit
when board at
Mahar samadhi
was removedCHANDAN HAYGUNDE
VUDHU BUDRUK, JANUARY 3

FOR FIVE days now, people in Vudhu Budruk village, about 30 km northeast of Pune, have been living amidst heavy police presence.

Because it was here that the spark was lit on December 29, leading to violent clashes between Dalits and Marathas — the removal of a board placed at the samadhi of a 17th-century Dalit who, according to defied Emperor Aurangzeb's orders and carried out the last rites of Chhatrapati Sambhaji Maharaj, Chhatrapati Shivaji Maharaj's son who was tortured to death in 1689.

CONTINUED ON PAGE 2

Mumbai: A pregnant woman's harrowing 4 hours to hospital

TABASSUM
BARANGARWALA
MUMBAI, JANUARY 3

WHEN MUMBAI shut down Wednesday, an anxious Asher family called the police control room around 10 am. Their daughter-in-law Ankita Asher had started experiencing labour pains. No one answered



11 EXPLAINED
Tussle between competing nationalisms

OPPN WANTS BILL SENT TO SELECT PANEL

Oppn changes tactics to stall debate on instant triple talaq Bill, Govt says sham

MANOJ CG,
ABANTIKA GHOSH &
SANTANU CHOWDHURY
NEW DELHI, KOLKATA, JAN 3

DAYS AFTER they put up little or no resistance in Lok Sabha to the passage of the Muslim Women (Protection of Rights on Marriage) Bill which outlaws talaq-e-biddat or instant triple talaq, Opposition parties changed tactics and joined hands Wednesday to stall a debate on the Bill in Rajya Sabha and demanded that it be sent to a select committee.

The show of strength by the Opposition in Rajya Sabha, where it outnumbers the ruling coalition, drew a sharp response from the government.

Law Minister Ravi Shankar



Jaitley, Prasad on Wednesday. *Praveen Jain*

Prasad accused the Congress of "political hypocrisy" and Finance Minister Arun Jaitley, who is also Leader of the House, called it a "sham".

"The whole country is watching that in the other House, you supported the Bill, and in this House, you are trying to derail the Bill," he said in the House.

CONTINUED ON PAGE 9

In dry Cape Town, Team India told: Not more than two minutes in shower



EXPRESS IN AFRICA

SANDEEP DWIVEDI
CAPE TOWN, JANUARY 3

IT'S AN impossible to implement order, but everybody in Cape Town has been officially told not to use the shower for more than two minutes. It's one of the several water conservation measures



Level 6 water restrictions in place in Cape Town

sages that the Indian cricketers came across on reaching their hotel after a sweaty and tiring day under the relentless sun. With many in the Indian team

CONTINUED ON PAGE 2

- Structure and Styling makes it easier to view and understand a document/page
 - Organization in the form of sections, headings, content with styling applied

Outline

- Building Blocks: Elements and Attributes
- Text
- Lists
- Links
- Images
- Tables
- Forms
- Extra Markup

Sample HTML

```
<html>
<head>
  <title>Simple HTML Example</title>
</head>
<body>
  <h1>Heading 1</h1>
  <p>This is the first paragraph under Heading 1. </p>
  <p>This is the second paragraph under Heading 1. </p>

  <h2>Heading 2</h2>
  <p>This is the first paragraph under Heading 2. </p>
  <p>This is the second paragraph under Heading 2. </p>

  <h3>Heading 3</h3>
  <p>This is the first paragraph under Heading 3. </p>
  <p>This is the <br> second paragraph under Heading 3 <br> with line breaks. </p>
</body>
</html>
```

Heading 1

This is the first paragraph under Heading 1.

This is the second paragraph under Heading 1.

Heading 2

This is the first paragraph under Heading 2.

This is the second paragraph under Heading 2.

Heading 3

This is the first paragraph under Heading 3.

This is the
second paragraph under Heading 3
with line breaks.

