Authoring for the Mobile Web

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Google™

Why write for the Mobile Web?

- Easily make a functional app for the world's phones
- More pervasive worldwide than PCs
- Different context from desktop
- Authoring for the many (old flip-phones), not the few (iPhones)

Web is essentially interoperable

- Nearly all HTML 3/4, XHTML
- Firefox, Internet Explorer render very similarly

Mobile Web has many markups

- WML (even HDML) 1.0–1.3
- i–mode's cHTML
- **XHTML Mobile Profile (MP) 1.0–1.2**
- **XHTML Basic 1.0–1.1**

… many different browsers

- OpenWave
- Opera
- Access NetFront
- WebKit
- … many more

… wide range of device capabilities

From tiny monochrome devices

…to “smartphones”

Keep It Simple

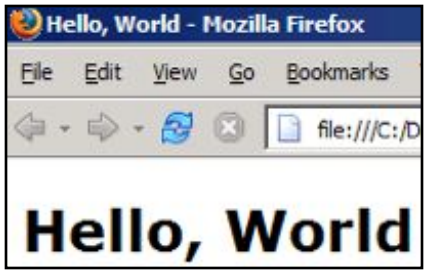
Stick To Standards

Use Well-Formed Markup

```
<html xmlns="http://www.w3.org/1999/xhtml"
 xml:lang="en">
<head>
  <title>Hello, World</title>
</head>
<body>
  <h1>Hello, World</h1>
</body>
</html>
```

Use XML header, DOCTYPE

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC
 "-//W3C//DTD XHTML Basic 1.0//EN"
 "http://www.w3.org/TR/xhtml-basic/xhtml-
basic10.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
 xml:lang="en">
<head>
  <title>Hello, World</title>
</head>
<body>
  <h1>Hello, World</h1>
</body>
</html>
```



Validate Markup

Unknown Parse Mode!

The MIME Media Type (`text/html`) for this document is used to serve both SGML
Declaration in your document. Parsing will continue in SGML mode.

This page is **not** Valid -//WA

Below are the results of attempting to parse this document with an SGML parser.

1. Error *Line 8 column 71*: **character data is not allowed here**.

```
...href="/mobile/css/global.css" type="text/css"/ >
```

You have used character data somewhere it is not permitted to appear. Mistakes that can ca
(such as a aragraph) or forgetting to quote an attribute value (where characters such

2. Error *Line 14 column 27*: **there is no attribute "ALIGN"**.

```
<div class="ad"><p align= " center" mode="nowrap"><a href="http://ad.m-a
```

http://validator.w3.org/

Specify Character Encoding

- Prefer UTF-8 encoding
- XML header

```
<?xml version="1.0" encoding="UTF-8"?>
```

- HTTP Content-Type header

```
Content-Type: application/xhtml+xml;charset=UTF-8
```

Online Resources

- **`validator.w3.org`**
- Mobile Web Best Practices
  `www.w3.org/TR/mobile-bp/`
- mobileOK Basic Tests
  `www.w3.org/TR/mobileOK-basic10-tests/`
- **`ready.mobi`**

Emulators for quick testing

- wmlbrowser Firefox plugin
  `addons.mozilla.org/addon.php?id=62`
- OpenWave browser emulator
  `developer.openwave.com/dvl/tools_and_sdk/phone_simulator/`
- NTT DoCoMo i-mode simulator
  `www.nttdocomo.co.jp/service/imode/make/content/download/contract/imode_sim.html`

Example Time

But What Will Happen on iPhone?

- Still looks good!
- Simple, correct pages load fast, render right,
  fit small screen well
- Android too has WebKit-based browser

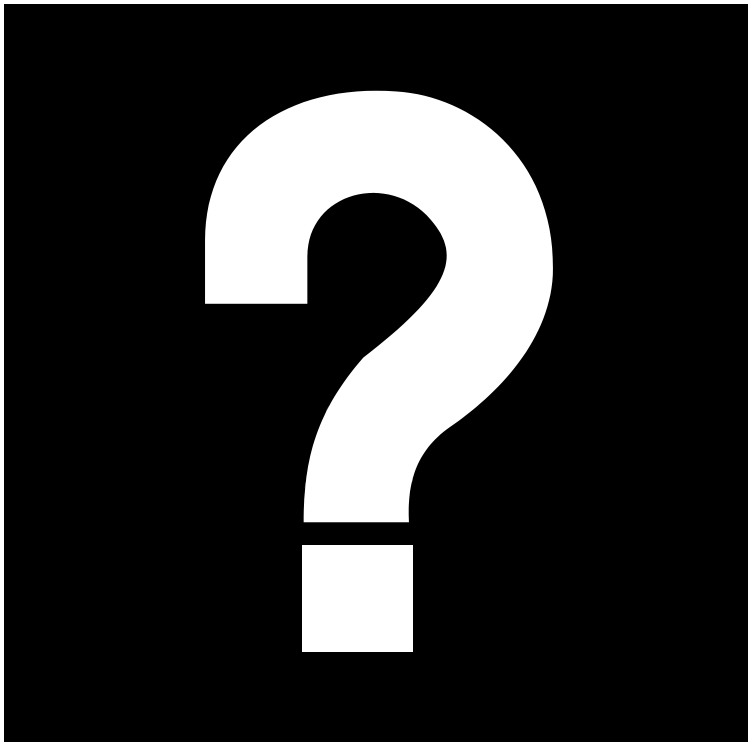
Simple Sites Work Well

vs.

iPhone / Android / WebKit Advice?

- Still, keep it simple, stick to standards
- A few new tricks
  - `<meta name="viewport" content="width=320"/>`
  - `<link media="only screen and (max-device-width: 480px)" href="small-device.css" type="text/css" rel="stylesheet"/>`
  - `developer.apple.com/iphone/devcenter/designingcontent.html`
- ... But this is another topic!

Questions? Thanks!



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