MS Office Training

This course is designed to provide comprehensive training in the essential tools of Microsoft Office, including Word, Excel, and PowerPoint. Gain proficiency in creating professional documents, analyzing data, and designing impactful presentations to enhance your productivity.

Tools Covered:

- **Microsoft Word**
- **Microsoft Excel**
- **Microsoft PowerPoint**

Course Overview
This course will help you:

- Master the core tools of MS Office to streamline tasks and boost efficiency.
- Learn advanced features for document creation, data analysis, and presentation design.
- Build skills applicable to a wide range of professional roles.

Course Curriculum

Module 1: Microsoft Word

- Document Creation and Formatting
    - Text Formatting, Alignment, and Styles
    - Working with Headers, Footers, and Page Layout
- Advanced Tools
    - Tables, Charts, and Graphics
    - Mail Merge for Bulk Document Processing
- Collaboration Features
    - Track Changes and Comments
    - Sharing and Protecting Documents

Module 2: Microsoft Excel

- Basic Excel Functions
    - SUM, AVERAGE, COUNT, and IF Formulas
    - Sorting and Filtering Data
- Data Analysis and Visualization

    - PivotTables and Charts
    - Conditional Formatting
- Advanced Excel Techniques
    - Lookup Functions: VLOOKUP, HLOOKUP
    - Data Validation and Protection

Module 3: Microsoft PowerPoint

- Designing Professional Presentations
    - Slide Layouts, Themes, and Templates
    - Adding Images, Charts, and Tables
- Animation and Transitions
    - Using Animations for Dynamic Presentations
    - Transition Effects Between Slides
- Advanced Presentation Tools
    - Embedding Media and Hyperlinks
    - Presenter View and Slide Timings

Key Features:

- Hands-on Practice: Work on real-world scenarios and projects.
- Comprehensive Coverage: Includes beginner to advanced topics for all tools.
- Certification: Earn a certificate of completion to showcase your MS Office skills.

Who Should Attend?

- Professionals seeking to improve productivity in the workplace.
- Students aiming to build essential computer skills.
- Anyone interested in mastering MS Office for personal or professional use.

Python Training Program

This course is designed to provide comprehensive training in Python, covering its core concepts, libraries, and real-world applications. Whether you are a beginner or looking to enhance your programming skills, this course will equip you with the knowledge to build robust and scalable solutions.

Tools & Technologies Covered:

- **Core Python**
- **Libraries**: NumPy, Pandas, Matplotlib, Seaborn
- **Frameworks**: Flask/Django (Optional Advanced Topics)

Course Overview
This course will help you:

- Understand Python programming from basics to advanced concepts.
- Work with Python libraries to analyze and visualize data.
- Automate tasks and develop applications using Python.

Course Curriculum

Module 1: Python Basics

- Introduction to Python
  - What is Python?
  - Setting Up Python and IDEs (e.g., Jupyter, PyCharm)
- Python Syntax and Fundamentals
  - Variables and Data Types
  - Control Structures: If, Loops (for, while)
- Basic Data Structures
  - Lists, Tuples, Sets, and Dictionaries

Module 2: Intermediate Python

- Functions and Modules
  - Writing Custom Functions
  - Importing and Using Modules
- File Handling
  - Reading and Writing Files

    - Working with CSV and JSON Files
- Error and Exception Handling

Module 3: Python for Data Analysis

- Introduction to NumPy
    - Working with Arrays
    - Performing Mathematical Operations
- Data Manipulation with Pandas
    - DataFrames and Series
    - Data Cleaning and Transformation
- Data Visualization
    - Plotting with Matplotlib
    - Advanced Visualizations with Seaborn

Module 4: Automation with Python

- Automating Tasks with Scripts
- Web Scraping Basics (Using BeautifulSoup or Selenium)
- Working with APIs to Extract and Process Data

Module 5: Advanced Topics (Optional)

- Introduction to Flask/Django (Web Development)
    - Creating Basic Web Applications
    - Handling Requests and Responses
- Introduction to Machine Learning (Optional)
    - Using Scikit-learn for Data Modeling

Key Features:

- Hands-on Projects: Build Python scripts, data analysis tools, and mini-applications.
- Comprehensive Learning: From Python basics to advanced libraries.
- Certification: Earn a Python certificate upon successful completion.

Who Should Attend?

- Aspiring programmers and software developers.
- Data enthusiasts looking to work with Python for analytics.
- IT professionals seeking to automate tasks and processes.