Elements/Tags

- HTML is just a series of elements
- Element defined by a start tag, some content, and an end tag
 - Example Element: `<p> This is a para </p>`
 - `<p>` : start tag ; `</p>`: end tag; “This is a para”: content
 - HTML tags are not case sensitive; `<P>` same as `<p>`
 - But strongly recommend use of lowercase for consistency
 - Note: some HTML elements need not have content or closing tag
 - E.g. `
` tag defines a line break
- Elements can be nested

- Each HTML element tells the browser something about the content between the tags
 - Anything between `<html>` tag and closing `</html>` tag is HTML code
 - Anything between `<head>` and `</head>` tag contains information about the page
 - A `<title>` element often present inside the `<head>` element
 - Contents of the `<title>` element are either shown in the top of the browser or on the tab
 - Anything between `<body>` tag and closing `</body>` tag should be shown inside the browser window
 - Words between `<h1>` and `</h1>` are main heading
 - Text between `<p>` and `</p>` tags is a paragraph
 - Words between `<h2>` and `</h2>` form a sub-heading

Attributes

- Attributes provide additional information about elements
 - Always specified in the start tag
- Attributes usually come in name/value pairs like: `name="value"`
 - E.g: `<p style="color:red;">This is a red paragraph.</p>`

Outline

- Building Blocks: Elements and Attributes
- Text
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- Multimedia

Text

- How to add markup to the text that appears in a web page?

Headings

- HTML has six "levels" of headings: `<h1>` to `<h6>`
- Browsers display the contents of headings at different sizes
 - `<h1>` element is the largest, and `<h6>` element is the smallest
 - Exact size depends on browser
 - One can control size of text, color, fonts etc via CSS

Paragraph

- Already saw
- Browser will show each paragraph on a new line with some space between paragraphs

Bold, Italic, Sup and Sub

- Enclosing text between `` and `` will make it appear bold
- Enclosing text between `<i>` and `</i>` will make it appear italic
- Enclosing text between `^{` and `}` will make it superscript (e.g. 2nd)
- Enclosing text between `_{` and `}` will make it subscript (e.g. H₂O)

```
<html>
<head>
  <title>Text Formatting Example-1</title>
</head>
<body>
  <h1>Use of Bold, Italicize, Subscript and Superscript</h1>

  <p>
    Here is some text with <b>bold</b> formatting.
  </p>

  <p>
    You can also <i>italicize</i> text
  </p>

  <p>
    Subscripts and superscripts are useful for scientific notation,
    such as H<sub>2</sub>O (water) or E = mc<sup>2</sup>.
  </p>
</body>
</html>
```


Use of Bold, Italicize, Subscript and Superscript

Here is some text with **bold** formatting.

You can also *italicize* text

Subscripts and superscripts are useful for scientific notation, such as H₂O (water) or $E = mc^2$.

Spaces, line breaks and Horizontal Rules

- White space collapsing:
 - Browser sees two or more spaces next to each other, it only displays one space
 - A line break is also treated as a single space
- `
` introduces a line break
- `<hr>` introduces a horizontal rule to separate content
- Above two are empty elements and have only one tag

```
<html>
<head>
  <title>Whitespace Collapsing and Line Breaks</title>
</head>
<body>
  <h1>Whitespace Collapsing and Line Breaks</h1>
```

```
<p>
```

This sentence contains multiple spaces, but HTML will collapse them into a single space.

Tabs and line breaks

are also collapsed.

```
</p>
```

<p>

To add a line break in the text without starting a new paragraph, you can use the
 tag.

For example, this sentence starts on a new line, but it's still part of the same paragraph.

</p>

<hr>

<p>

The <hr> tag creates a horizontal rule, like the one above, which is often used to separate sections of content.

</p>

</body>

</html>

Whitespace Collapsing and Line Breaks

This sentence contains multiple spaces, but HTML will collapse them into a single space. Tabs and line breaks are also collapsed.

To add a line break in the text without starting a new paragraph, you can use the
tag.

For example, this sentence starts on a new line, but it's still part of the same paragraph.

The

tag creates a horizontal rule, like the one above, which is often used to separate sections of content.

