

# HTML5

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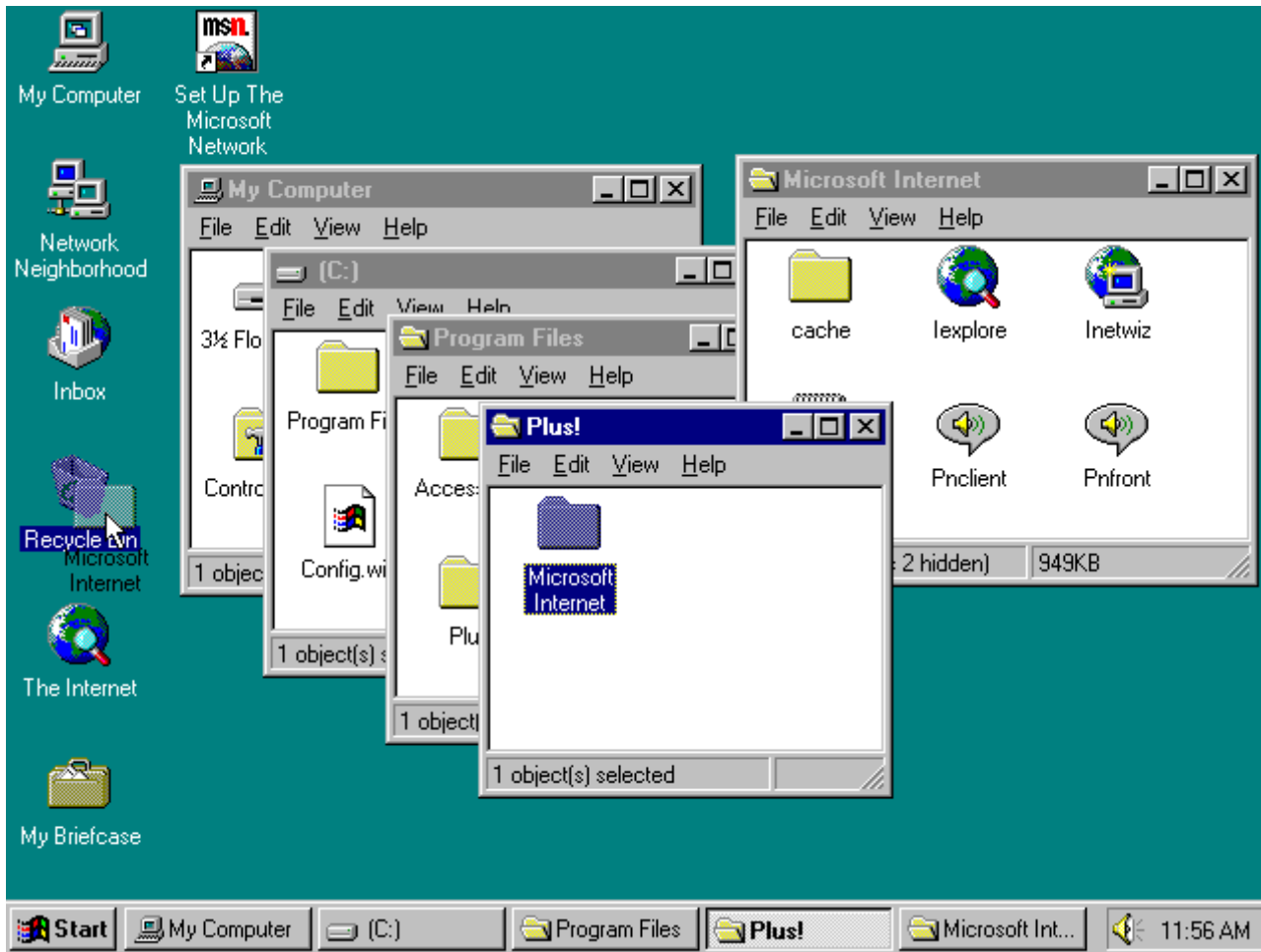


