

Web Development Classes

Introduction to Web Development

- Overview of web development technologies
- Client-side vs. server-side scripting
- Setting up a local development environment (e.g., XAMPP, WAMP)
- HTML and CSS fundamentals

Introduction to PHP

- Understanding PHP and its history
- Setting up a PHP development environment
- Writing your first PHP script
- Variables, data types, and operators in PHP

Web Development Classes

Control Structures and Functions

- Conditional statements (if, else, switch)
- Loops (for, while, foreach)
- Functions in PHP
- Scope and variable visibility

Arrays and Strings

- Creating and manipulating arrays
- Working with multidimensional arrays
- String manipulation functions
- Regular expressions in PHP

Web Development Classes

Forms and Superglobals

- Creating HTML forms
- Handling form data in PHP
- Working with `$_GET`, `$_POST`, and `$_REQUEST` superglobals
- Form validation and data sanitization

Object-Oriented PHP

- Introduction to object-oriented programming (OOP)
- Classes and objects in PHP
- Constructors and destructors
- Inheritance and polymorphism

Web Development Classes

Database Connectivity (MySQL)

- Introduction to databases
- Setting up a MySQL database
- Connecting to MySQL using PHP
- Performing CRUD operations (Create, Read, Update, Delete)

Sessions and Cookies

- Understanding sessions and cookies
- Using sessions to persist data
- Handling user authentication
- Security considerations

Web Development Classes

Error Handling and Debugging

- Common PHP errors and warnings
- Debugging techniques and tools
- Logging errors
- Best practices for error handling

Web Security

- Common web security threats (SQL injection, XSS, CSRF)
- Input validation and sanitization
- Cross-site scripting (XSS) prevention
- Cross-site request forgery (CSRF) prevention

Web Development Classes

Working with APIs

- Understanding RESTful APIs
- Consuming APIs using PHP (cURL, Guzzle)
- JSON and XML data manipulation
- Authentication with APIs

Content Management Systems

- Introduction to popular CMS like WordPress or Joomla
- Customizing and extending CMS functionality with PHP
- Theme and plugin development

Web Development Classes

Project Development

- Group or individual projects to apply what you've learned
- Emphasis on best practices, coding standards, and project management
- Regular code reviews and feedback

Deployment and Hosting

- Preparing your PHP application for production
- Choosing a hosting provider and configuring a web server
- Deploying your PHP project
- Server maintenance and scaling considerations

Web Development Classes

Advanced Topics

- Performance optimization
- API development with PHP
- Real-time applications (e.g., WebSocket)
- Testing and quality assurance

Final Project and Presentation

- Work on a final PHP project
- Document your project and code
- Present your project to the class

Thank You!