



Session: 9

Mobile SEO

Objectives



SEO

- ◆ Explain mobile SEO
- ◆ Explain the technologies and tools used for development of mobile sites
- ◆ Explain mobile Sitemaps
- ◆ List the best practices for mobile SEO

- ◆ Mobile Search Engine Optimization (SEO)
 - ◆ Optimizes the natural search results for a mobile Web site.
 - ◆ Increases the traffic towards the mobile Web site.
- ◆ User views these mobile Web sites on mobile devices.



Mobile Sites 1-2

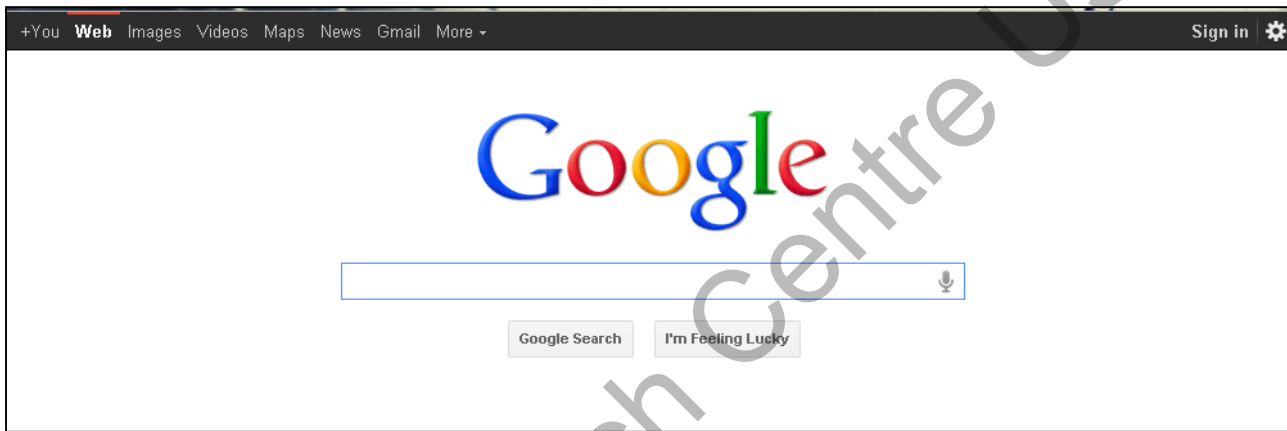
SEO

Mobile Sites are Web sites specifically developed to be viewed on mobile phones

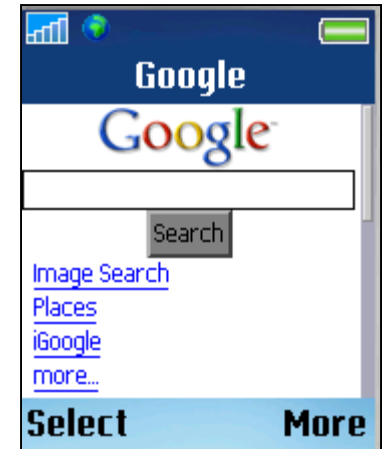
Developed with the aim of faster download and quick access



- ◆ For example, along with the main Web site **www.google.com**,



Google has developed a mobile Web site **www.m.google.com** for mobile users.

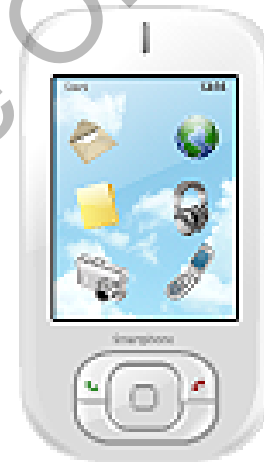


Types of Mobile Devices

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◆ Smartphones

- ◆ Browsers in smartphones can display regular desktop Web sites.
- ◆ These phones are also capable of rendering Web sites coded using HTML5.
- ◆ These include Android and iOS phones.



