



Google



Session: 4

On-Page Optimization

Objectives

SEO

- ◆ Explain on-page optimization and its need in SEO
- ◆ Describe different techniques for achieving on-page optimization
- ◆ Explain the importance of keywords while developing Web site
- ◆ Explain the placement of keywords on the Web pages
- ◆ Explain the optimization of site structure
- ◆ Explain the significance of developing quality content
- ◆ Explain the navigation structure for a Web site
- ◆ Explain the optimization of essential files such as robots.txt and sitemap.xml

Search Engine Optimization



*SEO is the science of
designing a Web site to
achieve maximum
ranking by search engines*



For Aptech Centre Only

Ranking of a Web Site

SEO

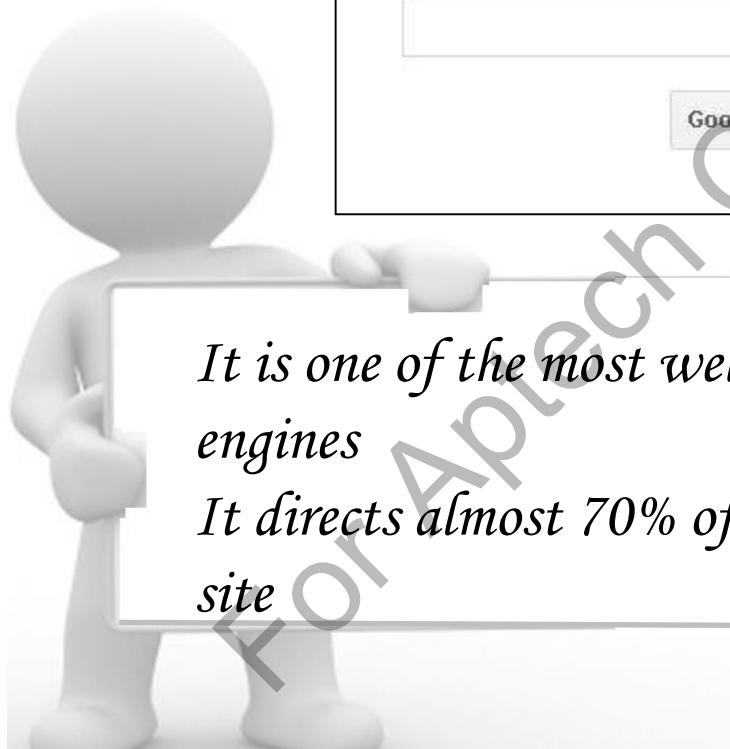
Ranking of a Web site is the listing and placement of its Web pages in the search results

More the pages are optimized, greater are the chances to achieve higher ranking in the search results



Google Search Engine

SEO



Optimization Strategies

SEO



An SEO consultant adopts different strategies to optimize the Web site which can improve its ranking on the Google search result pages.



On-page optimization

- Refers to selection of right keywords, proper site structure, and quality contents on the Web site



Off-page optimization

- Refers to building links from other Web sites to your site through directories, articles, and blogs

Overview of On-Page Optimization

SEO

A process to optimize the Web sites depending on their nature and business

Better Web site structure that can help in achieving better ranking and increased visitor satisfaction

Relevance of keywords with the overall content

SEO
On-Page Optimization

Deals with internal linking of pages

Includes use of proper keywords in different elements of the Web page

Techniques of On-Page Optimization

SEO



Characteristics of an Optimized Page

SEO

Unique content

- An optimized page is one that provides unique content and cannot be found phrased similarly, on any other Web site on the Internet.

Good User Experience

- To ensure that visitors return to the Web site multiple times, it must provide a great user experience.

Web bot Accessible

- Optimizing Web pages involves building pages such that they are accessible for engines to crawl, index, and rank the Web pages accurately.

Keyword Analysis 1-2

SEO

Keywords

- ❖ Are the cornerstone of SEO
- ❖ Play an important role in optimization
- ❖ Are words reflecting a potential visitor's thought
- ❖ Can be a single word or phrases

Phrases

- ❖ Are long tail keywords which combine two to five words
- ❖ Are typed by visitors to search specific information
- ❖ Reflect better targeting and increased search traffic to the Web site

Keyword Analysis 2-2

SEO



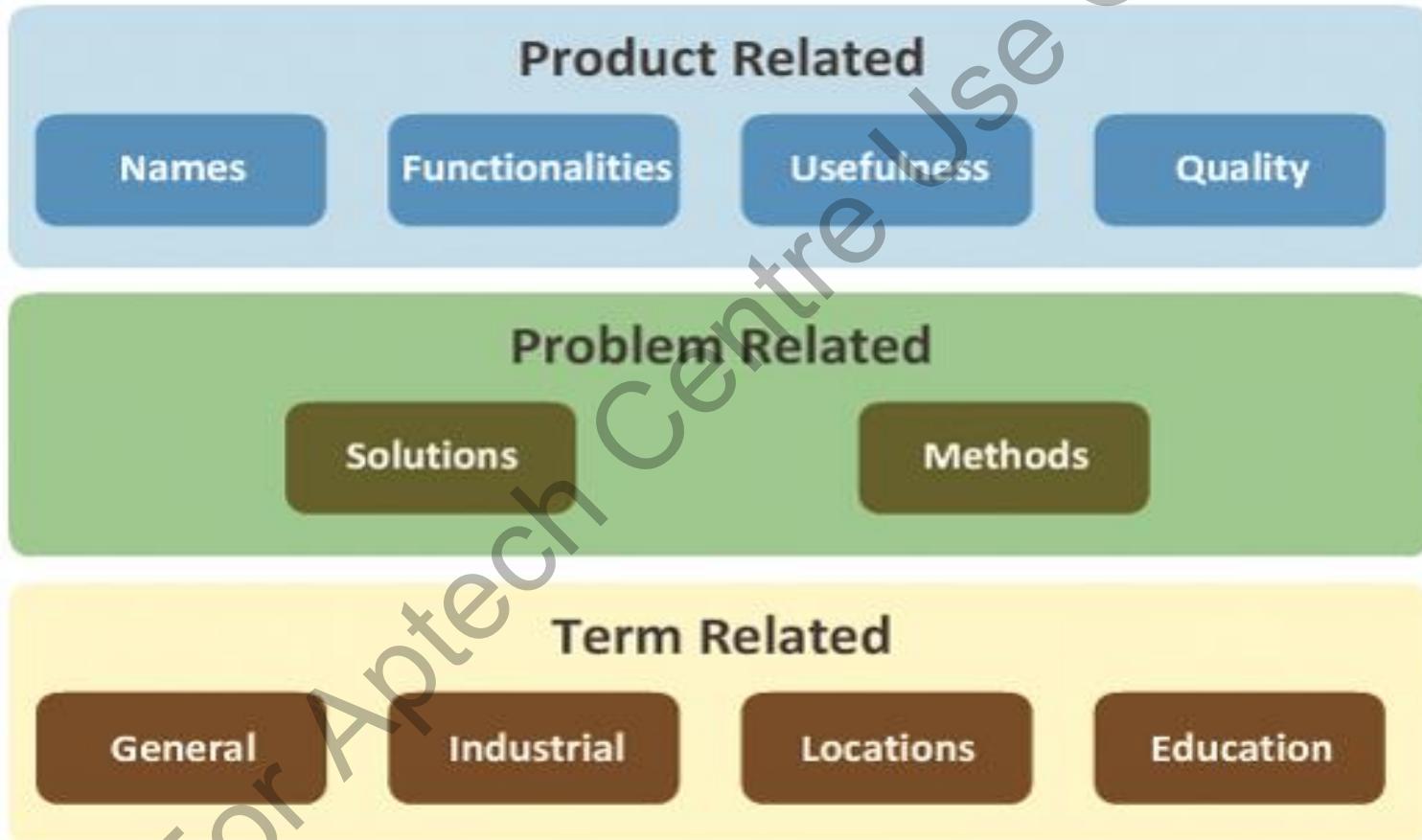
- ◆ Single word keywords are difficult to search as they are not well targeted for audience.
- ◆ Longer keywords are easier to rank well and have better adaptability among users.