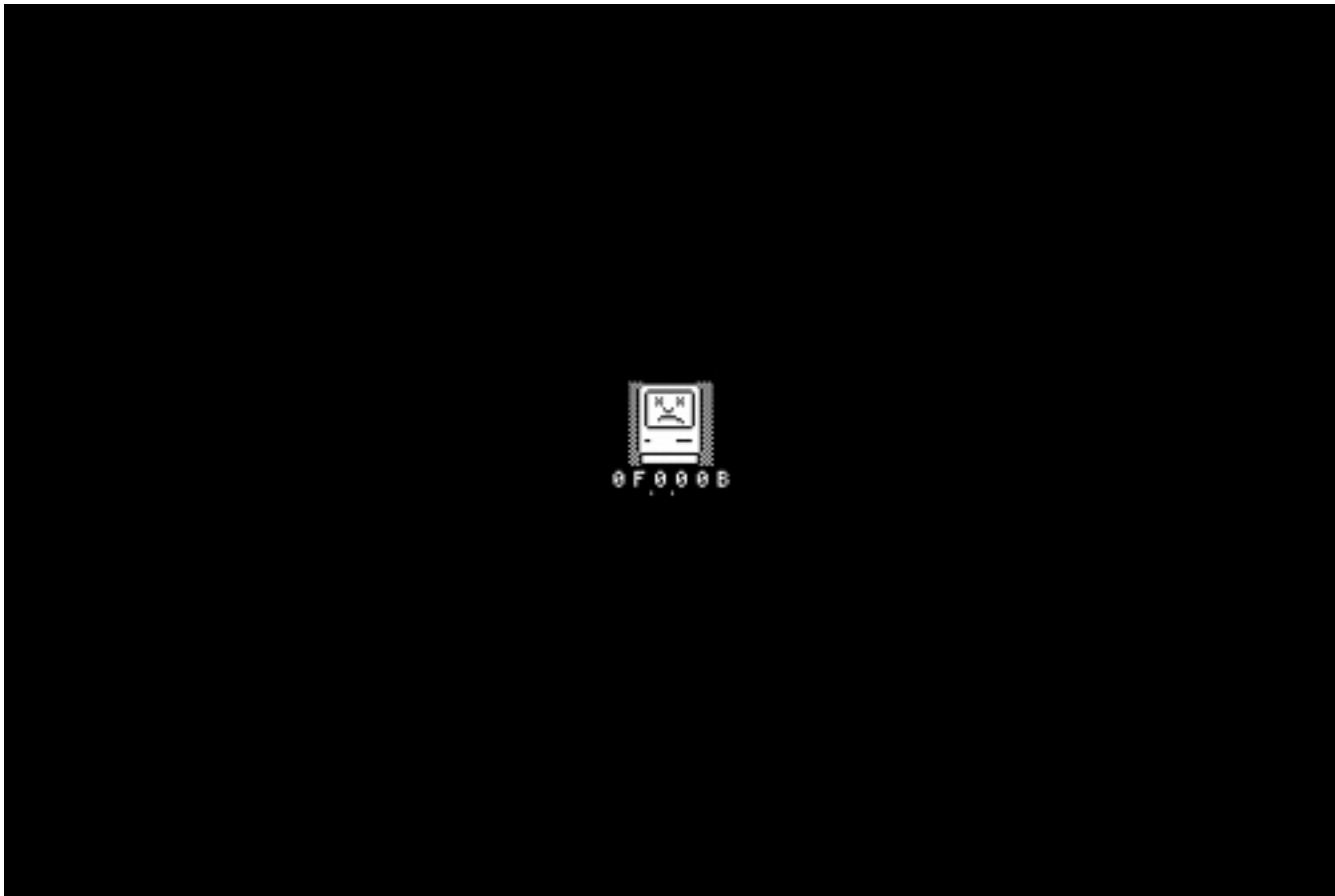
# Why do we need HTML5?