Changes to Content

- `<ins>` shows content that has been inserted into a document
 - Content usually underlines
- `` shows text that has been deleted
 - Content is striked through
- `<s>` indicates something that is no longer accurate or relevant (but should not be deleted)
 - Content is striked through

```
<html>
<head>
  <title>Text Editing Example </title>
</head>
<body>
  <h1>Text Editing Example </h1>

  <p>
    This sentence contains some text that was   <del>removed</del> and replaced with
    <ins>new content</ins>.
  </p>

  <p>
    The price of the item is   <s>$50.00</s> <ins>$45.00</ins>.
  </p>

  <p>
    We plan to meet on   <del>Monday</del> <ins>Wednesday</ins>.
  </p>

  <p>
    Sometimes, text is no longer accurate or valid,
    so it's marked as   <s>obsolete</s> or incorrect,
    while the new information is highlighted.
  </p>
</body>
</html>
```

Text Editing Example

This sentence contains some text that was ~~removed~~ and replaced with new content.

The price of the item is ~~\$50.00~~ \$45.00.

We plan to meet on ~~Monday~~ Wednesday.

Sometimes, text is no longer accurate or valid, so it's marked as ~~obsolete~~ or incorrect, while the new information is highlighted.

Outline

- Building Blocks: Elements and Attributes
- Text
- Lists
- Links
- Images
- Tables
- Forms
- Extra Markup
- Multimedia

Lists

- HTML provides 3 types:
 - Ordered lists which are numbered
 - Unordered lists with bullet points (no order)
 - Definition lists with set of terms along with definition of terms

- Ordered list is created with `` element
- Unordered list is created with `` element
- In either:
 - Each item is placed between `` and `` (li: list item)
 - Browsers indent lists by default
 - Can use a type attribute to specify type of numbering or bullet point (e.g letter numbering or diamond bullet point)
 - Better practice, use CSS `list-style-type` property

- Definition list is created with <dl> element
 - Consists of a series of terms and their definitions
 - Inside pairs of <dt> and <dd> elements are used
 - <dt> contains the term being defined
 - <dd> contains the definition
- Lists can be nested
 - Browsers uses indentation accordingly
 - If unordered lists, will change style of bullet point also

```
<html>
<head>
  <title>HTML Lists Example</title>
</head>
<body>
  <h1>Types of Lists in HTML</h1>

  <!-- Ordered List -->
  <h2>Steps to Make a Cup of Tea (Ordered List)</h2>
  <ol>
    <li>Boil water</li>
    <li>Add tea leaves to the pot
      <ul>
        <li>1 teaspoon per cup</li>
        <li>Additional spoon for the pot</li>
      </ul>
    </li>
    <li>Pour boiling water into the pot</li>
    <li>Let it steep for 3-5 minutes</li>
    <li>Pour into a cup and add milk or sugar if desired</li>
  </ol>
```

```
<!-- Unordered List -->
<h2>Grocery List (Unordered List)</h2>
<ul>
  <li>Fruits
    <ul>
      <li>Apples</li>
      <li>Bananas</li>
    </ul>
  </li>
  <li>Vegetables
    <ul>
      <li>Carrots</li>
      <li>Potatoes</li>
    </ul>
  </li>
</ul>
```

```
<!-- Description List -->
<h2>Programming Languages (Description List)</h2>
<dl>
  <dt>HTML</dt>
  <dd>A markup language for creating web pages.</dd>

  <dt>CSS</dt>
  <dd>A style sheet language used for describing the look and formatting of
a document written in HTML.</dd>

  <dt>JavaScript</dt>
  <dd>A programming language used to create interactive effects within web
browsers.</dd>
</dl>
</body>
</html>
```

Types of Lists in HTML

Steps to Make a Cup of Tea (Ordered List)

1. Boil water
2. Add tea leaves to the pot
 - 1 teaspoon per cup
 - Additional spoon for the pot
3. Pour boiling water into the pot
4. Let it steep for 3-5 minutes
5. Pour into a cup and add milk or sugar if desired

Grocery List (Unordered List)

- Fruits
 - Apples
 - Bananas
- Vegetables
 - Carrots
 - Spinach

Programming Languages

HTML

A markup language for creating web pages.

