WEB CONTENT MANAGEMENT SYSTEM

SYLLABUS:

Web Content Development and Management, Content Types and Formats, Norms and Guidelines of Content Development, Creating Digital Graphics, Audio Production and Editing.

Web Hosting and Managing Multimedia Content, Creating and Maintaining a Wiki Site. Presentation Software Part I, Presentation Software Part II, Screen casting Tools and Techniques, Multilingual Content Development.

Planning and Developing Dynamic Web Content Sites, Website Design Using CSS, Creating and Maintaining a WIKI Site, Creating and Managing a Blog Site.

E- Publication Concept, E- Pub Tools, Simulation and Virtual Reality Applications, Creating 2D and 3 D Animations. Introduction to Moodle, Creating a New Course and Uploading.

Create and Add Assessment, Add and Enroll User and Discussion Forum, Content Management System: Joomla, Content Management System: Drupal

UNIT-1

Web Content development and Management

INTRODUCTION

Web content development and management in simple terms refers to the process of creating, organizing, and taking care of the information and media that you see on websites.

Here's a breakdown:

Web content development refers to the process of creating, editing, and managing the textual, visual, or interactive elements that make up the content of a website. It involves the planning, writing, designing, and organizing of information to be presented on the web.

Web Content Management (WCM) refers to the process of creating, managing, and organizing digital content on a website. It involves the use of specialized software and tools, known as Content Management Systems (CMS), to streamline the creation, publication, and maintenance of web content.

What is Content Management System?

A content management system (CMS) is software that helps users create, manage, and modify and publish content on a website. A web content management system (WCMS) is a type of CMS that allows users to manage website information without any need for technical knowledge.

How does a CMS work ?

A CMS provides a graphical user interface with tools to create, edit and publish web content without the need to write code from scratch.

A CMS has two components:

  a content management application (CMA) a content delivery application (CDA). The CMA is a graphical user interface that enables users to design, create, modify and remove content from a website without HTML knowledge.

The CDA component provides the back-end services that support management and delivery of the content once a user creates it in the CMA.

Advantages of Content Management System

- **Ease of Content Creation and Editing:** CMS platforms provide user-friendly interfaces that make it easy for non-technical users to create, edit, and publish content without requiring knowledge of coding.

- **Time Efficiency:** CMS streamlines the content creation process, enabling users to publish content quickly. Templates and reusable components save time and effort.

- **SEO-Friendly:** Many CMS platforms offer built-in SEO tools or plugins that simplify the optimization of content for search engines, improving the website's visibility.

- **Easy to Scale:** CMS makes it easy for businesses to add new web pages as their business grows.

- **Quick and easy page management:** Any approved user can quickly and easily publish web page without complicated software or programming.

- **Security:** Reputable CMS platforms prioritize security, providing updates and patches to protect against vulnerabilities. Regular security updates help safeguard against potential threats.

- **Mobile Responsiveness:** Many modern CMS platforms are designed to create mobileresponsive websites, ensuring a consistent and user-friendly experience across various devices.

- **Integration Capabilities:** CMS can integrate with other tools and services, such as ecommerce platforms, social media, analytics, and more, enhancing the overall functionality of a website.

Disadvantages of Content Management System:

- **Learning Curve:** Users, especially those new to the CMS, may face a learning curve when trying   to understand and navigate the system's features and functionalities.

- **Customization Limitations:** Some CMS platforms have limitations when it comes to customization. While they offer themes and templates, making extensive design changes or implementing highly unique features may be challenging.

- **Performance Overhead:** Certain CMS platforms can introduce performance overhead due to the additional layers of abstraction and code they add. This may impact website loading times, particularly if not optimized properly.

- **Dependency on Third-Party Plugins:** Many CMSs rely on third-party plugins and extensions for additional functionalities. While these plugins can be beneficial, they may introduce compatibility issues, security vulnerabilities, or become outdated.

Examples of Popular Content Management Systems

WordPress, which we showed you above, is the best example of a popular content management system.