◆ Feature Phones

- ◆ Browsers in feature phones cannot generate regular desktop Web pages.
- ◆ These browsers also do not support cHTML (iMode), WML, and WAP.



Responsive Designs for Mobile Sites

SEO

- ◆ A Web site with responsive design:
 - ◆ Has one HTML code for the content.
 - ◆ Uses different CSS to display the content in different layouts and formats.
 - ◆ Ensures that the Googlebots and other search engine crawlers are allowed to crawl and index all pages including the CSS and JavaScript.
- ◆ Google recommends including the following CSS media query to their Web pages:

```
@media only screen and (max-width:  
640px) {...}
```



Benefits of Using a Responsive Design

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Makes it easier for users to access and share Web site content over various devices.

Single URL can be used to refer to Web site from any device.

Faster loading of Web pages.

Removes errors and enhances user experience.

Reduces the number of Web pages.

Enables Web crawlers index more of the Web site's contents.

Dynamic Serving and Vary HTTP Header

SEO

- ◆ Use the Vary HTTP header to indicate to Googlebots and Web servers that the Web site is using a responsive design.
- ◆ Googlebots are able to identify the mobile version of the content faster and crawl directly to index them.
- ◆ When a Web browser sends a HTTP user request to a Web server for a Web page with the Vary HTTP header, the server returns a response with the Vary HTTP header.

Vary HTTP



Separate Mobile Sites and Bidirectional Link Annotations

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- ◆ Some Web sites might have separate URLs for their desktop site and mobile sites.
- ◆ Recommended to use bi-directional link annotations.



In the `<head>` section of the desktop page, include the `rel="alternate"` attribute to a link tag and point to the URL of the corresponding mobile Web site.



In the `<head>` section of the mobile page, include the `rel="canonical"` attribute to a link tag and point to the URL of the corresponding mobile Web site.

Redirection Techniques

SEO

◆ HTTP redirection:

- ◆ Used to redirect users to the appropriate device-specific URLs depending on the user-agent specified in the HTTP request headers.
- ◆ Ensures that the redirected URL matches the URL specified with the `rel="alternate"` attribute value in the `<link>` tag on the Web pages.

◆ JavaScript redirection:

- ◆ It is used to redirect users to the device-specific URLs.



Possible Errors with Mobile Web Sites

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Improving Mobile Sites

SEO

- ◆ Remove extra windows.
- ◆ Provide device-appropriate functionality.
- ◆ Monitor traffic and user-experience of mobile-pages.
- ◆ Optimize for improving page speed.
- ◆ Track cross-device workflow and include new value-add features.



Mobile Markup Languages 1-2

SEO

- ◆ Mobile Web sites are created using markup languages such as:

XHTML
Basic 1.1

Subset of HTML.

Used for content authoring, images, tables, and forms.

XHTML
Basic 1.2

HTML subset.

Includes XHTML Basic and XHTML Mobile Profile (XHTML MP).

Mobile Markup Languages 2-2

SEO

WML

Oldest of the mobile markup languages.

Used globally.

Supports Wireless Application Protocol (WAP) based devices.

cHTML

HTML subset.

Used in Japan and Europe.

XHTML Basic

SEO

Used for content authoring and it includes:

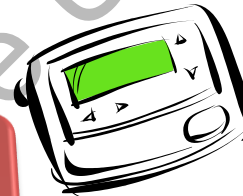
Tables

Images

Forms

XHTML Basic

Developed for devices such as:



Pagers



PDA's



Set Top Boxes

Includes the basic set of modules required for developing a mobile Web site

- ◆ Resolves resource constraints in mobile phones

Has enhanced functionality and support for Web developers by adding the following:



Presentation Elements



Stylesheets

Developed for
mobile phones



Small information-based devices have several hardware restrictions, such as:

- Low memory
- Low power CPU
- Small storage
- Small display
- Restricted input methods

cHTML was developed to counter these restrictions.