Power BI Training Program

This course is designed to provide comprehensive training in Power BI, equipping learners with the skills to analyze data, create interactive dashboards, and deliver actionable insights. Whether you're a beginner or an experienced data professional, this course will help you leverage Power BI for advanced data visualization and reporting.

Tools & Technologies Covered:

- **Power BI Desktop**
- **Power BI Service**
- **Power Query**
- **DAX (Data Analysis Expressions)**

Course Overview
This course will help you:

- Connect to various data sources and transform data using Power Query.
- Create interactive dashboards and reports to visualize data effectively.
- Write advanced DAX calculations for deep analytical insights.
- Publish and share reports using the Power BI Service.

Course Curriculum

Module 1: Introduction to Power BI

- What is Power BI?
- Understanding the Power BI Ecosystem (Desktop, Service, and Mobile)
- Installing and Setting Up Power BI Desktop

Module 2: Connecting and Transforming Data

- Importing Data from Multiple Sources (Excel, SQL, Web)
- Power Query Basics
    - Data Cleaning and Transformation
    - Merging and Appending Queries
- Data Modeling
    - Creating Relationships Between Tables
    - Star Schema and Snowflake Schema

Module 3: Building Visualizations

- Creating Basic Visuals
    - Bar Charts, Line Charts, and Pie Charts
    - Tables and Matrix Visualizations
- Advanced Visualizations
    - Maps, Treemaps, and Heatmaps
    - Custom Visualizations from the Marketplace
- Using Filters and Slicers for Interactivity

Module 4: Introduction to DAX (Data Analysis Expressions)

- Writing Basic DAX Calculations
    - SUM, COUNT, AVERAGE, and Logical Functions
- Advanced DAX
    - Calculated Columns and Measures
    - Time Intelligence Functions (YTD, QTD, MTD)
- Optimizing DAX Queries

Module 5: Building Dashboards and Sharing Reports

- Designing Interactive Dashboards
    - Using Bookmarks, Buttons, and Tooltips
    - Adding Drill-Through Pages
- Publishing Reports to Power BI Service
    - Managing Datasets and Workspaces
    - Scheduling Data Refreshes

Module 6: Advanced Power BI Features

- Working with Row-Level Security (RLS)
- Power BI with Python and R for Advanced Analytics
- Power BI Integration with Power Automate

Key Features:

- **Hands-On Practice**: Work on real-world datasets to build reports and dashboards.
- **Industry-Relevant Curriculum**: Learn best practices for data visualization and reporting.
- **Certification**: Earn a Power BI certificate upon successful completion.

Who Should Attend?

- Data Analysts and Business Intelligence Professionals.

- Business Users who work with data-driven decision-making.
- Anyone interested in learning advanced data visualization techniques.

Advanced Excel Training

This course is designed to equip learners with advanced Microsoft Excel skills for efficient data analysis, reporting, and automation. Whether you're a professional or a student, this course will take your Excel expertise to the next level, enabling you to handle complex tasks with ease.

Tools Covered:

- Microsoft Excel (Advanced Features)

Course Overview
This course will help you:

- Master advanced Excel formulas and functions for data analysis.
- Create dynamic dashboards and reports.
- Automate repetitive tasks using advanced Excel features.

Course Curriculum

Module 1: Advanced Formulas and Functions

- Logical Functions: IF, AND, OR, IFERROR
- Lookup and Reference Functions: VLOOKUP, HLOOKUP, INDEX-MATCH
- Text Functions: CONCATENATE, LEFT, RIGHT, MID, TRIM
- Array Formulas and Dynamic Arrays
- Date and Time Functions

Module 2: Data Analysis and Management

- Data Cleaning and Preparation
    - Removing Duplicates
    - Text-to-Columns and Flash Fill
- Sorting and Filtering Data
- Advanced Conditional Formatting
    - Formula-Based Rules
    - Highlighting Trends and Outliers

Module 3: PivotTables and PivotCharts

- Creating and Customizing PivotTables

- Using Slicers and Timelines
- Grouping Data and Performing Calculations
- Building Interactive PivotCharts

Module 4: Advanced Charting Techniques

- Creating Combo Charts
- Waterfall and Funnel Charts
- Dynamic Charts with Drop-Downs
- Sparklines and Data Bars

Module 5: Automation with Macros and VBA Basics

- Recording and Editing Macros
- Writing VBA Code for Automation
- Creating Custom Functions (UDFs)
- Debugging and Managing VBA Errors

Module 6: Dashboard Creation

- Combining Charts, Tables, and Slicers
- Designing Interactive Dashboards
- Using Power Query for Data Integration

Key Features:

- Hands-On Practice: Work on real-world datasets and projects.
- Industry-Relevant Training: Learn skills applicable to various business scenarios.
- Certification: Earn an Advanced Excel certificate upon course completion.

