WEBSITE DESIGNING - HTML5

Assignment

Submitted By: Riteek Mehta

1. What are the new tags added in HTML5?

- <article> It defines the independent or self-contained content of a webpage.
- <aside> It defines the content which provide information about the main content.
- <header> It defines the introductory or navigational content of the webpage.
- <main> It specifies the main content of the HTML document.
- <nav> It represents the section which contains navigation links.
- <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.
- <footer> It represents the footer section of the webpage.

2. How to embed audio and video in a webpage?

How to embed audio in HTML?

To embed audio in HTML, we use the <audio> tag. Before HTML5, audio cannot be added to web pages in the Internet Explorer era. To play audio, we used web plugins like Flash. After the release of HTML5, it is possible. This tag supports Chrome, Firefox, Safari, Opera, and Edge in three audio formats – MP3, WAV, OGG. Only Safari browser doesn't support OGG audio format

Syntax:

```
<audio>
<source src="file_name" type="audio_file_type">
</audio>
```

3.How to embed video in HTML?

To embed video in HTML, we use the <video> tag. It contains one or more video sources at a time using <source> tag. It supports MP4, WebM, and Ogg in all modern browsers. Only Ogg video format doesn't support in Safari browser.

Syntax

```
<video>
<source src="file_name" type="video_file_type">
</video>
```

4.Semantic element in HTML5?

Semantic Elements: Semantic elements have meaningful names which tells about type of content. For example header, footer, table, ... etc. HTML5 introduces many semantic elements as mentioned below which make the code easier to write and understand for the developer as well as instructs the browser on how to treat them.

- article
- aside
- details
- fig caption
- figure
- footer
- header
- main
- mark
- nav
- section

5.Canvas and SVG tags

The HTML5 introduced the two new graphical elements `<canvas>` and `<svg>` for creating rich graphics on the web, but they are fundamentally different.

The following table summarizes some of the basic differences between these two elements, which will help you to understand how to use these elements effectively and appropriately.

SVG	Canvas
Vector based (composed of shapes)	Raster based (composed of pixel)
Multiple graphical elements, which become the part of the page's DOM tree	Single element similar to `<img>` in behavior. Canvas diagram can be saved to PNG or JPG format
Modified through script and CSS	Modified through script only
Good text rendering capabilities	Poor text rendering capabilities
Give better performance with smaller number of objects or larger surface, or both	Give better performance with larger number of objects or smaller surface, or both
Better scalability. Can be printed with high quality at any resolution. Pixelation does not occur	Poor scalability. Not suitable for printing on higher resolution. Pixelation may occur