# Module – 3

## Q-1) What are the four important tags we use in SEO?

## ANS-

The four important tags we use in SEO (Search Engine Optimization) are:

**1. Title Tag (\<title> Tag):-** This tag specifies the title of a web page. It's displayed on the browser tab and is a crucial factor in determining the page's relevance to search queries.

**2. Meta Description Tag (\<meta name="description"> tag):-** This tag provides a brief summary of the content of a web page. While it doesn't directly impact rankings, a compelling meta description can influence click-through rates from search engine results pages (SERPs).

**3. Header Tags (\<h1>, \<h2>, \<h3>, etc.):-** These tags are used to define headings and subheadings within the content of a web page. Search engines use header tags to understand the structure and hierarchy of the content, which can affect how they interpret the relevance of different sections.

**4. Alt Tags (Alternative Text for Images):-** Alt tags (\<image alt="">) are used to describe the content of an image. They are important for SEO because search engines cannot "see" images; they rely on alt text to understand what an image is about. Alt tags also improve accessibility for users who rely on screen readers.

## Q-2) What is the use of open-graph tags in a website?

## ANS-

Open Graph tags are meta tags that are added to the `<head>` section of a webpage to provide structured data about the webpage content. They are primarily used for social media platforms like Facebook, LinkedIn, and others that support the Open Graph protocol. Here's how they are used and their benefits:

**1. Social Sharing:-** When a webpage URL is shared on social media, platforms like Facebook use Open Graph tags to gather information about the content. This information includes the title, description, image, and other relevant metadata that enriches how the link appears on social media feeds.

**2. Control over Content:-** Open Graph tags allow website owners to control how their content appears when shared on social media. By specifying the title, description, and image, they ensure that the shared post accurately represents the content and attracts more engagement.

**3. Enhanced Click-Through Rates:-** Well-crafted Open Graph tags can lead to higher click-through rates (CTR) on shared links because they provide users with a preview that is informative and visually appealing.

**4. Structured Data:-** Open Graph tags use a structured format that is understood by various social platforms, ensuring consistency in how content is displayed across different networks.

**5. Customization:-** Beyond basic metadata, Open Graph tags can include additional custom properties to provide more context about the content, such

as specific types (e.g., article, video, product) and other details relevant to the webpage.

**6. SEO Benefits:-** While not a direct ranking factor, Open Graph tags indirectly contribute to SEO by improving the visibility and attractiveness of shared links. Increased engagement on social media can also have secondary SEO benefits.

## Q-3) What tag we will use to add an image to the website? Explain the points we should care about while adding the image to the website.

## ANS-

To add an image to a website, you would use the `<img>` tag in HTML. Here are the key points you should consider when adding images to your website:

HTML `<img>` Tag

The `<img>` tag is used to embed images in an HTML document. Here's how you typically use it:

html

```
<img src="path_to_image.jpg" alt="Description of the image" title="Title of the image">
```

- **src attribute:-** Specifies the path to the image file. This can be a relative or absolute URL.

- **alt attribute:-** Provides alternative text for the image. This text is displayed if the image fails to load or for accessibility purposes (e.g., screen readers). Always include descriptive `alt` text for accessibility compliance and to improve SEO.

- **title attribute (optional):-** Adds a tooltip that appears when the user hovers over the image. It is not a replacement for `alt` text but can provide additional context or information about the image.

## Points to Consider When Adding Images:

**1. Optimization:-** Ensure images are optimized for the web to minimize file size without sacrificing quality. This improves website performance and loading times.

**2. File Formats:-** Use appropriate image formats such as JPEG, PNG, or SVG based on the content and requirements (e.g., photographs vs. illustrations).

**3. Responsive Design:-** Implement responsive design techniques to ensure images scale appropriately on different devices and screen sizes.

**4. Accessibility:-** Always provide descriptive `alt` text to ensure images are accessible to users with disabilities and for SEO benefits. Avoid using images for critical content that should be text-based.