An SEO consultant must take care to determine and short-list keywords that are most relevant to the products or services offered by the Web site.



Searching Information Using Keywords 1-3

SEO



Searching Information Using Keywords 2-3

1. User searches for information related to **services**



2. Google search engine's autocomplete algorithm offers keywords similar to user's search words
3. It also displays pages of different sites that have used keyword **services** to describe their offerings

services

services department
services tax
services
services department transfer orders
services in android
services marketing
services cape
services provided by banks
services tax return
services export promotion council

[Service - Wikipedia, the free encyclopedia](#)

en.wikipedia.org/wiki/Service ▾

Service may refer to: Contents. 1 Acts of service; 2 Religion; 3 Economics and business; 4 Technology; 5 Media; 6 Arts; 7 Other; 8 See also. Acts of service[edit]

Service (economics) - Service (systems architecture) - Customer service

SEO

A screenshot of a Google search results page. The search bar at the top contains the word "services". Below the search bar, a dropdown menu shows several autocomplete suggestions: "services department", "services tax", "services", "services department transfer orders", "services in android", "services marketing", "services cape", "services provided by banks", "services tax return", and "services export promotion council". Below the suggestions, there is a snippet from the Wikipedia article on "Service".

Searching Information Using Keywords 3-3

SEO

User narrows the search by typing **learning services**

A screenshot of a search engine results page. The search bar at the top contains the query "learning services". Below the search bar, there are tabs for "Web", "Images", "Maps", "Videos", "News", "More", and "Search tools". The "Web" tab is selected. The results section shows approximately 97,80,00,000 results found in 0.36 seconds. The first result is a link to "Aptech Learning Services: Offshore Content Development ...". The second result is a link to "Learning Services". The third result is a link to "Learning Services - Ericsson". A large green speech bubble is overlaid on the top left of the search results, containing the text "User narrows the search by typing learning services".

learning services

Web Images Maps Videos News More Search tools

About 97,80,00,000 results (0.36 seconds)

[Aptech Learning Services: Offshore Content Development ...](#)
www.aptechlearningservices.com/ ▾
Aptech's Learning Services business delivers Offshore Content Development, Multimedia Production & L&D Support Services to Corporates, Universities ...
Contact us - PMP Schedule - PMP - Services

[Learning Services](#)
www.learningservices.com/ ▾
At Learning Services, we understand the serious challenges facing people who have sustained a brain injury and their families. We have been helping families ...
Careers - FAQs - Neurobehavioral Outcomes - Supported Living Outcomes

[Learning Services - Ericsson](#)
www.ericsson.com/ourportfolio/services/learning-services ▾
Welcome to Learning Services and Ericsson Academy. Here you will get a better insight into the competence challenges that affect the telecommunications ...

Asoda Todran Rohini Block D
Bahadurgarh Phase 1 Pitampura Block E
Shidipur Loya Pachim Shahdara Rajendra Nagar
Janakpuri Khari Baoli Indirapuram
Dwarka Ring Rd Shital Vihar
Sector 22 Lajpat Nagar Bis Jal
Choma Vasant Kunj Pocket T Noida
Badarpur Bajidpur
Bis Jal Noida Badarpur Bajidpur
Ring Rd
2 29 ad 2014 Google

Use of two or more words narrows the search to display the Web pages offering services related to learning

Research on Keywords 1-2

SEO

An SEO consultant should research for keywords that clearly represent the services, products, or information provided by the Web site



**Knowledge
of your
product or
service**

*Keywords Research
Strategies*

**Competition
Analysis**

Customers

- ◆ Guidelines for optimizing keywords for the Web pages are as follows:
 - ☒ Web pages need to be checked for overlapped words used in the keyword phrases
 - ☒ Try no to use stop keywords such as 'a', 'an', 'the', 'when', 'and', 'or', and 'but'
 - ☒ Search engines such as Google are not case-sensitive
 - ☒ Put hyphen between two words as this ranks page better

Placement of Keywords in the Web Pages

SEO

Page
Titles

Headings

Meta
Tags

Images

Text
Links

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SEO



Keywords can include

Name of the Web site/business name

'Aptech Learning Services'

'Aptech Computer Education'

Geographical location

'China'

'South Africa'

Main offerings/focus areas

'Offshore content development'

'Pioneer in IT Education'

Page Titles 2-6

An SEO consultant can place the keywords in the beginning of the <title> tags which helps in improving the effectiveness of the tags



SEO

- ◆ Represents the type of information contained on the page
- ◆ Optimize the capabilities of a search engine
- ◆ Unique for each page on a Web site
- ◆ Placed in the <head> section of the Web page

Page Titles 3-6

SEO

Scenario: An SEO consultant wants to inform visitors about Aptech Learning Services Web site

Solution:
Keywords should
be informative
and speak about
the offerings



Snippet

```
...  
<head>  
  <title>  
    Aptech Learning Services:  
    Offshore Content Development  
    Services  
  </title>  
</head>  
...
```

- ◆ The `<title>` tag depicts the business name of Aptech and its offerings in the learning industry

Page Titles 4-6

Google search results for "aptech learning services":

- Aptech Learning Services: Offshore Content Development**
www.aptechlearningservices.com/ ▾
Aptech's Learning Services business delivers Offshore Content Development, Multimedia Production & L&D Support Services to Corporates, Universities ...
- Contact us**
Contact us. Aptech offers comprehensive Learning ...
- About us**
About Aptech Learning Services. Aptech Learning Services is the ...
- Solutions**
Aptech delivers one or a package of learning solutions to diverse ...
More results from aptechlearningservices.com »
- Aptech Global Learning Solutions: Retail & Corporate ...**
www.aptech-worldwide.com/ ▾
Aptech is an ISO 9001:2000 organization that commenced its education and traini

- ◆ **Contents of the <title> tag:**
 - ◆ Appear in the first line of the result as bold
 - ◆ On clicking, it appears as the page title of the Web page

SEO

Page Titles 5-6

SEO

Page Title



Aptech Learning Services: C x

www.aptechlearningservices.com

Aptech LEARNING SERVICES Unleash your potential

Home About us Solutions Services Our Approach Showcase Contact us

Aptech provides Learning Solutions that Work.