Who Should Attend?

- Data Analysts and Business Professionals seeking advanced Excel skills.
- Students and Professionals looking to enhance their resume with Excel expertise.
- Anyone aiming to automate tasks and improve data analysis efficiency.

C and C++ Programming Training

This course provides a comprehensive introduction to the C and C++ programming languages, designed to help learners build a strong foundation in programming concepts and problem-solving. Gain the skills needed to create efficient, structured, and scalable applications.

Tools & Technologies Covered:

- **C Language**
- **C++ Language**
- **IDEs**: Code::Blocks, Visual Studio, GCC Compiler

Course Overview
This course will help you:

- Learn the fundamentals of programming with C.
- Master object-oriented programming concepts with C++.
- Develop the ability to write efficient, modular, and error-free code.

Course Curriculum

C Programming

Module 1: Basics of C Programming

- Introduction to C Language and Compilers
- Variables, Data Types, and Operators
- Input and Output in C
- Control Structures
    - Decision-Making (if, if-else, switch)
    - Loops (for, while, do-while)

Module 2: Functions and Modular Programming

- Writing and Using Functions
- Parameter Passing and Return Values
- Recursion Basics

Module 3: Arrays and Strings

- One-Dimensional and Multi-Dimensional Arrays
- String Handling Functions in C
- Array-Pointer Interactions

Module 4: Pointers and Memory Management

- Basics of Pointers
- Dynamic Memory Allocation (malloc, calloc, free)
- Pointers to Functions

Module 5: Structures and File Handling

- Defining and Using Structures
- Reading and Writing to Files
- Random and Sequential Access to Files

C++ Programming

Module 6: Introduction to C++

- Differences Between C and C++
- Compiling and Running C++ Programs
- Introduction to Object-Oriented Programming

Module 7: Classes and Objects

- Defining Classes and Creating Objects
- Member Functions and Access Specifiers
- Constructors and Destructors

Module 8: Advanced Object-Oriented Concepts

- Inheritance and Polymorphism
    - Single, Multiple, and Multilevel Inheritance
    - Function Overloading and Overriding
- Operator Overloading
    - Defining Custom Operators
    - Stream Operators

Module 9: Templates and Exception Handling

- Function and Class Templates
- Standard Template Library (STL)
    - Vectors, Lists, and Maps

- Handling Errors with try-catch

Module 10: File I/O in C++

- File Streams (ifstream, ofstream)
- Reading and Writing to Files
- Random File Access

Key Features:

- Hands-On Practice: Work on coding exercises and mini-projects.
- Industry-Relevant Training: Develop problem-solving skills and structured programming techniques.
- Certification: Earn a C and C++ Programming certificate upon successful completion.

Who Should Attend?

- Beginners interested in learning programming.
- Students pursuing computer science or engineering.
- Professionals looking to strengthen their programming foundations.

Java Programming Training

This comprehensive course is designed to provide in-depth knowledge of Java programming, from its foundational concepts to advanced topics. Whether you're a beginner or an experienced programmer, this course will equip you with the skills needed to develop robust, scalable, and platform-independent applications.

Tools & Technologies Covered:

- **Java SE (Standard Edition)**
- **Integrated Development Environments (IDEs): Eclipse, IntelliJ IDEA, NetBeans**
- **Java Development Kit (JDK)**

Course Overview
This course will help you:

- Understand the fundamentals of Java programming.
- Learn object-oriented programming (OOP) concepts and best practices.
- Develop desktop, web, and mobile applications using Java.
- Gain exposure to advanced Java features like multithreading and database integration.