CSS

A style sheet language used for describing the look and formatting of a document written in HTML.

JavaScript

A programming language used to create interactive effects within web browsers.

Outline

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Links

- An important feature, allows to browse
 - Can link from one website to another
 - Can link from one page to another on the same website
 - Can link from one part of a web page to another part of the same page
- Links can be made to open in a new browser window
- Links can also open your email application filled with email address

- Use the `<a>` element to define a link
- Use the `href` attribute to define the link address
- Users can click on anything between the open and closing `<a>` tag to be taken to link
 - Browsers show links in blue with an underline by default
- Can use the “target” attribute to open link in new window/tab
 - `Visit Example`
 - Often used if link points to another website
 - User will browse to that tab and return to main site tab

Link Types

- Absolute URL: provides full path to a resource
 - `Visit Example`
 - Absolute URLs are useful when linking to resources outside your website or when to ensure link works regardless of where current page is located

- Relative URL: specifies a path relative to the current page's location
 - Does not include the protocol or domain, making it shorter and more flexible
 - `About Us`
 - about.html is relative to the current directory where current page is located
 - If the current page is `https://www.example.com/org/contact.html`, clicking link will take to <https://www.example.com/org/about.html>
 - Relative URLs are useful for linking to resources within the same website

- # symbol in URLs is used to create fragment identifiers
 - Allows to link to a specific section within the same page or another page
 - Useful for long pages to quickly jump to specific sections

Example:

```
<h2 id="section1">Section 1</h2>
```

```
<p>This is some content in Section 1.</p>
```

```
<h2 id="section2">Section 2</h2>
```

```
<p>This is some content in Section 2.</p>
```

```
<a href="#section1">Go to Section 1</a>
```

```
<a href="#section2">Go to Section 2</a>
```

- Can to link to a specific part of a different page (on own or a different website)
 - E.g. ``

Email Links

- Can use `<a>` element to also open email application to send emails
- href attribute starts with mailto: followed by email address
- E.g. `Email Us`


```
<html>
<head>
  <title>HTML Links Example</title>
</head>
<body>
  <h1>Links Example</h1>

  <p id="top">
    Welcome to the top of the page!
  </p>

  <h2>Absolute URL</h2>
  <p>
    Click the link below to visit an absolute URL:
    <a href="https://www.example.com" target="_blank">Visit Example.com in a new
window</a>
  </p>

  <h2>Relative URL</h2>
  <p>
    Click the link below to visit a relative URL:
    <a href="about.html">About Us</a>
  </p>
```

```
<h2>Fragment Identifier</h2>
<p>
  Click the link below to jump to a specific section of this page:
  <a href="#section3">Go to Section 3</a>
</p>

<h2>Sections</h2>
<h3 id="section1">Section 1</h3>
<p>This is Section 1. You can return to the top by clicking the link below: </p>
<p>
  <a href="#top">Back to Top</a>
</p>

<h3 id="section2">Section 2</h3>
<p>This is Section 2.You can return to the top by clicking the link below: </p>
<p>
  <a href="#top">Back to Top</a>
</p>

<h3 id="section3">Section 3</h3>
<p>This is Section 3.You can return to the top by clicking the link below: </p>
<p>
  <a href="#top">Back to Top</a>
</p>
</body>
</html>
```

Links Example

Welcome to the top of the page!

Absolute URL

Click the link below to visit an absolute URL: [Visit Example.com in a new window](http://example.com)

Relative URL

Click the link below to visit a relative URL: [About Us](#)

Fragment Identifier

Click the link below to jump to a specific section of this page: [Go to Section 3](#)

Sections

Section 1

This is Section 1. You can return to the top by clicking the link below:

[Back to Top](#)

Section 2

This is Section 2. You can return to the top by clicking the link below:

[Back to Top](#)

Section 3

This is Section 3. You can return to the top by clicking the link below:

[Back to Top](#)

Outline

- Building Blocks: Elements and Attributes
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Images

- Images can make a website lot more engaging and attractive
 - Good practice to keep all images used in the website in one folder
- Use an `` element to place image in the page
 - An empty element with many attributes