Get the details

About Aptech Learning Services

With 22 years of experience, Aptech delivers custom content development solutions, across the globe ►

Product demo >

"H1N1 Awareness" an Aptech Community Care Initiative (ACCI)



- ◆ Guidelines for defining page titles are as follows:
 - Accurate Page contents
 - Unique titles
 - Descriptive titles

Points to Avoid

- Avoid using keywords such as 'Untitled' or 'New Page 1'
- Avoid selection of a single title tag for all pages
- Avoid to specify lengthy keywords in the title

Meta Tags 1-2

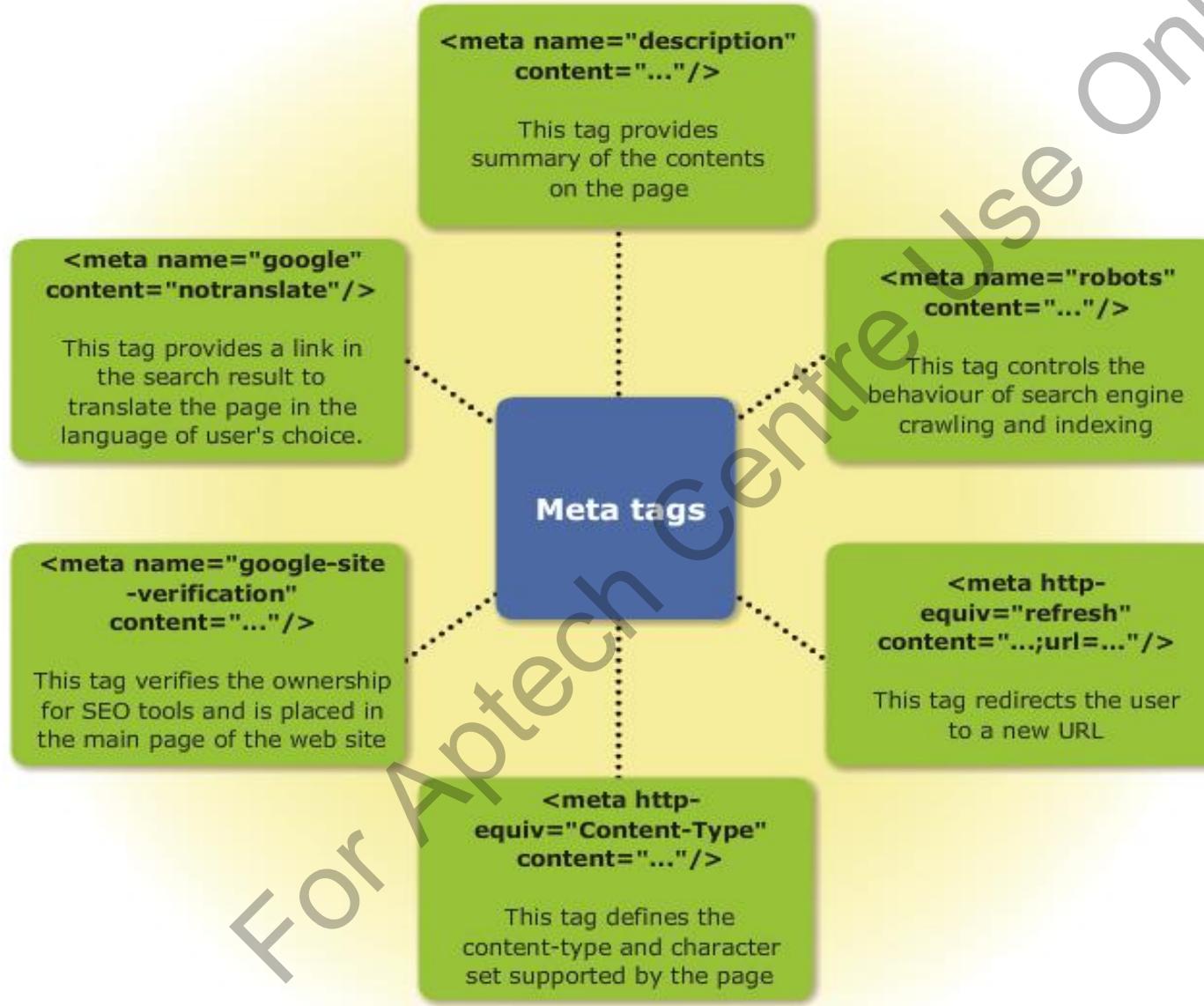
- ◆ Provide information about Web site to the search engines
- ◆ Written in the <head> section of the page
- ◆ Play a vital role in search engine optimization



SEO

Meta Tags 2-2

SEO



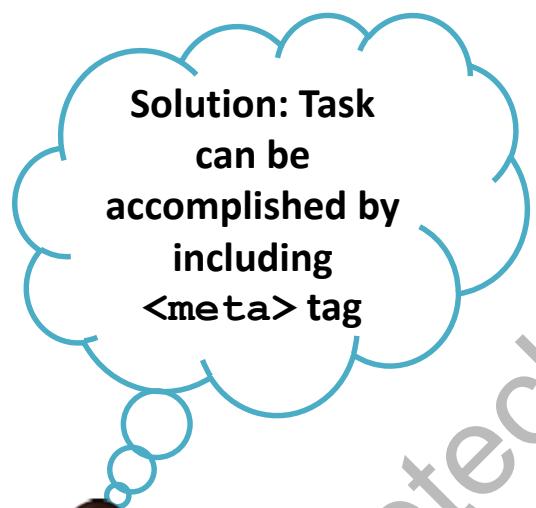
Meta Description Tag 1-4



- ◆ Provides summary of content on the page
- ◆ Used by search engines to display as snippet in the search results
- ◆ Is of few sentences or a short paragraph

Meta Description Tag 2-4

Scenario: An SEO consultant wants to include the overview of Aptech offerings on the home page of the Web site



Snippet

```
 . . .
<head>
. . .
<meta name="description"
content="Aptech's Learning Services
business delivers Offshore Content
Development, Multimedia Production &
I&D Support Services to Corporates,
Universities & Others" />
. . .
</head>
. . .
```

- ◆ Description Meta tag here outlines various offerings of the services provided by the organization

SEO

Meta Description Tag 3-4

SEO

Google search results for "aptech learning services". The results page shows a snippet from the Aptech Learning Services website, which includes a box containing links to "Contact us", "About us", "Solutions", "PMP Schedule", "Advantage Aptech", and "Content Development". A red box highlights this snippet area.

aptech learning services

Web Maps Images News Videos More Search tools

About 80,100 results (0.54 seconds)

Aptech Learning Services: Offshore Content Development ...
www.aptechlearningservices.com/ ▾
Aptech's Learning Services business delivers Offshore Content Development, Multimedia Production & L&D Support Services to Corporates, Universities ...

