Introduction to Objective-C Programming for iOS App Development

This course is designed for novice programmers as well as for programmers new to the Objective-C programming language. Topics covered will include both the general theoretical concepts of programming - with a focus on Object Oriented programming - as well as the specifics of Objective-C's code syntax. An in-depth exploration of Xcode - Apple's IDE for developing iOS Apps - will also be an integral part of this class as students use it to write many programs that demonstrate the concepts being taught. Students will gain a solid foundation and understanding of how Objective-C works, a strong familiarity of working with Xcode, and be ready to start learning iPhone and iPad App development.

Course Objectives:

- Write Objective-C programs with variables, primitives, conditionals, loops, and using other building blocks of programming.
- Work with Collection Objects such as NSArrays, NSDictionaries, and NSSets, and use of Fast Enumeration.
- Create and use custom user-defined Classes.
- Apply Objective-C's Object-Oriented messaging, Inheritance, Polymorphism, Dynamic Binding and Dynamic Typing.
- Explore the Foundation Framework's classes and data structures.
- Write programs that interact with files and the file system

Audience: Beginner programmers or programmers new to Objective-C language.

Prerequisites: Some programming experience is helpful but is not mandatory.

Number of Days: 3 days

1 Working with Variables and Data Types

Writing and Running basic programs
Working with the Console
Integers
Floats
Doubles
Booleans
Chars
NSString

2 Arithmetics and Expressions

Addition, Subtraction, Multiplication, Division, Modulus
Precedence of Operators
Type conversions through mixed operations
Type-casting
Assignment and Comparison operators
Intro to Math Library functions

3 Loops – Automatic Repetition

Addition, Subtraction, Multiplication, Division, Modulus
Precedence of Operators
Type conversions through mixed operations
Type-casting
Assignment and Comparison operators
Intro to Math Library functions

4 Conditionals & Decision Making

The If statement
The If-Else statement
The If-Else-If statement
Nested Conditionals
Compound Relationals
Boolean Variables
The Switch Statement