Attributes:

- **src:** Specifies the path to the image file
 - Example: ``
- **alt:** Provides alternative text for the image if it cannot be displayed
 - Important for accessibility.
 - Example: ``
- **width:** Specifies the width of the image in pixels
 - Example: ``
- **height:** Specifies the height of the image in pixels
 - Example: ``
- Size of images is increasingly being specified using CSS

```
<html>
<head>
  <title>Image Placement Example</title>
</head>
<body>
  <!-- Image above para -->
  
  <p>This text is below the image in a block</p>

  <!-- Inline Image -->
  <p>This is some text  that includes an inline image</p>

  <!-- Image with Align Attribute -->
  <p>
    
    This text will wrap around the image to the right. The image is aligned to the left. This continues to
    demonstrate how the text flows around the image.
  </p>

  <hr>

  <p>
    
    This text will wrap around the image to the left. The image is aligned to the right. The text continues to
    demonstrate the wrapping effect.
  </p>
</body>
</html>
```



This text is below the image in a block



This is some text

that includes an inline image.



This text will wrap around the image to the right. The image is aligned to the left. This continues to demonstrate how the text flows around the image.

This text will wrap around the image to the left. The image is aligned to the right. The text continues to demonstrate the wrapping effect.



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Tables

- Tables are used to display data in a structured, grid-like format with rows and columns
 - Used for displaying tabular data like statistics, schedules, or comparison charts!
- `<table>` element defines the beginning of a table
- `<tr>` (Table Row): defines a row in the table
 - Each row can contain multiple cells, defined by `<th>` or `<td>` tags
- `<th>` (Table Header): defines a header cell in a table
 - By default, the text in `<th>` elements is bold and centered
- `<td>` (Table Data): defines a standard data cell in a table
 - Represents one cell in the table, which can contain text, images, links, or other types of content

- `<thead>` (Table Head) groups the header content in a table
 - Usually contains one or more `<tr>` elements, each containing `<th>` elements
- `<tbody>` (Table Body) groups the main body of the table
 - Usually contains multiple `<tr>` elements, each containing `<td>` elements
- `<tfoot>` (Table Footer) groups the footer content in a table
 - Like `<thead>`, it usually contains one or more `<tr>` elements
 - Often contains summary information, such as totals
- Browsers rarely treat the content of these elements any differently than other elements
 - However can use CSS styles to change their appearance.

- colspan and rowspan attributes are used with <td> and <th> to merge cells across multiple columns and rows respectively
 - Help create complex table layouts
- Attribute Value is a positive integer that indicates the number of columns/rows the cell should span

```
<html>
<head>
  <title>Tables</title>
</head>
<body>

  <h1>Simple Table Example</h1>

  <table border="1">
    <thead>
      <tr>
        <th>Item</th>
        <th>Quantity</th>
        <th>Price</th>
      </tr>
    </thead>
```

```
<tbody>
  <tr>
    <td>Apples</td>
    <td>4</td>
    <td>100</td>
  </tr>
  <tr>
    <td>Bananas</td>
    <td>6</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Oranges</td>
    <td>3</td>
    <td>75</td>
  </tr>
</tbody>
</table>
```

```
<table border="1">
  <thead>
    <tr>
      <th>Category</th>
      <th>Item</th>
      <th>Details</th>
      <th>Price</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td rowspan="3">Fruits</td>
      <td>Apples</td>
      <td colspan="2">Not Available</td>
    </tr>
    <tr>
      <td>Bananas</td>
      <td>6</td>
      <td>50</td>
    </tr>
    <tr>
      <td>Oranges</td>
      <td>3</td>
      <td>75</td>
    </tr>
  </tbody>
</table>

</body>
</html>
```

Simple Table Example

Removes the visible border entirely, making the table appear without any surrounding or internal lines.