Contact us
Contact us. Aptech offers comprehensive Learning ...

About us
About Aptech Learning Services. Aptech Learning Services is the ...

Solutions
Aptech delivers one or a package of learning solutions to diverse ...

PMP Schedule
Select your PMP, ®, Training Schedule, Date, Timings, Batch ...

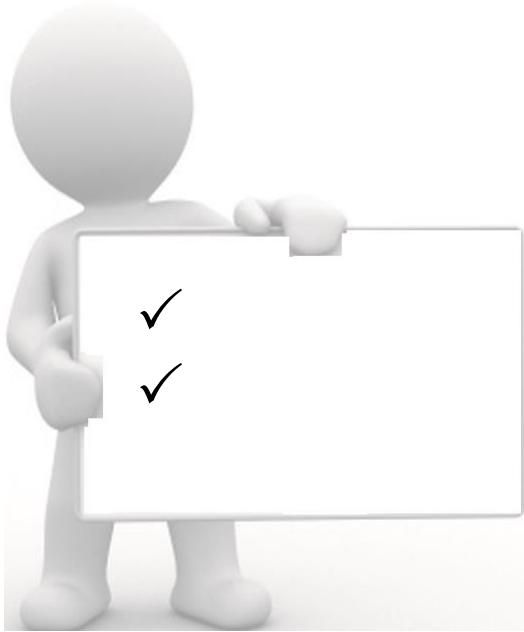
Advantage Aptech
Advantage Aptech. Aptech pioneered quality IT ...

Content Development
Aptech's content development team comprises specialists such ...

More results from aptechlearningservices.com »

Aptech Global Learning Solutions: Retail & Corp
www.aptech-worldwide.com/ ▾
Aptech is an ISO 9001:2000 organization that commenced its education ...
2010: Aptech Learning Services wins two 'Apex Awards for Excellence' ...

- Contents of description tag are displayed as snippet in the search results



- ◆ Guidelines for using Meta description on a Web page are as follows:
 - Summarize page contents accurately
 - Provide a unique description

Points to Avoid

- Avoid description that are not relevant to the page contents
- Avoid use of generic phrases such as 'This is a Web page' or 'Page about services'
- Avoid using only keywords or entire contents of the page

Heading Tags 1-4

- ◆ Emphasize the important text on the page
- ◆ Are embedded in the <body> section
- ◆ Help users to understand the type of contents included under them
- ◆ Allow to place important keywords appropriate with the rest of the contents
- ◆ Are of six types from <h1> to <h6>



Heading Tags 2-4

Scenario: An SEO consultant wants to highlight different types of services offered by the Aptech Learning Services

Solution: Use of heading tags will emphasize the text from the rest of the contents



Snippet

```
<body>
  <h1> Services </h1> <!-- Page Topic -->
  . . .
  <h2> Consulting </h2> <!-- Main Topic -->
  . . .
  <h3> . . . </h3> <!-- Sub Topic -->
  <h2> Managed Services </h2>
  . . .
  <h2> PMP Training </h2>
</body>
```

- ◆ Heading tags used in proper hierarchy makes navigation easier on the page for the users

SEO

Heading Tags 3-4

SEO

Aptech LEARNING SERVICES Unleash your potential

Home | About us | Solutions | Services | Our Approach | Showcase

Services

Aptech Learning Services offers end-to-end learning consulting, administrative, training & other services to organizations.

Consulting

Aptech's Consulting team works closely with Learning & Development (L&D) managers, helping them improve learning operations & deliver better business results. Consulting is frequently required in areas such as [Training Needs Analysis](#) & [Curriculum Design](#).

Managed Services

Heading tag, **<h1>**

Heading tag, **<h2>**

Heading Tags 4-4



- ◆ Guidelines for providing the headings are as follows:
 - Outline the points
 - Limit the use of headings across the pages

SEO

Points to Avoid

- Avoid unrelated text in heading tags
- Avoid selection of a single title tag for all pages
- Avoid replacement of and tags with headings
- Avoid placing of all text of the page in heading
- Avoid using heading tags as presentation of text
- Avoid random use of heading tag sizes

Cascading Style Sheets (CSS) 1-2

SEO



- ◆ Helps in formatting the design elements on a page
- ◆ Ensures that Web site pages are consistent
- ◆ Can be created separately and then linked in the Web pages

Snippet

```
 . . .
<head>
. . .
<link rel="stylesheet" href="style.css" />
</head>
. . .
```

Cascading Style Sheets (CSS) 2-2

SEO

Scenario: An SEO consultant wants to achieve consistency in terms of styling in the Aptech Learning Services Web site

Solution: This can be accomplished by creating CSS file



Snippet

```
...
body {
    font-size:12px;
    padding:10px;
    margin:0 auto;
    color:#000000;
    font-family:Verdana, Arial,
    Helvetica, sans-serif
}
a:link, a:visited, a:hover{
    color:#0066CC }
...
```

Working with Anchor Tag 1-3

SEO

Anchor text:

- ◆ Appear as links (hyperlinks) on the page and which can be clicked further to move to the result of link.
- ◆ In other words, represents clickable text on the page that is also referred to as linked text.
- ◆ Is Better and descriptive and helps users to navigate through the site.
- ◆ Also, help search engine crawlers to understand about the information contained in the linked pages.
- ◆ Are placed within the anchor tag, ` anchor text` on the page.



Working with Anchor Tag 2-3

SEO

Aptech LEARNING SERVICES
Unleash your potential

Home | About us | Solutions | Services | Our Approach | Showcase

Training & Assessment

Services

Consulting

Managed Services

PMP Training

Training & Assessment



Corporate Training

Aptech delivers synchronous Instructor-Led Training backed by audience-appropriate courseware. Training occurs in physical & virtual classrooms across the world. Areas of expertise include Induction & Orientation processes, Product skills, Software skills, Project management and Work & Leadership skills training.

Through the [Aptech Training Solutions](#) business, Aptech also offers a gamut of specific performance solutions such as Sales training, Customer Service training, Product/ Process training, Soft Skills and Managerial Development training to solve customers' business challenges.

Assessments

[Attest](#) is Aptech's global assessment solutions business. Attest assists universities, corporates, educational institutes & governments in conducting computer-aided assessments & paper-pencil tests. Attest helps enhance performance, reliability & security and cuts costs.

