**Modern HTML Assignment**

**Q.1.Ans.**

* **Semantic elements:- HTML5 introduces a number of new semantic elements, such as <header>, <footer>, <section>, and <article>. These elements make it easier to structure your web content and help search engines understand your pages better.**
* **Audio and video support:- HTML5 includes native support for audio and video playback, without the need for third-party plugins like Flash. This makes it easier to add multimedia to your web pages and applications.**
* **Canvas element:- The canvas element allows you to draw graphics and animations directly in the browser, without the need for any additional software.**
* **Geolocation API:- The Geolocation API allows you to access the user's current location, if they have given permission. This can be used to create a variety of location-based applications.**
* **Local storage:- HTML5 includes a local storage API that allows you to store data on the user's computer. This data can be accessed even when the user is offline.**
* **Web workers:- Web workers allow you to run scripts in the background, without blocking the main thread of execution. This can be used to improve the performance of your web applications.**
* **Drag and drop API:- The Drag and drop API allows you to create drag-and-drop functionality on your web pages. This can be used to create a variety of interactive features, such as file uploading and reordering items in a list.**
* **Form enhancements:- HTML5 introduces a number of new form elements and attributes, such as email, url, and date. It also includes built-in support for form validation.**

**Q.2.Ans.**

**An HTML entity is a piece of text that begins with an ampersand (&) and ends with a semicolon (;). Entities are used to represent characters that cannot be typed directly into HTML, such as special characters and reserved characters**

* **&lt; - less than sign (<)**
* **&gt; - greater than sign (>)**
* **&amp; - ampersand (&)**
* **&quot; - double quotation mark (")**
* **&nbsp; - non-breaking space**

**Q.3.Ans.**

**Web accessibility is the practice of making websites usable by as many people as possible, including people with disabilities. This means designing and developing websites so that they can be used by people with a wide range of abilities and impairments, including visual impairments, hearing impairments, cognitive impairments, and mobility impairments.**

**Why is it essential to create accessible websites?**

**There are a number of reasons why it is essential to create accessible websites:**

* **It is a legal requirement. In many countries, there are laws that require websites to be accessible to people with disabilities.**
* **It is the right thing to do. Everyone should have equal access to the information and services available on the web.**
* **It is good for business. Businesses that make their websites accessible reach a wider audience and are more likely to attract and retain customers.**

**How does web accessibility benefit different user groups?**

**Web accessibility benefits a wide range of user groups, including:**

* **People with disabilities: Web accessibility allows people with disabilities to use websites in the same way as everyone else. This can help them to access information and services, stay connected with friends and family, and participate fully in society.**
* **Older adults: As people age, they may experience a decline in their vision, hearing, and cognitive abilities. Web accessibility makes it easier for older adults to use websites and stay connected with the online world.**
* **People with temporary impairments: People may experience a temporary impairment, such as a broken arm or a concussion. Web accessibility allows them to continue using websites even when they are unable to use certain devices or input methods.**
* **People using mobile devices: Web accessibility is important for people using mobile devices, such as smartphones and tablets. These devices often have smaller screens and different input methods, so it is important to make sure that websites are easy to use on these devices.**
* **People with slow internet connections: Web accessibility is also important for people with slow internet connections. These people may have difficulty using websites that are large or complex. Web accessibility can help to make websites faster and easier to use on slow connections.**

**By making websites accessible, we can help everyone to have a positive user experience and benefit from the information and services available on the web.**

**Here are some specific examples of how web accessibility benefits different user groups:**

* **A person who is blind can use a screen reader to access the text content of a website, even if they cannot see the screen.**
* **A person who is deaf can use captioning to follow the audio content of a video, even if they cannot hear the audio.**
* **A person with a cognitive impairment can use a simplified layout and navigation to access the content of a website, even if they have difficulty understanding complex information.**
* **A person with a mobility impairment can use a keyboard to navigate and interact with a website, even if they cannot use a mouse.**
* **A person with a slow internet connection can use a lightweight version of a website that loads quickly, even if their connection is slow.**

**By making websites accessible, we can help everyone to have a positive user experience and benefit from the information and services available on the web.**

**Q.4.Ans**

1. **Use semantic HTML elements. Semantic HTML elements, such as <header>, <footer>, and <section>, provide more information about the content of a web page to screen readers and other assistive technologies. This helps users to understand the structure of the page and navigate more easily.**
2. **Provide alternative text for images. Alternative text is a brief description of an image that is displayed to users who cannot see the image. This is important for people who are blind or have low vision.**
3. **Use keyboard navigation. Make sure that users can navigate your website using only a keyboard. This is important for people with mobility impairments or who are unable to use a mouse.**

**Q.5.Ans**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>HTML Feature</title>**

**</head>**

**<body>**

**<h1><p>header:- This element contains information about the content showcase, such as its title, subtitle, and introduction</p></h1>**

**<h2><p>main:- This element contains the main content of the content showcase, such as a list of products, blog posts, or other types of content</p></h2>**

**<h3><p>section:- This element can be used to group related content within the main content area. For example, you could use a <section> element to group together products from the same category</p></h3>**

**</body>**

**</html>**

**Q.6.Ans**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>HTML5 Feature & HTML</title>**

**</head>**

**<body>**

**<table>**

**<tr>**

**<th>HTML</th>**

**<th>HTML5</th>**

**</tr>**

**<tr>**

**<td>**

**<li>HTML:- Earlier versions of HTML required a long and complex Document Type Definition (DTD) declaration. For example, <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"></li>**

**</td>**

**<td>**

**<li>HTML5:- HTML5 has a simplified, shorter, and more straightforward DOCTYPE declaration: <!DOCTYPE html></li>**

**</td>**

**</tr>**

**<tr>**

**<td><li>HTML:- HTML had limited semantic elements, and developers often used <div> and <span> with class attributes for layout and styling purposes</li></td>**

**<td><li>HTML5:- HTML5 introduced semantic elements like <header>, <nav>, <article>, <footer>, and <section>, which make it easier to structure content semantically, improving both SEO and accessibility</li></td>**

**</tr>**

**<tr>**

**<td><li>HTML:- In older versions of HTML, multimedia content (audio and video) required third-party plugins like Adobe Flash</li></td>**

**<td><li>HTML5:- HTML5 introduced native <audio> and <video> elements, allowing the embedding of multimedia content directly into web pages without the need for plugins</li></td>**

**</tr>**

**<tr></tr>**

**</table>**

**</body>**

**</html>**