Item	Quantity	Price
Apples	4	100
Bananas	6	50
Oranges	3	75

Category	Item	Details	Price
Fruits	Apples	Not Available	
	Bananas	6	50
	Oranges	3	75

Outline

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Forms

- Google search box is an example of a form
- Forms are used to collect user input and send it to a server for processing
- `<form>` element is the container for all form elements
 - Popular attributes:
 - `action`: Specifies the URL where the form data should be sent when the form is submitted
 - `method`: Specifies the HTTP method to be used when sending form data (e.g., GET, POST)
 - `id`: Used to identify the element distinctly from other elements on the page
 - More on this later!

Form Controls

There are several types of form controls that you can use to collect information from users

- `<input>` element is used to create several different form controls
 - Type attribute determines what kind of input they will be creating
 - `type="text"` attribute creates a single-line text input
 - `type="password"` attribute creates text box, except characters are blocked out
 - name attribute helps identify the form control

- `type="submit"` attribute creates a button
 - It can use a name attribute but it does not need to have one
 - Value attribute here is used to control the text that appears on the button
- `type="image"` lets you use an an image for the submit button
 - `src`, `width`, `height`, and `alt` attributes work like for the `` element

```
<html>
<head>
  <title>Simple Login Form</title>
</head>
<body>

  <h1>Login</h1>

  <form action="https://www.example.com/login.php" method="POST">
    <p>Username:
      <input type="text" id="username" name="name">
    </p>

    <p>Password:
      <input type="password" id="password" name="pass">
    </p>
    <input type="submit" name="submit" value="Login">
    <p>Or replace above login button with some thing
fancier!</p>
    <input type="image" src="login.jpeg" alt="Submit"
width="50">

  </form>

</body>
</html>
```

Simple Login Form X

← → ↺ http://127.0.0.1:3000/login-form

Login

Username:

Password:

Login

Or replace above login button with some thing fancier!



POST /login.php HTTP/1.1

Host: www.example.com

Content-Type: application/x-www-form-urlencoded

Content-Length: 37

name=chotu&pass=hello123&submit>Login

Note: Above assumes you used type="submit"

- `type="radio"` allow users to pick just one of a number of options
 - `name` attribute is sent to the server with the value of the option the user selects
 - value of `name` attribute should be the same for all of the radio buttons
 - value of each of the buttons in a group should be different
 - `checked` attribute can be used to indicate which value (if any) should be selected when the page loads
 - Only one radio button in a group should use this attribute

- type="checkbox" allow users to select (and unselect) one or more options in answer to a question
 - name attribute is sent to the server with the value of the option(s) the user selects
 - value of the name attribute should be the same for all of the buttons
 - checked attribute indicates that this box should be checked when the page loads

- `type="file"` is used to upload files
 - Creates a box that looks like a text input followed by a browse button
 - When user clicks on browse, a window opens to select a file from computer
 - `accept` attribute specifies the types of files that the server accepts
 - Note method for file upload has to be POST

- `type="hidden"` is used to include data that is not visible or modifiable by the user
 - The resulting POST will carry the name:value pair automatically
 - Useful for security purposes (CSRF tokens) , contextual information (e.g. product id), that were determined by earlier interactions etc

```
<html>
<head>
  <title>Form with Radio, Checkbox, and File Upload </title>
</head>
<body>

<form action="/submit_form" method="POST">

  <!-- Radio Buttons -->
  <p>Please select your gender: </p>
  <input type="radio" id="male" name="gender" value="male"> Male <br>
  <input type="radio" id="female" name="gender" value="female" checked="checked"> Female <br>
  <input type="radio" id="other" name="gender" value="other"> Other <br>

  <!-- Checkboxes -->
  <p>Choose your hobbies: </p>
  <input type="checkbox" id="hobby1" name="hobbies" value="reading"> Reading
  <input type="checkbox" id="hobby2" name="hobbies" value="traveling"> Traveling
  <input type="checkbox" id="hobby3" name="hobbies" value="gaming"> Gaming

  <!-- Hidden Input -->
  <input type="hidden" name="token" value="abcde12345">

  <!-- File Upload -->
  <p>Please upload your profile picture: </p>
  <input type="file" id="profilePicture" name="profilePicture" accept=".jpg,.jpeg,.png"><br><br>

  <!-- Submit Button -->
  <input type="submit" value="Submit">

</form>

</body>
</html>
```