Points to Avoid

- ☒ Avoid specifying generic keywords such as 'page' and 'click here' as anchor text
- ☒ Avoid selecting keywords with no relevance with contents
- ☒ Avoid using URLs as anchor text
- ☒ Avoid using CSS or text styling that make links look just like regular text.
- ☒ Avoid creating unnecessary links that do not help with the user's navigation of the site
- ☒ Avoid writing paragraphs, lengthy sentences, or excessive keywords as anchor text

Working with Images 1-2

SEO

Images: Fundamental components of Web page design



Element used to display image on the page is the `` tag

```

```

filename

alternative text for image

Working with Images 2-2

SEO

- ◆ Guidelines to work with images in a Web page are as follows:
 - ❑ Path of the image
 - ❑ Descriptive names
 - ❑ Alt text for images
 - ❑ Commonly supported file types

Points to Avoid

- ☒ Avoid specifying generic filenames such as 'picture.gif', 'a.jpg', or '1.jpg' for images
- ☒ Avoid lengthy file names
- ☒ Avoid long text description in alt attribute
- ☒ Avoid using images as links as Google cannot see the graphics-based links
- ☒ Avoid stuffing keywords or copy-pasting entire sentences into alt text

Alt Attribute in Images 1-4

Serves as a replacement for elements that are not properly displayed on the visitor browser

Provide the same information which might have to be depicted by an image, a link, or an element to the user



Used with images and graphics

SEO

Alt Attribute in Images 2-4

Scenario: An SEO consultant wants to specify keywords for an image supporting text for various deliverables on the Aptech Learning Services Web site

SEO

Solution: alt
attribute can be
used for
describing the
image



Snippet

```
...  
<body>  
<br />  
...  
</body>  
...
```

Alt Attribute in Images 3-4

SEO



Alt Attribute in Images 4-4

SEO

- ◆ Guidelines for defining alt attribute for the images or other elements are as follows:
 - ❑ Length of keywords used in the alt attribute should be between 50 and 125 characters
 - ❑ Keywords used in the alt attribute must convey the information to the visitors and their connectivity with the rest of the contents on the page

Metadata and Snippets for Additional SEO Markups

SEO

- ◆ Webmasters can include following Metadata attributes and snippets in Web pages for optimization:
 - ❖ rel=author and rel=publisher attributes can be included as Metadata in the link tags to display the brand image of the Web site along with its details in Google search results.
 - ❖ Bing provides a linked pages feature that allows users to have pages linked to their public profiles or brand profiles.
 - ❖ Use schemas to mark up the HTML content of Web sites to help search engines understand the content of Web pages better and provide greater visibility of the Web pages in search results.



Optimization of the Web Site Structure

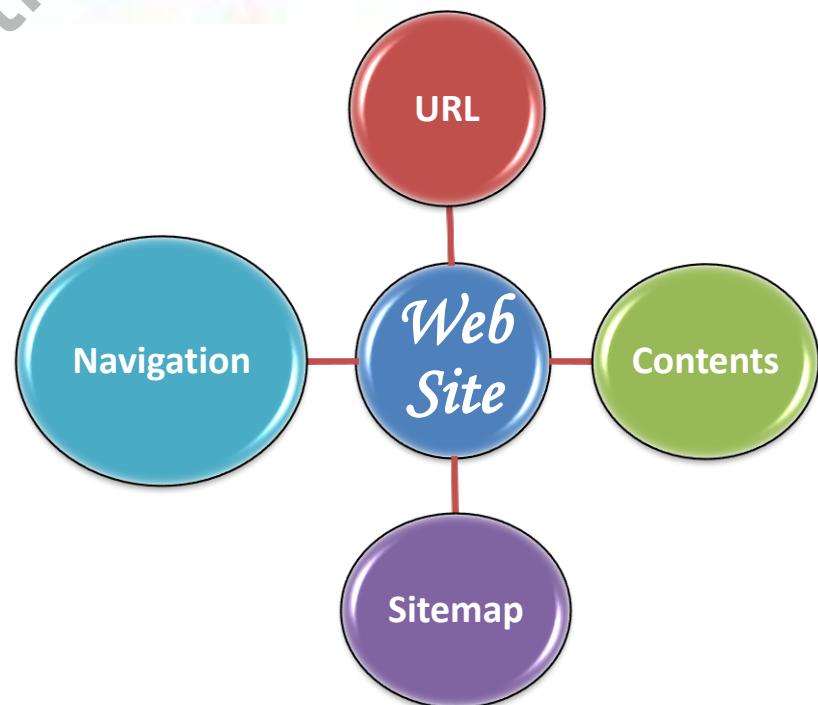
SEO

The structure of the Web site attracts a search engine crawler to your Web site



Web site structure can be enhanced by providing:

- ✓ Easy to understand URLs
- ✓ Proper file names
- ✓ Better quality contents
- ✓ Proper navigation structure



Structure of URLs 1-3

SEO

URLs are the address of the Web pages and other resources on WWW

URLs are displayed as the part of the search result

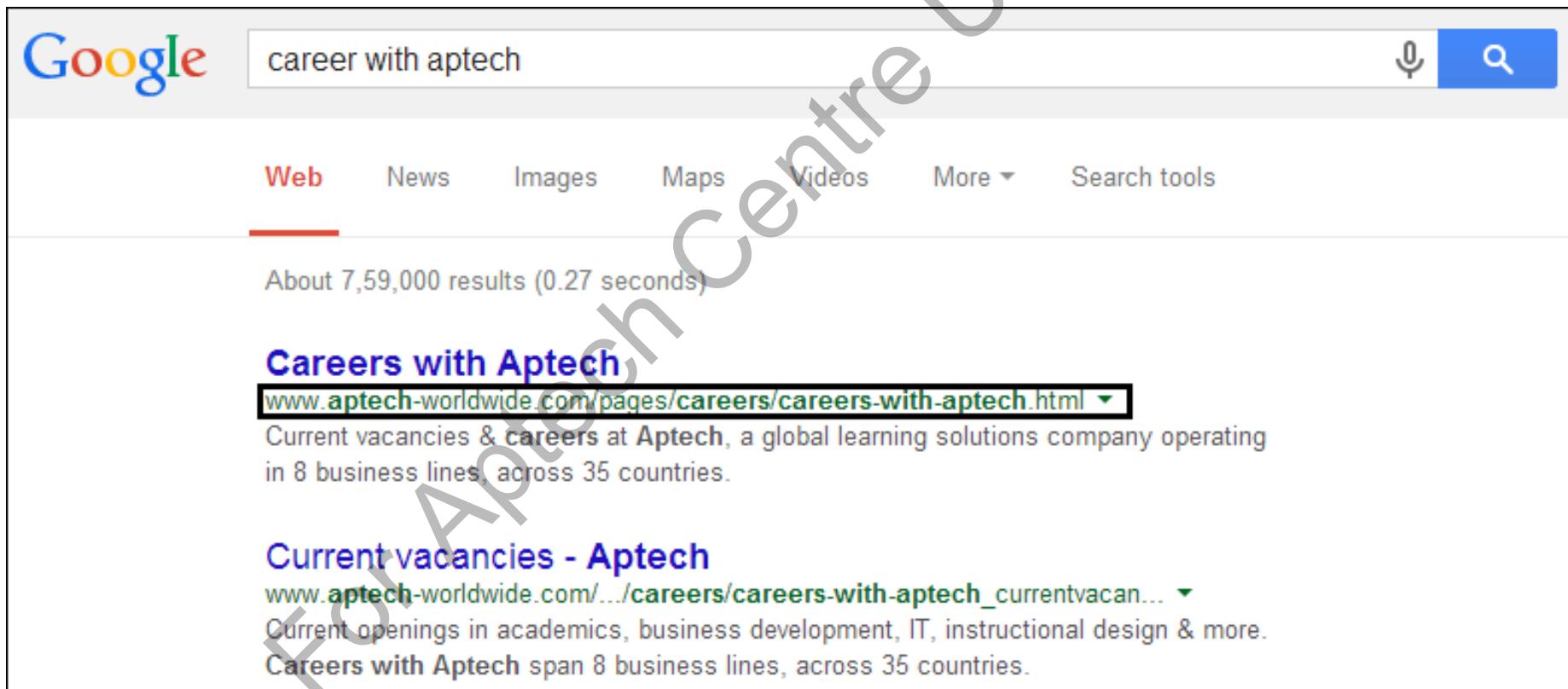
The URL structure of the site should be simple, user-friendly, and understandable