# HTML4 was published 1997

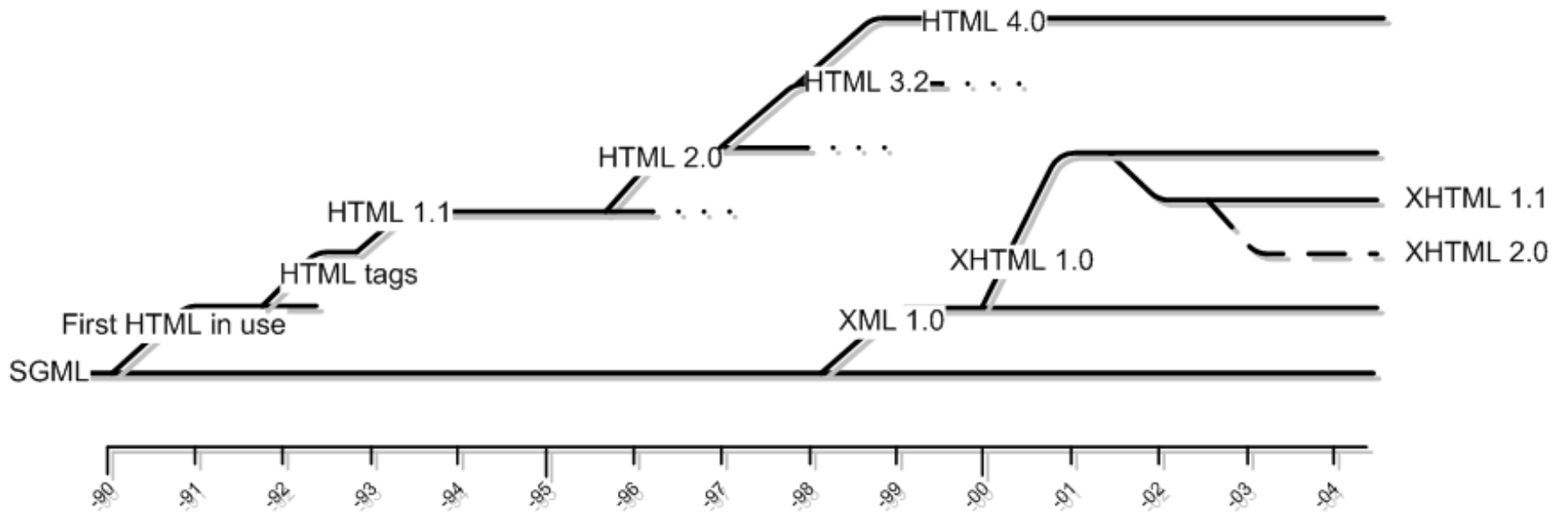
# Yes... 1997







<xml />





# XML != robustness



## Markup Validation Service

Check the markup (HTML, XHTML, ...) of Web documents

**Jump To:** [Notes and Potential Issues](#) [Validation Output](#)

### Errors found while checking this document as XHTML 1.0 Strict!

**Result:** 25 Errors, 10 warning(s)

**Address:**

**Encoding:** utf-8

**Doctype:** XHTML 1.0 Strict

**Root Element:** html

**Root Namespace:** <http://www.w3.org/1999/xhtml>



**XML Parsing Error: mismatched tag. Expected: </link>.**  
**Location: file:///Users/niklas/Dropbox/Desktop/protocol7.xml**  
**Line Number 123, Column 103:**

```
<link rel='stylesheet' type='text/css' href='http://protocol7.com/wp-custom/my-styles.css'></head>  
-----^
```

# Position Paper for the W3C Workshop on Web Applications and Compound Documents

This document represents the consensus opinion of the Mozilla Foundation and Opera Software in the context of standards for Web Applications and Compound Documents.

We consider Web Applications to be an important area that has not been adequately served by existing technologies.

There is a rising threat of single-vendor solutions addressing this problem before jointly-developed specifications. To compete with other players in this field, user agents with initial implementations of jointly-developed specifications should ideally be shipping before the end of the year 2004.

Work has been started by Mozilla and Opera on aspects of this work and one [working draft](#) is already underway and publicly available.

## Design Principles for Web Application Technologies

The following seven principles represent what we believe to be the most critical requirements for this work.

### Backwards compatibility, clear migration path

Web application technologies should be based on technologies authors are familiar with, including HTML, CSS, DOM, and JavaScript. Basic Web application features should be implementable using behaviors, scripting, and style sheets in IE6 today so that authors have a clear migration path. Any solution that cannot be used with the current high-market-share user agent without the need for binary plug-ins is highly unlikely to be successful.

### Well-defined error handling

Error handling in Web applications must be defined to a level of detail where User Agents do not have to invent their own error handling mechanisms or reverse engineer other User Agents'.