Beyond the self-hosted WordPress software, other popular content management systems include:

- Joomla
- Drupal
- CMS Hub
- Magento (for eCommerce stores)
- Squarespace
- Wix TYPO3

Content Types and Formats

Web content refers to any information or material that is published, presented, or made available on the Web (websites). This consists of wide range of digital content types, including text, images, videos, audio files, interactive elements, and structured data.

•   Web content serves various purposes, such as informing, entertaining, educating, persuading, or engaging users.

•   Effective web content is designed to attract and retain the attention of users, provide value or utility, and achieve specific communication or business objectives.

Content Types

Text Content:

Article/News: Typically used for news updates, blog posts, or articles.

Page: General-purpose content type for creating static pages on a website.

Media Content:

Image: For uploading and managing images on the website.

Video: To handle video content and embed videos on pages.

Audio: Used for managing audio files such as podcasts and music tracks.

Document Content: This includes PDFs, Word documents, and other file types that users can upload and make available for download.

Interactive Content:

Form: Used for creating interactive forms for user input.

Quizzes/Assessments: Interactive quizzes or assessments to engage users and test their knowledge.

Polls/Surveys: Interactive forms to gather opinions, feedback, or data from users.

Metadata Content:

CMS often allows users to add metadata to content items, including titles, descriptions, and tags for improved search and organization

E-Commerce Product Content:

Product Page: Used for managing product information in e-commerce websites. Includes fields like product name, description, price, images, and specifications. Product Category: To categorize and organize products.

Event Content:

 For managing information about events, including date, time, location and registration forms.

User-Generated Content:

Some CMS platforms enable users to submit content, such as comments, reviews, or forum posts.

User Profile: To manage information about registered user.

Widgets and Plugins:

Users can often add custom functionality through widgets or plugins that extend the CMS's capabilities. Some WCMS platforms support modular components or widgets that users can add to pages. These may include things like slideshows, galleries, or interactive elements.

Menus and Navigation Content:

CMS manages the structure of the website, including menus, navigation links, and site maps

Custom Content Types:

Organizations might define custom content types based on specific needs, such as case studies, testimonials, or FAQs.

Email Content:

Newsletters: Newsletters: CMS often integrates with email marketing tools to manage and send newsletters.
Email Campaigns: Targeted messages for specific purposes (e.g., promotions, announcements).

Social Media Content:

Posts: Short updates, announcements, or thoughts shared on social media platforms.

Dynamic Content:

Some CMS platforms support dynamic content, which can be personalized based on user interactions or demographics.

RSS Feeds: Syndicated content from other websites or sources, frequently updated.

Formats

In the context of Content Management Systems (CMS), "formats" typically refer to the way content is structured or presented. These formats help determine how content appears to both website administrators and visitors. Here are two common aspects of formats in CMS:

1) **Content Format:** Content format refers to how textual content is styled and laid out. It includes elements such as fonts, text sizes, colors, headings, paragraphs, bullet points, and other formatting options. CMS often provides tools for users to format text, making it easy to create visually appealing articles, blog posts, or pages without needing extensive coding skills.

2) **Media Format:** This aspect of formats pertains to how non-textual content, such as images, videos, and audio, is displayed on the website. CMS may offer options for resizing, cropping, and positioning media files within web pages. Media formats also include things like image galleries, slideshows, and video players, which determine how these media elements are presented to users.

In summary, formats in a CMS relate to how both textual and media content are styled and arranged to create a visually appealing and user-friendly website. They allow users to control the appearance of their content without delving into complex coding.

Norms and Guidelines Of Content development

Definition: Norms refer to the accepted and expected patterns of behavior, actions, or conduct within a particular group, culture, or society. They represent the standard or typical behavior that is considered appropriate and in line with the values and expectations of that group.

Definition: Guidelines are specific recommendations, instructions, or principles that provide guidance or advice on how to perform a task, achieve a goal, or follow a certain standard. They are often used in professional, educational, or procedural contexts to help individuals or groups make informed decisions or take appropriate actions.

