EXCELSIOR COLLEGE

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CENTER FOR PROFESSIONAL DEVELOPMENT

WEB APPLICATIONS DEVELOPER

267 Hours/12 Months/Instructor-Facilitated
Course Code: **CPD127**

OVERVIEW

Excelsior College has partnered with ed2go to bring you the Web Applications Developer program. In this program, you'll use multiple tools and technologies to develop state-of-the-art web applications. The program is broken into 10 modules designed to teach you all the fundamentals of developing and maintaining database-driven Web sites.

You'll begin by learning basic HTML, the core technology behind almost all websites. You'll also master using CSS to design your pages and discover how to make your site more dynamic with JavaScript. Then you'll dive into PHP and SQL, technologies that allow you to create database-driven websites such as intranets and e-commerce sites. In addition, you'll learn the basics of XML, a technology that's helpful in all programming including web development.

Next, you'll create Ajax applications that respond more like traditional desktop software, giving users a faster and more interactive experience. You'll end your course by exploring HTML5, the newest version of HTML, putting you on the cutting edge of web development.

This all-in-one package will teach you every skill you need to be proficient in creating database-driven websites. Once you've successfully completed this program, you'll be prepared to enter the job market where Web Applications Developers are in high demand and earn rewarding salaries.

OBJECTIVES

As a student, you will learn the following:

- Know how to use HTML, Cascading Style Sheets, and JavaScript to design web pages.
- Use Dynamic HTML to make your web pages more interactive.
- Create database-driven web applications using PHP.
- Use SQL to pull data from a database and to insert and modify data in a database.
- Employ XML to store and validate data and to make data more accessible to other applications.
- Use Ajax techniques to build web applications.
- Use the latest HTML5 features to build forward-looking websites.

MATERIALS INCLUDED

You will receive the following print manuals:

- HTML 4 Training
- Introduction to CSS Training
- Advanced CSS Training
- Introduction to JavaScript Training
- Advanced JavaScript Training
- Ajax Training
- Introduction to PHP Training
- Introduction to SQL Training
- Introduction to XML Training
- HTML5 Training

OUTLINE

- **HTML 4 Training**
  - Overview of Web Development
  - Introduction to HTML
  - Paragraphs, Headings and Text
  - HTML Links
  - HTML Images
  - HTML Lists
  - HTML Tables
  - HTML Forms
  - HTML Formatting

- **Introduction to CSS Training**
  - Crash Course in CSS
  - CSS Fonts
  - CSS Text
  - Colors and Backgrounds
  - Custom Cursors
  - CSS and Links
  - Borders, Margins, and Padding
  - Styling Tables with CSS

- **Advanced CSS Training**
  - Positioning and Visibility
  - Advanced CSS Page Layout
  - CSS Shorthand Properties
  - CSS Lists as Hierarchical Navigation
  - CSS Background Tricks
  - Laying out and Styling Forms with CSS
  - Browser-Compatibility Issues
  - CSS Best Practices

- **Introduction to JavaScript**
  - JavaScript Basics
  - Variables, Arrays, and Operators
  - JavaScript Functions
  - Built-In JavaScript Objects
  - Conditionals and Loops
  - JavaScript Form Validation
  - Images, Windows, and Timers
  - Navigator, History, and Location Objects

- **Advanced JavaScript**
  - Advanced Techniques
  - Regular Expressions
  - HTML Document Object Model
  - Dynamic Forms
  - Dynamic HTML

- **Introduction to PHP**
  - PHP Basics
  - Flow Control
  - Arrays
  - PHP and HTML Forms
  - String Manipulation
  - Reusing Code and Writing Functions
  - Managing Data
  - MDB2
  - Authentication with PHP and SQL
  - Regular Expressions
  - Session Control and Cookies
  - Sending Email with PHP
  - File System Management

- **Introduction to SQL**
  - Relational Database Basics
  - Simple SELECTs
  - Advanced SELECTs
  - Subqueries, Joins, and Unions
  - Conditional Processing with CASE
  - Inserting, Updating, and Deleting Records

- **Introduction to XML**
  - XML Basics
  - Quick Introduction to XHTML
  - DTDs
  - XML Schema Basics
  - Simple-Type Elements
  - Complex-Type Elements
  - Attributes
  - XSLT Basics
  - XPath
  - Flow Control

Outlines are subject to change.
For more information, visit our Web site at: **www.excelsior.edu/CPD**,
email **CPD@excelsior.edu**, or call: **888-647-2388 ext 11-8211**

- **Ajax Training**
  - Ajax Basics
  - Passing Data
  - Ajax Applications
  - XSLT Transformations with JavaScript
  - Ajax/JavaScript Frameworks
  - More Ajax Applications

- **Introduction to HTML5**
  - Introduction to this Course
  - Laying out a Page with HTML5
  - HTML5 - How We Got Here
  - Sections and Articles
  - HTML5 Audio and Video
  - HTML5 Forms
  - HTML5 Web Storage
  - HTML5 Canvas
  - Integrated APIs

COMPUTER REQUIREMENTS

You may use a PC or a Mac for this program. You must have an Internet connection (high-speed recommended). Full setup instructions and technical requirements are provided after accessing each module in the course.

The following are minimum system requirements necessary to access the program modules:

- Web browser: IE 7 or later, Firefox 3 or later, Chrome 5 or later, or Safari 3 or later.
- Any text or HTML editor (i.e., Adobe Dreamweaver, Notepad)
- For the Ajax and PHP modules, you must install either MAMP or XAMPP, both of which are free. Additionally, you will need one of the following databases: Microsoft Access, Microsoft SQL Server Express, MySQL, or Oracle.

INSTRUCTOR BIOS

Hamlet Javier earned his B.S. in Computer Science from Fredonia State University. He has been developing websites and web applications for 10 years. He is an expert in ColdFusion and JavaScript and has worked extensively with JavaScript frameworks, including jQuery and the YUI Library.

Brian Love started building web applications when he was 13, and hasn't stopped. A graduate from the Institute of Technology, the State University of New York at Utica/Rome, with an undergraduate degree in Computer Information Systems and a master's degree in Business Administration, Brian provides a rare and valuable ability to combine his passion for technology with his business expertise.