

# HTML5

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# History

# HTML4

Initial version ready in  
six months.

Lots of details left  
undefined.

# XHTML1

Identical to HTML4, just  
a different syntax.

W3C started working on  
XForms and XHTML2.

# "The Workshop"

W3C hosted a workshop  
on Web applications in  
2004.

W3C: "XML is the  
future."

Browser vendors  
revolted. (Opera, Mozilla  
& Apple.)

Instead of reinventing  
HTML, **evolve** it.

# WHATWG

Lots of people on the mailing list.

[wiki.whatwg.org](http://wiki.whatwg.org)

[blog.whatwg.org](http://blog.whatwg.org)

[forums.whatwg.org](https://forums.whatwg.org)

End of 2006 Tim Berners-Lee had a change of heart: "The attempt to get the world to switch to XML, including quotes around attribute values and slashes in empty tags and namespaces all at once didn't work."

w3.org/html +  
whatwg.org = HTML5

# Increasing Interoperabili ty

For instance, by defining  
the `contenteditable`  
attribute.

Defining how to parse  
HTML.

It would be nice if in one hundred years we can still read what we write today.

Enabling competition by  
defining the Web  
platform in greater  
detail.

# Extending HTML

Addressing needs of  
Web applications.

Better structure for documents based on author conventions. E.g. `<header>`, `<footer>`, `<section>`, and `<aside>`.

Hooks for scripts using  
**data-\*** attributes.

(jQuery Mobile is based  
around this.)

# Simpler HTML

# The DOCTYPE

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

```
<!doctype html>
```

# Character encoding

```
<meta  
  http-equiv="Content-Type"  
  content="text/html;  
    charset=utf-8">
```

```
<meta charset="utf-8">
```

**type=""** is now optional

```
<style type="text/css">  
  /* ... */  
</style>
```

```
<script src="..." type="text/javascript"></  
script>
```

**type=""** is now optional

```
<style>  
  /* ... */  
</style>
```

```
<script src="..."></script>
```

**<canvas>**

```
<canvas width="150" height="200" id="demo">  
  <!-- Still using Internet Explorer? -->  
</canvas>
```

```
<script>  
  var canvas = document.getElementById("demo")  
,  
      context = canvas.getContext("2d")  
  context.fillStyle = "lime"  
  context.fillRect(0, 0, 150, 200)  
</script>
```

# Simple **canvas** application



# Video

# Syntax

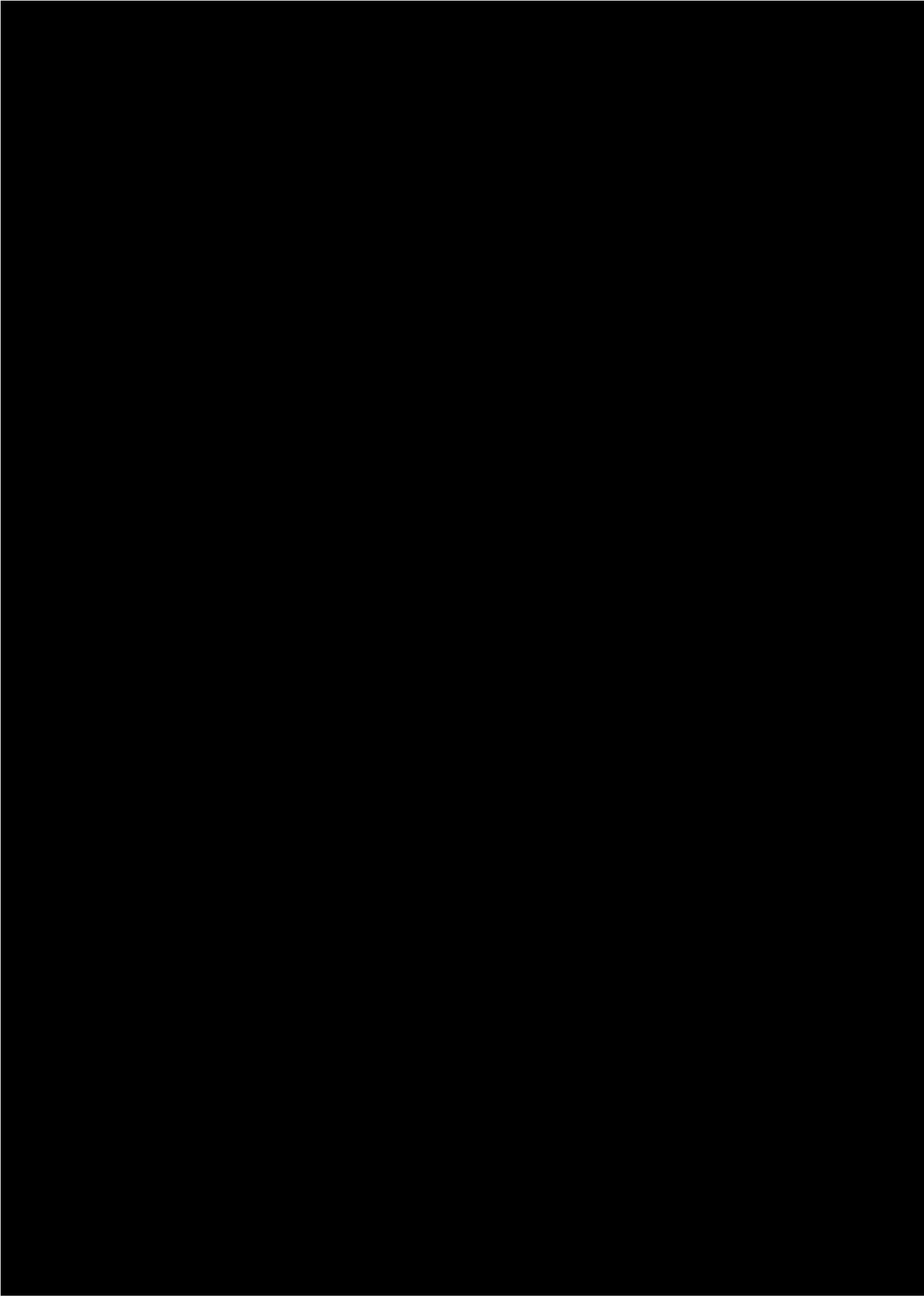
```
<video src=clip.webm controls>  
  Download the <a  
href=clip.ogg>clip</a>.  
  <!-- browser does not support  
<video> -->  
</video>
```

**Format**

WebM

Distributing several  
equivalent video  
streams

```
<video>  
  <source type=video/mp4 src=clip.mp4>  
  <source type=video/webm src=clip.webm>  
</video>
```



(Yes, there's an  
equivalent **audio**  
element.)

# Forms



```
<input list="languages"  
name="language">  
<datalist id="languages">  
  <option value="Dutch"></option>  
  <option value="English"></  
option>  
  <option value="Norwegian"></  
option>  
  <option value="Portuguese"></  
option>  
</datalist>
```

`<input type="number">`:

`<input type="range">`:

```
<input pattern="[a-z]">
```

```
<input type=range min=10  
max=50 step=5>
```

```
<input required="">
```

```
<input type=file multiple>
```

# Near Future

There is a lot more  
coming.

# 3D via WebGL

Bidirectional  
communication channel  
via the WebSocket  
protocol and API.

# Video conferencing APIs.

**Thanks! Questions?**

