

# HTML 5

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Title

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# Outline

- 1** Title
- 2 Introduction
- 3 Comparison Between HTML 4 and HTML 5
- 4 Tags
- 5 JavaScript API
  - Web SQL Database
  - Geolocation
- 6 CSS
- 7 Advantages
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# WHATWG

Web Hypertext Application Technology Working Group





## Introduction

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# History of HTML

1991 HTML

1994 HTML 2

1995 HTML 3

1996 CSS + JavaScript

1997 HTML 3.2

1998 HTML 4, CSS 2

2000 XHTML 1

2002 Tableless Web Design

2005 AJAX

2008 HTML 5 Working Draft



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HTML 5  $\approx$  HTML + CSS + JavaScript API



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# HTML 4

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<head>
  <title>HTML</title>
</head>
<body>
<p>Hello World</p>
</body>
```



## Comparison Between HTML 4 and HTML 5

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# HTML 5 Minified

```
<!DOCTYPE html>  
<title>HTML</title>  
<p>Hello World</p>
```



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Tags

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## Removed Tags

- width
- height
- size
- `<u>`
- `<strike>`
- cellpadding
- valign
- `<basefont>`
- `<font>`
- `<center>`



Tags

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## New Tags

- header
- nav
- aside
- article
- section
- footer'
- video
- canvas
- time

```
<div id="header">
```

```
<div id="nav">
```

```
<div class="article">
```

```
<div class="section">
```

```
<div id="sidebar">
```

```
<div id="footer">
```

<header>

<nav>

<article>

<section>

<aside>

<footer>



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## Video and Audio

```
<video src="x.mp4" controls autobuffer></video>
```

```
<audio src="sound.mp3" controls></audio>
```

### *Example*

<http://youtube.com/html5>





Tags

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## Link Relations

```
<link rel="icon" href="/favicon.ico" />
<a rel="archives" href="http://myblog.com/archives">
old posts</a>
<a rel="external" href="http://notmysite.com">
tutorial</a>
<a rel="license" href="http://licenseurl.org">
license</a>
<a rel="nofollow" href="http://notmysite.com/sample">
wannabe</a>
```



Tags

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## Micro Data

My name is `<span itemprop="name">Neil</span>.`  
Our band is called `<span itemprop="band">Blah</span>.`  
I am `<span itemprop="nationality">Indian</span>.</p>`



Tags

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## Canvas

Canvas, Canvas 3D (WebGL)

*Example*

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<http://www.3dtin.com>



Tags

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## SVG

```
<html>
<svg>
  <circle id="myCircle" class="important" cx="50%"
    cy="50%" r="100"
    fill="url(#myGradient)"
    onmousedown="alert('hello');"/>
</svg>
</html>
```



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## JavaScript API

# JavaScript API

- Client Side Storage (Web SQL Database, App Cache, Web Storage)
- Communication (Web Sockets, Worker Workers)
- Desktop experience (Notifications, Drag and Drop API)
- Geolocation



## JavaScript API

# Web SQL Database

```
var db = window.openDatabase("Database Name",  
"Database Version");  
db.transaction(function(tx) {  
tx.executeSql("SELECT * FROM test", [],  
successCallback, errorCallback);  
});
```



# Geolocation

```
if (navigator.geolocation) {  
  navigator.geolocation.getCurrentPosition(function(position)  
    var lat = position.coords.latitude;  
    var lng = position.coords.longitude;  
    var options = { position: new google.maps.LatLng(lat, lng)  
    var marker = new google.maps.Marker(options);  
    marker.setMap(map);  
  });  
}
```





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## CSS

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# CSS 3: New Features

- FontFace
- Text wrapping
- Columns
- Text Stroke
- Opacity
- Rounded Corners
- Gradients
- Shadows
- Animations



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## Advantages

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# Advantages

- No need to depend on proprietary technologies
- Less webpage size compared to HTML 4
- Faster when compared to HTML 4 + JavaScript
- Common platform for all webpages



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## Current Problems

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# Current Problems

- Heavy processor and memory utilisation
- Standardisation



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# Reference

- **W3C Working Draft**  
[dev.w3c.org/html5](http://dev.w3c.org/html5)
- **WHATWG**  
<http://whatwg.org/html5>,  
[# whatwg](http://irc.freenode.net)
- **Wikipedia**

# Thank You !

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