Course Curriculum

Module 1: Introduction to Java

- Overview of Java and Its Features
- Java Development Kit (JDK) and Java Runtime Environment (JRE)
- Setting Up the Development Environment
- Writing, Compiling, and Running Java Programs

Module 2: Core Java Concepts

- Variables, Data Types, and Operators
- Control Flow Statements
    - Decision-Making: if, if-else, switch
    - Loops: for, while, do-while
- Arrays and Strings
    - One-Dimensional and Multidimensional Arrays
    - String Manipulation (String, StringBuilder, StringBuffer)

Module 3: Object-Oriented Programming (OOP) in Java

- Classes and Objects
    - Creating and Using Classes
    - Constructors and Overloading
- Inheritance
    - Single and Multilevel Inheritance
    - Method Overriding
- Polymorphism
    - Method Overloading and Dynamic Method Dispatch
- Encapsulation and Abstraction
    - Access Modifiers
    - Abstract Classes and Interfaces

Module 4: Advanced Java Concepts

- Exception Handling
    - try, catch, throw, throws, and finally
    - Custom Exceptions
- Collections Framework
    - Lists, Sets, Maps, and Queues
    - Iterators and Enhanced for Loop
- Input/Output (I/O) Streams
    - File Handling Using FileReader and FileWriter
    - BufferedReader and BufferedWriter

Module 5: Multithreading and Concurrency

- Thread Life Cycle
- Creating Threads (Extending Thread Class and Implementing Runnable)
- Synchronization and Thread Communication

Module 6: Database Connectivity (JDBC)

- Introduction to JDBC
- Connecting Java Applications to Databases
- Executing SQL Queries from Java
- Prepared Statements and Callable Statements

Module 7: Building GUI Applications

- Introduction to JavaFX and Swing
- Creating Windows, Buttons, and Event Handlers
- Designing Forms and Dialog Boxes

Module 8: Real-World Projects and Applications

- Developing Mini Projects
    - Library Management System
    - Employee Management System
- Working on a Capstone Project

Key Features:

- **Hands-On Learning**: Work on coding challenges and real-world projects.
- **Comprehensive Curriculum**: Covers beginner to advanced Java topics.
- **Certification**: Earn a Java Programming certificate upon successful completion.

Who Should Attend?

- Aspiring software developers and programmers.
- Students pursuing computer science or related fields.
- Professionals seeking to learn Java for career advancement or application development.

MySQL Training Program

This course is designed to provide a comprehensive understanding of MySQL, one of the most popular open-source relational database management systems. Whether you're new to databases or looking to refine your skills, this course equips you with the tools to manage, query, and optimize MySQL databases effectively.

Tools & Technologies Covered:

- **MySQL Server**
- **MySQL Workbench**
- **SQL Commands**

Course Overview
This course will help you:

- Understand the fundamentals of relational databases.
- Write SQL queries to retrieve, manipulate, and analyze data.
- Learn database design principles and normalization.
- Manage databases, users, and permissions in MySQL.

Course Curriculum

Module 1: Introduction to MySQL

- Overview of MySQL and Relational Databases
- Installing and Configuring MySQL Server and Workbench
- Understanding MySQL Client and Server Architecture

Module 2: SQL Basics

- Introduction to SQL Syntax
- Writing Basic Queries
    - SELECT, INSERT, UPDATE, DELETE
- Filtering Data
    - WHERE, BETWEEN, LIKE, IN Operators
    - Using Logical Operators (AND, OR, NOT)
- Sorting and Limiting Data
    - ORDER BY and LIMIT Clauses

Module 3: Database Design and Normalization

- Database Design Principles
- Primary Keys, Foreign Keys, and Constraints
- Normalization (1NF, 2NF, 3NF)
- Creating and Managing Tables
    - Data Types in MySQL
    - ALTER and DROP Commands

Module 4: Advanced SQL Queries

- Aggregate Functions
    - COUNT, SUM, AVG, MAX, MIN
- Grouping Data
    - GROUP BY and HAVING Clauses
- Joining Tables
    - INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN
- Subqueries and Nested Queries

Module 5: MySQL Database Management

- Creating and Managing Databases
- User Management and Permissions
- Backing Up and Restoring Databases
- Exporting and Importing Data

Module 6: MySQL Functions and Stored Procedures

- Built-in Functions
    - String, Date, and Numeric Functions
- Writing Stored Procedures and Functions
- Using Triggers for Automated Tasks

Module 7: Performance Optimization

- Indexing and Query Optimization
- Analyzing Query Execution Plans
- Optimizing Database Design

Module 8: MySQL in Applications

- Connecting MySQL to Programming Languages (e.g., Python, PHP)
- Working with MySQL in Web Development
- Real-World Use Cases and Projects

Key Features:

- **Hands-On Training**: Practice with real-world databases and queries.
- **Comprehensive Curriculum**: Covers beginner to advanced MySQL topics.
- **Certification**: Earn a MySQL certificate upon successful completion.

Who Should Attend?

- Aspiring database administrators and data analysts.
- Web developers integrating MySQL with applications.
- IT professionals seeking to enhance their database skills.

