

**CSC 106**

**WEBSITE DESIGN AND MANAGEMENT**

## **WEBSITE DESIGN AND MANAGEMENT**

### **Course Outline:**

1. Design theory principles
2. Applying the design principles
3. Basics of HTML
4. Cascading Style Sheets
5. Site Management, Server-side and client-side scripting
6. Effective use of web authoring tools
7. Design and development of websites

## **WEB**

1. A webpage is a document that is accessible through the internet.
2. A website is a collection of web pages.
3. There are 3 ways of accessing a webpage:
  - Typing a web address
  - Clicking on a link within a document
  - Putting a query in the search engine
4. Why people search on websites:
  - To get needed information
  - To complete a task

## **WHY DESIGN WEBSITE**

Focus should be when a website is built:

1. Designing for the customers/visitors
2. Containing content in an organized manner
3. Putting a page appealing to the visitors

## **Designing a Website Includes the Following:**

1. Adding colors
2. Selecting fonts
3. Using images
4. Writing text that provides good information about your service

## **Advantages of Web Design:**

1. Saves time
2. Gets you more business
3. Reinforces brand image

## **Characteristics of a Good Website:**

1. Consistent brand identity
2. More visitors who stay on the page
3. Distinction from competitors
4. Focus, structure, and purpose
5. Smooth navigation from one page to another
6. Clicking options for functions

### **TYPES OF WEBSITE:**

Two categories of website

1. **Static website** (read-only)

#### **Advantages of Static Website:**

- It can be developed in a shorter time because it is less complicated than a dynamic website.
- It is cheaper because it takes less effort and the portions are not as diverse as a dynamic website.
- **Flexibility:** Each page in a static website can be designed differently.

#### **Disadvantages:**

- It requires web development expertise to update the site.
  - A static website is not as useful to the user as a dynamic website

2. **Dynamic Website:**

The website owner has the opportunity to update new content, and there is no limit to the features that can be added.

#### **Advantages of a Dynamic Website:**

- More functional and efficient.
- Easier to update.

#### **Disadvantages:**

- Slower and more expensive to develop.

- Hosting the website costs more than a static one.

## Major Web Technologies

(1) *Client side (Focus on client device)*

(2) *Server side (Engine driving the website)*

### Client Side

- **XHTML:** Allows pages to load faster, visible on all browsers, search engine priority.
- **Jquery:** A JavaScript library; easy to use; allows developers to build websites faster; easy to learn.
- **CSS:** Cascading Style Sheet.
- **JavaScript:** Interpreted scripting language for the creation of web pages; creates dynamic webpages
- **Frontend Frameworks or Libraries:**
  - React
  - Angular

### Server Side

Languages, frameworks, or libraries used on server-side tasks, including database management, business logic, database interaction, etc. It is focused on what happens behind the scenes and is not visible to clients using it.

1) PHP (open source & downloadable)

=> Languages

- \* PHP
- \* Python
- \* Ruby

=> Web Servers

- \* Apache (host databases and attend request)

=> Databases

- \* MySQL
- \* PostgreSQL

=> Frameworks

- \* Laravel (PHP)

\* Django (Python)



## **CONTENT MANAGEMENT SYSTEM.**

A content management system is an application that enables multiple users to manage content. It can be data or information for a website.

### **Examples of Content Management Systems:**

1. WordPress (Very easy to use, flexible, and comes with a lot of templates)
2. Drupal (Advanced than WordPress, has more features and more options)
3. Joomla (Functionality lies between the two)

## **WEBSITE DESIGN PRINCIPLES**

**A. Website Purpose:** Identify the purpose of every page on the website. Varies and is diverse.

1. **Description of Expertise:** This is usually to sell products or services.
2. **Building Reputation:** So visitors to your page can see you as reliable and trustworthy.
3. **Generating Leads:** Link visitors to the page to the services they need.
4. **Sales and Aftercare:** It is involved in online sales and customer care.

**B. Simplicity:** It allows enhancement of usability of the website. As a rule, it is good practice to keep the number of elements on the website below five. They should be colors that will complement each other.

**C. Typography**

The typeface to be chosen must be flexible.

The number of fonts should not be more than three.

**D. Imagery**

The website should include images, illustrations, videos, and more graphics.

**E. Navigation**

A wayfinding system on the website.

It tells users how to move around.

**F. F-shaped pattern reading**

**G. Visual Hierarchy**

**H. Elements are arranged in order of importance.**

**I. Content**

Information on the webpage.

Using language that attracts and influences visitors.

**J.** Load Tag

**K.** Mobile Friendly