

HTML5

[Anne van Kesteren](#)

[@annevk](#)

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

blog.whatwg.org

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

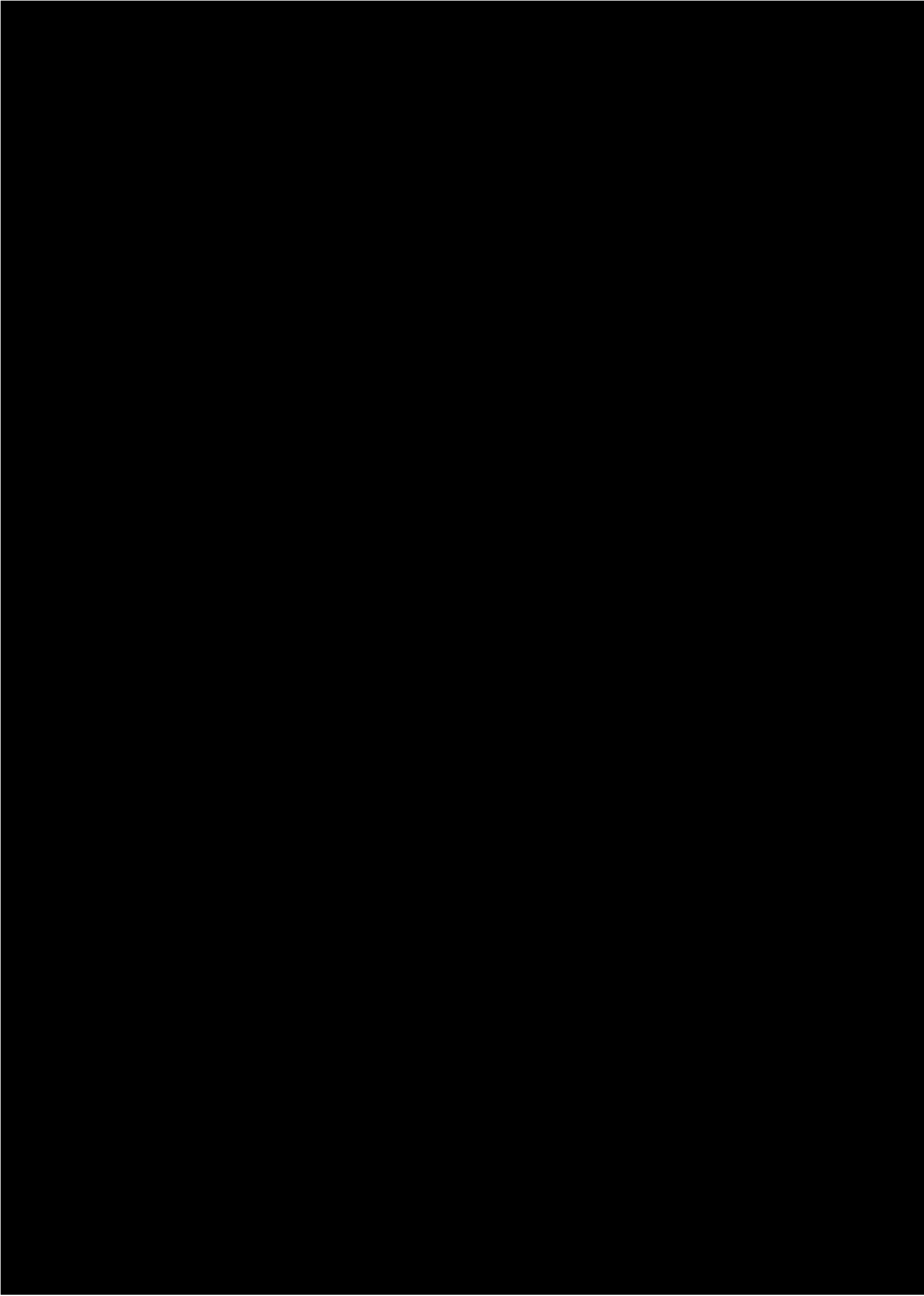
```
<video src=clip.webm controls>  
  Download the <a  
href=clip.ogg>clip</a>.  
  <!-- browser does not support  
<video> -->  
</video>
```

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?