HTML Training Program

This course is designed to provide a thorough understanding of HTML (HyperText Markup Language), the foundational language of the web. Whether you're a beginner starting your journey in web development or looking to refine your skills, this course will help you create well-structured and responsive web pages.

Tools & Technologies Covered:

- **HTML5**
- **Text Editors**: Visual Studio Code, Sublime Text, Notepad++
- **Web Browsers**: Chrome, Firefox, Edge

Course Overview
This course will help you:

- Learn the fundamentals of HTML for web development.
- Create and structure web pages effectively using HTML5 elements.
- Understand best practices for semantic and accessible web design.

Course Curriculum

Module 1: Introduction to HTML

- What is HTML?
- Understanding the Structure of an HTML Document
- Setting Up the Development Environment
- Writing and Viewing Your First HTML Page

Module 2: Basic HTML Elements

- HTML Tags and Attributes
- Headings (h1 to h6) and Paragraphs (p)
- Formatting Text
    - Bold, Italics, Underline, and Strikethrough
- Lists
    - Ordered Lists (ol) and Unordered Lists (ul)

Module 3: Links and Images

- Creating Hyperlinks (a tag)

    - Internal and External Links
    - Anchor Links for Navigation
- Adding Images to Web Pages (img tag)
    - Image Attributes: src, alt, width, and height

Module 4: Tables and Forms

- Creating and Formatting Tables
    - Rows, Columns, and Headers
    - Merging Cells (colspan and rowspan)
- Building Forms
    - Input Fields, Checkboxes, Radio Buttons, and Dropdowns
    - Buttons, Labels, and Textareas
    - Form Attributes (action, method)

Module 5: Advanced HTML5 Features

- HTML5 Semantic Elements
    - header, nav, section, article, footer, and aside
- Multimedia Integration
    - Adding Audio (audio tag)
    - Embedding Videos (video tag)
- Working with HTML5 Canvas for Graphics

Module 6: Best Practices and Accessibility

- Writing Clean and Semantic HTML Code
- Introduction to Web Accessibility (ARIA Attributes)
- Optimizing for Search Engines (SEO Basics)

Module 7: Building a Complete Web Page

- Combining All HTML Elements
- Structuring a Web Page Layout
- Creating a Simple Multi-Page Website

Key Features:

- **Hands-On Practice**: Build and test web pages using real-world examples.
- **Comprehensive Learning**: Covers all essential and advanced HTML concepts.
- **Certification**: Earn an HTML Development certificate upon successful completion.

Who Should Attend?

- Beginners looking to start a career in web development.
- Students and professionals interested in learning web technologies.
- Anyone aiming to create personal or professional websites.

CSS Training Program

This course is designed to provide a comprehensive understanding of CSS (Cascading Style Sheets), a vital technology for creating visually appealing and responsive web pages. Learn how to style and layout web pages with modern CSS techniques.

Tools & Technologies Covered:

- **CSS3**
- **Text Editors**: Visual Studio Code, Sublime Text, Notepad++
- **Web Browsers**: Chrome, Firefox, Edge

Course Overview
This course will help you:

- Learn how to use CSS to style web pages effectively.
- Understand responsive design principles for mobile-friendly websites.
- Create layouts using modern CSS techniques like Flexbox and Grid.

Course Curriculum

Module 1: Introduction to CSS

- What is CSS?
- The Role of CSS in Web Development
- Types of CSS
    - Inline, Internal, and External CSS
- CSS Syntax: Selectors, Properties, and Values

Module 2: Styling Text and Elements

- Font Properties
    - Font Family, Size, Weight, and Style
- Text Properties
    - Alignment, Line Height, and Letter Spacing
- Applying Colors
    - Color Names, HEX, RGB, and HSL Formats
- Backgrounds and Borders
    - Adding Background Colors, Images, and Gradients

    - Border Styles, Width, and Radius

Module 3: Layout and Positioning

- Box Model Explained
    - Margins, Padding, Borders, and Content
- Positioning Elements
    - Static, Relative, Absolute, Fixed, and Sticky Positions
- Display Property
    - Block, Inline, and Inline-Block
- Overflow and Z-Index

Module 4: Advanced CSS Techniques

- CSS Selectors
    - Pseudo-classes and Pseudo-elements
    - Attribute Selectors and Combinators
- Styling Lists and Tables
    - Customizing Bullet Points and Table Borders
- CSS Animations and Transitions
    - Keyframes and Animation Properties
    - Adding Smooth Transitions

