

Module 7: CMS Framework (Special Classes 25–27)

Module Duration: 6 Hours (3 Classes × 2 Hours)

Software: XAMPP, Visual Studio Code, WordPress (Latest Version), Web Browser

Module Learning Objectives

By the end of this module, students will be able to:

- Understand what a Content Management System (CMS) is.
 - Install and configure WordPress on a local server.
 - Create and manage websites using WordPress.
 - Customize themes and install plugins.
 - Build a professional business website without coding.
 - Understand the differences between CMS-based and custom web development.
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Class 25 (2 Hours)

Introduction to CMS & WordPress Installation

Learning Outcomes

Students will be able to:

- Explain the concept of a CMS.
- Compare CMS and custom web development.
- Install WordPress on a local server.
- Explore the WordPress Dashboard.

Topics Covered

What is a CMS?

A **Content Management System (CMS)** is software that allows users to create, edit, organize, and publish website content without extensive programming knowledge.

Popular CMS Platforms

- WordPress
- Joomla
- Drupal
- Magento
- OpenCart
- Shopify (Hosted CMS)

Advantages of Using a CMS

- Easy to use
- Faster website development
- SEO-friendly
- Thousands of themes and plugins
- User management
- Secure and regularly updated

CMS vs Custom Development

CMS	Custom Development
Faster development	More development time
Minimal coding	Full coding required
Easy content management	Requires programming skills
Theme and plugin support	Built from scratch
Suitable for most business websites	Suitable for highly customized applications

Installing WordPress

- Download WordPress
- Create a MySQL database
- Configure `wp-config.php`
- Complete the installation wizard
- Log in to the WordPress Admin Dashboard

WordPress Dashboard Overview

- Dashboard
- Posts
- Pages
- Media
- Appearance
- Plugins
- Users
- Settings

- Tools

Practical Exercise

- Install XAMPP.
- Create a database.
- Install WordPress locally.
- Log in to the WordPress Admin Dashboard.

Assignment

Install WordPress on your own computer and take screenshots of each installation step.

Class 26 (2 Hours)

Themes, Plugins & Website Customization

Learning Outcomes

Students will be able to:

- Install and customize WordPress themes.
- Add pages and menus.
- Install useful plugins.
- Create a responsive website layout.

Topics Covered

WordPress Themes

- Free Themes
- Premium Themes
- Installing Themes
- Activating Themes
- Theme Customization

Theme Customizer

- Site Identity
- Logo
- Colors

- Typography
- Header
- Footer
- Homepage Settings

Creating Pages

- Home
- About
- Services
- Gallery
- Contact

Navigation Menu

- Primary Menu
- Footer Menu
- Dropdown Menus

WordPress Plugins

Popular plugins:

- Contact Form
- SEO Plugin
- Security Plugin
- Backup Plugin
- Cache Plugin
- Image Optimization Plugin

Widgets

- Recent Posts
- Search
- Categories
- Social Media
- Contact Information

Practical Exercise

Students will:

- Install a business theme.
- Create five website pages.
- Create navigation menus.
- Install a contact form plugin.

- Customize the homepage.

Assignment

Develop a business website homepage using WordPress.

Class 27 (2 Hours)

Website Management, SEO & Deployment

Learning Outcomes

Students will be able to:

- Manage WordPress content.
- Perform website backups.
- Improve website SEO.
- Deploy a WordPress website to a live server.

Topics Covered

Managing Content

- Posts
- Pages
- Categories
- Tags
- Media Library

User Management

- Administrator
- Editor
- Author
- Contributor
- Subscriber

Website Backup & Restore

- Manual Backup
- Plugin-based Backup

- Database Export
- File Backup

WordPress Security

- Strong Passwords
- Automatic Updates
- Security Plugins
- Backup Strategy
- Login Protection

Basic SEO

- SEO-friendly URLs
- Meta Titles
- Meta Descriptions
- Image Alt Text
- XML Sitemap

Website Performance

- Image Optimization
- Caching
- Database Cleanup
- Plugin Management

Website Deployment

- Domain & Hosting Setup
- Uploading WordPress Files
- Importing the Database
- Configuring the Website
- Testing the Live Website

Practical Exercise

Students will:

- Optimize the website.
 - Create a backup.
 - Configure basic SEO settings.
 - Prepare the website for deployment.
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Module Project

Students will develop a **Professional Business Website using WordPress** with:

- Responsive Homepage
 - About Page
 - Services Page
 - Blog Section
 - Contact Page
 - Navigation Menu
 - Contact Form
 - Image Gallery
 - SEO-Friendly Structure
 - Mobile-Responsive Design
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Module Assessment

Assessment	Marks
CMS & WordPress Quiz	10
Practical Exercises	20
Assignments	20
Business Website Project	40
Presentation & Viva	10
Total	100

Learning Outcomes

After completing **Module 7: CMS Framework**, students will be able to:

- Explain the purpose and benefits of a CMS.
- Install and configure WordPress on a local server.
- Create and manage a complete website using WordPress.
- Customize themes, menus, widgets, and plugins.
- Apply basic SEO, security, and backup practices.
- Deploy and maintain a WordPress website for clients or personal projects.
- Choose between CMS-based and custom web development based on project requirements.