Developed for devices such as:



PDAs

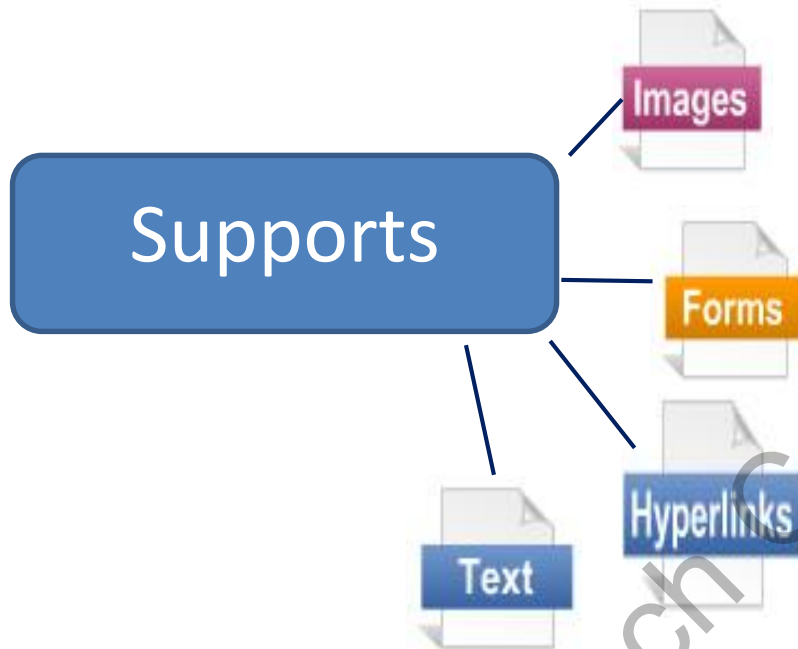


Communicators



Smartphones

- ◆ Is one of the oldest mobile markup languages.



Developed to support WAP based devices, such as:



Validators and Other Tools 1-2

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- ◆ Checks the syntax validity of language used for developing a Web site.
- ◆ Used for HTML and CSS Web pages.
- ◆ Are available for mobile Web sites.





Analyzes a mobile Web site for best practices



Checks whether the Web site is mobile friendly



Checks the mobile readiness of Web pages



Acts as a robot that crawls and tests the Web site

Mobile Web Site Validators

SEO

- ✓ Checks how the Web pages will appear on a mobile phone.
- ✓ Used before uploading the mobile sites on the Web.



wmlbrowser

Simulates the WML pages



XHTML Mobile Profile

Supports the mime-type applications



User Agent Switcher

Adds a tool bar and menu for switching the browser user agent



.mobi Emulator

Helps to view a mobile Web site as it would appear on mobile phone



i-mode Emulator

Used for the i-mode technology based devices

Mobile Web Site Emulators

Mobile Sitemaps 1-2

SEO

Mobile Sitemaps

Created to help crawlers easily access and crawl the mobile Web sites

An XML file containing a list of URLs present in a mobile Web site

Discovers new Web sites and content

Provides metadata to Google

Uses the Sitemap Protocol 0.9, provided by **sitemaps.org**

Mobile Sitemaps 2-2

SEO

Web sites that contain dynamic content

Web sites that contain content such as images and will not be crawled on by **Googlebot**

Web sites that would benefit from Sitemaps

Web sites that contain pages that are not linked or poorly linked

Web sites that are recently released and that contain less number of links

Adding Mobile URL to Sitemaps 1-2

SEO

- ◆ A mobile Sitemap requires a:
 - ◆ URL name
 - ◆ specific tag
- ◆ Example - Adding Sitemap for an HTML file present at URL, `m.aptechlearningservices.com`.

```
<?xml version="1.0" encoding="UTF-8" ?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
xmlns:mobile="http://www.google.com/schemas/sitemap-mobile/1.0">
  <url>
    <loc>http://m.aptechlearningservices.com/imagefile.html</loc>
    <mobile:mobile/>
  </url>
</urlset>
```

Adding Mobile URL to Sitemaps 2-2

SEO

Guidelines

- Provide only mobile Web content in the URL links
- Provide a unique name to each mobile Sitemap
- Create a separate configuration file for a mobile Sitemap
- Ensure that the <mobile:mobile/> tag is present
- Use only single Sitemap

