

Web development using PHP & MySQL with HTML5, CSS, JavaScript

Static Webpage Development

Introduction to web

- Browser
- Website
- Webpage
- Content of webpage
- Static vs dynamic webpage
- Technologies to create static webpage
- Technologies to create dynamic webpage

HTML5

Introduction to HTML

- What is HTML?
- Minimum structure of HTML
- What is tag in HTML?
- What is element in HTML?
- What is void element in HTML?
- What is Attribute?
- Nesting Elements

Basic elements

- The <html> element
- The <head> element
- The <body> element
- The <title> element
- The DOCTYPE Declaration
- Heading elements (h1-h6)
- The <p> element
- The element
- The <i> element
- The <u> element
- The element
- The element
- The <sup> element
- The <sub> element

The <audio> element
The <video> element
The <figure> element
The <figcaption> element
The element
The <hr> element
The
 element
The <a> element

Table in HTML

The <table> element
The <tr> element
The <th> element
The <td> element

Input from User

The <input> element
The <textarea> element
The <select> element
The <option> element
The <optgroup> element
The <fieldset> element
The <legend> element
HTML5 input types
HTML5 input attributes

List in HTML

The element
The element
The element

Elements for layouts

The <div> element
The element
The <header> element
The <footer> element
The <nav> element
The <section> element
The <aside> element
The <article> element

More elements in HTML

The <meta> element
The <script> element
The <link> element

Global attributes

The id attribute
The class attribute
The hidden attribute
The title attributes
The lang attributes

More HTML

HTML Symbols
Various attributes depend on elements
Validating Form data using HTML5
Embed youtube video in Webpage

CSS (Cascading style sheet)

Basics of CSS

What is CSS and why we need it?
Internal CSS
External CSS
Inline CSS

CSS selectors

The type selector
The class selector
The id selector
The attribute selector
The descendant selector
grouping selector
The child selector
The universal selector

More CSS

Block level tags and inline level tags
Difference between div and span
Fonts and typography
Managing text styles
CSS colors
Positioning elements
Pseudo classes

CSS box model

Templates

HTML, CSS based templates
Create website using templates

Website Hosting

Free subdomain
Free hosting
Free vs paid hosting

JavaScript

Basics of JavaScript

Variables
Operators

Expression and control flow in Javascript

Conditionals
Looping

Functions

JavaScript Functions
Create your own functions

DOM (Document Object model)

Interacting with page Elements
Accessing CSS properties from JavaScript
Change attributes of HTML tags

More JavaScript

using Interrupts
Animation
Validation

Project [Collection of related static webpages]

Dynamic Webpage Development

Basic Terms

Network
Internet
Client
Server

Types of server
Web Server
Web Client
IP address
Port number

More basics

HTTP request
HTTP response
Static webpage processing
Dynamic webpage processing
Ways of HTTP request

Installation of Softwares

Installation of PHP, MySQL and Apache (Wampserver / XAMPP)
Installation of IDE

Basics of PHP

Introduction to PHP

How to display output
Datatypes and variable declaration
Datatype conversion
Using comments
Operators
Type casting

Control flow in PHP

Conditionals
 The if statement
 The else statement
 The elseif statement
 The switch statement
Looping
 while loop
 do...while loop
 for loop
 breaking out of a loop

Arrays in PHP

Numerically Indexed arrays

associative arrays
assignment using the array keyword
the foreach .. as loop
Multidimensional arrays
Super global arrays

Functions in PHP

string functions
date time functions
utility functions
using array functions
Checking of function existence
create your own functions
passing by value
passing by reference
global variables in functions

Form Handling in PHP

Difference between GET and POST
Building Forms
Retrieving submitted data

Reusing Code in PHP

The include statement
The include_once statement
The require statement
The require_once statement
Breaking HTML, CSS template and reuse of it

OOPS programming in PHP

Declaring a class
Creating an object
Constructors
Destructors
Writing methods

Exception Handling In PHP

types of errors
@ operator
try block
catch block

Cookies in PHP

Setting a cookie
Accessing a cookie
Destroying a cookie

Session in PHP

Starting a session
Ending a session
Insert value in session
Show value from session
Update value of session
Destroy value of session
Session id

Database Programming In PHP using MySQL

Basic of database

What is data?
What is information?
What is table?
What is database?
What is RDBMS?
What is SQL?

Introduction to MySQL

Accessing MySQL via the command line
Accessing MySQL via phpMyAdmin
Import and export of database

SQL using MySQL

Creating a database
Selecting database
Datatypes
Creating a table
Inserting data into table
Show data from table
Show filtered data from table
Update data in table
Delete data from table
Drop table
Drop database
Constraints

Accessing MySQL using PHP

Executing select query using mysqli

Executing non select query using mysqli

More PHP

Uploading and Downloading in PHP

Redirection and hashing

Authentication (User Registration, Login, Logout etc.)

Client side and server side validation

Sending email through coding

CAPTCHA

Configure PHP.INI

Ajax

What is Ajax?

Using XMLHttpRequest

WordPress

Installation of WordPress

Getting started with WordPress

WordPress as a blogging platform

WordPress as a content management system

Work with WordPress themes

Manage multimedia in WordPress

Install plugins in WordPress

Hosting of Dynamic website

Project (Dynamic Website)