

Frontend Developer Interview Preparation Guide

For 2 Years Experience Level

HTML INTERVIEW QUESTIONS & SOLUTIONS

1. What is the difference between `<div>` and `` elements?

Answer:

- `<div>` is a block-level element that takes up the full width available and starts on a new line
- `` is an inline element that only takes up as much width as necessary and doesn't start on a new line

Example:

html

```
<div>This is a block element</div>
<div>This starts on a new line</div>
```

```
<span>This is inline</span> <span>This continues on same
line</span>
```

2. Explain HTML5 semantic elements and their importance.

Answer: HTML5 semantic elements provide meaning to the structure of web content, improving accessibility and SEO.

Key Semantic Elements:

- `<header>` - Page or section header
- `<nav>` - Navigation links
- `<main>` - Main content area
- `<article>` - Independent, self-contained content
- `<section>` - Thematic grouping of content
- `<aside>` - Content aside from main content
- `<footer>` - Page or section footer

Example:

html

```
<header>
  <nav>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </nav>
</header>
<main>
  <article>
    <h1>Article Title</h1>
    <p>Article content...</p>
  </article>
  <aside>
    <p>Related links...</p>
  </aside>
</main>
<footer>
  <p>&copy; 2024 Company Name</p>
</footer>
```

3. What are HTML attributes and how do you use data attributes?

Answer: HTML attributes provide additional information about elements. Data attributes allow storing custom data.

Data Attributes:

- Start with **data-**
- Can store custom information
- Accessible via JavaScript using **dataset**

Example:

html

```
<div id="user" data-user-id="123" data-role="admin"
data-active="true">
  User Profile
</div>

<script>
const user = document.getElementById('user');
console.log(user.dataset.userId); // "123"
console.log(user.dataset.role);   // "admin"
console.log(user.dataset.active); // "true"
```

```
</script>
```

4. Explain form validation and different input types in HTML5.

Answer: HTML5 provides built-in form validation and new input types for better user experience.

Input Types:

- `email` - Email validation
- `tel` - Telephone numbers
- `url` - URL validation
- `number` - Numeric input
- `date` - Date picker
- `range` - Slider control

Validation Attributes:

- `required` - Field must be filled
- `pattern` - Regular expression validation
- `min/max` - For numeric inputs
- `minlength/maxlength` - For text inputs

Example:

html

```
<form>
  <input type="email" required placeholder="Enter email">
  <input type="password" minlength="8" required
placeholder="Password">
  <input type="number" min="18" max="100" placeholder="Age">
  <input type="tel" pattern="[0-9]{10}" placeholder="Phone">
  <button type="submit">Submit</button>
</form>
```

5. What is the difference between `localStorage`, `sessionStorage`, and cookies?

Answer:

Feature	localStorage	sessionStorage	Cookies
Storage Limit	~5-10MB	~5-10MB	~4KB
Lifetime	Until manually cleared	Until tab closes	Set expiration date

Server Access	No	No	Yes (sent with requests)
Scope	Same origin	Same tab/window	Same domain

Example:

html

```

<script>
// localStorage
localStorage.setItem('user', 'john');
localStorage.getItem('user'); // 'john'

// sessionStorage
sessionStorage.setItem('temp', 'data');
sessionStorage.getItem('temp'); // 'data'

// Cookies
document.cookie = "username=john; expires=Thu, 18 Dec 2024
12:00:00 UTC";
</script>

```