**MODERN HTML ASSIGNMENT**

* **Features of HTML5**:  
  HTML5 introduced numerous features and improvements over its predecessors, including:
* **Semantic Elements**: New elements like <header>, <nav>, <article>, and <footer> to better structure web content.
* **Audio and Video Support**: Native support for embedding audio and video without plugins using <audio> and <video> elements.
* **Canvas**: A drawing surface for creating graphics and animations.
* **Local Storage**: The localStorage and sessionStorage APIs for client-side storage.
* **Web Workers**: The ability to run JavaScript code in the background to improve performance.
* **Geolocation**: Support for determining a user's geographical location.
* **Form Enhancements**: New input types (e.g., date, email, number) and attributes (e.g., placeholder, required).
* **Offline Web Applications**: Support for creating web apps that work offline using the Application Cache API.
* **Improved Accessibility**: Enhanced support for accessibility features.
* **WebSocket**: A protocol for real-time, full-duplex communication.

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* **HTML Entities**:  
  HTML entities are special characters represented by their corresponding entity names or codes. Here are five commonly used HTML entities:
* &lt; for <
* &gt; for >
* &amp; for &
* &quot; for "
* &copy; for ©

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* **Web Accessibility (WAI)**:
* **Web Accessibility Initiative (WAI)**: It's an effort by the World Wide Web Consortium (W3C) to improve the accessibility of the web for people with disabilities.
* **Assistive Devices**: Common assistive devices include screen readers (e.g., JAWS, NVDA), screen magnifiers, braille displays, voice recognition software, and keyboard alternatives.

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* **Ways to Improve Accessibility of HTML**:
* Use semantic HTML elements.
* Provide descriptive alt text for images.
* Ensure keyboard navigation and focus management.

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* **Tab Index**:  
  The tabindex attribute specifies the order in which elements receive keyboard focus when a user presses the "Tab" key. It's used to control the sequence of focusable elements on a web page, allowing developers to customize the tabbing order for accessibility or usability purposes.

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* **Semantic HTML Tags**:
* <header>: Represents introductory content, typically containing headings and navigation.
* <nav>: Represents a section with navigation links.
* <article>: Represents a self-contained composition, such as a blog post or news article.
* <section>: Represents a thematic grouping of content.
* <footer>: Represents the footer of a document or section.

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* **Benefits of Using Semantic Tags**:
* Improved Accessibility: Assistive technologies can better understand and navigate the content.
* SEO: Search engines can better index and rank content.
* Maintenance: Easier to read and maintain code.
* Consistency: Promotes consistent structure and styling.
* Clarity: Enhances the understanding of content's meaning and purpose.

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