Limitations of HTML 4

- The previous version of HTML 4.01 is released in 1999 and after that Internet has changed a lot.
- DOCTYPE is much longer as HTML4 is based on SGML.
- Audio and Video are not part of HTML4 specification
- Vector Graphics is possible with the help of technologies such as VML, Silverlight, Flash etc.
- It is almost impossible to get true Geo Location of user browsing any website especially if it comes to mobile devices.
- Browser cache can be used as temporary storage.
- JavaScript runs in same thread as browser interface.

Introduction and Advantages of HTML 5

- HTML5 is a cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext
 Application Technology Working Group (WHATWG).
- All the New features of HTML5 are based on HTML, CSS, DOM, and JavaScript. HTML5 is designed to replace
 HTML 4, XHTML and HTML DOM Level 2.
- It is designed to deliver rich content without the need for additional plugins which was explicitly done in previous versions of HTML.
- The new standard incorporates features like video playback and drag-and-drop that have been previously dependent on third-party browser plug-ins such as Adobe Flash, Microsoft Silverlight, and Google Gears.
- HTML5 is still a work in progress. However, the major browsers support many of the new HTML5 elements and APIs.
- HTML5 is device independent.
- HTML5 has more markup to replace scripting.

First HTML5 Document

Document type in HTML4.01

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

Document Type in HTML5

<!DOCTYPE html>

HTML5 is designed, as much as possible, to be backward compatible with existing web browsers.

<!DOCTYPE html>

```
<html>
<head>
<title>Demo Title</title>
</head>
<body>
This is my first HTML5 document......
</body>
</html>
```

Overview of New Features of HTML5

- HTML5 comes with many new content-specific elements, like <article>, <footer>, <header>, <nav>, <section>
- Improvements to HTML web forms where new attributes have been introduced for <input> tag with support for form controls like calendar, date, time, email, url, search etc...
- Introduction of Canvas which supports a two-dimensional drawing surface that you can program with JavaScript.
- Embedding audio or video to web pages without third-party plugins.
- Choice to the visitors to share their physical location with your web application. (Geo Location)
- Introduction of Microdata which lets you create your own vocabularies beyond HTML5 and extend your web pages with custom semantics.
- Drag and drop the items from one location to another location on the same webpage.
- A next-generation bidirectional communication technology for web applications with introduction to Server-Sent Events (SSE).

List of HTML 4.01 elements removed from HTML5:

- 1. <center>
- 2. <dir>
- 3.
- 4. <big>
- 5. <frame>4
- 6. <frameset>
- 7. <noframes>
- 8. <acronym>
- 9. <applet>
- 10. <basefont>

- 11. <strike>
- 12. <tt>

An excellent website providing which feature of HTML5 is supported in each and every browser:

http://www.CanlUse.com