Here are some norms and guidelines of Content development:

1.Know Your Audience:

- Understand your target audience's demographics, preferences, and needs.

- Create a content that resonate with your audience and address their interests and concerns.

2. Clear Objectives:

- Define clear objectives for your content. Determine what you want to achieve with each piece of content.
- Align your content with your overall marketing or communication goals

3. Content Strategy:

- Develop a content strategy that outlines topics, formats, and publishing schedules
- Maintain a consistent tone, style, and branding across your content to build a recognizable and cohesive brand identity.

4. Quality Content:

- Focus on providing valuable and informative content.
- Write in a clear, concise, and engaging manner.
- Avoid grammatical errors and typos. Use credible sources for research and factchecking.

5. SEO Best Practices:

- If creating content for online platforms, consider search engine optimization (SEO) best practices to improve the discoverability of your content.

6. **Readability and Structure:**
   - Use headings, subheadings, and bullet points for better readability. Organize content logically with a clear beginning, middle, and end.

7. **Visual Elements:**
   - Incorporate visual elements such as images, infographics, and videos to enhance the visual appeal of your content. Ensure visual elements are relevant and of high quality.

8. **Accessibility:**
   - Ensure that your content is accessible to a diverse audience. This includes considerations for individuals with disabilities, such as providing alternative text for images and using accessible design principles.

9. **Mobile-Friendly Design:**
   - Optimize your content for various devices, particularly mobile devices. Many users access content on smartphones, so responsiveness is crucial for a positive user experience.

10. **Engagement and Interactivity:**
    - Encourage audience engagement through comments, social media sharing, or interactive elements within your content.

11. **Legal and Ethical Considerations:**
    - Respect copyright laws and give proper credit for any third-party content used.

12. **Adaptability:**
    - Be prepared to adapt your content strategy based on changing trends, feedback, or new information.

13. **Review and Edit:**
    - Thoroughly review and edit your content to eliminate errors, improve clarity, and ensure a polished final product.

14. **Feedback and Iteration:**
    - Collect and analyze feedback from your audience to continuously improve and iterate on your content strategy.

By following these norms and guidelines, you can develop content that is not only appealing to your audience but also aligns with your overarching goals and objectives.

Creating Digital Graphics in CMS

Definition of Digital graphics

Digital graphics refers to the creation, manipulation, and representation of visual images and content using digital technology and computers.

It encompasses a wide range of visual media, including:

▪ 2D Graphics: This includes images, drawings, and designs that exist in two dimensions, often on a flat surface. Examples include digital paintings, icons,logos, and illustrations.

▪ 3D Graphics: These involve the creation of three-dimensional objects and scenes. They are commonly used in video games, computer-aided design(CAD), 3D modeling, and animation.

▪ Raster Graphics: Also known as bitmap graphics, these are composed of individual pixels arranged in a grid. Common raster file formats include JPEG,PNG, and GIF.

▪ Vector Graphics: These are composed of mathematical equations that describe shapes and lines. They can be scaled without loss of quality and are commonly used in logo design (e.g., with formats like SVG).

Creating Digital Graphics in CMS

Creating digital graphics within a Content Management System (CMS) typically involves integrating images, illustrations, or visual content into your website or digital platform.

Types of Graphics: Graphics can include various forms, such as illustrations, photographs, charts, diagrams, maps, animations, and more.

Here are the general steps for creating and managing digital graphics within a CMS:

1.Understand the Platform:

 Familiarize yourself with the specific WCM platform you are using. Different systems may have varying requirements and capabilities for handling graphics.

2. Log In to Your CMS:

- Access the admin panel or dashboard of your CMS by logging in with your credentials.

3. **Access the Content Editor:**

   - Navigate to the section where you can edit or create content. This is usually where you manage pages, posts, or articles.

4. **Create or Edit Content:**

   - Depending on your needs, you can either create a new piece of content or edit an existing one.