Module 5: Responsive Design

- Introduction to Media Queries
- Creating Fluid Layouts with Percentages and Viewport Units
- Mobile-First Design Principles
- Using CSS Frameworks (e.g., Bootstrap Overview)

Module 6: Modern CSS Layout Techniques

- Flexbox Layout
    - Aligning and Distributing Items in a Flexible Container
    - Using Flexbox for Navigation Bars and Grids
- CSS Grid Layout
    - Defining Grid Templates and Areas
    - Creating Complex Layouts with Grid

Module 7: Building a Complete Project

- Styling a Multi-Page Website with CSS
- Applying Responsive Design Principles
- Incorporating Animations and Modern Layout Techniques

Key Features:

- **Hands-On Practice**: Build styled web pages and real-world layouts.
- **Comprehensive Learning**: Covers all CSS concepts, from basic to advanced.
- **Certification**: Earn a CSS Development certificate upon successful completion.

Who Should Attend?

- Aspiring web designers and developers.
- Students and professionals looking to improve their web styling skills.
- Anyone aiming to create visually appealing and responsive websites.

JavaScript Training Program

This course is designed to provide a comprehensive understanding of JavaScript, the programming language of the web. Learn how to create dynamic, interactive, and responsive websites using JavaScript, and gain skills applicable to both front-end and back-end development.

Tools & Technologies Covered:

- **JavaScript (ES6+)**
- **Browsers**: Chrome, Firefox (for debugging and testing)
- **Text Editors**: Visual Studio Code, Sublime Text

Course Overview
This course will help you:

- Understand JavaScript fundamentals and advanced concepts.
- Create dynamic and interactive web pages with DOM manipulation.
- Build and test modern applications with JavaScript frameworks and libraries.

Course Curriculum

Module 1: Introduction to JavaScript

- What is JavaScript?
- Setting Up the Environment (Browser Console and Text Editors)
- JavaScript Syntax and Statements
- Variables (var, let, const) and Data Types

Module 2: JavaScript Fundamentals

- Operators and Expressions
- Control Structures
    - Conditional Statements (if-else, switch-case)
    - Loops (for, while, do-while)
- Functions

    - Function Declarations and Expressions
    - Arrow Functions (ES6)
- Arrays and Objects
    - Array Methods (map, filter, reduce)
    - Object Properties and Methods

Module 3: Working with the DOM

- Understanding the Document Object Model (DOM)
- Selecting and Manipulating Elements
    - getElementById, querySelector, etc.
- Handling Events
    - Adding Event Listeners
    - Event Delegation and Bubbling
- Modifying HTML and CSS Dynamically

Module 4: Advanced JavaScript Concepts

- JavaScript Closures and Scope
- Promises and Async/Await
- Error Handling (try, catch, finally)
- JavaScript Modules (import/export)

Module 5: Working with APIs

- Fetch API for Data Retrieval
- Handling JSON Data
- Making HTTP Requests (GET, POST, PUT, DELETE)
- Working with Third-Party APIs

Module 6: Object-Oriented JavaScript

- Prototypes and Inheritance
- Classes and Object-Oriented Programming (ES6)
- Encapsulation and Polymorphism

Module 7: Debugging and Testing JavaScript

- Using Browser DevTools for Debugging
- Writing Unit Tests for JavaScript Code
- Understanding Common Errors and Fixes

Module 8: Building Real-World Applications

- Creating a Dynamic To-Do List
- Developing a Simple Calculator

- Building an Interactive Form with Validation

Module 9: Introduction to Frameworks and Libraries (Optional)

- Overview of React.js, Angular, and Vue.js
- Using jQuery for Simplified DOM Manipulation

Key Features:

- **Hands-On Practice**: Build interactive projects to strengthen your understanding.
- **Comprehensive Curriculum**: Covers both foundational and advanced JavaScript concepts.
- **Certification**: Earn a JavaScript Development certificate upon successful completion.

Who Should Attend?

- Aspiring web developers looking to learn JavaScript.
- Professionals aiming to enhance their front-end development skills.
- Anyone interested in creating dynamic and interactive websites.

Bootstrap Training Program

This course is designed to teach you how to create responsive, mobile-first web designs using the Bootstrap framework. Learn to leverage Bootstrap's powerful grid system, components, and utilities to design professional, visually appealing websites quickly and efficiently.