**5. File Paths:-** Double-check file paths to images to ensure they are correct and accessible from the web server. Use relative paths whenever possible to maintain flexibility and ease of maintenance.

**6. SEO Considerations:-** Use relevant keywords in `alt` text and consider adding descriptive filenames and captions where appropriate to improve SEO.

**7. Loading Speed:-** Consider lazy loading techniques for images that are not immediately visible on the screen to improve initial page load times.

**8. Copyright and Licensing:-** Ensure you have the right to use the images on your website and comply with copyright laws. Consider using stock photos or images with Creative Commons licenses if needed.

## Q-4) What is the difference between NOFOLLOW and NOINDEX?

## ANS-

The terms "NOFOLLOW" and "NOINDEX" are directives used in the context of search engine optimization (SEO) to control how search engines interact with specific webpages. Here's the difference between them:

### NOFOLLOW:

- **Purpose:-** The `NOFOLLOW` directive is used to instruct search engines not to follow the links on a particular webpage.

- **Usage:-** It is typically applied to hyperlinks (anchor tags `<a>`), but can also be applied at the level of an entire webpage.

- **Impact:-** When search engines encounter a `NOFOLLOW` directive on a link, they do not pass link equity (PageRank) from the linking page to the linked page. This means the linked page won't benefit from SEO rankings based on that link.

## Example:

```html
<a href="https://example.com" rel="nofollow">Link text</a>
```

In this case, search engines will visit `https://example.com` but won't consider the link as a factor in ranking the target page.

## NOINDEX:

- **Purpose:-** The `NOINDEX` directive instructs search engines not to include a specific webpage in their index.

- **Usage:-** It is applied at the page level, usually via a meta tag in the HTML `<head>` section of the webpage.

- **Impact:-** When a webpage is marked with `NOINDEX`, search engines will not display that webpage in search engine results pages (SERPs). Essentially, the content of that page is hidden from search engine users.

## Example:

```html
<meta name="robots" content="noindex">
```

```

Placing this meta tag in the `&lt;head&gt;` section of a webpage informs search engines not to index the content of that page.

### Key Differences:

- **Purpose:-** `NOFOLLOW` controls how search engines treat outgoing links, whereas `NOINDEX` controls whether a page's content is included in search engine results.

- **Scope:-** `NOFOLLOW` is usually applied to individual links or pages to control the flow of PageRank, while `NOINDEX` is applied to entire pages to prevent them from appearing in search results.

- **Effect:-** `NOFOLLOW` affects link equity passing between pages, while `NOINDEX` affects whether a page's content is searchable and visible in search results.

In summary, while both `NOFOLLOW` and `NOINDEX` are directives used in SEO to control search engine behavior, they serve different purposes: `NOFOLLOW` influences how links are treated for SEO purposes, and `NOINDEX` dictates whether a page's content appears in search engine results.

## Q-5) Explain the types of queries.

## ANS-

In the context of information retrieval and databases, queries refer to requests for data or information from a database management system (DBMS) or a
```

search engine. These queries can vary significantly in complexity and purpose. Here are the main types of queries commonly used:

## 1. Select Queries (Retrieval Queries):-

- **Purpose:** Retrieve data from a database based on specific criteria.

### Example:

```sql
SELECT * FROM Employees WHERE Department = 'IT';
```

This query retrieves all columns (`*`) from the `Employees` table where the `Department` is 'IT'.

## 2. Insert Queries:-

- **Purpose:** Add new records (rows) into a database table.

### Example:

```sql
INSERT INTO Employees (Name, Department, Salary) VALUES ('John Doe', 'IT', 60000);
```

This query inserts a new employee record into the `Employees` table with specified values for `Name`, `Department`, and `Salary`.

## 3. Update Queries:-

- **Purpose:** Modify existing records in a database table.