5. **Insert Images and Graphics:**

   - Within the content editor, look for options to insert images or media. CMS platforms typically provide a button or toolbar option for this.
   - You may have the option to upload images from your computer or select from a library of previously uploaded graphics.

6. **Upload and Manage Graphics:**

   - If you're uploading new graphics, select the image file(s) from your computer, and upload them to the CMS. Ensure that the images meet the recommended dimensions and file size for your website.
   - Some CMS platforms allow you to organize and categorize your graphics in a media library, making it easier to manage and reuse them in different content.

7. **Position and Format Graphics:**

   - Once you've inserted an image into your content, you can usually adjust its position, size, and alignment. Many CMSs offer options to add captions alt text (for accessibility), and links to images.

8. **Optimize for Web:**

   - It's important to optimize your graphics for the web to ensure fast loading times. This might involve compressing images and using the appropriate file format (e.g., JPEG for photos, PNG for transparency)

9. **Preview and Publish:**

   - Preview how your content looks with the added graphics to ensure it aligns with your design and layout.
   - When you're satisfied, publish or update the content to make it live on your website.

10. Responsive Design:

 If your CMS supports responsive design, ensure that your graphics and layout adapt well to different screen sizes and devices (e.g., smartphones and tablets).

11. SEO Considerations:

 For images, make sure to set appropriate alternative text and image titles to improve SEO and accessibility.

12. Regular Maintenance:

 Periodically review and update your graphics as needed. Ensure that images remain relevant and functional.

The specific steps may vary depending on the CMS you are using, as each CMS has its own interface and features. Popular CMS platforms like WordPress, Joomla, Drupal, and others offer various plugins and extensions that can enhance your ability to work with digital graphics seamlessly.

Audio Production and Editing

Audio production and editing within a web content management system (CMS) involves integrating tools and processes to create, enhance, and manage audio content directly within the CMS platform.

Here are some key considerations and steps for incorporating audio production and editing in a web CMS:

1. **Select a CMS with Audio Support:** Ensure that your chosen CMS has native or compatible support for audio content. Popular CMS platforms like WordPress, Drupal, and Joomla often have plugins or modules that enable audio functionality.

2. **Audio File Formats:** Determine the supported audio file formats by your CMS and choose the appropriate format for your content. Common formats include MP3, WAV, and AAC.

3. **Integration of Audio Players:** Integrate audio players into your CMS to allow users to play audio files directly on your website.

4. **Audio Editing Tools:** Evaluate whether your CMS or associated plugins provide basic audio editing capabilities. Some platforms offer tools for trimming, cutting, and

adjusting audio levels directly within the CMS interface. If not, you might need to use external audio editing software before uploading the files.

5. **Metadata and Descriptions:** Utilize metadata fields within the CMS to add relevant information about each audio file, such as title, description, artist, and genre. This improves searchability and provides context for your audience.

6. **Transcription and Captioning:** If your audio content includes spoken words, some CMS platforms offer transcription services. This can help with accessibility and SEO. Additionally, you can add captions or subtitles to make your audio content more inclusive.

7. **Playback Controls:** CMS typically offers customizable playback controls for your audio. Users can play, pause, adjust volume, and skip within the audio file.

8. **Analytics:** Some CMS platforms provide analytics related to audio content. You can track metrics like the number of plays, audience engagement, and user interactions with your audio.

9. **User Permissions:** Define user roles and permissions within the CMS to control who can upload, edit, and manage audio content. This helps maintain content quality and security.

10. **Backup and Versioning:** Implement a robust backup strategy to prevent data loss. Version control can also be beneficial, allowing you to track changes made to audio files over time.

11. **Testing and Optimization:** Regularly test the audio functionality on different devices and browsers to ensure a seamless user experience. Optimize audio files for streaming to reduce loading times.

Overall, audio production and editing in a CMS streamline the process of managing and delivering audio content to your audience, making it a powerful tool for content creators and organizations.