Tools & Technologies Covered:

- **Bootstrap 5** (latest version)
- **HTML & CSS**
- **Text Editors**: Visual Studio Code, Sublime Text

Course Overview
This course will help you:

- Understand the fundamentals of the Bootstrap framework.
- Build fully responsive and mobile-friendly web layouts.
- Use pre-designed components and utilities to create professional websites.

Course Curriculum

Module 1: Introduction to Bootstrap

- What is Bootstrap?
- Setting Up a Bootstrap Project
    - CDN Integration vs. Local Installation
- Overview of the Bootstrap Ecosystem

Module 2: Bootstrap Grid System

- Understanding the Grid System
    - Rows and Columns
    - Breakpoints for Responsive Design
- Creating Responsive Layouts
    - Fluid Containers
    - Nesting Columns
- Using Flexbox in Bootstrap

Module 3: Bootstrap Components

- Working with Common Components

    - Navbar and Navigation Menus
    - Modals and Popups
    - Buttons and Button Groups
    - Cards and Media Objects
- Forms in Bootstrap
    - Input Fields, Dropdowns, Checkboxes, and Radio Buttons
    - Form Validation and Layouts

Module 4: Bootstrap Utilities

- Spacing and Sizing
    - Margins and Padding
    - Width and Height Utilities
- Typography
    - Text Alignment, Colors, and Styling
- Colors and Backgrounds
    - Using Predefined Colors
    - Adding Background Images and Gradients

Module 5: Advanced Customization

- Overriding Default Styles with Custom CSS
- Using Sass for Advanced Styling
- Customizing Bootstrap Variables

Module 6: Building Responsive Websites

- Creating Navigation Menus with Dropdowns
- Building Hero Sections with Jumbotrons
- Designing Feature Sections with Grids and Cards
- Adding Interactive Elements with JavaScript Components

Module 7: Real-World Project

- Designing a Responsive Multi-Page Website
- Implementing Components and Utilities in a Practical Scenario
- Optimizing Website Performance for Mobile and Desktop

Key Features:

- **Hands-On Practice**: Build responsive websites with Bootstrap's components and utilities.
- **Comprehensive Curriculum**: Covers foundational to advanced Bootstrap features.
- **Certification**: Earn a Bootstrap Development certificate upon successful completion.

Who Should Attend?

- Aspiring front-end developers looking to learn responsive design.
- Web designers wanting to streamline their workflow.
- Anyone aiming to create professional and visually appealing websites.

Web Development Training Program

Master the Core Front-End Technologies: HTML, CSS, JavaScript, and Bootstrap

This course provides a complete introduction to front-end web development, enabling you to build responsive, interactive, and professional websites from scratch. By mastering these technologies, you'll be equipped with the foundational skills needed for a career in web development.

Tools & Technologies Covered:

- **HTML5**
- **CSS3**
- **JavaScript (ES6+)**
- **Bootstrap 5**
- **Text Editors**: Visual Studio Code, Sublime Text
- **Web Browsers**: Chrome, Firefox, Edge

Course Overview
This course will help you:

- Understand how websites are structured and styled using HTML and CSS.
- Create interactive, dynamic web pages using JavaScript.
- Build responsive, mobile-first web designs using Bootstrap.

Course Curriculum

Module 1: Introduction to Web Development

- Overview of the Web Development Process
- Understanding Client-Side and Server-Side Development
- Setting Up the Development Environment (Text Editors, Browsers)

Module 2: HTML (HyperText Markup Language)

- Structure of an HTML Document
- Basic HTML Elements

    - Headings, Paragraphs, Lists, Links
- Images and Media Elements
    - Adding Images, Audio, and Video
- Forms and Input Elements
    - Text Fields, Buttons, Dropdowns, and Checkboxes
- Semantic HTML5 Tags (header, nav, section, article, footer)

Module 3: CSS (Cascading Style Sheets)

- CSS Syntax: Selectors, Properties, and Values
- Styling Text and Elements
    - Fonts, Colors, Backgrounds, Borders
- The Box Model (Margins, Padding, Borders, Content)
- Layout and Positioning
    - Static, Relative, Absolute, Fixed, and Sticky
- Responsive Design with Media Queries
- Advanced Features: Animations, Transitions, Gradients

Module 4: JavaScript Basics

- Introduction to JavaScript
- Variables and Data Types (var, let, const)
- Operators and Control Flow (if-else, loops)
- Functions and Events
    - Writing and Calling Functions
    - Handling Click, Mouse, and Keyboard Events
- Arrays and Objects
- Manipulating the DOM
    - Selecting and Updating HTML Elements
    - Adding Dynamic Behavior to Web Pages