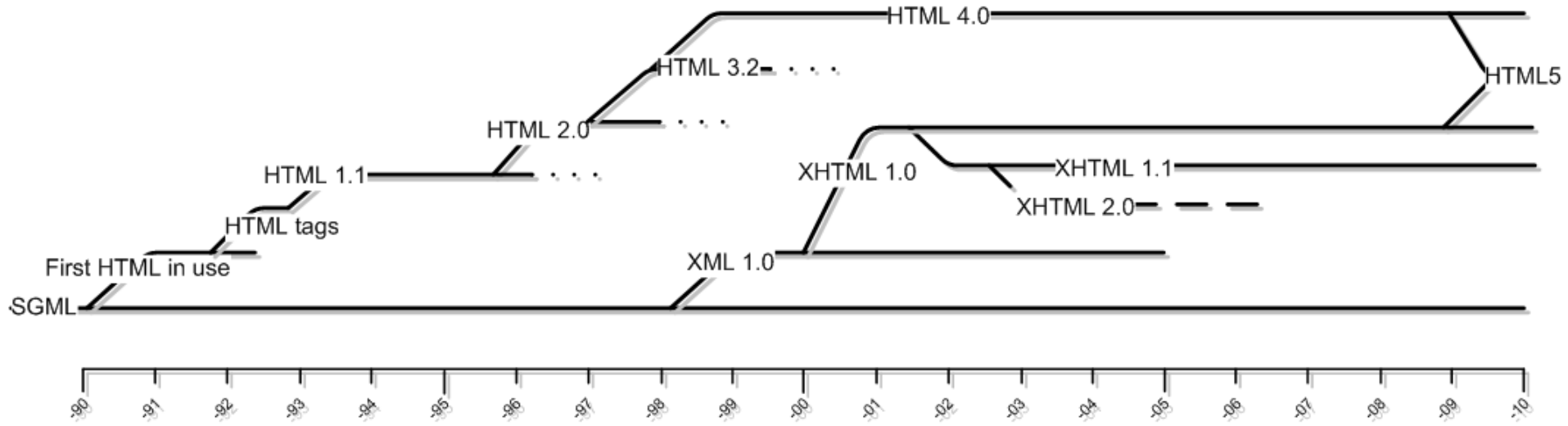
### Users should not be exposed to authoring errors

Specifications must specify exact error recovery behaviour for each possible error scenario. Error handling should for the most part be defined in terms of graceful error recovery (as in CSS) rather than obvious and catastrophic failure (as in XML).

# WHATWG



# W3C <3 WHATWG



- [X] First Working Draft in October 2007.
- [X] Last Call Working Draft in October 2009.
- [ ] Call for contributions for the test suite in 2011.
- [ ] Candidate Recommendation in 2012.
- [ ] First draft of test suite in 2012.
- [ ] Second draft of test suite in 2015.
- [ ] Final version of test suite in 2019.
- [ ] Reissued Last Call Working Draft in 2020.
- [ ] Two complete and bug-free implementations in 2022.



# So, what is then HTML5?

# Parser model

# New elements

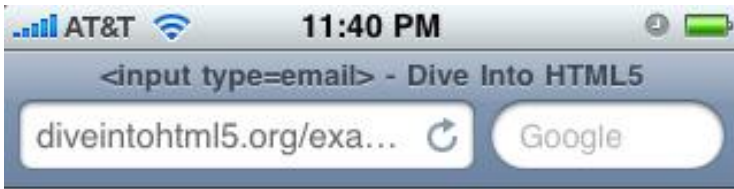
```
<div id=nav>
  ...
</div>
<div class=post>
  <div
  class=postheader>
    ...
  </div>
  ...
</div>
```

```
<nav>
  ...
</nav>
<article>
  <header>
    ...
  </header>
  ...
</article>
```

# Updated forms

text  
password

text  
password  
email  
url  
date  
datetime  
month  
week  
time  
datetime-local  
number  
range  
color



<form>

```
<input type="email">
```

```
<input type="submit" value
```



<form>

```
<input type="url">
```

```
<input type="submit" value
```



From <http://diveintohtml5.org/forms.html>

# Video/audio



# Canvas

# Web sockets

# Geolocation

# Cross domain messaging

# Offline support

## Local storage

# Web workers

# Further reading

<http://diveintohtml5.org>

<https://developer.mozilla.org/En/HTML>

<http://dev.w3.org/html5/spec>

<http://html5demos.com/>

<http://github.com/protocol7/html5-demos>  
<http://github.com/protocol7/node.websocket.js>



# Questions?