← → ↺ http://127.0.0.1:3000/buttons-file-form

Please select your gender:

- ☐ Male
☒ Female
☐ Other

Choose your hobbies:

☐ Reading ☐ Traveling ☐ Gaming

Please upload your profile picture:

Choose file No file chosen

Submit

- `<textarea>` element is used to create a multi-line text input
 - This needs an opening and closing tag unlike others
 - `rows` and `cols` attribute control height and width of the text area
 - Avoid these attributes and use CSS instead
 - `placeholder`: Provides a hint or example of what to input in the text area
- `<button>` element used to create clickable buttons
 - Unlike `<input type="submit">`, `<button>` element can contain various content such as text, images, or other HTML elements
 - provides greater flexibility in design and functionality

- name and value attributes are used to pass data to the server when the form is submitted.
- type attribute defines the button's behavior; submit, reset, or button
 - Default value: submit; acts as a form submission button
 - Reset resets all form fields to their initial values when clicked
 - Button performs a specific action, typically with JavaScript, without submitting the form

- `<select>` element helps create drop-down or list box
 - name attribute indicates the name to be sent along with value user selects
 - Multiple attribute allows multiple options to be selected
 - Control will appear as a list box rather than a drop-down

- Contains two or more <option> elements
 - <option> element is used to specify the options that the user can select from.
 - Uses value attribute to indicate the value that is sent to the server along with the name of the control
 - selected attribute can be used to indicate the option that should be selected when the page loads
 - If this attribute is not used, the first option will be shown when the page loads


```
<html>
<head>
  <title>Form Example</title>
</head>
<body>

<form action="/submit_form" method="POST">
  <!-- Textarea -->
  <p>Enter your comments: </p>
  <textarea id="comments" name="comments" rows="4" cols="50" placeholder="Write your comments here..." ></textarea>

  <!-- Select with Multiple Options -->
  <p>Select your favorite fruits: </p>
  <select id="fruits" name="fruits" multiple>
    <option value="apple">Apple</option>
    <option value="banana">Banana</option>
    <option value="cherry">Cherry</option>
  </select>

  <p>Select your favorite fruits: </p>
  <select id="fruits" name="fruits">
    <option value="apple">Apple</option>
    <option value="banana">Banana</option>
    <option value="cherry" selected>Cherry</option>
  </select>

  <!-- Buttons -->
  <p>Choose an action: </p>
  <button type="submit">Submit Form</button>
  <button type="reset">Reset Form</button>
  <button type="button" onclick="alert('This is a button with no form action' )" >Click Me</button>
</form>

</body>
</html>
```

← → ↺ http://127.0.0.1:3000/select-textarea-button

Enter your comments:

Write your comments here...

Select your favorite fruits:

Apple ▲
Banana
Cherry ▼

Select your favorite fruits:

Cherry ▼

Choose an action:

Submit Form Reset Form Click Me

Outline

- Building Blocks: Elements and Attributes
- Text
- Lists
- Links
- Images
- Tables
- Forms
- Extra Markup

Extra Markup

- Will cover some extra miscellaneous but important elements

Comments

- Add comment text between `<!--` and `-->`
 - E.g. `<!-- comment goes here -->`
- Comment will not be visible in the user's browser
- But can be viewed by anyone who looks at source code of the page

id

- A powerful attribute that allows for unique identification of elements
 - Helps with targeted styling (CSS), scripting (javascript), and navigation
- Each id must be unique
 - No two elements in the same HTML document can have the same id value
- id value should start with a letter or an underscore (not a number or any other character)
- Use descriptive and meaningful names for id values
- Also avoid Overuse
 - For styling multiple elements, classes are better

