

1. Table and its Properties

HTML Tables are used to display data in a tabular format. The `<table>` element is the container for a table, and it contains several sub-elements:

- `<table>`: Defines a table.
- `<tr>`: Defines a row in a table.
- `<th>`: Defines a header cell in a table.
- `<td>`: Defines a standard cell in a table.

Properties and Attributes:

- `border`: Specifies the border width of the table.
- `cellpadding`: Specifies the space between the cell wall and the cell content.
- `cellspacing`: Specifies the space between cells.
- `colspan`: Attribute of `<td>` and `<th>` that allows a cell to span across multiple columns.
- `rowspan`: Attribute of `<td>` and `<th>` that allows a cell to span across multiple rows.

2. Media Elements and How They Work

HTML provides several elements to embed media content:

- ``: Embeds an image.

Attributes: `src`, `alt`, `width`, `height`.

- `<audio>`: Embeds sound content.

Attributes: `src`, `controls`, `autoplay`, `loop`.

Example:

html

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

- `<video>`: Embeds video content.

Attributes: `src`, `controls`, `autoplay`, `loop`, `width`, `height`.

Example:

html

Copy code

```
<video width="320" height="240" controls>
  <source src="videofile.mp4" type="video/mp4">
  Your browser does not support the video tag.
</video>
```

- **<source>**: Specifies multiple media resources for **<audio>** and **<video>**.

Example:

html

```
<video controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>
```

3. GET and POST in Forms

GET and **POST** are two HTTP methods used to send form data to the server:

- **GET:**
 - Appends form data into the URL in name/value pairs.
 - Not secure (data is visible in the URL).
 - Limited amount of data can be sent (URL length restrictions).
 - Used for retrieving data.

POST:

- Sends form data inside the body of the HTTP request.
- More secure (data is not visible in the URL).
- No size restrictions on the amount of data sent.
- Used for sending data that will change the server state (e.g., submitting a form).

List of Input Types in Forms

HTML5 introduced various input types to enhance forms:

- **text**: Single-line text input.
- **password**: Password input (characters are hidden).
- **submit**: Submit button.
- **reset**: Reset button.
- **radio**: Radio button (for selecting one of many choices).
- **checkbox**: Checkbox (for selecting multiple choices).
- **button**: Button.
- **color**: Color picker.
- **date**: Date picker.
- **datetime-local**: Local date and time picker.
- **email**: Email address input.
- **file**: File selection.
- **hidden**: Hidden input (not visible to the user).
- **image**: Image as a submit button.
- **month**: Month and year picker.
- **number**: Numeric input.
- **range**: Range slider.
- **search**: Search field.
- **tel**: Telephone number input.
- **time**: Time picker.
- **url**: URL input.
- **week**: Week and year picker.