**Example:**

```sql
UPDATE Employees SET Salary = 65000 WHERE Name = 'John Doe';
```

This query updates the `Salary` field for the employee with `Name` 'John Doe' in the `Employees` table.

## 4. Delete Queries:-

- **Purpose:** Remove records from a database table.

**Example:**

```sql
DELETE FROM Employees WHERE Name = 'John Doe';
```

This query deletes the employee record with `Name` 'John Doe' from the `Employees` table.

## 5. Aggregate Queries:-

- **Purpose:** Perform calculations on data and return summary results.

**Example:**

```sql
SELECT Department, AVG(Salary) AS AvgSalary FROM Employees GROUP BY Department;
```

This query calculates the average salary (`AVG(Salary)`) for each `Department` in the `Employees` table.

## 6. Join Queries:-

- **Purpose:** Combine rows from two or more tables based on a related column between them.

### Example:

```sql
SELECT Employees.Name, Departments.DepartmentName
FROM Employees
INNER JOIN Departments ON Employees.DepartmentID = Departments.DepartmentID;
```

This query retrieves `Name` from `Employees` table and `DepartmentName` from `Departments` table, where `DepartmentID` matches between both tables.

## 7. Subqueries (Nested Queries):-

- **Purpose:** Queries nested within another query to retrieve data or perform operations based on the results of the outer query.

Example:

```sql
SELECT Name
FROM Employees
WHERE DepartmentID IN (SELECT DepartmentID FROM Departments WHERE DepartmentName = 'IT');
```

This query retrieves names of employees who belong to the 'IT' department by using a subquery to find corresponding `DepartmentID`.

## 8. Full-Text Search Queries:-

- **Purpose:** Search for text within one or more columns of a database table.

### Example:

```sql
SELECT * FROM Articles WHERE MATCH (title, content) AGAINST ('database management');
```

This query searches for articles where either the `title` or `content` contains the phrase 'database management'.

## 9. Transactional Queries:-

- **Purpose:** Manage transactions in a database to ensure data integrity and consistency.

### Example:

```sql
BEGIN TRANSACTION;
UPDATE Account SET Balance = Balance - 100 WHERE AccountID = 123;
UPDATE Account SET Balance = Balance + 100 WHERE AccountID = 456;
COMMIT;
```

This set of queries transfers 100 units from account 123 to account 456, wrapped in a transaction to ensure both updates occur together or not at all.

## 10. Stored Procedure Queries:-

- **Purpose:** Precompiled SQL statements stored in the database for repeated use, which can include any combination of SQL queries and programming logic.

**Example:**

```sql
CALL CalculateYearlySalesReport(2023);
```

This query executes a stored procedure named `CalculateYearlySalesReport` with the parameter specifying the year (2023) for which the sales report is generated.

## Q-6) What is the importance of Site Map and Robot.txt in SEO?

## ANS-

A sitemap and a robots.txt file are crucial elements for SEO (Search Engine Optimization) because they help search engines understand and navigate your website effectively. Here's why each is important:

### 1. Sitemap:-

A sitemap is essentially a map of your website that lists all the pages, posts, and other content on your site, along with metadata about each item (like when it was last updated). It serves several important purposes:

- **Helps with Crawling:-** Search engine crawlers (like Googlebot) use sitemaps to discover and index pages on your site. When a crawler accesses your sitemap, it can see the structure of your site and prioritize indexing important pages.

- **Improved Visibility:-** By submitting a sitemap to search engines (such as through Google Search Console), you ensure that all your pages are noticed and indexed promptly. This is especially useful for large websites or ones with dynamic content that might not be easily discovered through normal crawling processes.

- **Metadata and Updates:-** Alongside URLs, a sitemap can include additional information like when a page was last modified or how often it typically changes. This metadata helps search engines understand the freshness of your content, which can impact how often they revisit and update their index.