Class

- Attribute used to assign one or more class names to an element
 - Unlike id attribute, class attribute can be shared by multiple elements
 - Can apply CSS styles to multiple elements or select elements in JavaScript for manipulation
- E.g want to distinguish different types of paras or differentiate between links in same site vs external sites etc

```
<html>
<head>
  <title>Example of ID and Class Attributes with CSS</title>
  <style>
    /* Styling for the element with the id 'main-header' */
    #main-header {
      color: darkblue;
      text-align: center;
      font-size: 2em;
      margin-top: 20px;
    }

    /* Styling for elements with the class 'intro' */
    .intro {
      color: darkgreen;
      font-size: 1.2em;
      margin: 10px 0;
    }

    .highlight {
      font-weight: bold;
    }

    /* Styling for the element with the id 'special-paragraph' and class 'highlight' */
    #special-paragraph {
      background-color: lightyellow;
      padding: 10px;
      border-left: 5px solid orange;
    }
  </style>
</head>
```



```
<body>

  <!-- Using an ID to uniquely identify the main header -->
  <h1 id="main-header">Welcome to My Website</h1>

  <!-- Using a class to group similar elements -->
  <p class="intro">This is an introduction paragraph.</p>
  <p class="intro">This is another introduction paragraph.</p>

  <!-- Using both ID and Class on the same element -->
  <p id="special-paragraph" class="highlight intro">This is a special highlighted paragraph.</p>

</body>
</html>
```

Welcome to My Website

This is an introduction paragraph.

This is another introduction paragraph.

This is a special highlighted paragraph.

Block and Inline Elements

- Block elements start on a new line in browser window
 - Eg. `<h1>`, `<p>`, ``, ``
- Inline elements continue on the same line as their neighbouring elements
 - Eg. `<a>`, ``, ``, ``

Div

- div stands for "division"
- A block level Element used to group and organize other HTML elements
 - Has no semantic meaning
 - In browser, no difference in presentation other than starting in new line
 - However, if used with id or class, will help with layout, styling or scripting purposes

span

- Element in HTML that is an inline container
 - Used to apply styles or scripts to a specific part of text or other inline elements
 - Unlike `<div>`, which is a block-level element, `` is an inline element
 - Like `<div>`, `` does not convey any specific meaning (not semantic)
 - A class or id attribute is often used with `` to style or script

```
<html>
<head>
  <title>Example of div with ID and Class </title>
  <style>
    /* Styling for the div with the id 'main-container' */
    #main-container {
      width: 80%;
      margin: auto;
      padding: 20px;
      border: 2px solid #333;
      background-color: #f4f4f4;
    }

    /* Styling for elements with the class 'box' */
    .box {
      background-color: #e0e0e0;
      padding: 15px;
      margin: 10px 0;
      border: 1px solid #ccc;
    }

    /* Additional styling for the div with the id 'special-box' */
    #special-box {
      background-color: #d0f0d0;
      border: 2px dashed #4caf50;
    }

    .highlight {
      background-color: yellow;
      font-weight: bold;
    }

    /* Styling for the span element with the id 'important' */
    #important {
      color: red;
      font-size: 1.2em;
    }
  </style>
</head>
```

```
<body>

  <!-- Div with an id for unique styling -->
  <div id="main-container">
    <h1>Welcome to My Page</h1>

    <!-- Div with a class for common styling -->
    <div class="box">
      <h2>Box 1</h2>
      <p>This is the first box with common styling. </p>
    </div>

    <!-- Div with both id and class for specific and common styling -->
    <div id="special-box" class="box">
      <h2>Box 2</h2>
      <p>This is a special box with unique styling as well as common styling. </p>
    </div>

    <!-- Another div with a class for common styling -->
    <div class="box">
      <h2>Box 3</h2>
      <p>This is the third box with common styling. </p>
      <p>Also a normal paragraph with <span class="highlight">highlighted text</span>
        and <span id="important">important text</span> for emphasis.
      </p>
    </div>
  </div>
</body>
</html>
```



Welcome to My Page

Box 1

This is the first box with common styling.

Box 2

This is a special box with unique styling as well as common styling.

Box 3

This is the third box with common styling.

Also a normal paragraph with **highlighted text** and **important text** for emphasis.

Summary

- Lot more to HTML than covered here
 - But most important elements and attributes covered
- We saw how to markup text? how to create lists, links, tables, forms? how to embed images?
- Reference:<https://www.w3schools.com/html/default.asp>