Module 5: Bootstrap (Responsive Web Design)

- Setting Up Bootstrap (CDN or Local)
- Understanding the Grid System
    - Rows, Columns, Breakpoints for Responsive Layouts
- Using Bootstrap Components
    - Navigation Bars, Modals, Buttons, Cards, Forms
- Styling with Utilities

    - Colors, Spacing, Typography
- Advanced Features
    - Creating Hero Sections and Interactive Forms
    - Customizing Bootstrap with Custom CSS and Sass

Module 6: Integrating HTML, CSS, JavaScript, and Bootstrap

- Combining All Technologies to Create Web Pages
- Styling and Adding Interactivity to Content
- Building Responsive and Dynamic Multi-Page Websites

Module 7: Real-World Project

- Developing a Full-Stack Web Application
    - Responsive Landing Page with Navigation
    - Interactive Elements (Forms, Buttons, Modals)
    - Using JavaScript for Dynamic Content and Validations
    - Styling the Project with Bootstrap Components

Key Features:

- **Hands-On Practice**: Build multiple projects throughout the course.
- **Real-World Application**: Work on a capstone project to create a complete website.
- **Certification**: Earn a Web Development certificate upon successful completion.

Who Should Attend?

- Aspiring web developers and designers.
- Students looking to start a career in front-end development.
- Professionals seeking to build personal or business websites.

SQL Training Program

Master the Language of Databases: Learn SQL for Data Management and Analysis

This course provides a comprehensive introduction to SQL (Structured Query Language), enabling you to manage, query, and analyze data in relational databases. Perfect for beginners and professionals alike, this program covers everything from the basics to advanced SQL techniques.

Tools & Technologies Covered:

- **SQL (Structured Query Language)**
- **MySQL**
- **PostgreSQL**
- **SQL Server**
- **SQL Workbench**

Course Overview
This course will help you:

- Understand the fundamentals of relational databases and SQL.
- Learn to write SQL queries for data retrieval, manipulation, and analysis.
- Gain expertise in database design, optimization, and security.

Course Curriculum

Module 1: Introduction to SQL

- What is SQL?
- Understanding Relational Database Management Systems (RDBMS)
- Key SQL Concepts: Tables, Rows, and Columns
- Setting Up the Development Environment (MySQL Workbench, PostgreSQL, or SQL Server)

Module 2: Basics of SQL Queries

- Writing Basic Queries with SELECT
- Filtering Data Using WHERE, AND, OR, NOT

- Sorting Data Using ORDER BY
- Using Aliases for Tables and Columns

Module 3: Data Manipulation

- INSERT Statements for Adding Data
- UPDATE Statements for Modifying Existing Records
- DELETE Statements for Removing Data

Module 4: Working with Functions

- Aggregate Functions: SUM, AVG, MAX, MIN, COUNT
- String Functions: CONCAT, LENGTH, SUBSTRING
- Date and Time Functions: NOW, DATE_ADD, DATE_DIFF

Module 5: Advanced Query Techniques

- Using Subqueries and Nested Queries
- Joining Tables
    - INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN
- Grouping Data with GROUP BY and HAVING
- Combining Results with UNION and INTERSECT

Module 6: Database Design and Normalization

- Understanding Keys: Primary Key, Foreign Key, Unique Key
- Database Normalization: 1NF, 2NF, 3NF
- Creating and Altering Tables
- Relationships Between Tables

Module 7: SQL for Data Analysis

- Writing Complex Queries for Analytical Insights
- Window Functions: ROW_NUMBER, RANK, LEAD, LAG
- Pivoting Data for Reporting

Module 8: SQL for Performance Optimization

- Indexing for Faster Query Execution
- Analyzing and Optimizing Query Performance
- Using EXPLAIN and Execution Plans

Module 9: Security and User Management

- Creating Users and Assigning Permissions
- Securing Databases and Preventing SQL Injection

Module 10: Real-World Applications and Projects

- Building and Querying Databases for Business Scenarios
    - Sales Reporting System
    - Customer Data Analysis
- Writing SQL Scripts for Automation

Key Features:

- **Hands-On Practice**: Work on real-world datasets and queries.
- **Comprehensive Curriculum**: Covers basic to advanced SQL concepts.
- **Certification**: Earn an SQL Programming certificate upon successful completion.

Who Should Attend?

- Aspiring database administrators and data analysts.
- Developers looking to integrate databases into applications.
- Business professionals aiming to enhance data querying and reporting skills.