## 2. Robots.txt:-

A robots.txt file is a text file that tells search engines which pages or files they can or cannot request from your site. It's located at the root directory of your website (e.g., `www.example.com/robots.txt`). Key reasons for its importance include:

- **Control Over Crawling:-** You can use robots.txt to control how search engines crawl your site. For example, you can specify directories or files that you do not want crawlers to access, such as admin pages, private content, or duplicate content that you don't want indexed.

- **Directives for Crawlers:-** The file uses specific directives (`User-agent` and `Disallow` being the primary ones) to instruct search engine crawlers on which areas of your site to avoid. This helps in conserving crawl budget (the number of pages a search engine will crawl on your site during a visit) by focusing on important pages.

- **Preventing Indexing Issues:-** It can prevent indexing of pages that you don't want to appear in search engine results, such as duplicate content or staging areas of your site.

## Q-7) Below is the list of pages for an e-commerce site that doesn't need to be crawled by any crawler.

## Admin pages

## Cart page

## Thank-you page

## Images

## How will you achieve this?

## ANS-

To prevent certain pages from being crawled by search engine crawlers (like Googlebot), you can use the `robots.txt` file with specific directives. Here's how you can achieve this for the pages listed:

### 1. Admin Pages:-

- If your admin pages are located under a specific directory (e.g., `/admin/`), you can disallow the entire directory.

- Example directive in `robots.txt`: `Disallow: /admin/`

- This tells crawlers not to crawl any page or directory that starts with `/admin/`.

### 2. Cart Page, Thank-you Page:-

- Assuming these pages have specific URLs, you can disallow them individually.

- Example directives in `robots.txt`:

```
Disallow: /cart-page-url
```

Disallow: /thank-you-page-url

```

- Replace `/cart-page-url` and `/thank-you-page-url` with the actual URLs of these pages.

## 3. Images:-

- If you want to prevent search engines from crawling your images directory (assuming it's a specific directory like `/images/`):

- Example directive in `robots.txt`: `Disallow: /images/`

- This prevents crawlers from accessing any file or directory that starts with `/images/`.

## Sample `robots.txt` Example:

Here's how your `robots.txt` might look to achieve the above exclusions:

```
User-agent: *

Disallow: /admin/

Disallow: /cart-page-url

Disallow: /thank-you-page-url

Disallow: /images/
```

## Notes:

- **User-agent: ***: This line applies the following rules to all robots (crawlers).
```

- **Disallow**: Specifies the files or directories that crawlers should not access.

- Ensure your `robots.txt` file is placed at the root of your website (e.g., `www.example.com/robots.txt`) and is accessible to crawlers.

Remember, while `robots.txt` directives can prevent crawling, they do not prevent indexing if the content is found through other means (like links from other sites). For more stringent control over indexing, you might also consider using meta tags (`<meta name="robots" content="noindex">`) on specific pages or implementing password protection for sensitive areas like admin pages.

## Q-8) What are on-page and off-page optimization?

## ANS-

On-page and off-page optimization are two key pillars of SEO (Search Engine Optimization), each focusing on different aspects to improve a website's search engine rankings.

### 1. On-Page Optimization:-

On-page optimization refers to the factors that you can control directly on your own website. These factors help search engines understand the content and context of your pages, which can improve their visibility in search engine results. Key elements of on-page optimization include:

- **Content Quality:-** Creating high-quality, relevant, and valuable content that satisfies user intent and provides useful information.

- **Keyword Optimization:-** Using relevant keywords naturally throughout your content, including in titles, headings, meta descriptions, and body text.

- **Meta Tags:-** Optimizing meta titles and meta descriptions to accurately describe the content of each page and encourage click-throughs from search engine results pages (SERPs).

- **URL Structure:-** Creating SEO-friendly URLs that are short, descriptive, and include relevant keywords.

- **Internal Linking:-** Linking to other pages within your own website to improve navigation and distribute link equity.

- **Page Speed:-** Ensuring fast page loading times to improve user experience and reduce bounce rates.

- **Mobile Optimization:-** Ensuring your website is responsive and performs well on mobile devices.

