

Training content

➤ ***HTML5***

➤ ***CSS3***

➤ ***JS***

➤ ***DB***

➤ ***PHP***

➤ ***SEO***

HTML:

- HTML Basics:
 - HTML Document Structure
 - HTML Elements and Tags
 - HTML Attributes
- Lists:
 - Ordered Lists
 - Unordered Lists
 - Definition Lists
- Tables:
 - Creating Tables
 - Table Rows and Columns
 - Table Headings
 - Table Borders and Styling
- Forms:
 - Form Elements
 - Text Input and Text area
 - Radio Buttons and Checkboxes
 - Submitting Forms

- Links and Anchor Tags:
 - Creating Hyperlinks
 - Linking to External Resources
 - Anchor Tags
- Images:
 - Inserting Images
 - Image Attributes
 - Image Maps
- Semantic HTML:
 - Semantic Elements
 - Using Semantic Tags for SEO
- HTML5 Audio and Video:
 - Embedding Audio and Video
 - HTML5 Media Elements
- HTML Forms Validation:
 - Using HTML5 Form Validation
 - Custom JavaScript Validation
- HTML Metadata:
 - Meta Tags

- Setting Page Title and Encoding

CSS3:

1. Introduction in CSS
 2. CSS Syntax
 3. Including CSS in HTML
 4. CSS Selectors
 5. CSS Color
 6. CSS Text & Fonts
 7. CSS Box Model
 8. CSS Units
 9. CSS Position
 10. CSS Background
 11. CSS Variables
 12. CSS Flexbox
 13. CSS Media Queries
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JS:

1. JavaScript Basics:

- Introduction to JavaScript
- Variables and Data Types in JavaScript
- Basic Operations in JavaScript (+, -, *, /)

2. Control Flow:

- Conditions and Conditional Statements (if and else)
- Loops (such as for and while)
- Switch Statement

3. Functions and Methods:

- Defining and Calling Functions
- Parameters and Return Values of Functions

- Anonymous Functions and Function Expressions

4. Objects and Arrays:

- Creating and Manipulating Objects
- Array Operations (Adding, Removing Elements, etc.)

5. Events and DOM Manipulation:

- Finding and Manipulating DOM Elements
- Event Handling (e.g., Click, Drag, and Drop)

6. Advanced JavaScript Concepts:

- Promises and Asynchronous Programming with Async/Await
- Error Handling and Exceptions
- AJAX and Fetching Data from Servers

7. Object-Oriented Programming (OOP):

- Understanding Objects in JavaScript
- Inheritance and Object Usage

8. Libraries and Frameworks:

- Using Libraries like jQuery
- Introduction to Frameworks like Angular, React, and Vue.js

9. UI/UX Development:

- Creating UI Effects and Enhancements using JavaScript and CSS

10. Web Application Development:

- Building Dynamic Web Applications with JavaScript and Backend Servers

Database

1. Database Concepts:

- What Are Databases?
- Types of Databases (SQL and NoSQL Databases)

2. SQL Databases (Relational Databases):

- Table Design and Relationships
- Basic SQL Queries (SELECT, INSERT, UPDATE, DELETE)
- Understanding Primary Keys and Foreign Keys

3. SQL Query Language:

- Advanced SELECT Queries (JOIN, GROUP BY, HAVING)
- Conditional Queries

- Subqueries

4. Database Design:

- Optimizing Table Design
- Data Organization and Avoiding Redundancy (Normalization)
- Indexing Concepts

5. Database Management:

- Creating, Deleting, and Modifying Tables and Data
- Backing Up and Restoring Databases
- Database Security and Permissions

6. NoSQL Databases:

- Types of NoSQL Databases (e.g., MongoDB and Firebase)

- Using Documents, Keys, and Values in NoSQL

- SQL vs. NoSQL Comparison

7. Using Databases in Applications:

- Integrating Databases with Web and Mobile Applications

- Using Databases in Content Management Systems (CMS)

- Practical Examples of Database Usage in Real-world Projects

8. Security and Performance in Databases:

- Implementing Data Security Practices

- Optimizing Database Performance

- Efficient Querying and Data Storage

P h P:

1. Introduction to PHP:

- What is PHP?
- PHP Syntax and Basic Structure
- Setting Up a PHP Development Environment

2. PHP Variables and Data Types:

- Declaring Variables
- Data Types (String, Integer, Float, Boolean)
- Variable Scope (Local and Global)

3. PHP Control Structures:

- Conditional Statements (if, else, elseif)
- Loops (for, while, foreach)
- Switch Statement

4. Functions in PHP:

- Creating Functions
- Function Parameters and Return Values
- Built-in PHP Functions

5. Arrays in PHP:

- Indexed Arrays
- Associative Arrays
- Multidimensional Arrays
- Array Functions

6. Working with Forms and User Input:

- Handling Form Submissions
- Sanitizing and Validating User Input
- Uploading Files with PHP

7. Working with Databases

(MySQL/MariaDB):

- Connecting to a Database
- Executing SQL Queries
- Fetching and Manipulating Data
- Prepared Statements for Security

8. PHP Sessions and Cookies:

- Managing User Sessions
- Storing Data in Cookies
- Security Considerations

9. PHP Error Handling and Debugging:

- Error Reporting and Logging
- Debugging Techniques
- Handling Exceptions

10. Object-Oriented PHP:

- Introduction to Object-Oriented Programming (OOP)

- Classes and Objects

- Inheritance and Polymorphism

11. Working with Files and Directories:

- Reading and Writing Files

- File Uploads and Handling

- Directory Manipulation

12. PHP Security Best Practices:

- SQL Injection Prevention

- Cross-Site Scripting (XSS) Prevention

- Session Management Security

13. Working with APIs and Web Services:

- Consuming RESTful APIs

- Sending HTTP Requests

- Parsing JSON and XML

14. PHP Frameworks (Optional):

- Introduction to Popular PHP Frameworks (e.g., Laravel, Symfony)
 - Building Web Applications with a Framework
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يجب التركيز على ما يلي:

- وجود لابتوب لكل متدرب + شاحن + انترنت
- مساحة في الجهاز على الأقل 1 جيجا
- في حال عدم توفر مساحة، وجود فلاش
- العلم بأن كل محاضرة تدريبية تحوي مشروعين على الأقل
- تحميل فيجول كود
- Xampp

يمكن تقديم كل محتوى على انفراد

1(HTML CSS JS)

2(DB - Design and development-)

3(PHP)

لكل واحد 20 ساعة تدريبية

و 5 ساعات على محاضرتين مشاريع لكل جزء

سوار اعیده