Troubleshooting Issues Related to Mobile Sitemaps

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Avoid large documents for a mobile site. Keep the Web site size below 25 KB

Unsupported features
(such as cookies,
embedding, and so on)

Submitting
non-mobile
URLs

Unsupported
encoding

Unsupported
markup
language

Illegal tags

- ◆ User-agent strings for Googlebot-Mobile:
 - ◆ **Feature phones Googlebot-Mobile:**
 - ◆ SAMSUNG-SGH-E250/1.0 Profile/MIDP-2.0 Configuration/CLDC-1.1 UP.Browser/6.2.3.3.c.1.101 (GUI) MMP/2.0 (compatible; Googlebot-Mobile/2.1; +http://www.google.com/bot.html)
 - ◆ DoCoMo/2.0 N905i(c100;TB;W24H16) (compatible; Googlebot-Mobile/2.1; +http://www.google.com/bot.html)
 - ◆ **Smartphone Googlebot-Mobile:**
 - ◆ Mozilla/5.0 (iPhone; U; CPU iPhone OS 4_1 like Mac OS X; en-us) AppleWebKit/532.9 (KHTML, like Gecko) Version/4.0.5 Mobile/8B117 Safari/6531.22.7 (compatible; Googlebot-Mobile/2.1; +http://www.google.com/bot.html)

Mobile Content Strategy

SEO

◆ Mobile First

- ◆ Create content that is mobile-friendly with small chunks of text, light content, graphical, and attractive.

◆ Know your Audience

- ◆ Identify the percentage of users accessing the site on mobile devices.
- ◆ The type of devices they use, the type of content they are accessing on the site, and the type of activities they perform.

◆ Formatting and Layout

- ◆ The formatting should be legible and easy to read.
- ◆ It is useful to integrate some visual content, such as images, infographics, videos, and charts.



Best Practices 1-3



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Mobile keywords must be short as compared to regular Web searches.

Mobile Content on the site must be very effective.

Positioning - Location and/or specific task are major search factors based on which Google search results are displayed.

Transcoding - Google alters non-user friendly site to display a mobile friendly result, which is called transcoding.

Best Practices 2-3



SEO

Mobile Filters - The Google Analytics tool provides a mobile filter, which provides details about the number of visitors accessing the site via mobile.

On-site Best Practices - Best practices for mobile sites include content optimization, Image Alt description, and so on.

Layout of the mobile Web site must be checked on various emulators.

Mobile URL - Content for both mobile and regular content is served to Googlebot and Googlebot-Mobile using a single URL.

Mobile Device - Google Analytics can be used to view the information as to which mobile phone device is used most by the users to access the mobile Web site.

Best Practices 3-3

SEO

Accessibility - Provide accessibility of the mobile Web site to search engines.

Submit the site to the relevant search engines.

Validate the site - Use only the markup languages supported by Google. Also, run the mobile Web site through different validators to avoid facing issues at a later stage.

Localized information – Ensure that the mobile sites are sensitive to the location and time zone from which the site is being accessed and display content appropriately.

Enable sharing on social media through widgets and functionality to allow visitors to share the content on social media and recommend the site's products and services.

Avoid hiding content in apps.

Summary



SEO

- ◆ Web sites for mobiles are created using different markup languages such as XHTML Basic, XHTML MP, cHTML, and WML.
- ◆ Validators are used to check the validity of syntax of a Web site.
- ◆ Emulators are used to test a mobile Web page and see how it would appear on an actual mobile screen.
- ◆ Sitemaps help to elaborate all the pages that are present on a Web site to a search engine.
- ◆ A Web user must use the Google Webmaster Tools service to submit a Sitemap to Google.
- ◆ Transcoding is the process where search engines alter mobile sites to display a mobile friendly result.
- ◆ Google Analytics tool provides a mobile filter which provide details about the number of visitors accessing the site via mobile.