- **Schema Markup:-** Implementing structured data markup to help search engines understand the content on your pages better.

## 2. Off-Page Optimization:-

Off-page optimization refers to actions taken outside of your website to impact your rankings within search engine results pages. It primarily involves acquiring backlinks (links from other websites pointing to your site) and building your website's authority. Key elements of off-page optimization include:

- **Link Building:-** Acquiring backlinks from other authoritative websites and relevant sources. Quality and relevance of backlinks are crucial.

- **Social Media Marketing:-** Promoting your content and website through social media channels to increase visibility and engagement.

- **Online Reputation Management:-** Managing online reviews and mentions to build a positive reputation and trustworthiness.

- **Guest Blogging:-** Writing articles or blog posts for other websites to gain exposure and backlinks.

- **Influencer Outreach:-** Collaborating with influencers or industry leaders to promote your content and gain backlinks.

- **Local SEO:-** Optimizing your website for local search results, including local listings and citations.

Both on-page and off-page optimization are essential components of a holistic SEO strategy. While on-page factors focus on improving the content and structure of your website, off-page factors aim to increase your website's authority and popularity on the web through external signals like backlinks and social signals. Combining both approaches effectively can help improve your website's search engine rankings and overall visibility.

## Q-9) Perform an on-page SEO using available tools for www.designer2developer.com

## ANS:-

**Meta Title: -** IOT development company|Top Mobile App Development Company

**Meta Description: -** "Leading android app development company, iphone app development company, IOT product development company, Telematics Software Development Company, Connected Car"

**Meta Keywords:-**

1. **Short tail keywords: -**

- Designer2Developer
- Web Design to Development
- UI/UX Design
- Front-end Development
- Web Development Tutorials
- Design to Code
- Web Design Conversion
- PSD to HTML
- Sketch to HTML
- Figma to HTML
- Web Development for Designers
- Learning to Code for Designers
- Design and Development Resources
- Web Development Best Practices
- Design to Development Workflow

2. **Long tail keywords: -**

- "Converting design files to HTML and CSS"
- "Web development tutorials for graphic designers"
- "UI/UX design principles for developers"
- "Front-end development frameworks for designers"
- "Design to development workflow optimization"
- "PSD to HTML conversion tools and tutorials"
- "Figma design to code tutorials"
- "Sketch design to HTML tutorials"
- "Web development for non-coders"
- "Design and development collaboration tools"

**Robot.txt……**

## Q-10) Prepare complete on-page and off-page SEO audit report for www.esellerhub.com

## ANS: -

**Meta Title: -** Custom Inventory Management Software | Online Inventory Systems

**Meta Description: -** "Seller Hub offers the best inventory management software company custom online inventory systems with high-end services for order management. Request a demo today!"

**Meta Keywords: -**

**Short tail keywords: -**

- Eshellerhub
- Shell Scripting
- Linux Shell
- Unix Shell
- Command Line Interface
- Scripting Hub
- Open-Source Community
- DevOps Tools
- Automation Scripts
- System Administration
- IT Automation
- Shell Scripting Tutorials
- Linux Tutorials
- Unix Tutorials
- Command Line Tutorials

**Long tail keywords: -**

- "Bash shell scripting tutorials"
- "Linux system administration scripts"
- "Unix command line interface tutorials"
- "DevOps automation tools for Linux"
- "Open-source shell scripting community"
- "Eshellerhub tutorials and guides"
- "Shell scripting for beginners"
- "Advanced shell scripting techniques"

Robot.txt: -

.....

## Q-11) What are the characteristics of “bad links”?

## ANS-

"Bad links" refer to links that can potentially harm your website's search engine rankings rather than benefiting them. These links are typically considered low-quality, spammy, or manipulative in nature. Here are some characteristics of bad links:

**1. Low Domain Authority:-** Links coming from websites with low domain authority or those that are not considered authoritative in your industry may be seen as low-quality.