Structure of URLs 2-3

SEO

- ◆ Consider a scenario, where a user wants to know about the career opportunities at Aptech.
- ◆ He/she searches for the keywords ‘career with aptech’ in Google search engine page, as shown in figure.



The screenshot shows a Google search results page for the query "career with aptech". The search bar at the top contains the query. Below it, the "Web" tab is selected among News, Images, Maps, Videos, More, and Search tools. A message indicates "About 7,59,000 results (0.27 seconds)". The first result is a link to "Careers with Aptech" with the URL "www.aptech-worldwide.com/pages/careers/careers-with-aptech.html". The snippet for this result mentions "Current vacancies & careers at Aptech, a global learning solutions company operating in 8 business lines, across 35 countries.". The second result is a link to "Current vacancies - Aptech" with the URL "www.aptech-worldwide.com/.../careers/careers-with-aptech_currentvacan...". The snippet for this result mentions "Current openings in academics, business development, IT, instructional design & more." and "Careers with Aptech span 8 business lines, across 35 countries." The entire screenshot is overlaid with a large, semi-transparent watermark reading "Aptech Centre USE ONLY".

Google career with aptech

Web News Images Maps Videos More Search tools

About 7,59,000 results (0.27 seconds)

Careers with Aptech
www.aptech-worldwide.com/pages/careers/careers-with-aptech.html

Current vacancies & careers at Aptech, a global learning solutions company operating in 8 business lines, across 35 countries.

Current vacancies - Aptech
www.aptech-worldwide.com/.../careers/careers-with-aptech_currentvacan...

Current openings in academics, business development, IT, instructional design & more.
Careers with Aptech span 8 business lines, across 35 countries.

Structure of URLs 3-3

SEO



- ◆ Guidelines to improve the structure of URLs are:
 - ❑ Usage of words in URLs
 - ❑ Simple directory structure
 - ❑ Single URL for a Web page

Points to Avoid

- ☒ Avoid long URLs with parameters, session IDs, generic names such as 'Page 1.html', or keywords
- ☒ Avoid nesting of subdirectories at deeper level or selecting directory names that are not related to the contents
- ☒ Avoid pages from different directories accessing the same contents

Creating Quality Contents 1-3

- ◆ Content is the most important aspect of the Web site design from:
 - ❖ User perspective
 - ❖ Webmaster perspective
- ◆ Creating quality content compels the visitors to come back to the site
- ◆ An SEO consultant must target the audience and accordingly create content strategy plan which can impart right type of content to the users.



Creating Quality Contents 2-3

SEO

- ◆ Some of the recommended pages to be included on a Web site:





- ◆ Guidelines to follow when developing contents for a Web page:
 - ❑ Use of keywords
 - ❑ Write easy and understandable text
 - ❑ Organize the topics
 - ❑ Unique contents
 - ❑ Prime focus of the contents

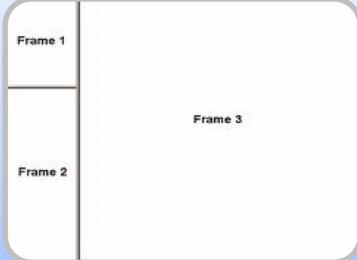
Points to Avoid

- ☒ Avoid writing large amount of unrelated text
- ☒ Avoid spelling and grammar mistakes
- ☒ Avoid embedding of text without paragraphs, sub-headings, and layouts
- ☒ Avoid duplication of contents across the site
- ☒ Avoid writing text without paragraphs, sub headings, and layouts
- ☒ Avoid text that are hidden from users but visible to search engines



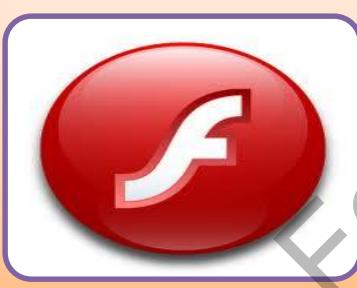
Used to create dynamic contents on the page

- Can lower search engine ranking of a Web site, as search engines may crawl all pages containing large amount of code
- Should be lean and clean to increase the download speed of the page



Provides navigational capabilities to the Web site

- Search engines may not crawl through the sites containing frames
- Users also cannot bookmark or link pages of the framed sites



Provides multimedia platform to add animations

- Might slow down the loading of pages and block its execution
- Might also block crawlers from tracking the site

- ◆ Search engines give consideration to the keywords used in the file name of the Web pages
- ◆ The words in the file name must be separated by hyphen (-), otherwise, Google may treat it as a single word



File Name of the Web page

Knowledge on Navigation

SEO

Navigation means moving from one page to another page on the Web site using links displayed on the Web pages



