**HTML 5 Assignment**

1. **What are the new tags added in HTML5?**

>> In HTML5, there are lots of new elements are added which provides some extra functionality to create an attractive and dynamic website. With the help of these elements, you can make your code easy and quick.

Following is the complete list of the newly added element with their descriptions.

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| **Tag** | **Description** |
| Structural or Semantic Tags | |
| <article> | It defines the independent or self-contained content of a webpage. |
| <aside> | It defines the content which provide information about the main content. |
| <bdi> | It is used to isolate the part of text which might be formatted in another direction. |
| <details> | It defines additional information which only visible as per user demand. |
| <dialog> | It represents a dialog box or other interactive components. |
| <figcaption> | It defines caption for the <figure> element. |
| <figure> | It defines a self-contained content, and referenced as a single unit. |
| <footer> | It represents the footer section of the webpage. |
| <header> | It defines the introductory or navigational content of the webpage. |
| <main> | It specifies the main content of the HTML document. |
| <mark> | It represent the text which is highlighted or marked for reference or notation purposes. |
| <meter> | It represents a scalar value within a known range. |
| <nav> | It represents the section which contains navigation links. |
| <progress> | It defines a progress bar which shows completions progress of a task. |
| <rp> | It defines alternative content for the browser which do not support ruby annotations. |
| <rt> | It defines explanations and pronunciations of characters in ruby annotations. |
| <ruby> | It defines ruby annotations (Specifically for Asian language). |
| <section> | It defines a generic section within an HTML document. |
| <summary> | It defines summary or caption for a <details> element which can be clicked to change the state of <details> element. |
| <time> | It defines data/time within an HTML document. |
| <wbr> | It specifies a line break opportunity. (Where line break possible) |

1. **How to embed audio and video in a webpage?**

>> The <vid eo> element allows us to embed video files into an HTML, very similar to the way images are embedded. Attributes we can include are: src This attribute stands for the source, which is very similar to the src attribute used in the image element. We will add the link to a video file in the src attribute.

1. **Semantic element in HTML5?**

>> A semantic element clearly describes its meaning to both the browser and the developer.

Examples of **non-semantic** elements: <div> and <span> - Tells nothing about its content.

Examples of **semantic** elements: <form>, <table>, and <article> - Clearly defines its content.

In HTML there are some semantic elements that can be used to define different parts of a web page:

* <article>
* <aside>
* <details>
* <figcaption>
* <figure>
* <footer>
* <header>
* <main>
* <mark>
* <nav>
* <section>
* <summary>
* <time>
* 

1. **Canvas and SVG tags**

>> **SVG is a language for describing 2D graphics in XML**. Canvas draws 2D graphics, on the fly (with a JavaScript). SVG is XML based, which means that every element is available within the SVG DOM.

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| **SVG** | **Canvas** |
| Vector based (composed of shapes) | Raster based (composed of pixel) |
| SVG has better scalability. So it can be printed with high quality at any resolution. | Canvas has poor scalability. Hence it is not suitable for printing on higher resolution. |