**2. Irrelevant Links:-** Links that come from websites or content that are not related to your website's niche or topic can appear unnatural and manipulative.

**3. Paid Links:-** Links that are bought or sold solely for the purpose of influencing search engine rankings violate search engine guidelines. This includes links in advertorials, sponsored posts, or paid placements.

**4. Link Farms:-** Links from link farms or networks designed specifically to manipulate search engine rankings are considered spammy. These are often automated and offer links in bulk.

**5. Exact Match Anchor Text:-** Overuse of exact match anchor text (the clickable text in a hyperlink) that matches a specific keyword can appear unnatural and may be penalized by search engines.

**6. Unnatural Links:-** Links that are placed in a way that seems unnatural or manipulative, such as excessive link exchanges, reciprocal linking schemes, or excessive guest posting solely for link building purposes.

**7. Footer and Sidebar Links:-** Links in footers, sidebars, or templates across multiple pages that are not relevant to the content of the page can be seen as low-quality.

**8. No-follow vs. Do-follow Ratio:-** A disproportionate ratio of no-follow to do-follow links can indicate an attempt to manipulate PageRank flow, which can be flagged by search engines.

**9. Links from Penalized Sites:-** Links from websites that have been penalized or banned by search engines can negatively impact your own website's rankings.

**10. Comment Spam:-** Links placed in comment sections of blogs or forums solely for the purpose of link building without adding any meaningful contribution to the discussion.

It's crucial to regularly monitor your backlink profile and disavow bad links if necessary to prevent them from negatively impacting your SEO efforts. Focus

on acquiring high-quality, relevant links from authoritative sources to improve your website's authority and trustworthiness in the eyes of search engines.

## Q-12) Perform Keyword Research then create a blog on “Importance of IT Training” and provide a link to TOPS Technologies and connect it with the webmaster and Google Analytics

## ANS-

https://uniquecar14.blogspot.com/2024/07/the-importance-of-it-training-in-todays.html

## Q-13) What is the use of Local SEO?

## ANS-

Local SEO (Search Engine Optimization) is crucial for businesses that operate on a regional or local level. It focuses on optimizing your online presence to attract more business from relevant local searches on search engines like Google. Here are some key uses and benefits of Local SEO:

**1. Increased Visibility:-** Local SEO helps your business appear prominently in local search results, making it easier for potential customers in your area to find you.

**2. Targeted Traffic:-** By optimizing your website and content for local keywords and search terms, you attract traffic that is more likely to convert into actual customers because they are specifically searching for products or services in your locality.

**3. Competitive Advantage:-** Many businesses neglect local SEO, so optimizing for local searches can give you an edge over competitors who haven't invested in it.

**4. Google My Business Optimization:-** Local SEO often involves optimizing your Google My Business profile, which is critical for appearing in Google's local pack (the map section that appears in search results).

**5. Increased Website Traffic:-** Effective local SEO strategies can drive more traffic to your website, especially from users on mobile devices who are looking for local businesses.

**6. Improved Conversion Rates:-** Local searches often have higher conversion rates because they are from people who are actively looking for local products or services.

**7. Build Trust and Credibility:-** When your business appears in local search results, especially with positive reviews and ratings, it builds trust and credibility with potential customers.

**8. Cost-Effective Marketing:-** Compared to traditional advertising methods like print ads or direct mail, local SEO is cost-effective and can provide a higher return on investment (ROI).

**9. Integration with Other Marketing Strategies:-** Local SEO can complement other digital marketing strategies such as content marketing, social media marketing, and PPC advertising.

**10. Measurable Results:-** Local SEO efforts can be tracked and analyzed using tools like Google Analytics and Google My Business Insights, allowing you to see what's working and adjust your strategy accordingly.

In summary, Local SEO helps businesses connect with local customers at the exact moment they're looking for your products or services. It's an essential strategy for any business that depends on local clientele to thrive.