Navigation Types

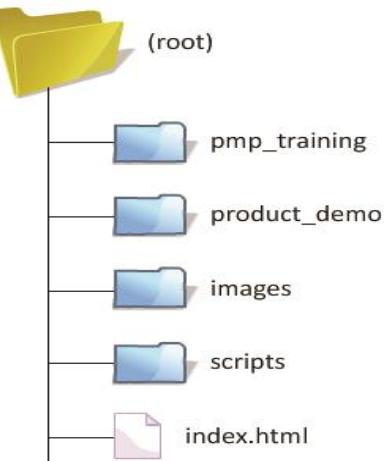
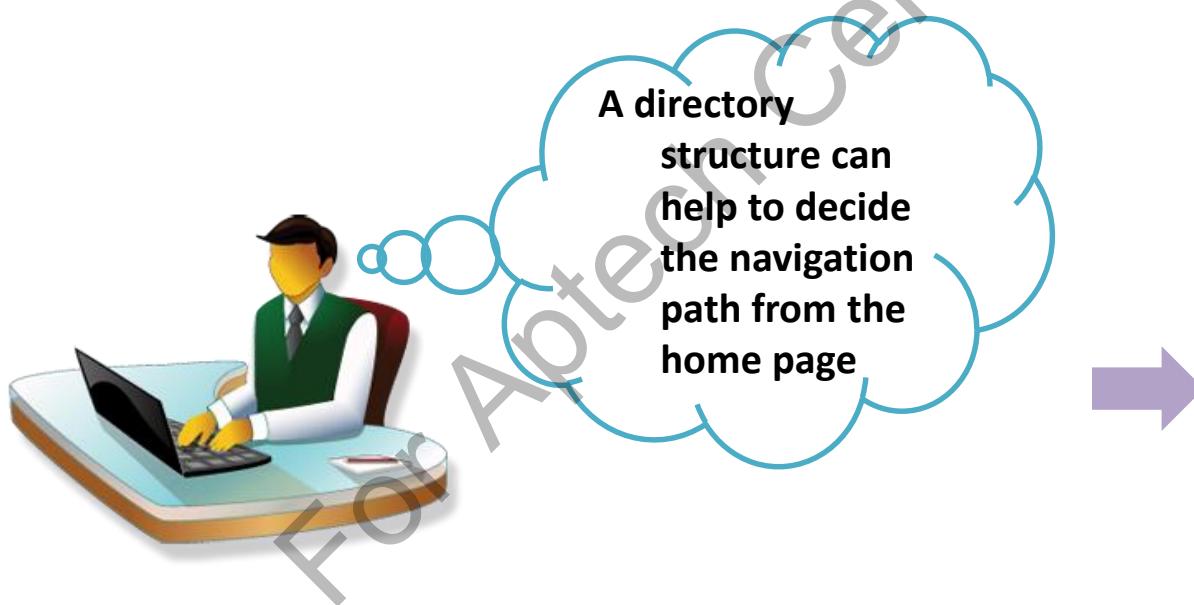
**Internal
Navigation**

**External
Navigation**

Planning Navigation 1-5



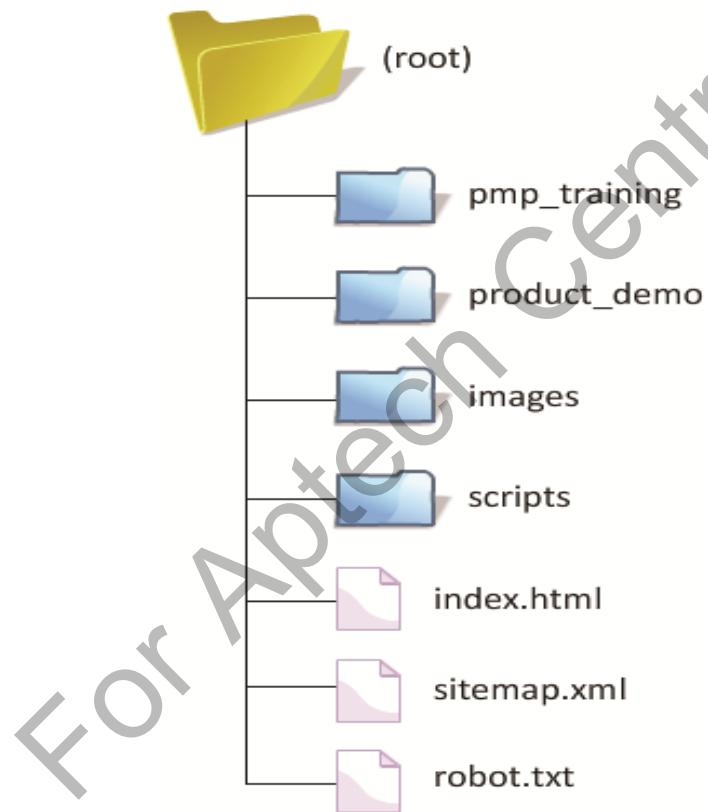
- ◆ Navigation based on home page
 - ❖ Start page of all Web sites is the '**home**' or '**root**' page which is considered as the starting point for planning the navigation of the Web site
- ◆ Text-based navigation
 - ❖ Site should be based on text links as it helps the search engine crawlers to understand the site structure

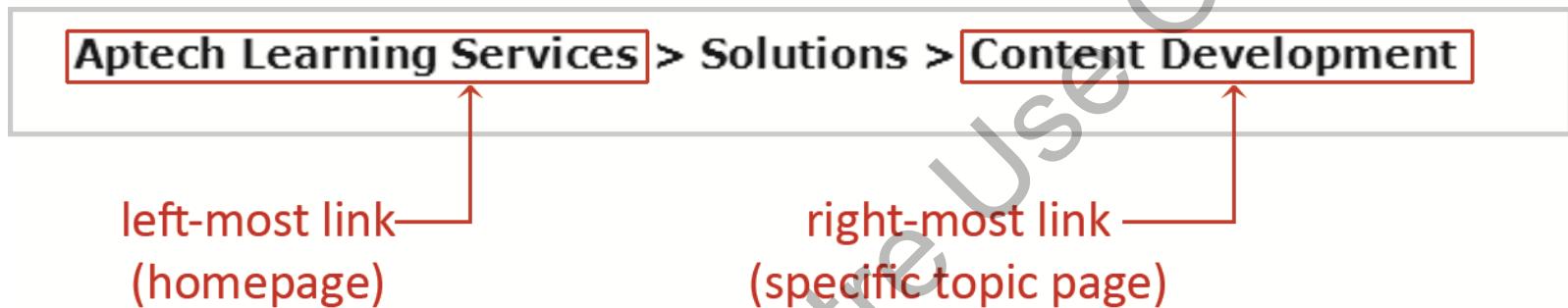


Planning Navigation 2-5

SEO

- ◆ Figure shows a directory structure of the Aptech Learning Services Web site that helps the SEO consultant to decide the navigation path from the home page.





◆ Preparing HTML site maps

- ❖ A sitemap is a simple page of a Web site that displays the structure of the Web site in hierarchical fashion
- ❖ Benefits of using site map for different stakeholders are:
 - ❖ **Visitors** - If visitors have problems finding pages on the site, then they can visit the site map page.
 - ❖ **Search engines** - Search engines can crawl into this page and understand about the pages provided on the site.



- ◆ Creating a page handling 404 error
 - ❖ Users may reach on a page that is either not existing or whose link is broken and which takes them to an error page with a HTTP status code 404
 - ❖ Customizing a 404 page can guide user back to the home page

For Aptech Centre Use Only

Points to Avoid

- ☒ Avoid linking every page on the Web site to the other page, as it makes the navigation complex
- ☒ Avoid planning navigation on images, animations, and drop-down menus
- ☒ Avoid out dated pages in HTML site map
- ☒ Avoid text that are hidden from users but visible to search engines
- ☒ Avoid messages such as 'error page' or '404' on the error page

Understanding Site Map

SEO

A site map is an overview of the navigational structure of the Web site

Helps the search engine crawlers to crawl all the linked pages from it

Google Site Map

Search Guides

- [Basics of Search](#)
- [Advanced Search](#)
- [Explore search](#)
- [Setting Preferences](#)
- [Search Features](#)
- [Services & Tools](#)
- [Help Center](#)

Tools

- [Alerts](#)
- [Answers](#)
- [Books](#)
- [Directory](#)
- [Froogle](#)
- [Groups](#)
- [Google Apps](#)
- [Images](#)
- [Google Labs](#)
- [Local](#)
- [Patents](#)



enters

Corporate Information

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Investor Relations

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- [Financial Information](#)
- [Corporate Governance](#)
- [Company Overview](#)

Press Center

- [News from Google](#)
- [Google Blog Directory](#)
- [Google Twitter Directory](#)
- [Google Channel](#)
- [Media Room](#)
- [Permissions](#)

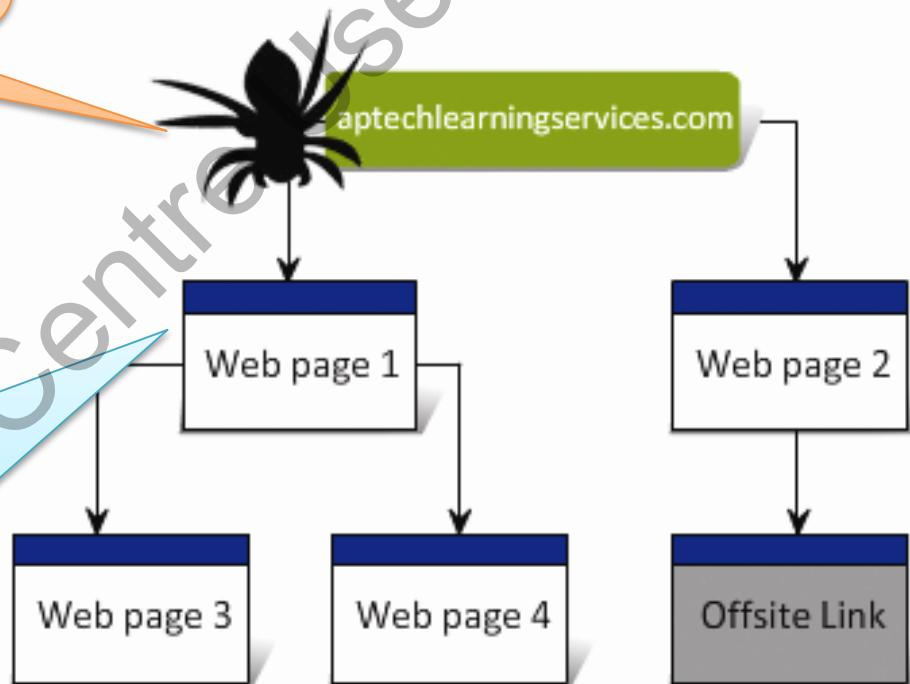
Hiring

- [Jobs](#)
- [Life at Google](#)
- [Office locations](#)
- [Joining Google](#)
- [Student jobs](#)
- [Benefits](#)

Search Engine Spiders

Programs that crawl from one page to other page following links on the Web site

Collect information such as text and link from the Web site, index them, and save in a database



Robots.txt 1-2

SEO

- ◆ Is a text document placed in the root directory of the Web site
- ◆ Informs the search engines about:
 - ❖ What they are allowed and not allowed to access while crawling in the Web site
- ◆ Typically contains the following code:

```
User-agent: *
Disallow: /images
Disallow: /download
```



A robots.txt file will help to restrict the crawler

- ◆ User-agent indicator - Tells which user agent or crawler is commanding
- ◆ Disallows indicator - Tells what a crawler is not allowed to access

Robots.txt 2-2

Snippet

```
User-agent: *
Disallow: /cache/
Disallow: /download/
Disallow: /FCKeditor/
Disallow: /giaitri/
Disallow: /images/
Disallow: /includes/
Disallow: /javascript/
Disallow: /languages/
Disallow: /modules/
Disallow: /register/
Disallow: /sitemapgen/
Disallow: /thames/
Disallow: /upload/
Disallow: /vuoncao_hna/
Disallow: /search/
```

An SEO consultant does not want a crawler to access images, JavaScript, or any URL whose path begins with / search

SEO

XML Site Mapping

SEO

- ◆ Is an XML file that lists the URLs for a Web site
- ◆ Is used by crawlers to index the Web site
- ◆ Can be placed in robots.txt or directly submitted to the search engines



The screenshot shows a web browser window with the URL `www.aptechlearningservices.com/sitemap.xml`. The page content displays an XML sitemap with the following structure:

```
<loc>http://www.aptechlearningservices.com/</loc>
<lastmod>2008-12-12</lastmod>
<changefreq>weekly</changefreq>
<priority>0.5</priority>
</url>
<url>
  <loc>
    http://www.aptechlearningservices.com/pages/services_pmptraining
  </loc>
  <lastmod>2008-10-23</lastmod>
  <changefreq>hourly</changefreq>
  <priority>0.5</priority>
</url>
<url>
  <loc>
    http://www.aptechlearningservices.com/pages/showcase.html
  </loc>
  <lastmod>2008-10-23</lastmod>
  <changefreq>hourly</changefreq>
  <priority>0.5</priority>
</url>
<url>
  <loc>
    http://www.aptechlearningservices.com/pages/contactus_locations.html
  </loc>
  <lastmod>2008-10-23</lastmod>
  <changefreq>hourly</changefreq>
  <priority>0.5</priority>
</url>
<url>
  <loc>http://www.aptechlearningservices.com/index.html</loc>
  <lastmod>2008-12-12</lastmod>
  <changefreq>hourly</changefreq>
  <priority>0.5</priority>
</url>
<url>
```

XML Site map for
Aptech Learning
Services

- ◆ Following are the ways to submit the site map to Google:
 - ❖ **Submitting using robots.txt**
 - ❖ Add a directive in the robots.txt file with the complete path that will be auto discovered by the crawlers
 - ❖ Example,
Sitemap: http://example.com/sitemap_location.xml
 - ❖ **Submitting using Search engines**
 - ❖ An account needs to be created in Google which is a linked Webmaster Tools account
 - ❖ Using this interface, submit the sitemap

Common Mistakes in On-Page Optimization

SEO



Summary

SEO

- ◆ SEO is basically the science of designing Web site.
- ◆ An SEO consultant adopts different optimization strategies such as on-page and off-page to achieve maximum ranking in the search engine results.
- ◆ Keywords are the cornerstone of SEO and play an important role in optimization.
- ◆ Some of the elements where keywords are placed on the Web page are page titles, Meta tags, headings, text links, and images.
- ◆ The site structure can be enhanced by providing easy to understand URLs, proper file names, and providing better quality content on the page.
- ◆ Proper navigation structure helps visitors to move on the Web site and find relevant contents as per their need.
- ◆ Crawlers, spiders, and robots are programs that crawl from one page to other page following links on the Web site.